Development and validation of the career plateauing experiences scale in relation to job satisfaction, motivation, and work engagement in the South African Police Service

by

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DECLARATION

I, Shailyn Ramgoolam, student number: 30449219, declare that this thesis, entitled, **"Development and validation of the career plateauing experiences scale in relation to job satisfaction, motivation and work engagement in the South African Police Service"**, is my own work, and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references (APA 7th edition style for referencing was applied). This thesis has not, in part or in whole, been previously submitted for any other degree or examination at this or any other university.

I also declare that the study has been carried out in strict accordance with the Policy for Research Ethics of the University of South Africa (Unisa). I took great care that the research was conducted with the highest integrity, taking into account Unisa's Policy for Infringement and Plagiarism. I further declare that I submitted the thesis to originality checking software and that it falls within the accepted requirements for originality.

I further declare that ethical clearance to conduct the research has been obtained from the Department of Industrial and Organisational Psychology, University of South Africa (see Appendix B for certificate). Permission to conduct the research was also obtained from the participating organisation as well as the individuals who participated in the study.

S. Ramgoolam — 1 July 2020

SIGNATURE — DATE

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"Knowledge that is not put into practice
is like food that is not digested"
Sathya Sai Baba

ABSTRACT/SUMMARY

DEVELOPMENT AND VALIDATION OF THE CAREER PLATEAUING EXPERIENCES SCALE IN RELATION TO JOB SATISFACTION, MOTIVATION AND WORK ENGAGEMENT IN THE SOUTH AFRICAN POLICE SERVICE

by

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The focus of this research is employees' career development in the South African Police Services (SAPS). The general aim of the research is to develop a valid and reliable measure of career plateauing and to determine whether individuals' experiences of career plateauing (as antecedent) positively or negatively predict their job satisfaction, motivation, and work engagement (as consequences). The research further aims to investigate whether individuals' biographical variables (gender, age, race, marital status, rank, and tenure) significantly influence their subjective work experiences (career plateauing, job satisfaction, motivation, and work engagement). A quantitative cross-sectional survey was conducted on a non-probability purposive sample of employees (N = 410) from different biographical groups at the SAPS. Descriptive, correlational, and inferential statistics were performed. Exploratory factor analysis and confirmatory factor analysis provided evidence of the internal consistency reliability and construct validity of the newly developed career plateauing experiences scale (CPES). Structural equation modelling confirmed the predictive validity of the CPES and showed that job content plateau and hierarchical/structural plateau predicted lower levels of job satisfaction. The psychological plateau predicted lower work engagement levels. Maintenance plateau predicted higher job satisfaction and engagement levels. Tests for significant mean differences indicated that individuals from the various biographical groups differed significantly regarding their career plateauing experiences, job satisfaction, motivation, and work engagement. The research extended career development theory by demonstrating the relevance of the new construct of psychological plateau in relation to traditional forms of career plateauing and work engagement in flat organisational structural contexts. Although still in need of further refinement, the newly developed CPES shows empirically promise to provide useful information for measuring and alleviating negative experiences of career plateauing in the SAPS. The findings further provide valuable insights into the unique career plateauing experiences, job satisfaction, motivation, and work

engagement of employees of different age, gender, race, marital status, rank, and tenure groups. The study makes an original contribution to career development theory and research and adds value to career development practice in the contemporary organisational setting.

KEY TERMS

Career plateauing, hierarchical/structural plateauing, job content plateau, maintenance plateau, psychological plateau, job satisfaction, motivation, and work engagement

OPSOMMING

ONTWIKKELING EN VALIDERING VAN 'N LOOPBAANPLATOBELEWINGSKAAL VIR WERKSBEVREDIGING, MOTIVERING EN WERKSBETROKKENHEID IN DIE SUID-AFRIKAANSE POLISIEDIENS

deur

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Hierdie studie handel oor die loopbaanontwikkeling van werknemers in die Suid-Afrikaanse Polisiediens (SAPD). Die doel van die navorsing is om 'n geldige en betroubare aanduiding dat 'n loopbaanplato bereik is, te ontwikkel, en om vas te stel of individue se belewing dat hulle loopbaan 'n plato bereik het (as die antesedent), hulle werksbevrediging, motivering en werksbetrokkenheid (as die gevolge) positief of negatief voorspel. Afgesien hiervan word ondersoek of werknemers se biografiese veranderlikes (geslag, ouderdom, ras, huwelikstatus, rang en dienstyd) 'n beduidende uitwerking op hulle subjektiewe werksbelewing (loopbaanplato, werksbevrediging, motivering en werksbetrokkenheid) het. 'n Kwantitatiewe dwarssnitopname van 'n doelgerigte onwaarskynlikheidsteekproef onder werknemers (N=410) uit verskillende biografiese groepe in die SAPD is gedoen. Deskriptiewe, korrelatiewe en inferensiële statistiek is uitgevoer. 'n Verkennende en bevestigende faktoranalise het bewys dat die nuut ontwikkelde loopbaanplatobelewingskaal (LPBS) as konstruk geldig, intern konsekwent en betroubaar is. Strukturele vergelykingsmodellering het die voorspellingsgeldigheid van die LPBS bevestig en getoon dat die posinhoud- en hiërargiese/strukturele plato laer vlakke van werksbevrediging voorspel. Die sielkundige plato het laer vlakke van werksbetrokkenheid voorspel, terwyl die handhawingsplato groter werksbevredigings- en -betrokkenheidsvlakke voorspel het. Toetse vir beduidende gemiddeldeverskille het aangedui dat werknemers uit verskillende biografiese groepe beduidende verskille getoon het met betrekking tot hul loopbaanplatobelewing, werksbevrediging, motivering en werksbetrokkenheid. Die navorsing het die loopbaanontwikkelingsteorie verryk deur die relevansie van die nuwe konstruk van 'n sielkundige plato vir die tradisionele vorme van loopbaanplato's en werksbetrokkenheid in plat maatskappystrukture te demonstreer. Ofskoon die nuwe LPBS verfyn moet word, beloof dit veel wat betref inligting waarmee die negatiewe belewing van loopbaanplato's in die SAPD gemeet en verander kan word. Voorts bied die bevindings waardevolle insigte in die unieke

loopbaanplatobelewings, werksbevrediging, -motivering en -betrokkenheid van werknemers ongeag hul ouderdomsgroep, geslag, ras, huwelikstatus, rang en dienstyd. Hierdie studie lewer ŉ bydrae tot die loopbaanontwikkelingsteorie en -navorsing, en voeg waarde toe tot die loopbaanontwikkelingspraktyk in eietydse organisasies.

KERNBEGRIPPE

Loopbaanplatobereiking, hiërargiese/strukturele platobereiking, posinhoudplato, handhawing, sielkundige plato, werksbevrediging, motivering, werksbetrokkenheid

NGAMAFUPHI

UKUTHUTHUKISWA KANYE NOKUQINISEKISWA KWESILINGANISO SOBIZO LOMSEBENZI MAYELANA NEZINGA LOKWANELISEKA NGOKOMSEBENZI, KWEZINHLELO EZIKHUTHAZAYO KANYE NOKUBANDAKANYEKA KWABASEBENZI OPHIKWENI LWEZAMAPHOYISA ENINGIZIMU AFRIKA (*DEVELOPMENT AND VALIDATION OF THE CAREER PLATEAUING EXPERIENCES SCALE IN RELATION TO JOB SATISFACTION, MOTIVATION AND WORK ENGAGEMENT IN THE SOUTH AFRICAN POLICE SERVICE)*

Ibhalwe ngu

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Lolu cwaningo lugxile ekuthuthukiseni ubizo lomsebenzi wabasebenzi boPhiko lwezaMaphoyisa eNingizimu Afrika (*SAPS*). Inhloso enkulu yocwaningo wukuthuthukisa uhlelo lokulinganisa uhlelo olufanele noluthembekayo lobizo lomsebenzi kanye nokuqondisisa ukuthi ngabe isimo somuntu ahlangabezana naso, isimo sesiqongolo sobizo lomsebenzi (as *antecedent*), njengesilinganiso esikwazi ukubikezela kahle noma kabi izinga lokwaneliswa umsebenzi, izinto ezikhuthaza isisebenzi kanye nokuzibandakanya kwesisebenzi emsebenzini. (njengomphumela). Ngaphezu kwalokho ucwaningo luhlose ukuphenya ukuthi ngabe izimpawu zempilo yomuntu (ubulili, iminyaka yomuntu, inhlobo yohlanga lomuntu, isimo somshado, isikhundla kanye nelungelo lobunikazi) zithinta kakhulu izimpilo zabo zomsebenzi (isiqongolo sobizo lomsebenzi, izinga lokwaneliseka ngokomsebenzi, okukhuthaza isisebenzi Kanye nokubandakanyeka kwesisebenzi emsebenzini. Uhlelo locwaningo lwezigaba olugxile kumanani lwenziwa kusampuli yabasebenzi ngohlelo olungenamathuba okwenzeka olungenanhloso (N = 410), ucwaningo olwenziwe kumaqembu ahlukene ngezimpilo zabasebenzi abasophikweni lwesiphoyisa (SAPS). Kuye kwenziwa uhlelo lwamanani ngendlela yokuchaza, yokuqhathanisa okufanayo kanye nokufunisela. Uhlelo lohlaziyo oluphenyayo kanye nohlelo lohlaziyo oluqinisekisayo lunikeze ubufakazi obuthembekayo bangaphakathi obungaguquki kanti bakha isiqinisekiso z

sesilinganiso esisanda kwakhiwa, phecelezi i-*Career Experiences Plateauing Scale (CEPS*). Imodeli ebizwa phecelezi *Structural equation modelling* iye yaqinisekisa uhlelo olufanele olubikezelayo lwe-*CPES* futhi iye yakhombisa ukuthi isigaba sokugcina solwazi lobizo

lomsebenzi kanye nohlaka/nesakhiwo sesiqongo sobizo lomsebenzi lubikezele amazing aphansi okwaneliseka ngomsebenzi. Isiqongo sezomqondo siye sabikezela izinga eliphansi lokuzibandakanya kwabasebenzi emsebenzini wabo, kanti isiqongo sobizo lomsebenzi siye sabikezela izinga eliphezulu lokwaneliseka ngokomsebenzi Kanye nangamazinga okubandakanyeka kwabasebenzi emsebenzini wabo. Izinhlelo zokuhlola eziqonde ukuveza umehluko phakathi, phecelezi kwe-*mean* zibikezele ukuthi abantu abavela kumaqembu ahlukene empilo akhombise ukwehluka mayelana nemisebenzi yesiqongo sobizo lomsebenzi, ukwaneliseka ngokomsebenzi Kanye namazinga okubandakanyeka kwabasebenzi emsebenzini wabo. Ucwaningo luye lwanweba ithiyori yezokuthuthukiswa kobizo lomsebenzi ngokukhombisa izimpawu ezifanayo zesakhiwo esisha zesigaba esiyisiqongo somqondo mayelana nezindlela ezejwayelekile zesiqongo sobizo lomsebenzi kanye nokubandakanyeka kwabasebenzi emsebenzini wabo kwizizinda ezingaguquki zesakhiwo senhlangano. Yize zisadinga ukuhluzwa kabanzi, izinhlelo ezithuthukiswe kabusha ze-CPES zikhombisa isithembiso esiphathekayo sokunikeza ulwazi olusebenzayo lokulinga Kanye nokunciphisa/nokugwema izenzo ezibi zesiqongo sobizo lomsebenzi ophikweni lwe-SAPS. Ulwazi olutholakele luqhubeka nokuveza umnyombo mezenzo zesiqongo sobizo lomsebenzi, ukwaneliseka ngokomsebenzi, izinto ezikhuthaza abasebenzi Kanye nokubandakanyeka kwabasebenzi emsebenzini, okungabasebenzi beminyaka eyehlukene, bobulili, bobuhlanga, besimo somshado, besikhundla kanye namaqembu anobunikazi bempahla eyigugu. Ucwaningo lwenza igalelo langempela kwithiyori ethuthukisa ubizo lomsebenzi Kanye nocwaningo futhi lwengeza ubugugu kwingqubo ethuthukisa ubizo lomsebenzi kwisizinda samanje senhlangano.

AMAGAMA ASEMQOKA

Isiqongo sokugcina sobizo lomsebenzi, isiqongo sohlaka/sesakhiwo, okuqukethwe wuhlelo lomsebenzi/ummongo womsebenzi, ukugcina, isiqongo somqondo, ukwaneliseka ngokomsebenzi, izinto ezikhuthaza isisebenzi Kanye nokubandakanyeka kwabasebenzi emsebenzini.

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Chapter 1 SCIENTIFIC OVERVIEW OF THE STUDY

The focus of this study is the development and predictive validation of the career plateauing experiences scale (CPES) in relation to job satisfaction, motivation, and work engagement in the South African Police Service (SAPS). The relevant constructs for the study include career plateauing, job satisfaction, motivation, and work engagement. This chapter provides the background to and a motivation for the current study, leading to the formulation of the problem statement and the research hypotheses. The paradigm perspective provides applicable paradigms, which guides the context of the literature review as well as the formulation of the research design and research method. Each chapter is introduced and ends with a summary.

1.1 BACKGROUND AND MOTIVATION FOR THE STUDY

The context of the study is career development in the SAPS. More specifically, the study focuses on the relationship dynamics among several psychosocial dispositions and attributes that are known to be associated with individuals' subjective experiences of their careers. In the context of the present study, individuals' experiences of career plateauing are viewed as antecedents of their job satisfaction or dissatisfaction, motivation or de-motivation, and work engagement or disengagement (consequences). The research is interested in investigating whether individuals' experiences of career plateauing (as an independent variable) negatively or positively influence their job satisfaction, motivation, and work engagement (as dependent variables).

Investigating the effect of career plateauing on employees' job satisfaction, motivation, and engagement has become important in the SAPS due to the end of apartheid in 1994, forcing the country towards democratisation (Pruitt, 2010). Since apartheid was characterised by inequalities, the South African democratic government introduced legislations such as the Employment Equity Act (No. 55 of 1998) and the Promotion of Equality and Prevention of Unfair Discrimination Act (No. 4 of 2000) so that organisations are made up of all South African workforce demographics (Potgieter, Coetzee, & Ximba, 2017). Dismantling apartheid allowed for the development of a democratically oriented police system (Potgieter, 2013). The SAPS was likely the most crucial institution for change as it was to ensure the maintenance of apartheid (Marks, 1995). The country was experiencing democracy for the first time in many decades and the police had to adapt to this situation, increasing its racial diversity (Leggett, 2005). The SAPS fast tracked promotions because traditional methods of promotion and affirmative action would have taken many generations for the population of the country to be

reflected (Brogden, 1996). According to Marks (1995), whilst the police force had historically employed mostly Black officers, these have largely been low-rank appointments. Since Black police officers have experienced severe difficulties in terms of promotion, the management of the police services remained largely White (Marks, 1995). The transformation process in the police service entails adjusting staff compilation so that it reflects the country's demographics in terms of race and gender (Young, Koortzen, & Oosthuizen, 2012). Rapid promotions meant that by 2003 there were five times as many inspectors as there were constables (Leggett, 2005). If officers are promoted too quickly, they may not possess the experience or skills needed to do the work they are promoted to do. On the other hand, if officers progress too slowly, they may experience frustration and less satisfaction with police work, resulting in them leaving the department or even the career (Wilson & Heinonen, 2012).

According to Bendix (2010), the purpose of affirmative action is not to unfairly discriminate against other races, however, it will become unfair and discriminatory if a previously disadvantaged person is appointed at all costs without allowing other persons to compete. There is a perception that affirmative action creates opportunities that are plentiful for Black people (Black, Coloured, and Indian) but much less for White people (Dlanga, 2014). Thus, it can be concluded that if affirmative action policies are not properly implemented, it can create career plateaus for White people. Conner (2014) highlights that whether the career plateau is viewed from an organisational perspective resulting from limited job opportunities, or a content perspective resulting from a lack of challenges, or a personal perspective resulting from an absence of ability or desire, the underlying theme is that it is a stage where upward career mobility seems unlikely. Hurst, Baranik, and Clark (2013) state that hierarchical plateaus might occur as a result of economic factors, the organisational structure, individuals' level of education, or the nature of the individual's chosen career path. Career plateaus occur when employees perceive an upward mobility (hierarchical plateaus) or when employees lack challenge or responsibilities in their roles (job content plateaus) (Hurst, Kungu, & Flot, 2012). The employee remains at the same job level more than it is necessary and careers progress gradually where tasks include more responsibility and as time proceeds the employee gets accustomed to the new challenges (Njuguna, 2013).

In general, there are limited chances for promotion in the public sector (Gupta & Pannu, 2013). Most organisations (including the SAPS) have a pyramid-shaped structure that rank positions according to the amount of authority they possess (Billinger & Workiewicz, 2019). Authority, power, and status tends to increase at each higher level of the ranking structure thereby ensuring that each individual is supervised by a superior officer (Mohajane, 2017). Many employees experience being in jobs that offer them limited upward mobility in the organisation.

Career plateauing is regarded as one of the factors that influence employees' motivation, job satisfaction, job performance, and intention to leave an organisation (Njuguna, 2013). Thus, the constructs of job satisfaction, motivation, and work engagement will be studied in relation to career plateauing. Schultz, Bagraim, Potgieter, Viedge, and Werner (2003) define job satisfaction as a collection of attitudes of employees regarding a number of areas of their work and includes the work itself, relationships at work, interaction in the workplace, personal characteristics, rewards, recognition, and incentives. Job satisfaction can be described as psychological and physiological pleasure in one's job (Ali, 2016). Overall job satisfaction emphasises employees' fulfilment or discontentment in their job (Thompson & Phua, 2012). Lawson, Anderson, and Rudiger (2013), O'Donnell, Reeve, and Smith (2007) and Nel *et al*. (2001) define motivation as forces within or without a person that are adjusted by self-regulation to initiate, direct, and sustain actions toward a goal or set of goals. Motivation can be seen in the choices individuals make among goals to pursue (direction), the amount of effort they put forth toward goal attainment (vigour and intensity), and the amount of time they invest in goal pursuit (duration or persistence of action) (Diefendorff & Chandler, 2011, as cited in Zedeck, 2011, p. 66). In addition, Mallik (2017) describes motivation as a transformation of an individual's thoughts and beliefs into action. The concept of work engagement is associated with positive psychology that focuses on human strengths and optimal functioning rather than on weaknesses and malfunctioning (Seligman & Csikszentmihalyi, 2000). Engaged employees are aware of their work roles and mission, and have good relationships with co-workers (Abraham, 2012). The extent to which an employee engages at work varies from day to day and from task to task (Sonnentag, 2017).

Greenhaus, Callanan, and Godshalk (2010) argue that the overall implication of being plateaued is that such employees may become angry, frustrated, bored, stagnant, less involved, and demotivated in their work. Mullins (1996) states that motivation is a process which may lead to job satisfaction. Although the relationship between motivation and job satisfaction is not clear, it can be illustrated by means of the motivational theories. Achievement-oriented behaviour is a critical factor that motivates individuals to succeed (Hsu, Chen, Yu & Lou, 2010). Research conducted by Otto, Roe, Sobiraj, Baluku, and Vasquez (2017) revealed that achievement motivation was negatively related to job satisfaction. Samiei and Salavati's (2015) study showed that increased motivation leads to increased job satisfaction. Greenhaus *et al.* (2010) state that plateaued employees may also exhibit deteriorating performance and cause a decline in the performance of their unit and overall organisation. Thus, career plateau has become the most critical aspect in an organisational setting and it is necessarily vital for organisations to explore the significant factors contributing

to career plateau and the means of effectively dealing with the negative impact of it (Greenhaus *et al*., 2010).

In light of the above, the emphasis of this study is mainly on career plateau aspects in relation to job satisfaction, motivation, and work engagement with special reference to SAPS employees.

1.1.1 Consequences of career plateauing

According to Vandrew (2012), reaching a career plateau can have negative consequences for the employee and employer. Some employees do not mind being plateaued, however, the potential negative effects associated with career plateau can influence the amount of success an employee experiences especially if she/he requires upward career growth (Dawson, 2014). Hierarchical plateauing becomes inevitable for employees when organisations downsize and restructure (Badiane, 2016). A career plateau has a negative influence on an employee when there is talent and initiative to advance beyond the current position, however, either the organisation does not have available positions or lacks confidence in the employee's ability. This type of organisational plateau occurs when individuals want to advance but cannot and may be a source of stress and frustration (Ference *et al*., 1977). Since job content plateaus contribute to boredom and lack of challenge in an employee's job or career, she/he might rely on their organisations to provide challenging opportunities or assignments to avoid such a plateau.

Beheshtifar and Modaber (2013) stated that a career plateau to many employees, is like a shock and it has a direct negative effect on job satisfaction, motivation, and performance. Maintaining motivation when the career plateau is reached is important to employment longevity. Badiane (2016) states that plateaued employees are more likely to experience a lack of motivation. According to Schein (1978), success of vertical career movement (upward or downward) can be measured by attaining particular hierarchical levels (Mayasari, 2010). Career plateauing primarily eradicates promotional opportunities resulting in a decline in career motivation (Hays, 2012) and job satisfaction (Wickramasinghe & Jayaweera, 2010; Xie, Lu, Zhou, & Xin, 2014). Njuguna's (2013) study revealed that if overall job satisfaction is high, then the perception of career plateau is lower. The study showed that career plateau leads to low motivation and low job satisfaction. Dawson's (2014) study also supports the idea that promotional opportunities influence the perception of whether a career plateau exists. Thus, the perception of promotability is high provided that employee job satisfaction also remains

high. Godshalk and Fender (2015) found that employees who are structurally plateaued for external reasons experienced low job satisfaction whilst employees structurally plateaued for internal reasons reported high job satisfaction. Lu and Wu (2014) found that career plateau has a negative effect on engagement.

Miles *et al*. (2013) further explain that employee perceptions of promotability in relation to career plateau are affected by job enrichment and motivation such as motivating employees by giving them more responsibility and variety in their jobs. Employees may view a job content plateau as a shortage of resources from the organisation and may react with negative job attitudes (Hurst *et al*., 2013). Research conducted by Hurst, Baranik, and Clark (2017), revealed that job content plateaus lead to more job dissatisfaction. According to Burke and Mikkelsen (2006), a career plateau is a critical managerial and organisation issue that must be managed properly to prevent discontent for employees. They examined the career plateau by comparing Norwegian police officers with fifteen years or more of service who had been promoted to those of the same experience level who have not. They found that plateaued officers also reported less favourable work outcomes. Salami (2010) also found that a career plateau had a negative influence on employees' work attitudes. Lu and Wu (2014) found that career plateau has a negative effect on engagement. According to Miles, Gordon, and Storlie (2013), it is imperative that organisations immediately address and promote programs for the career development of the employee talent pool in order to decrease the negative impact of plateauing.

Ference, Stoner, and Warren (1977) and Ramlal and Siva sree (2017) believe that a career plateau can have both a positive and a negative influence on employees. A plateau can be a positive influence upon an employee whereby she/he no longer faces uncertainty in the form of changing and/or increased responsibilities which may lead to contentment, security, and job comfort. This type of plateau is described as personal plateaus and is often self-determined by the employee. According to Clarke (2005), personal plateaus refer to a situation where an individual possesses the ability but no longer desire career growth. Ongori and Agolla (2009) indicate that researchers have found that some employees display the same level of productivity, are not bored and have high satisfaction with their jobs because learning new skills allows them to be better suited for career opportunities elsewhere. Researchers such as Evans and Gilbert (1984), Near (1980), and Palmero, Roger, and Tremblay (2001) found no significant difference between employees at a career plateau and those that were not yet plateaued. Most employees in public organisations understand the dynamics associated with civil service designations and tend to accept the status quo pertaining to their positions

(Re'em, 2011). The employees are grateful for their job ranks and promotion no longer serves as a motivational factor (Mafini & Diodlo, 2014).

Evans and Gilbert (1984) found no significant difference in terms of general satisfaction between respondents already at a career plateau and those who didn't reach this stage. Near (1980) conducted a study to tackle some common assumptions people have about plateaued employees such as these who are assumed to have lower job performance, lower motivation, and satisfaction. This study found that plateaued employees were neither less motivated nor less satisfied than their non-plateaued peers. In addition, they did not possess poorer attitudes or work behaviours. They did, however, rate their jobs as less challenging, less rewarding, and reported much lower career aspirations. The results found in a study conducted by Ugwu, Ezeh, and Ogbu (2015) showed that hierarchical plateauing was not significantly related to work engagement. This may be due to the lack of employment opportunities where, even though employees are plateaued, it may not significantly influence their work engagement behaviour as they are afraid of losing their jobs.

Thus, despite the dysfunctional effects of career plateauing, there is evidence to suggest that such negativities may lead to optimism from the perspective of employees (Salami, 2010). Since empirical studies have shown that career plateauing can have both positive and negative effects on employees, further research must be conducted especially because of its relevance to the SAPS. It is for this reason that the relationship between career plateauing and job satisfaction, motivation, and work engagement should be investigated in the present study.

1.1.2 Relationship between demographic variables and career plateauing, job satisfaction, motivation, and work engagement

The present research is also interested in demographic variables that may influence the external validity of the anticipated statistical relationship between individuals' experiences of career plateauing and their job satisfaction, motivation, and work engagement. More specifically, gender, age, race, marital status, rank, and tenure will be treated as control variables, in order to establish that these demographic variables do not influence the results, when investigating the relationship between the demographic variables and career plateauing experiences, job satisfaction, motivation, and work engagement.

Greenhaus *et al*. (2010) suggest that although a plateau can occur at any stage of a career, it is particularly relevant to employees older than 40. Brown-Wilson and Parry (2013) found that managers at mid-career level, at an average age of 50, are more prone to experiencing a

career plateau than their subordinates. Latack (1984) observed that a negative relationship exists between age and career mobility. According to Tremblay and Roger (1993), most studies have found that the greater the time spent working for the same organisation, and thus tenure or loyalty to this organisation, the lower the chances for promotion. Breaugh (2011) stated that one factor that has been linked negatively to promotability is job tenure, and individuals with greater job tenure are typically older. Also, women and older employees encounter obstacles in advancing in organisations. Studies of career plateau show that individuals who have reached a plateau have significantly more tenure than others (Gould & Penley, 1985). It can be deduced that older employees and those with long tenure have a lesser chance of being promoted which makes these groups of employees more susceptible to experiencing a career plateau.

Burke and Mikkelsen's (2006) study revealed that those who experienced a career plateau tended to be younger, had less police tenure and were more educated than their non-plateaued colleagues. These differences reflect that officers with longer tenure were more likely to be promoted which contradicts the research findings of Latack (1984), Tremblay and Roger (1993), Breaugh (2011), and Gould and Penley (1985). Vandrew (2012) found that employment longevity (ten years and more) lead to experiences of structural and personal plateaus, but not content plateaus due to significant work challenges and continued professional development. In terms of Vandrew's (2012) findings, it shows that even if employees are hierarchically/structurally plateaued, they can avoid a job content plateau if they are challenged and are continuously developed. Badiane's (2016) research indicated that there were no significant differences in gender for job contentment plateauing and hierarchical plateauing. Furthermore, a higher level of education decreases experiences of job content plateauing. Thus, group differences do exist in relation to career plateauing and should therefore be investigated in the current study.

Despite a vast amount of literature on this subject, no consensus has been reached on gender differences in job satisfaction (Kifle & Desta, 2012). According to Saner and Eyupoglu (2012), some studies have found that women experience higher levels of job satisfaction (Iroegbu, 2015), whereas others have yielded opposite results (Forgionne & Peeters, 1982; Marasinghe & Wijayaratne, 2018). Sirin (2009) indicated that female employees may experience greater job satisfaction because they have lower work expectations and aspirations since they are not usually fully responsible for the finances of the family. Iroegbu (2015) also stated that men are the main bread winners of the family and as such have more financial responsibilities and more work expectations therefore this could explain why women are more satisfied in their jobs. Results from Watanabe's (2010) study revealed that job satisfaction does not vary

significantly by gender or race. Rast and Tourani (2012) and Yapa, Rathnayake, Senanayake, and Premakumara (2014) found no significant difference between male and female employee's job satisfaction while Agbor, Ebeh, Nwankwo, and Agu (2014), El Badawy and Magdy (2015) and Nordin, Yusuf, Sadikin, and Desa's (2017) research results revealed that gender had no effect on job satisfaction.

Campbell (2011) discovered a weak relationship between race and job satisfaction. In contrast, Sarwar (2014) found that White women experience higher job satisfaction than Black women, and women of all other race groups. Studies indicating the relationship between race and job satisfaction within the South African context are, however, limited. An investigation by Erasmus (1998) found a difference in job satisfaction between White and African females whilst Bowen, Cattell, and Distelle r (2008) found no significant differences between Black and White employees in this regard. Buitendach and Rothmann (2009) and Beekhan (2012) found that Black employees experience lower levels of intrinsic job satisfaction than White employees. According to Sarwar (2014), other varaibles may impact on the job satisfaction of men, women, and race. For instance, there may be fewer job opportunities for minority women than minority men, minority women may earn lower salaries than minority men, and income is a significant predictor of job satisfaction for women (Sarwar, 2014).

Malik, Zaheer, Khan, and Ahmad (2010) found that a positive relationship exists between job satisfaction and tenure. Multilevel analyses revealed that people became less satisfied as their tenure within a given organisation increased, but as people grew older, and changed organisations, their satisfaction increased (Riza, Ganzach, & Liu, 2016). According to El Badawy and Magdy (2015), age does not affect job satisfaction. According to Sarwar (2014), age significantly affects job satisfaction for both men and women. Iroegbu (2015) found that employees who are 45 years and older experience higher levels of job satisfaction than younger employees. This may be due to older employees being in the establishment stage of their career and would not change jobs as they do not want to lose their retirement benefits. Also, older employees tend to occupy more managerial positions with better pay and allowances (Iroegbu, 2015). In contrast, Yapa et al. (2014) found that younger employees (20-40 years) were more satisfied than older employees (41-60 years). Beekhan's (2012) study showed that overall job satisfaction is not significantly different between the categories of age, tenure, race, and gender. Research by Yapa *et al*. (2014) showed that the level of education has no effect on job satisfaction, and that unmarried employees experienced higher job satisfaction than married employees. Wickramasinghe and Jayaweera (2010) found that married employees are more satisfied with their careers than those that are unmarried. Gudeta and Getachew's (2017) study showed a significant difference on job satisfaction among

different education levels and age groups. The above discussion regarding demographic variables in relation to job satisfaction shows that demographic variables have the potential to impact job satisfaction and should therefore be investigated in the present study.

A study conducted by Roberts (2005) at an insurance company in the Western Cape revealed that employees in the 41-50 age group reported lower levels of motivation than employees in the 30-year range which may be due to older employees' resistance to change in rapidly transforming work environments. Ng and Feldman (2012) also found that older employees are less motivated. Roberts' (2005) study showed that employees who had been working at the organisation for less than five years were the least motivated in terms of rewards and recognition. Also, married employees reported the lowest levels of motivation. Hitka and Balazova (2015) found no significant difference between motivation and the categories of tenure and level of education, however, there was a significant difference between motivation and age. Meyer and Braxton (2002), and Alduaij (2013) found no significant relationship between achievement motivation and age. Research conducted by Franks (2002) revealed significant differences along racial lines where organisational and personal factors motivates employees. Erwee (1986) found that Black students experience higher achievement motivation than White students. In contrast, Meyer and Braxton (2002) established that White South Africans have a significantly higher level of achievement motivation than Black South Africans (Meyer & Braxton, 2002). This may be the due to inadequate development and educational opportunities, and unfair discrimination however, performance motivation on occupational progress should also be considered (Meyer & Braxton, 2002). Beekhan's (2012) study also shows a significance difference amongst race groups with Black employees having the lowest mean score on achievement motivation. Even though South African organisations theoretically do not discriminate in terms of race, and career and educational opportunities are equally afforded to all race groups, individuals from previously disadvantaged communities still encounter the adverse effects of unemployment such as lack of education and poverty, unlike most of their White counterparts (Beekhan, 2012).

Studies conducted by Ufuophu-Biri and Iwu (2014) and Nazir, Qun, Yulin, Afzal, and Hui (2014) revealed that there is no significant difference between gender and motivation. Similarly, in a study conducted by Meyer and Braxton (2002) and Beekhan (2012), results showed no significant relationship between achievement motivation and gender in the South African context. In contrast, Alduaij (2013) found that male employees experience higher work motivation than female employees. Clark's (2010) study in Western Carolina in the United States, revealed that a statistically significant difference exists between males and females in achievement motivation. Gender and developmental level are key aspects in explaining

differences in achievement motivation (Clark, 2010). Gender differences were observed in overall and intrinsic as well as extrinsic motivations (Brouse, Basch, LeBlanc, McKnight, & Lei, 2010; Chen & Zhao, 2013). Yau, Kan, and Cheng (2011) found that intrinsic motivation for university students in Hong Kong is the same for both males and females. A study by Makki and Abid (2017) revealed that there is a significant difference between gender and intrinsic motivation, however, there is no significant difference between gender and extrinsic motivation. According to Schreuder and Theron (2001), there is a negative relationship between achievement motivation and tenure. The above research findings regarding demographic variables in relation to work motivation shows that the demographic variables have the potential to influence work motivation in different ways and should therefore be investigated in the current study.

Age and gender have often been linked to work engagement (Bezuidenhout & Cilliers, 2011; Burke & El-Kot, 2010). According to Ng and Feldman (2012), older workers are less engaged. In terms of age, Videnska (2013) and Freeney and Fellenz (2013) confirmed that work engagement increases with age. The study conducted by Haley, Mostert, and Els (2013) found that young and middle-aged employees in the South African financial sector experience higher levels of exhaustion compared to older employees, while older employees tend to be more dedicated. A plausible explanation for younger employees experiencing higher levels of exhaustion than their older counterparts could be that they have not yet developed adequate coping skills as they are just entering the workforce and do not have the necessary experience to deal with the challenges accompanying their new job (Brewer & Shapard, 2004). A possible reason for younger employees experiencing lower dedication levels than older employees could be that young employees are relatively new in the workplace and may not have had enough time to create a meaningful connection with the organisation (Haley *et al.*, 2013).

Wang, Liu, Zou, Hao, and Wu (2017) found that vigour, dedication, and absorption differed amongst age and gender groups but not for marital status. In terms of gender, Chinese female nurses' low level of work engagement were likely caused by adverse work characteristics. The high physical and psychological demands of nurses impact on their decreased vigour. In addition, there are inadequate rewards such as promotions, stability, respect, and income. Thus, this may decrease their dedication and absorption at work (Wang *et al.*, 2017). Dissimilarly, Mani (2011) and Videnska (2013) indicated that there is no significant relationship between gender and work engagement. Burke and El-Kot (2010) found that men and single employees displayed higher levels of work engagement. In contrast, Coetzee and de Villiers (2010) found that women experience higher levels of work engagement than their male counterparts. Highly educated employees tend to experience greater work engagement

(Innanen, Tolvanen, & Salmela-Aro, 2014; Xanthopoulou, Bakker, & Fischbach, 2013). According to Schaufeli and Bakker (2003), small differences exist in levels of engagement between occupational groups, but these are not of any practical significance. Managers and entrepreneurs display high levels of work engagement whilst police officers and blue-collar workers tend to show low levels of work engagement. The above discussion regarding demographic variables in terms of work engagement shows that the demographic variables impact work engagement in diverse ways and should therefore be investigated in the present study.

1.1.3 The research hypotheses

Based on the background and motivation for the current study, the following research hypotheses will be addressed:

- The elements of the theoretical framework for career plateauing can be operationalised into a valid and reliable career plateauing experiences scale (CPES).
- There is a statistically significant interrelationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement.
- Individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement.
- There is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.
- Gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement.
- Individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement.

It should be noted that only overarching research hypotheses were stated in order to achieve the overall aim of the doctoral study. The doctoral study deals with various variables to address the complexity of analysis required for a thesis. For reasons of parsimony, the overarching research hypotheses were more suitable for achieving the overall purpose of the doctoral research rather than the micro-level research hypotheses that one would expect in a research article.

1.2 PROBLEM STATEMENT

The discussion on the relationship between career plateauing, job satisfaction, motivation, and work engagement has revealed that, although many studies have been conducted on career plateauing, the focus has been on the effect of career plateauing on job satisfaction and motivation. Previous research has also focused on each of the concepts of career plateauing, job satisfaction, motivation, and work engagement separately or in relation to other variables. The focus of recent studies on career plateauing has mainly been on job satisfaction (Godshalk & Fender, 2015; Herbst-Bergin, 2014; Hurst *et al*., 2016; Tabarsa & Nazari, 2016; Xie *et al*., 2014; Yang, 2016) and turnover intention (Herbst-Bergin, 2014; Omar, Anuar, Salleh, & Yaakop, 2014; Tabarsa & Nazari, 2016; Yang, 2016) with limited research on career plateauing focussing on work engagement (Lu & Wu, 2014; Ugwu *et al*., 2015) and motivation (Godshalk & Fender, 2015). Currently, there are international career plateau scales such as that of Bardwick (1986) and Milliman (1992). However, as Yang (2016) has indicated, hierarchical plateau is most commonly investigated whilst job content plateau is studied alongside hierarchical plateau in recent studies because of its increasing impact on both employees and organisations.

Herbst-Bergin (2014) incorporated four career plateau typologies (structural, job content, double, and professional plateau) in the career plateau scale whereas Xie *et al*. (2014) utilised hierarchical, job content, and inclusive plateau. Both Su, Kuo, Cheung, Hung, Lu, and Cheng (2017) and Yang (2016) included hierarchical/structural and job content plateau in the career plateau scale. Lee, Song, and Kim (2016) and Omar, Anuar, Salleh, and Yaakop (2014) used only hierarchical/structural plateau whilst Jiang (2016) and Tabarsa and Nazari (2016) used only job content plateau in the career plateau scale. Reflecting on the scales that have been developed and used thus far, it does not incorporate the elements of maintenance (pleasantly plateaued) and psychological plateau which are pertinent to career plateauing in the current study. Incorporating these two additional elements together with hierarchical/structural and job content plateau allows for a more comprehensive insight into the state of mind of employees when they are exposed to different types of career plateaus and how this ultimately affects their experience of work-related variables such as job satisfaction, motivation, and work engagement. This extra awareness provided by the psychological plateau and maintenance plateau will be able to better determine employees' experience of these work-related variables. For instance, if an employee experiences a maintenance plateau (pleasantly plateaued), they will still be satisfied, motivated and engaged in their work as opposed to an employee who experiences a psychological plateau.

What appears to be lacking in the conceptualisations of career plateauing are the psychological feelings of plateauing. In the context of the present study, psychological plateauing relates to the feelings individuals experience as a result of a job content plateau and a hierarchical/structural plateau, especially in settings which afford little opportunity for upward promotion such as in the SAPS. Job content plateaus and hierarchical/structural plateaus generally relate to feelings of dissatisfaction with job contentment due to a lack of challenging assignments and new initiatives (job content plateau) and the lack of career advancement and upward promotion in the hierarchy (hierarchical/structural plateau). Psychologically, individuals may become disillusioned by the job, feel uninspired and lose their passion for the current job (psychological plateau). Individuals who experience a maintenance plateau generally feel satisfied in their current job and are not concerned with promotions at the present stage of their lives (that is, they are pleasantly plateaued). High maintenance plateau is likely to be associated with lower levels of psychological plateauing. The researcher's conceptualisation of the psychological plateau is based on Hall's (1997) view of the career plateaued employee as someone whose productivity is constant (maintenance plateau) or has declined over a period of time as a result of a lack of motivation by the current job (psychological plateau and job content plateau).

This study aims to develop a scale that measures not only the two classical forms of career plateau (job content and hierarchical/structural) but also the less-researched forms of plateauing, namely maintenance plateau and psychological plateau in order to have a holistic scale measuring all four types of plateaus. The two latter forms of plateau relate specifically to job satisfaction and work engagement, which seems to be less researched in the career plateauing context. The maintenance plateau and psychological plateau syndromes may be especially relevant to the SAPS setting due to few opportunities for upward mobility. It is important to assess how these two forms manifest in this setting, and how the constructs relate to employees' job satisfaction, motivation, and work engagement. Furthermore, there appears to be limited research on career plateauing in the post-apartheid context of the SAPS. Thus, the sample was selected from the SAPS because of its relevance to the current study. Therefore, the aim of this study is to focus on empirically investigating the relationship between career plateauing, job satisfaction, motivation, and work engagement in an effort to promote a better understanding of these concepts amongst industrial and organisational psychologists and human resource professionals. The findings of this study may assist organisations in positively contributing to the career development of employees with regard to career plateauing, job satisfaction, motivation, and work engagement.

Moreover, as discussed in the background section, the demographic variables of gender, age, race, marital status, rank, and tenure are under-researched in the context of career plateauing, and especially in the South African context. Understanding the differences on career plateauing, job satisfaction, motivation and work engagement among these groups may further enlighten career development interventions and help to addres the unique needs of these groups.

The problem statement leads to the formulation of the following general research question that requires further research:

What are the theoretical elements of career plateauing and how can these be operationalised into a valid and reliable measure of career plateauing? To what extent do individuals' experiences of career plateauing predict their job satisfaction, motivation, and work engagement? Are these subjective work experiences of individuals influenced by their gender, age, race, marital status, rank, and tenure?

From the above, the following specific research questions arise in terms of the literature review and the empirical study:

1.2.1 Research questions from the literature review

Research question 1: What is the nature and theoretical elements of career plateauing and how do these relate to staff members' career development in the South African Police Service?

Research question 2: How are job satisfaction, motivation, and work engagement conceptualised and explained by theoretical models in the literature?

Research question 3: What is the nature of the theoretical relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement and how can this relationship be explained in terms of an integrated theoretical model?

Research question 4: How do individuals' biographical characteristics gender, age, race, marital status, rank, and tenure influence their career plateauing, job satisfaction, motivation, and work engagement?

Research question 5: What are the implications of the theoretical relationship for career development practices in the South African Police Service?

1.2.2 Research questions regarding the empirical study

Research question 1: How can the elements of the theoretical framework for career plateauing empirically be operationalised into a valid and reliable career plateauing experiences scale (CPES)?

> ***Sub-question 1.1:*** What are the psychometric properties (internal consistency reliability and construct validity) of the newly developed career plateauing experiences scale (CPES)?
>
> ***Sub-question 1.2:*** What is the nature of the interrelationships between the sub-scale dimensions of the career plateauing experiences scale (CPES)?

Research question 2: What is the direction and magnitude of the statistical inter-relationships between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the South African Police Service context?

Research question 3: Do individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement?

Research question 4: Is there a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model?

The biographical variables of gender, age, race, marital status, rank, and tenure will be treated as control variables in the study. The following research questions are posed:

Research question 5: Do gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement?

Research question 6: Do individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, and work engagement?

Research question 7: What recommendations can be formulated for industrial and organisational psychologists and human resource professionals for career development

practices in the South African Police Service and what suggestions can be made for future research in the field?

1.3 AIMS OF THE STUDY

From the above research questions, the following aims are formulate

1.3.1 General aims of the research

The general aim of the research is to develop a valid and reliable measure of career plateauing and to determine whether individuals' experiences of career plateauing (as antecedent) positively or negatively predict their job satisfaction, motivation, and work engagement (as consequences). The research further aims to investigate whether individuals' gender, age, race, marital status, rank, and tenure significantly influence their subjective work experiences (career plateauing, job satisfaction, motivation, and work engagement).

1.3.2 Specific aims of the study

The following specific aims have been formulated for the literature review and empirical study:

1.3.2.1 Literature review

Research aim 1: To establish the nature and theoretical elements of career plateauing and critically evaluate the implications for staff members' career development in the South African Police Service.

Research aim 2: To conceptualise job satisfaction, motivation, and work engagement from a theoretical perspective.

Research aim 3: To conceptualise the theoretical relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement and to explain this relationship in terms of an integrated theoretical model.

Research aim 4: To conceptualise the influence of individuals' biographical characteristics (gender, age, race, marital status, rank, and tenure) on their career plateauing, job satisfaction, motivation, and work engagement.

Research aim 5: To conceptualise the implications of the theoretical relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement for career development in the South African Police Service.

1.3.2.2 Empirical study

Research aim 1: To operationalise the elements of the theoretical framework for career plateauing empirically into a valid and reliable career plateauing experiences scale (CPES).

> ***Sub-aim 1.1*:** To assess the psychometric properties (internal consistency reliability and construct validity) of the newly developed career plateauing experiences scale (CPES).
>
> ***Sub-aim 1.2*:** To assess the nature of the interrelationships between the sub-scale dimensions of the career plateauing experiences scale (CPES).

Research aim 2: To assess the direction and magnitude of the statistical inter-relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the South African Police Services context.

Research aim 3: To assess whether individual experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement.

Research aim 4: To assess if there is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

Research aim 5: To assess whether gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement.

Research aim 6: To assess whether individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement.

Research aim 7: To formulate recommendations for industrial and organisational psychologists and human resource professionals for career development practices in the South African Police Service and to make suggestions for future research in the field.

1.4 STATEMENT OF SIGNIFICANCE

As presented in the problem statement, various studies on career plateauing have extensively addressed the relationship between variables such as job satisfaction and motivation. However, there seems to be a paucity in research on career plateauing in the SAPS. Despite the fact that concepts of career plateauing, job satisfaction, motivation, and work engagement have been researched, it has been done either separately or in relation to other variables. Moreover, a measure of career plateauing does not presently exist in South African research that addresses the unique and limited career progression structures of the country's police service. This study will attempt to discover if a relationship exists between career plateauing, job satisfaction, motivation, and work engagement.

1.4.1 Potential contribution on a theoretical level

The contribution of this study on a theoretical level lies in firstly identifying the theoretical elements of career plateauing to construct a career plateauing experiences scale (CPES) and, secondly, in identifying the relationship between career plateauing, job satisfaction, motivation, and work engagement. If the findings are significant, the results can be used to formulate recommendations to assist organisations with employees' career development. The study will contribute to theory on careers by providing more insight into how career plateauing impacts on job satisfaction, motivation, and work engagement and subsequently on the careers of individuals.

1.4.2 Potential contribution on an empirical level

On an empirical level, this study can provide valuable contributions by making recommendations based on empirically testing and operationalising the theoretical elements of career plateauing into a reliable and valid measurement scale. The newly developed career plateauing experiences scale (CPES) can then be used to assess the direction and magnitude of the statistical inter-relationship between career plateauing, job satisfaction, motivation, and work engagement. The usefulness of these recommendations will depend on the significance of the relationships that emerge between the variables of this study.

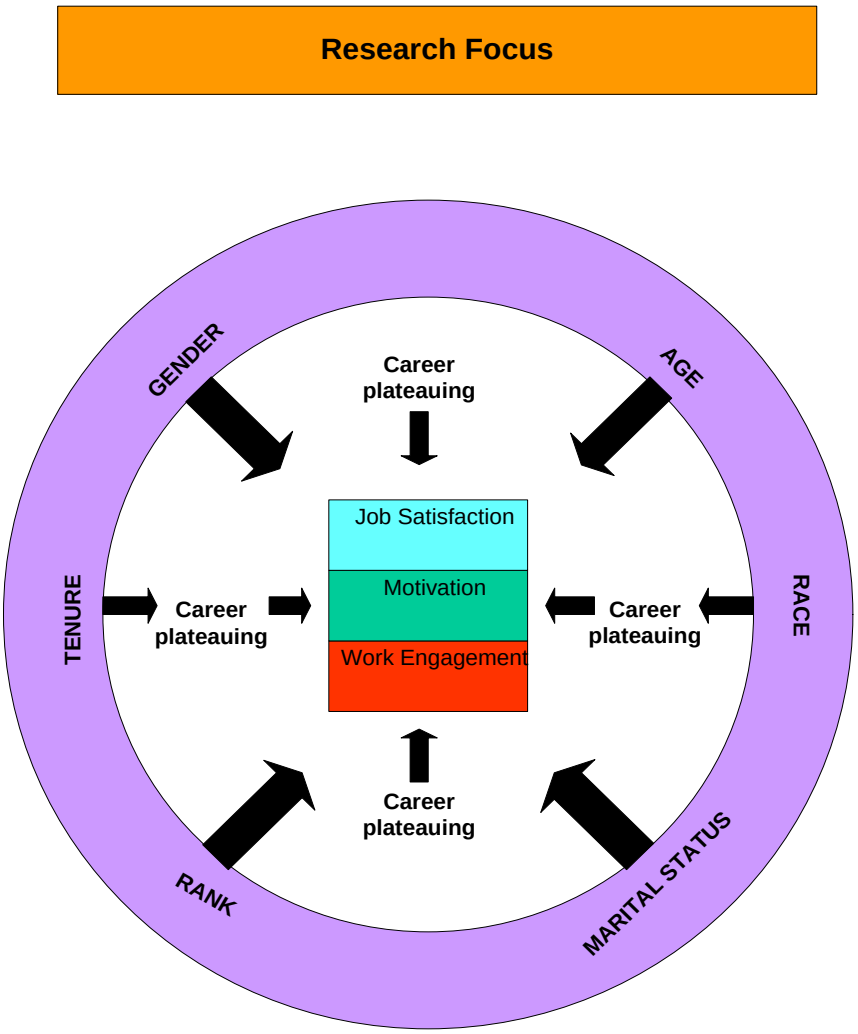
Furthermore, the study will take into account the cultural and generational diversity of the workforce in the SAPS by empirically investigating whether individuals from different gender, age, race, marital status, rank, and tenure differ with regard to career plateauing, job

satisfaction, motivation, and work engagement. The diversity of the SAPS workforce will be considered by identifying differences in employees in terms of their biographical variables thereby enhancing the pertinence of the recommendations put forward.

1.4.3 Potential contribution on a practical level

On a practical level, this study can potentially promote a better understanding of the concepts of career plateauing, job satisfaction, motivation, and work engagement as well as the relationship that may exist between these concepts, amongst industrial and organisational psychologists and human resource professionals. If relationships are found between these concepts, the study will assist in guiding the direction of career development practices and the content of career development programmes in the SAPS. Also, job satisfaction, motivation, and work engagement can serve as significant outcomes of career plateauing, and they can be used as important tools to diagnose problems individuals may encounter in their career development. The empirically tested newly developed career plateauing experiences scale (CPES) may be used for future research and assessment in the SAPS especially in terms of the under-researched concepts of psychological plateau and maintenance plateau. This will support the significance of conducting such a study. The outcome of the research may add to existing research and future research on career development. This study is one of the first to investigate the relationship between career plateauing, job satisfaction, motivation, and work engagement especially within the SAPS. Figure 1.1 illustrates the research focus of the study.

Figure 1.1 *The Research Focus*



1.5 THE RESEARCH MODEL

This study will adopt the classical research model framework proposed by Mouton and Marais (1996). This model is based on the five dimensions of social science research, namely, the sociological (research is a joint or collaborative activity), ontological (research is always directed at an aspect or aspects of social reality), teleological (research is goal-directed and aims at explaining phenomena), epistemological (research aims to gain understanding and provide valid and reliable findings) and methodological dimensions (refers to the manner in which scientific methodologies are used in research) which are aspects of one and the same process of research (Mouton and Marais, 1996). The paradigm perspective of the research will be explained and thereafter the research model will be described in detail.

1.6 PARADIGM PERSPECTIVE OF THE RESEARCH

According to Mouton and Marais (1996), a paradigm is a collection of meta-theoretical, theoretical and methodological beliefs from a particular field. It guides the particular assumptions about the nature, domain, and structure underlying the theories and models within the chosen discipline for the research to be conducted. The proposed study will be conducted in the field of Industrial and Organisational Psychology.

1.6.1 The intellectual climate

Thematically, the constructs of career plateauing, job satisfaction, motivation, and work engagement are relevant to this study. The literature review will be presented from the humanistic paradigm and open systems paradigm, while the empirical study will be presented from the perspective of the positivist research paradigm.

1.6.1.1 Literature review

The basic assumptions underlying the humanistic paradigm, according to Meyer, Moore, and Viljoen (2008) include the notion that an individual is a dignified human being with qualities that distinguishes her/him from animals and other lifeless objects; people are basically good and any behaviour to the contrary can be attributed to environmental influences; the individual is an integrated whole; individuals are active beings responsible for their lives and the decisions they make and; individuals possess conscious processes which dictate their decisions. In terms of the humanistic paradigm, this study will not only focus on individual perspectives but will also consider the views of individuals as a whole (Viljoen, 2008). Thematically, the humanistic paradigm is pertinent to this study and the constructs of career plateauing, job satisfaction, motivation, and work engagement as it assumes that individuals are able to make their own decisions about their satisfaction and commitment to an organisation, and whether they will decide to leave and join another organisation.

According to the open systems approach (Lawson, Andersen, & Rudiger, 2013), the actions of organisations can be understood only when observed within the context in which these actions were generated. The systems approach traces the origins of a problem and the surrounding context as well as focuses on the problem itself, thus going beyond the linear or cause and effect that isolates organisational systems from each other and their context (Lawson *et al*., 2013). The open systems approach highlights the need to define objectives in

terms of the environment and maintains that the organisation, as an open system, must constantly adapt to changes in the environment. In order to ensure survival and growth, an open system must be in constant interaction with its environment where input is received from the environment and output is disseminated to the environment (Barnes, Fogg, Stephens, & Titman, 2013). In this study, the focus is on the career behaviour of individuals or groups (subsystems) with varied levels of job satisfaction, motivation, and engagement in their work to produce the organisation's outputs (e.g. career development and organisational effectiveness).

1.6.1.2 The empirical study

The empirical research on career plateauing, job satisfaction, motivation, and work engagement will be presented from the perspective of the positivist research paradigm. According to Flick (2015), the core aspect of positivism is that research is based on being objective where the research situation is regarded as being independent of the individual researchers collecting and analysing the data. The starting point of research is the collection of facts from which theories can be inductively deduced. Thus, research is standardised and aims for accurate representation of what is being studied, making random sample the ideal choice. Research is free of values and strives towards scientific statements avoiding normative and evaluative statements (Flick, 2015). Thematically, in this quantitative study, the researcher will take a detached stance and will objectively investigate the relationship between career plateauing, job satisfaction, motivation, and work engagement.

1.6.2 The market of intellectual resources

Mouton and Marais (1996) describe the market of intellectual resources as a collection of beliefs that have a direct bearing on the epistemic status of scientific statements. Theoretical beliefs about the nature and structure of phenomena, and methodological beliefs about the nature and structure of the research process are the two main types of market of intellectual resources. This research will present the meta-theoretical statements and conceptual descriptions of career plateauing, job satisfaction, motivation, and work engagement. The central hypothesis as well as the theoretical and methodological assumptions will be discussed.

1.6.2.1 Meta-theoretical statements

Any meta-theoretical statement or world view may include different schools of thought, which are described as different ways of approaching and studying a shared reality or world view (Morgan, 1980). In this study, the discipline of Industrial and Organisational Psychology forms the definitive boundary of the study.

Industrial and Organisational Psychology is a sub-discipline of psychology that applies the principles of psychology to the workplace. Industrial and Organisational Psychology applies research findings so that the work being performed with organisations will be of high quality thereby enhancing an organisation's effectiveness (Aamodt, 2010). Although the field itself is relatively new, its subject matter is not. The construction, management, and leadership of groups of people to accomplish work that one person cannot do alone, has been part of cultural groups for many millennia (Lawson *et al*., 2013). Thematically, this study will provide an understanding of career development within the SAPS work environment by applying the constructs of career plateauing, job satisfaction, motivation, and work engagement in organisational context.

1.6.2.2 Conceptual descriptions

The following conceptual descriptions are relevant for this study:

(a) Career plateauing

For the purposes of this study, career plateauing will be defined as a situation where (1) further hierarchical career advancement becomes unlikely (hierarchical/structural plateau), (2) the employee has learnt everything pertaining to the job and experiences no further challenges (job content plateau), (3) the employee feels satisfied with the current job (maintenance plateau), and (4) the employee feels dissatisfied, disillusioned, and uninspired by the current job (psychological plateau) as measured by the newly developed career plateauing experiences scale (CPES). Super's (1957) developmental theory and career stage theory, Levinson, Darrow, Klein, Levinson, and McKee's (1978) theory of career development, and Bardwick's (1986) model of career plateau will be applicable to the present study.

(b) Job satisfaction

The conceptualisation of Locke (1976) will be applied to this study. Locke (1976) views job satisfaction as a positive emotional state arising from an appraisal of one's job. This definition

by Locke is the most used research definition of job satisfaction (Rehman & Waheed, 2011). Locke (1976) mentioned that common aspects of job satisfaction were work, pay, promotions, recognition, benefits, working conditions, and co-workers. Locke's (1976) definition of job satisfaction is applicable as the core definition for the current study and will be measured by Weiss, Dawis, England, and Lofquist's (1967) Minnesota satisfaction questionnaire (MSQ). Herzberg's (1966) two-factor theory will also apply to this study.

(c) Motivation

The conceptualisation of Lee (2010) applies to this study. Lee (2010) describes motivation as a drive to achieve targets and as a process to maintain that drive. More specific to this study is the concept of achievement motivation which is an internal psychological drive that enables individuals to pursue work that they find valuable and drives them to attain their goals whilst simultaneously competing and comparing themselves with others (Lee, 2010). Achievement motivation refers to the tendency to work hard to meet personal standards and to attain goals within one's social environment (Ziegler, Schmukle, Egloff, & Buhner 2010). This will be measured by Pottas, Erwee, Boshoff, and Lessing's (1988) achievement motivation questionnaire (AMQ). McClelland's (1976) achievement motivation theory will also be applicable to this study.

(d) Work engagement

For the purposes of this study the well-validated definition of work engagement developed by Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002) will be used whereby engagement is defined as a positive, fulfilling, work related state of mind that is characterised by vigour, dedication, and absorption and will be measured by the Utrecht work engagement scale (UWES). The job demands-resources (JD-R) model (Bakker & Demerouti, 2007; Demerouti, Nachreiner, Bakker, & Schaufeli, 2001) will apply to the present study.

1.6.2.3 Central hypothesis

The central hypothesis of this study can be formulated as follows:

The theoretical elements of career plateauing can be operationalised into a reliable and valid scale that can be used to assess whether a relationship exists between career plateauing, job satisfaction, motivation, and work engagement. Furthermore, individuals with different biographical characteristics (gender, age, race, marital status, rank, and tenure) differ significantly regarding career plateauing, job satisfaction, motivation, and work engagement.

1.6.2.4 Theoretical assumptions

The following theoretical assumptions will be addressed in the present research:

- There is a need to develop a scale to measure career plateauing in the SAPS context.
- There is a need to empirically clarify the influence of career plateauing on job satisfaction, motivation, and work engagement, and to explain this relationship in terms of an integrated model.
- Biographical factors (gender, age, race, marital status, rank, and tenure) may influence career plateauing, job satisfaction, motivation, and work engagement.
- Insight into an individual's career plateauing, job satisfaction, motivation, and work engagement will provide a better understanding of factors that may impact on career development.
- Research needs to provide elements for recommendations pertaining to the relationship between career plateauing, job satisfaction, motivation, and work engagement.

1.6.2.5 Methodological assumptions

Methodological beliefs are views pertaining to the nature of social science and scientific research. Methodological beliefs tend to be no more than methodological preferences, assumptions, and presuppositions about what should constitute good research. A direct link exists between methodological beliefs and the epistemic status of research findings (Mouton & Marais, 1996). The methodological convictions that are applicable to this study are described below.

(a) Sociological dimension

The sociological dimension describes scientific research as a joint or collaborative activity. The social nature of research is viewed as a typical human activity. It also emphasises the existence of networks or research communities, mechanisms of social control, issues of research ethics, and the influence of ideologies and interests (Mouton & Marais, 1996). In this study, human activity will be investigated using quantitative methods, and the researcher will maintain professionalism at all times as well as ensuring that respondents are awarded confidentiality.

(b) Ontological dimension

In the ontological dimension, research in the social sciences is always directed at an aspect or aspects of social reality referred to as the research domain of the social sciences. The research domain includes aspects such as human activities, characteristics, institutions, behaviour, and products. This diversity permits different perspectives on the nature of the research domain and, very often, a substantive degree of overlap exists between the various theoretical orientations, models, and methodologies (Mouton & Marais, 1996). This study focuses on the measurement of human behaviour within the SAPS work environment.

(c) Teleological dimension

The teleological dimension refers to social science as intentional and goal-directed with the aim of understanding phenomena. Theoretical goals are exploratory, descriptive, or explanatory and are directed at understanding human behaviour to gain insight into social reality. Practical goals seek to improve quality of life (Mouton & Marais, 1996). The theoretical goal of this study is to provide a better understanding of career plateauing, job satisfaction, motivation, and work engagement by examining the relationship between these constructs subsequently contributing to existing knowledge in the field of Industrial and Organisational Psychology. The practical goal of this study is to provide valuable information that will improve the quality of working life.

(d) Epistemological dimension

The epistemological dimension aims to not only gain an understanding of phenomena but to also provide a valid and reliable understanding of reality (Mouton & Marais, 1996). This research will attempt to produce valid and reliable results by using a good research design.

(e) Methodological dimension

The methodological dimension refers to how social sciences research is carried out. It regards research in the social sciences as objective by virtue of it being critical, balanced, unbiased, systematic, and controllable (Mouton & Marais, 1996). The present study will conduct quantitative research, which is objective, through the use of questionnaires.

1.7 RESEARCH DESIGN

According to Mouton (2001), a research design is a plan of how the researcher is going to collect and analyse data in order to maximise the internal and external validity of the research results. The aim of the research design is to ensure that it is possible to provide answers for

the research question and to keep the conditions of the study constant so that different responses of participants can be attributed to individual differences and not because they were asked the same question in different ways (Flick, 2015). The types of research design conducted will be discussed, followed by a discussion on validity and reliability.

1.7.1 Exploratory research

The aim of exploratory studies is the exploration of a relatively unknown area through gaining new insights into phenomena; undertaking preliminary investigations; establishing central concepts and constructs; determining future research priorities and; developing new hypotheses (Mouton & Marais, 1996). This study is exploratory in nature as it compares various theoretical perspectives on career plateauing, job satisfaction, motivation, and work engagement. Quantitative methods will be used to explore the possible relationships between the different constructs and to gain new insight into the relationships that may exist among them.

1.7.2 Descriptive research

Descriptive studies are conducted to gather information about a population's needs, experiences, or behaviours in order to provide a particular intervention (Reynolds & Guest, 2015). Mouton and Marais (1996) state that the key aspect of descriptive studies is to collect accurate data on the phenomena in the research domain. Since this study is aimed at exploring the relationship that may exist between the different constructs it is appropriate to use a descriptive study.

In the literature review, descriptive research applies to the conceptualisation of the constructs of career plateauing, job satisfaction, motivation, and work engagement. In the empirical study, descriptive research applies to the means, standard deviations, and Cronbach's internal consistency reliability and composite reliability of the construct measures of career plateauing, job satisfaction, motivation, and work engagement.

1.7.3 Explanatory research

The main aim of explanatory studies is to indicate causality between variables or events. It attempts to explain phenomena in terms of specific causes (Mouton & Marais, 1996). The empirical part of this study is explanatory in nature because the scores obtained by the

research subjects on career plateauing, job satisfaction, motivation, and work engagement will explain the relationship between these variables. Due to the cross-sectional nature of the research, the focus will not be on establishing cause and effect, but rather to establish the nature, direction, and magnitude of the relationship between the variables. Cross-sectional research is warranted because of the exploratory nature of the research on the relatively unknown phenomenon, namely the relationship dynamics between the constructs of a newly developed career plateauing scale and the three constructs of job satisfaction, motivation, and work engagement.

1.7.4 Validity

Internal and external validity are assessed for research designs. Internal validity refers to the extent to which the findings of a study can be analysed unambiguously. External validity refers to whether the research findings can be transferred to other situations and individuals (Flick, 2015).

1.7.4.1 Validity regarding the literature

In terms of the literature, the study will ensure validity by presenting the literature review logically and systematically, utilising the most recent sources with relevant theories and models, although a number of the classical and contemporary mainstream research streams will also be referred to because of their relevance to the conceptualisation of the constructs relevant to this research.

1.7.4.2 Validity regarding the empirical research

The validity of the empirical research in this study will be ensured by using appropriate and standardised measuring instruments. Validity will be determined by how accurate and useful the instrument is. The measuring instruments will be critically examined for their face validity, content validity, criterion-related validity, and construct validity.

Face validity judges whether, upon superficial inspection, a measure appears to measure what it claims to measure (Patten, 2018). Face validity is tested during pilot testing when the researcher makes use of a panel of experts and a small group of people to pilot test the questionnaire to determine if the questionnaire makes sense (Saunders, Lewis, & Thornhill, 2016). According to Jimenez *et al.* (2016), face validity is important for scale development research as it concentrates on consistency and guidance pertaining to item retention during the expert judging. After analysis of the data from the scale development, the application of

different decision rules to use for item retention is important. New, altered, or previously unexamined scale items, should at least be judged for face validity (Jimenez *et al.*, 2016). In the current study, subject matter experts confirmed the face validity of the CPES as an indicator of the scale's content validity**.**

According to Howitt and Cramer (2017), good content validity stems from the cautious development of a wide range of items. The items are grouped together to reveal a broad array of aspects of the concept being investigated. Thereafter, potential items are produced for inclusion through various means such as the research literature, interviewing individuals similar to potential participants, and established theory in the field (Howitt & Cramer, 2017). The components of the CPES and the statements of the questionnaire are substantiated by the content of the literature review. Content validity is tested during the development of the CPES by providing details on item generation, item development, item refinement and evaluation. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were also applied to the CPES to verify its content validity.

Criterion-related validity is tested when researchers make deliberate comparisons to check whether a measure yields scores that relate to a particular criterion (Patten, 2018). Criterion-related validity is not applicable to the current study, however, it is recommended that future cross-validation studies investigate the criterion-related validity of the CPES.

Construct validity is the "extent to which your measurement questions actually measure the presence of those constructs you intended them to measure" (Saunders *et al.*, 2016:373). Construct validity refers to the amalgation of observed variables that are related to the same latent variable (convergent validity) and separation of observed variables from one another that are related to other latent variables (discriminant validity) (Civelek, 2018). In order to establish the construct validity of a measure, researchers start by hypothesising the components that make up the construct they intend to measure (Patten, 2018). The current study evaluated the structural validity of the CPES and the manner in which convergent and discriminant validity manifested in terms of the structure that arose from the CFA analysis.

Internal validity strives to demonstrate that the explanation of a particular event, issue or set of data which a particular research provides, can be sustained by the data. Thus, the findings must accurately describe the phenomena being researched (Cohen, Manion, & Morrison, 2011). External validity refers to the extent to which the research results can be generalised to the wider population, cases, settings, times or situations, i.e. to the transferability of the findings from a sample to a population (Cohen *et al*., 2011).

Internal validity will also be ensured by minimising selection bias. A large as possible sample will be chosen to offset the effects of extraneous variables. The questionnaires will include standard instructions and information to all participants, whilst the statistical procedures will control for biographical variables. External validity will be ensured by the results being relevant only to employees who are permanently employed in the SAPS. Targeting the total population of employees in the SAPS will help to increase the generalisability of the results to the targeted population.

1.7.5 Reliability

Mouton and Marais (1996) state that the central consideration of validity relating to collecting data is that of reliability which requires that the application of a valid measuring instrument for different groups and under different circumstances should yield the same observations. Reliability is concerned with stability and consistency and refers to whether a particular measuring technique (instrument), applied repeatedly to the same object, would yield the same result each time (Babbie, 2010). In this study, the reliability of the literature review will be addressed by making sure that other researchers will have access to the literature sources. The reliability of the empirical study will be ensured by using a representative sample and by using measuring instruments that have been proven by being successfully used in previous studies. Cronbach's alpha and composite reliability coefficient will be used to indicate the internal consistency reliability of the questionnaires. Appropriate statistical techniques that are congruent with the aims of this research will be used to analyse the data.

1.7.6 The unit of research

According to Babbie (2010), units of analysis are people or things that we observe or examine in order to create summary descriptions of all such units and to explain differences among them. Typically, the unit of analysis in social research is the individual, but it may also be a group, organisation, social interaction, or a social artefact which are distinguished by characteristics, orientations, and actions. In the present study, the unit of analysis for the individual assessments, is the individual. The unit of analysis for determining the relationship between career plateauing, job satisfaction, motivation, and work engagement is the group. The unit of analysis for examining the influence of biographical variables (gender, age, race, marital status, rank, and tenure) on career plateauing, job satisfaction, motivation, and work engagement is the sub-group.

1.7.7 The variables

Babbie (2010) defines variables as logical groupings of attributes and distinguishes between independent and dependent variables. A dependent variable is a variable whose values are not problematic in an analysis and is presumed to cause or determine a dependent variable. A dependent variable is assumed to depend on or be caused by an independent variable (Babbie, 2010). For the present research, the following variables are the focus of the study:

- Career plateauing (independent variable) and job satisfaction (dependent variable)
- Career plateauing (independent variable) and motivation (dependent variable)
- Career plateauing (independent variable) and work engagement (dependent variable)
- Biographical variables (gender, age, race, marital status, rank, and tenure) (independent variables) and career plateauing, job satisfaction, motivation, and work engagement (dependent variables)

1.7.8 Delimitations

The present study is restricted because it focuses on the relationship between the four core variables, namely career plateauing, job satisfaction, motivation, and work engagement in a single research setting therefore the research findings cannot be generalised but only applicable to the study's current setting. The study only focuses on investigating whether there is a relationship between career plateauing, job satisfaction, motivation, and work engagement, and whether these constructs are influenced by gender, age, race, marital status, rank, and tenure. If this study produces results that are not part of the main aim of this study, such information can be used for future research.

No attempt is made to manipulate or classify any of the information, results, or data based on family or spiritual background. Also not included in any classification process are the factors of disability, or physical or psychological illness. The study is intended to be breaking new ground and original research that restricts its focus to the relationship between career plateauing, job satisfaction, motivation, and work engagement in a single study. If the researcher can identify such a relationship, then the groundwork information could be useful to future researchers to address other issues relating to the four constructs in longitudinal studies. The selected research approach is not intended to establish the cause and effect of the relationship, but merely endeavour to investigate whether such relationships do in fact exist and whether the relationship between career plateauing, job satisfaction, motivation, and

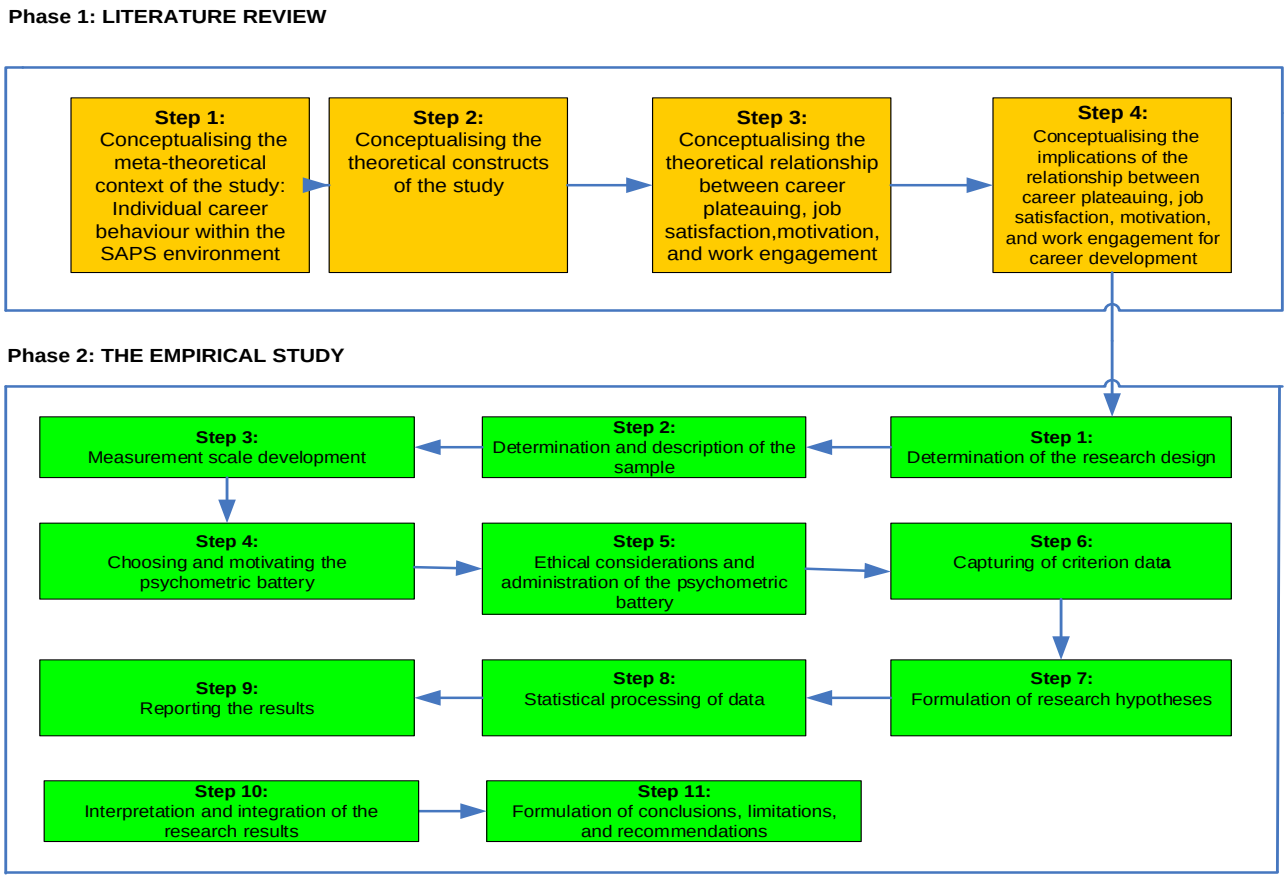
work engagement is influenced by variables such as gender, age, race, marital status, rank, and tenure.

The cross-sectional quantitative research design of the present study is limited to a measurement of the research variables at a specific point in time in a single research setting. Cross-sectional quantitative research designs do not allow for the repetitive measurement of research variables over a period of time so that time series or trend analyses can be produced for documenting long-term changes (Flick, 2015). This aspect of the research design will be considered in the interpretation of the results.

1.8 RESEARCH METHOD

The research will be conducted in two phases. The first phase will comprise of the literature review and the second phase will consist of an empirical study, as illustrated in figure 1.2.

Figure 1.2 *Overview of the Research Methodology*



1.8.1 Phase 1: literature review

The literature review will consist of a discussion of career plateauing, job satisfaction, motivation, and work engagement with attention focused on the subjective experiences of employees within the SAPS environment.

Step 1: conceptualising the meta-theoretical context of the study: Individual career behaviour within the SAPS environment.

Chapter 2 will conceptualise career behaviour within the SAPS environment and in a career development context.

Step 2: conceptualising the theoretical constructs of the study.

Chapter 3 and 4 will conceptualise the constructs of career plateauing, job satisfaction, motivation, and work engagement from a theoretical perspective and critically evaluate the implications for career development within the SAPS environment. The influence of demographic variables on these constructs will also be conceptualised.

Step 3: conceptualising the theoretical relationship between career plateauing, job satisfaction, motivation, and work engagement.

Chapter 4 includes conceptualising the theoretical elements of the career plateauing experiences scale (CPES) and the integration of the hypothetical theoretical relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement.

Step 4: conceptualising the implications of the relationship between career plateauing, job satisfaction, motivation, and work engagement for career development.

In chapter 4, the relationship between career plateauing, job satisfaction, motivation, and work engagement and its implications for career development practices for the discipline of Industrial and Organisational Psychology will be discussed.

1.8.2 Phase 2: empirical study

An empirical study will be conducted in a South African organisational context. The empirical study will involve the following eleven steps:

Step 1: determination of the research design

Step 1 will be discussed in detail in chapter 5.

Step 2: determination and description of the sample

Step 2 will be discussed in detail in chapter 5.

Step 3: measurement scale development

Step 3 will be discussed in detail in chapter 5.

Step 4: choosing and motivating the psychometric battery

Step 4 will be discussed in detail in chapter 5.

Step 5: ethical considerations and administration of the psychometric battery

Step 5 will be discussed in detail in chapter 5.

Step 6: capturing of criterion data

Step 6 will be discussed in detail in chapter 5.

Step 7: formulation of research hypotheses

Step 7 will be discussed in detail in chapter 5.

Step 8: statistical processing of data

Step 8 will be discussed in detail in chapter 5.

Step 9: reporting the results

Step 9 will be discussed in detail in chapter 6, the results chapter.

Step 10: Interpretation and integration of the research results

The results of the empirical research will form part of chapter 7, the results chapter.

Step 11: discussion of results and the formulation of conclusions, limitations, and recommendations

This is the final step and forms the culmination of the study. It includes a discussion and interpretation of the results which will culminate into core conclusions based on the results and their integration with theory. It also includes the limitations of the research. The recommendations provided for career development practices and future research will also be discussed in Chapter 7.

1.9 CHAPTER DIVISION

The chapters will be presented in the following manner:

- Chapter 1: Scientific overview of the research
- Chapter 2: Meta-theoretical context of the study: Individual career behaviour within the SAPS environment.
- Chapter 3: Career plateauing
- Chapter 4: Job satisfaction, motivation, and work engagement
- Chapter 5: Research method
- Chapter 6: Research results
- Chapter 7: Discussion, conclusions, and recommendations

1.10 SUMMARY

This chapter outlined the scientific orientation of the study, the background to and motivation for the research, the aim of the study, the research model, the paradigm perspectives, the theoretical research, the research design and methodology, the central hypothesis, and the research method. The motivation for this study is based on the fact that no known research has been conducted on the relationship dynamics between the constructs of career plateauing, job satisfaction, motivation, and work engagement, and whether the relationship dynamics between these constructs can be used to assist with the career development of employees in the South African Police Service. The research sets out to evaluate critically and, based on sound research methodology, investigate the relationship dynamics, the interrelationships and the overall relationship between career plateauing (as independent variable) and job satisfaction, motivation, and work engagement (as dependent variables) when controlling for gender, age, race, marital status, rank, and tenure. The research also aims to investigate whether individuals from various biographical characteristics (gender, age, race, marital status, rank, and tenure) differ significantly regarding these variables. The research may inform industrial and organisational psychologists, and human resource professionals on more effective career development strategies.

Chapter 2 META-THEORETICAL CONTEXT OF THE STUDY: INDIVIDUAL CAREER BEHAVIOUR WITHIN THE SOUTH AFRICAN POLICE SERVICE ENVIRONMENT

This chapter outlines the meta-theoretical context of the study. The chapter discusses the changes that have occurred in the contemporary world of work and the implications for career plateauing, job satisfaction, motivation, work engagement and career development practices in the South African Police Service (SAPS). The focus is on how individuals manage their careers as well as the challenges they experience in a dynamic career environment.

2.1 CAREERS IN THE CONTEMPORARY WORLD OF WORK

Stone (2014) describes a career as a series of positions that an individual occupies during the course of their working life which exposes them to specific job experiences and activities. According to Webb (2016), a career is a succession of related jobs that occur in a hierarchical order, experienced by a person during their working life and which result in higher levels of responsibility, status, and rewards (both financial and non-financial). Roth (2008) stated that previously individuals had jobs rather than careers. A job is described as an activity carried out for purely monetary gain whilst a career is a series of prospects and accomplishments that contribute to one's experiences and future (Pillay, 2020). The reshaping of the working world has seen a shift in the form of careers from stability to mobility (Abdolhoseini, Abedi, Baghban, & Nilforoshan, 2013). In the past, an individual's career was viewed as occurring in a linear fashion where they were expected to work for one organisation for their entire working life (Hinton, 2012). This traditional approach to careers has been replaced by the protean and boundaryless career characterised by inter-organisational mobility and temporary contracting arrangements (Korsakiene & Smaliukiene, 2014; Sammarra, Profili, & Innocenti, 2013).

The characteristics of a more boundaryless career include careers that may span more than one or two organisations, self-career management, individuals who are risk takers and not concerned with succeeding with one specific employer. The boundaryless career tends to be less rigid and more flexible (Mansah-Owusu, 2013). People with a protean career attitude are self-directed and values-driven (Bernardo & Salanga, 2019; Guan *et al.*, 2018). The self-directed career management attitude refers to the autonomy to choose one's career path whilst the values-driven attitude refers to the freedom to make career decisions based on one's own preferences (Bernardo & Salanga, 2019). Consistent with the findings of previous research (Colakoglu, 2011; DeFillippi Arthur, 1996), Pisapia, Wood, and Bendassolli's (2016) study in a large Brazilian financial institution indicated that experiencing a boundaryless career

increases the opportunity to accumulate skills and knowledge that can be used in other organisations. The results of Sultana and Malik's (2019) study showed that a protean career attitude has a positive influence on subjective career success, objective career success, and task performance. The findings of Briscoe, Henagan, Burton, and Murphy's (2012) study empirically confirm that protean and boundaryless attitudes may assist employees to engage in career development behaviour that enable them to cope with uncertain career environments. The results highlight that self-directed protean attitudes are internally focused, facilitating self-exploration that allows individuals to deal with identity issues, while boundaryless attitudes are externally focused, allowing individuals to cross boundaries of the organisation to look for support and opportunities.

Career development is an ongoing individual self-discovery process by which the individual progresses through a series of stages given the changing and unstable nature of work (Coetzee & Roythorne-Jacobs, 2012; Savickas, 2011). In a post-modern work context, Young, Valach, and Domene's (2005) contextual action theory of career development regards the career as an action system where career-related action is intentional, goal-directed, and constructed by interacting as well as engaging in discussions in a specific systems context (Coetzee & Potgieter, 2014). Striving towards acquiring a substantive amount of knowledge assists individuals in having more influence and control over pertinent areas of their career development (Brown, Bimrose, Barnes, & Hughes, 2012). Results of a study conducted by Maurer and Chapman (2013) revealed that employees may experience more satisfaction with their jobs and careers which may subsequently lead to more financial success if their organisation promotes training and development. Individuals who engage in activities that develop their skills and abilities, over time, may be more eligible for promotions. Furthermore, employees who are learning-oriented and so doing seek out platforms to prove their abilities, may have higher pay increases in their careers (Maurer & Chapman, 2013). Employees feel motivated and satisfied when they are trained and developed to carry out their duties (Mathevani, 2012). According to Spagnoli (2017), employees are more motivated if they have more opportunities for career development. Thus, if staff are trained and developed, this will promote motivation, job satisfaction, and work engagement leading to the possibility of promotions and pay increases thereby eliminating career stagnation and ultimately career plateauing.

By having more control over their careers, however, employees need to be lifelong learners so that they constantly acquire skills that will secure their employability (Savickas, 2012). Employability is the ability to obtain and retain employment (Hogan, Chamorro-Premuzic, & Kaiser, 2013). Guan *et al.*'s (2018) research findings revealed that protean individuals tend to

seek out opportunities for continuous learning and this makes their careers more intrinsically satisfying. Organisations are now providing learning opportunities for career development whereby motivated individuals can acquire new skills and knowledge that will increase their personal growth and future marketability both within and outside their work (Joo & Ready, 2012; Wang, Weng, McElroy, Ashkanasy, & Lievens, 2014). According to career construction theory (Savickas, 2005), individuals enhance their careers by attaching meaning to their vocational behaviour and work experiences. Objectively, a career can be viewed as a sequence of occupations held by an individual. Subjectively, a career is a shaping of work experiences that provide personal meaning to people's present, past, and future experiences (Di Fabio & Maree, 2013).

Since a career is a process driven by individuals' enthusiasm to understand their future career development and life meanings, individuals' intrinsic motivation is significant in their career exploration and career adaptability development (Guan *et al*., 2015). Brown-Wilson and Parry's (2013) study demonstrates that each individual's motivation is associated less to her/his career or life stage and more to individually meaningful past, present, and future career and life goals. Findings by Chiaburu, Diaz, and De Vos (2013) suggest that when an organisation does not promote an environment where employees can express their intrinsic motivation, they become less committed and subsequently more alienated. The contemporary career environment encourages individual agency and intrinsic motivation which will engage employees in managing their own careers, thereby resulting in positive outcomes (such as promotions) and for their organisations (Chiaburu *et al*., 2013). In relation to the present study, based on the findings of Chiaburu *et al*. (2013), it can be deduced that if individuals are not allowed to experience intrinsic motivation, they may be less engaged in their work reducing their chance for promotions and increasing their chance of being career plateaued in the SAPS.

Individuals are regarded as proactive agents in their career development (Di Fabio & Maree, 2013). Career adaptability has become a fundamental aspect of career development as it enables successful adjustment and proactive career behaviour (Savickas & Porfeli, 2012; Tolentino *et al*., 2014). According to Savickas and Porfeli (2012), career adaptability consists of four self-regulatory elements namely, concern (focussing on preparing for one's future career), control (taking responsibility for one's career), curiosity (exploring new opportunities and experiences), and confidence (overcoming challenges whilst pursuing a career). Boundaryless and protean career attitudes combined with career adaptability have been identified as vital for the survival and success for individuals in the work context of the global economy (Savickas & Porfeli, 2012). The elements of career adaptability, as outlined by

Savickas and Porfeli (2012), is applicable to this study because if SAPS employees adopt career adaptability, it will allow them to take control of their careers by exploring other career opportunities and overcoming existing challenges.

According to Coetzee, Bester, Ferreira, and Potgieter (2020), career agility refers to the inclination to proactively adjust to technological change and to be involved in continuous learning which may help to initiate the use of career-adaptability resources. Guan *et al*. (2015) found that certain career behaviours like self-exploration and environmental exploration can promote the development of career adaptability. Conversely, it was established that career adaptability can assist individuals to participate in proactive career behaviours like career exploration. The findings of a study conducted by Chan *et al*. (2015) showed that career adaptability is closely linked to post-modern, boundaryless mindset, and protean career attitudes. Career adaptability is central in helping individuals cope with more boundaryless and dynamic work contexts. Similarly, research findings of Howes and Goodman-Delahunty (2015) indicated that boundaryless career attitudes are an adaptive approach of individuals to the labour market. Police officers and teachers who scored high on the boundaryless career attitudes scale may be more likely to seek new careers than those with lower scores in response to career and personal circumstances (Howes & Goodman-Delahunty, 2015). In an organisation like the SAPS where there are limited opportunities for promotions (Hlengane & Bayat, 2013a; Jackson, van de Vijver, & Molokoane, 2013), employees need to have career adaptability in order to survive in such a boundaryless work environment.

Individuals have to be more willing to engage in career self-management and to find their own way in a constantly shifting work environment that does not provide clear career paths (Converse, Pathak, DePaul-Haddock, Gotlib, & Merbedone, 2012; Potgieter, 2012). Individuals that are career-resilient are able to adjust and accept changes in their job as well as organisation, are more willing to take risks, and show self-confidence when confronted with challenging situations (Potgieter, 2012). According to Bezuidenhout (2011) and (Converse *et al*., 2012), career self-management, career resilience, and positive self-esteem are recognised as important self-regulatory meta-capacities for proactive career behaviour that sustains employability and enhances career success in today's workplace. Sustainable careers enable individuals to have positive career experiences thereby enhancing organisational and individual effectiveness (Herman & Lewis, 2012). Sustainability protects and fosters career development with a focus on balance and renewal (Newman, 2011). The results of a study by Coetzee and Potgieter (2014) supports the significance of possessing career self-management attitudes and attributes as these have a positive influence on individuals' self-esteem and career resilience. Individuals with higher levels of positive self-esteem tend to

engage more in proactive behaviours allowing them to be flexible, resilient, and adaptable to changes and difficulties in their career (Coetzee & Potgieter, 2014). Career self-management will enable SAPS employees to engage more positively in their work and to be more career resilient which may reduce career plateauing.

Schreuder and Coetzee (2013) state that subjective and objective careers assume that people have a certain amount of control over their lives and that they can manipulate opportunities to optimise the success and satisfaction derived from their careers. Individuals who actively take control of their work environment and their own behaviour are more likely to achieve career success (Converse *et al*., 2012). According to Moon and Choi (2016), in addition to promotion and raise in pay, the criteria for career success varies according to an individual's personal values. Perceived career success refers to perceptions of positive work-related outcomes that individuals have attained from work experiences in a particular career context and time frame (Du Toit & Coetzee, 2012). Research conducted by Ng, Eby, Sorensen, and Feldman (2005) has found extrinsic (objective) success and intrinsic (subjective) success to be the two main aspects of career success. According to De Haro, Castejon, and Gilar (2013), objective and subjective career success criteria are positively related yet distinct. The inability to maintain continuous employment (i.e. employability) in a career can have a detrimental effect on the achievement of subjective career success because of the difficulty experienced with identifying and working on what is personally meaningful for the individual (Colakoglu, 2011). Over time, most individuals in organisations focus on their own self-development, that is, the acquisition of new skills and abilities that result in continued personal growth and long-term career success (Joo & Reddy, 2012). Acquiring new skills and abilities may enhance motivation, job satisfaction, and work engagement amongst SAPS employees and subsequently may reduce career plateauing.

In order to attract and retain talented employees, organisations encourage employees to develop their own careers and increase their career satisfaction (Joo & Ready, 2012). Career satisfaction is an indication of the importance and preference that individuals have for the factors relating to their assessment of their career achievements. Career satisfaction has become significant in organisations because individual success leads to organisational success and contributes to committed and motivated employees (Oh, 2013). In a study conducted by Timms and Brough (2013), career satisfaction demonstrated a significant negative relationship with disengagement indicating that people who are satisfied with their career are less likely to be disengaged with their work. The results of their study further revealed that those that were satisfied with their career choice displayed vigour and dedication facets of work engagement in the workplace. The results of a study conducted by Enache,

Sallan, Simo, and Fernandez (2011) showed that a high-mobility preference is linked to a future significant increase in subjective career success, but when having a cross-sectional approach, it can be argued that individuals seek opportunities beyond organisational boundaries when they are not satisfied with their achievements in their current organisation. Since career satisfaction leads to motivated employees (Oh, 2013) and increased work engagement (Timms & Brough, 2013), SAPS employees will be more motivated and experience more work engagement if they increase their career satisfaction.

Hobfoll's (1989) conservation of resources theory emphasises the significance of resources to individuals to the extent that people aim to acquire and protect resources. Some resources identified by Hobfoll (1989) are pertinent to the workplace, such as feelings of success, goal accomplishment, challenge, and advancement in training. These resources are associated with career advancement and job monotony, and when threatened, may lead to career plateauing perceptions (Wang, Hu, Hurst, & Yang, 2014). Within the conservation of resources theoretical approach, career adaptabilty resources and other career resources are factors that help employees to achieve subjective and objective career success (Haenggli & Hirschi, 2020). According to Drucker-Godard, Fouque, Gollety, and Le Flanchec (2015), subjective plateauing refers to the feeling of lack of career development experienced by the employee. The relationship between plateauing and satisfaction clearly displayed that the job satisfaction of scholars decreases with increased feelings of career plateauing.

It is evident from the above discussion that the protean and boundaryless career encompasses consistently acquiring skills and knowledge that can be applied in other organisations. This promotes lifelong learning and employability within or without the SAPS which will eliminate career plateauing and promote a work environment where employees are motivated and experience both job satisfaction and work engagement. Proactive career behaviour enhances career success (Bezuidenhout, 2011; Converse *et al*., 2012) and equips employees with career resilience and career adaptability when confronted with changes or challenges in their work environment (Coetzee & Potgieter, 2014). In the context of the SAPS, the impact of a new generation of police officers and an expanded use of technology innovations has prompted police leaders to confront the challenges of a changing world within the police environment (Batts, Smoot, & Scrivner, 2012). Hence, career development in the SAPS should include career adaptability and continuous learning to cope with these changes. Continuous learning increases growth and development, as well as satisfaction, motivation, and work engagement, subsequently reducing the probability of career plateauing.

The contemporary career in relation to career development will be critically evaluated within the context of the SAPS.

2.2 CAREERS IN THE SOUTH AFRICAN POLICE SERVICE ENVIRONMENT

Organisations world-wide are changing rapidly in terms of structure, workforce composition, and technology due to technological, economic, and political developments (Schreuder & Coetzee, 2013). This dynamic nature of work has resulted in different approaches toward the management of careers which does not allow living in a state of stability (Bienkowska, 2012; Korsakiene & Smaliukiene, 2014; Uy *et al*., 2015). Workers are urged to develop career adaptability by obtaining new knowledge and skills, learning to use new technologies, accepting the fluctuating working conditions, being open to change and creating their own work opportunities (Di Fabio & Maree, 2013). Employees that are eager to examine their environment and adjust to career changes (career navigation which is an aspect of career agility), take resposibility for their future and keep abreast of new developments in their profession (career control), are intrinsically motivated to pursue other career prospects (career curiosity), and believe they can overcome hurdles and achieve their goals (career confidence) (Coetzee *et al.*, 2020). In relation to the current study, SAPS employees should ideally develop career adaptability so that they are better equipped to overcome obstacles such as career plateauing.

Technology plays a vital role in enabling police to provide safety and security to all South Africans. In order to achieve the desired results, the SAPS should have an understanding of the type of skills required for the optimal use of technologies, as well as understand the philosophical and legal implications associated with the use of technology in policing (Matlala, 2012). Experienced employees who are subject matter specialists in the SAPS should be used to train less experienced employees. These experienced employees will feel appreciated and this may improve their self-esteem and job satisfaction (Mathevani, 2012). According to Coetzee *et al.* (2020), technological adaptivity, which is another aspect of career agility, represents optimism and positivity toward technological development where the focus is on the innovative and exciting job as well as possible career opportunities.

The SAPS has a bureaucratic and functional organisation. Bureaucratic structures have a certain degree of standardisation, and functional structures have specialised groups, such as organised crime (Gottschalk, 2010). In most organisations, especially within the large and centralised SAPS, the flow of power is hierarchical, and work is segregated (Steyn, 2010). Traditionally police agencies were characterised by a hierarchical authority structure that

made a clear distinction between decision-makers and line staff, emphasising adherence to principles of structure over flexibility, and favouring uniform operations and interchangeability across staff positions (Batts *et al*., 2012). Decisions in the SAPS are usually taken by those in higher ranks and imposed on subordinates who are expected to execute these tasks (Mofemme, 2001). Mathevani (2012) found that at least 50% of SAPS employees were dissatisfied with the poor consultation they receive during the decision-making process. Employees felt that they should be consulted when decisions are taken otherwise this may contribute to grievances and absenteeism. If employees at the SAPS are not included in the decision-making process, this could result in feelings of demotivation, dissatisfaction, and disengagement.

According to Batts *et al*. (2012), in the SAPS, like other organisations, constancy and predictability must be balanced with adaptation and change. In an attempt to standardise operations, most police leaders recognise the fluid context in which their agencies operate. Furthermore, Batts *et al*. (2012) realise that the SAPS must be willing to adapt and evolve in order to remain effective in a world that is constantly changing. Like most modern work structures, police agencies emanate from the first industrial revolution and the industrial organisations that were the foundation of manufacturing industries. The shift away from older industrial systems built on hierarchies, traditions, and formal rules and procedures applicable to another era, police agencies in the 21st century require a similar revolution in their organisation (Batts *et al*., 2012). SAPS employees that are willing to adapt and evolve to keep up with a constantly changing world of work may experience greater motivation, job satisfaction, and work engagement which may lead to fewer instances of career plateauing.

Prior to 1994, the SAPS was not representative of the South African population. Balance in respect of race, gender, and equality issues was disregarded in recruitment and selection processes (Hlongwane, 2013). Women were viewed as incompetent to fill higher positions and were employed on a temporary basis under less favourable conditions. Black people were recruited to positions inferior to their White counterparts irrespective of qualifications or levels of experience. Such practices amounted to unfair discrimination and unequal employment opportunities (Hlongwane, 2013). South Africa has a long history of discrimination but after the end of apartheid in 1994 affirmative action practices in appointments and promotions was used to address past injustices (Jackson *et al.*, 2013). In achieving a more racially and gender representative organisation, the SAPS has rapidly progressed by undertaking *en masse* recruitment between 2002 and 2012 (Bruce, 2013). Subsequently, employees have been appealing to SAPS management to improve how employment equity or affirmative action is implemented. If employment equity is not applied fairly, employees may feel discriminated

against, thereby impacting negatively on the organisation (Mathevani, 2012). This negative impact, in terms of this study, will be investigated in the form of decreased motivation, job satisfaction, and work engagement as well as increased career plateauing.

After 1994, the South African Police was transformed into the South African Police Service and had to make numerous changes in its structure, culture, and strategies. Cultural changes included moving from a culture of militarism and power to one of self-control, movement from hierarchy, rank, and authority towards development, creativity, and flexibility (Mofemme, 2001). The transition from apartheid to democracy resulted in military ranks being replaced by civilian ranks, reflecting a more human rights-based approach to policing (Faull, 2011). However, in April 2010, in order to improve both its image and its function, the SAPS reverted back to using military ranks, namely: constable, sergeant, warrant officer, lieutenant, captain, major, lieutenant colonel, colonel, brigadier, major general, lieutenant general, and general (Hlongwane, 2013). According to Petrus (2014), the police need to re-evaluate their policy of remilitarisation as this has communicated the wrong message to the wider public about transformation in the SAPS, due to the historical associations of militarisation within the police. Mathevani's (2012) research results revealed that there is no clear provision for promoting SAPS employees based on tenure (seniority) or outstanding performance. Furthermore, it takes a long time before employees are promoted to the next rank, especially from warrant officer to captain. This can lead employees to feel dissatisfied (Mathevani, 2012). In the context of this study, a lack of promotion can lead to SAPS employees experiencing lower levels of job satisfaction, motivation, and work engagement with a higher chance of being career plateaued.

According to Olson and Wasilewski (2014), police officers are as susceptible to experiencing unsatisfying and depressing plateaus as anyone else, and maybe even more so. Flatter organisations have forced an increasing number of employees to stay at the same level and in the same job, resulting in the plateau occurring earlier in their career. This situation can lead to frustration and loss of motivation of employees (Bhavani & Prasad, 2013). A study conducted by Hlengane and Bayat (2013a), found that SAPS employees lacked motivation and job satisfaction due to various factors including scarcity of promotion and poor communication. Ledwaba and Mofokeng's (2014) research results revealed that even though these employees were satisfied with their job, they experienced low morale because of limited career progress. Management should enhance the performance of their employees by meeting their expectations and providing them with a challenging work environment ultimately reducing the plateau situations in organisations. In a diversified workforce it is difficult to meet employees' expectations. Providing mentoring or enriching the job will reduce the structural

plateau. Loading a job horizontally with the same level and nature of job tasks, can enhance the knowledge and skill level of employees. Job rotation is a career development tool (Choudhary, Ramzan, & Riaz, 2013) that allows for rotating employees between different jobs, thereby reducing the occurrence of a job content plateau. By implementing this in the SAPS, the occurrence of career plateauing may be reduced whilst job satisfaction, motivation, and work engagement may increase.

The nature of policing and the experiences of police officers result in the formation of a subculture characterised by specific values, norms, and institutions. Values guide what is deemed essential, guiding the rest of the culture; norms are expectations of behaviour which are enforced by the culture; and institutions are structures of a society wherein values and norms are transmitted (Dempsey & Forst, 2010). Research conducted by Young (2004) on fifteen male police officers from three units in the Gauteng area revealed that due to the socio-historical circumstances in South Africa, transformation of the police and the political landscape and rising structural uncertainty has contributed to a loss of meaningful work. These historical and organisational changes have also caused police officers to feel overwhelmed, powerless, and helpless (Young, 2004). This is exacerbated by the fact that SAPS employees are dissatisfied with remuneration, rewards, and working conditions (Mathevani, 2012).

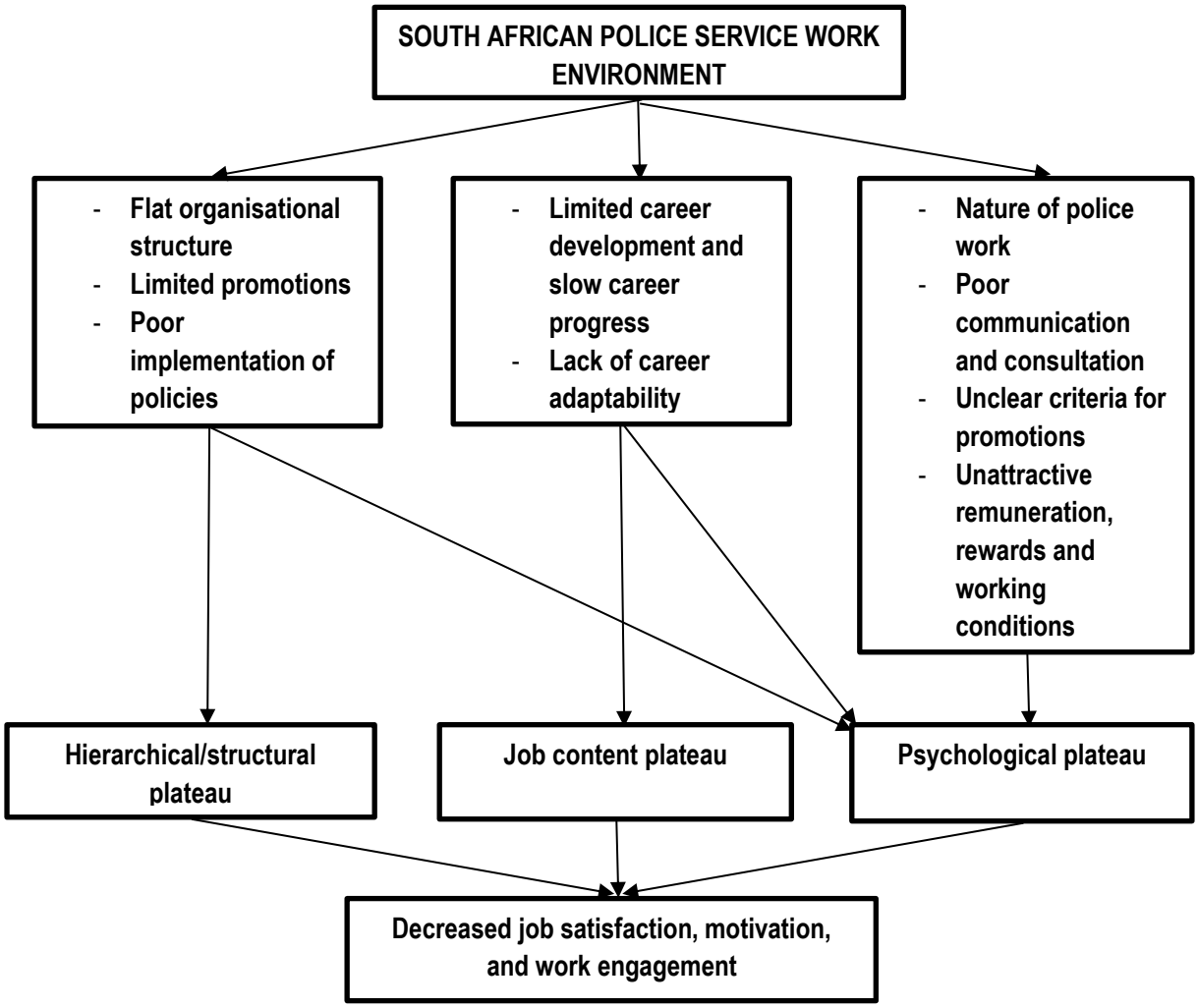
The role of policing in South Africa is both demanding and challenging and requires a healthy and satisfied workforce to achieve excellence in policing standards (Bellingan, 2004). Employees that view their workplace as unpredictable and threatening are more likely to disengage from their work and be reluctant to take risks and try new things (May, Gilson, & Harter, 2004). If employees in the SAPS become disengaged from their work, it may increase their chance of being career plateaued.

Transformation in the SAPS has led to changes in its structure and culture whilst technological innovations have prompted continuous learning and achievement of specific skills. However, career development in the form of personal growth is adversely affected by the unfair implementation of employment equity, poor consultation during decision-making, delayed promotions, unsatisfactory rewards, remuneration, and working conditions. This in turn leads to a decrease in job satisfaction and motivation (Hlengane & Bayat, 2013a) and work engagement (May *et al*., 2004) as well as a higher occurrence of career plateauing (Ledwaba & Mofokeng, 2014). This study aims to investigate the influence of career plateauing on job satisfaction, motivation, and work engagement as these variables have not been previously incorporated in a single study including in the context of the SAPS.

2.3 IMPLICATIONS FOR INDIVIDUAL CAREER BEHAVIOUR

In this section, the implications of individual career behaviour in the form of career adaptability and its impact on job satisfaction, motivation, work engagement, and career plateauing will be discussed. Career adaptability refers to the ability to adjust in order to participate, cope, or fit into changing work situations (Ebenehi, Rashid, & Bakar, 2016). Figure 2.1 describes important aspects of the SAPS career environment and how they impact on career plateauing, job satisfaction, motivation, and work engagement.

Figure 2.1 *The South African Police Service Career Environment*



Individuals who proactively manage their careers tend to be more satisfied with their careers than those who adopt a more passive career attitude (Volmer & Spurk, 2011). According to Hirschi (2012), the concept of career self-management is used when referring to specific

career management behaviours. The issues of career management are now dealt with by the individuals who need to set goals, make strategies, and demand feedback so that they successfully develop themselves and manage their careers. Mathevani's (2012) study revealed that respondents were dissatisfied with the amount of growth and development provided by the SAPS. Employees felt that they should be provided with more opportunities to enhance their skills and abilities. Even though employees attach vast importance to growth and development, the organisation does not cater for their needs and this leads to them feeling dissatisfied (Mathevani, 2012) which may impact negatively on job satisfaction, motivation, and work engagement, thereby promoting career plateauing.

Opportunities to improve professional expertise and life-long learning as well as the ability to have flexibility and adaptability, is at the core of career management (Visi, 2016). To guard against a sense of limited opportunities for growth and development, the SAPS needs to implement an employment development policy that allows for such growth thereby increasing employability (Mathevani, 2012). Management should focus on enhancing career adaptability, as this equips employees to handle their career development effectively (Karatepe & Olugbade, 2017). The SAPS already implements some form of learning programme for employees to improve their skills and abilities. These programs and attendees are constantly evaluated. The main aim of this training is to better equip employees for the police work environment (Van Eeden, 2015). SAPS employees' career behaviour must encompass continuous learning and employability which may subsequently enhance job satisfaction, motivation, and work engagement, and may reduce career plateauing.

Adaptation to the organisation might assist in the perception that there are chances for development and advancement within the organisation, which will enhance job satisfaction (Chen *et al*., 2016). Facilitating career adaptability skills not only enables individuals to deal with the changing world of work, but also promotes employee engagement within the organisation. Thus, the focus of career development interventions should be on developing career adaptability skills to enhance engagement levels and help employees deal with experiences of career plateauing (Tlandinyane & Van der Merwe, 2016). Results from Pei's (2017) study revealed that individual career management has a strong positive effect on engagement. The findings of Jiang's (2016) study showed that employees who are very adaptable are more likely to perceive themselves as fitting into their jobs and organisations, which results in experiencing lower levels of job content plateau (Jiang, 2016). Thus, in relation to the present study, career adaptability may enhance job satisfaction and work engagement, and may reduce career plateauing.

The following career plateauing issues appear to exist in the SAPS career development setting:

- Flat organisational structure
- Limited promotions
- Poor implementation of employment equity and affirmative action policies
- Limited career development and slow career progress
- Lack of career adaptability
- Nature of police work
- Poor communication and consultation during decision-making processes
- Unclear criteria used for promotions
- Unattractive remuneration and rewards, and unpleasant working conditions

Flatter organisational structures means that there are fewer promotions (Ledwaba & Mofokeng, 2014) available which may result in most employees experiencing a hierarchical/structural plateau. The unfair promotion of employees due to policies not being implemented properly (Mathevani, 2012) may also lead to hierarchical/structural plateaus.

Limited career development opportunities (Mathevani) lead to slower career advancement and this could result in a job content plateau due to remaining in the same position for an extended period. The absence of career adaptability affects an employees' willingness to be flexible and grow in their careers, and this may result in a job content plateau.

The feelings of frustration, disappointment, and boredom that are usually associated with the above career plateauing issues relating to hierarchical/structural plateau and job content plateau may also lead to a psychological plateau. In addition, employees' dissatisfaction with the demanding nature of police work, exclusion from decision-making processes, vague distinction between performance and tenure as promotion criteria, unappealing remuneration, rewards, and working conditions (Batts *et al.*, 2012; Mathevani, 2012; Mofemme, 2001) may contribute to a psychological plateau as they become despondent in their jobs.

The flat organisational structure and nature of police work will not change. Furthermore, the flatter structures that dominate the contemporary working world have become the norm for organisations, therefore industrial psychologists need to understand the construction of psychological plateaus in relation to job satisfaction, motivation, and engagement. If the SAPS addresses its career plateauing issues, employees may experience a maintenance plateau and be satisfied in their job potentially increasing their job satisfaction, motivation, and work engagement. In contrast, hierarchical/structural plateau, job content plateau and psychological plateau may possibly decrease employees' job satisfaction, motivation, and engagement.

2.4 IMPLICATIONS FOR CAREER DEVELOPMENT PRACTICES

In this section, the implications of training and communication for career development practices will be discussed. Training provides more opportunities for career advancement because it may enhance competence levels of employees (Akinyi, 2014). Training and development as well as personal development are more important to the new generation employee than vertical careers (van der Smissen, Schalk, & Freese, 2013). According to Vilakazi (2015), the lack of training and development in the SAPS is the main impediment for efficient service delivery. It is imperative that there should be training programmes within the SAPS, which encourage employees to study further academically. The SAPS should increase the time spent in the police academy to address all of the necessary training interventions (Vilakazi, 2015). It is imperative for the SAPS to have a proactive development programme that distinguishes between employees who possess the potential to be developed for higher positions and those who have the ability to occupy higher positions provided that they first grow and develop. Managers should continue with basic education of its employees who have not attained the expected standard for specific skills (Mathevani, 2012). Training opportunities can guide employees in achieving their career goals and in growing professionally and allows them to experience more job satisfaction and to become more motivated to grow within the organisation (Chen *et al*., 2016). Interventions aimed at promoting organisational learning and employees' perception of career growth within an organisation enhances job satisfaction and performance (Spagnoli, 2017). In terms of the current study, training and development can prepare suitable employees for promotions and provide challenging work, keeping them inspired by their job. This may assist employees to avoid a hierarchical/structural plateau, job content plateau and psychological plateau thereby enhancing job satisfaction, motivation, and work engagement.

According to Mathevani (2012), effective and constructive communication within the SAPS will assist in reducing conflict between employees and innovative groups. Employees will be satisfied, remain loyal and feel that they are treated fairly if affirmative action procedures are accessible to everyone (Mathevani, 2012). Due to the perceptual nature of plateaus, managers should engage in regular conversations with employees about career progression in order to prevent the negative impact of plateaus on pertinent organisational outcomes (Hurst *et al*., 2016). If managers promote work environments where employees can share ideas and participate in organisational decisions, work engagement is likely to increase (Knight, Patterson, Dawson, & Brown, 2017). In the present study, through effective communication, employees continue to be productive in their current position and may experience the

maintenance plateau. This can possibly promote job satisfaction, motivation, and work engagement.

The SAPS does not currently have a career development programme that encourages training and development which equips their employees with career adaptability resources that enable their continued employability both within and without the organisation. SAPS employees can cope with career plateauing by adopting a boundaryless mindset and career adaptability, and engaging in career development behaviour including gathering skills, knowledge, and competencies to be used in other organisations (Briscoe *et al*., 2011; Colakoglu, 2011; Di Fabio & Maree, 2013; Savickas & Porfeli, 2012). Members of the SAPS must implement career self-management thereby promoting their continuous personal growth and development so that they can remain engaged, motivated, and satisfied with their jobs thus ensuring their future marketability and employability (Joo & Ready, 2012; Maurer & Chapman, 2013; Volmer & Spurk, 2011; Wang *et al*., 2014). This is relevant to the present study because career adaptability and lifelong learning may reduce experiences of hierarchical/structural plateau, job content plateau, and psychological plateau, and increase experiences of a maintenance plateau subsequently improving job satisfaction, motivation, and work engagement.

2.5 EVALUATION AND SYNTHESIS

The shift from a traditional to a boundaryless career requires that individuals seek employment with more than one employer due to limited growth opportunities within a single organisation. Thus, individuals need to be highly career adaptable and proactive by constantly acquiring the skills and knowledge that can be used in other organisations thereby ensuring lifelong learning and employability both within and outside of their current organisation. Continuous learning promotes growth and development, as well as satisfaction, motivation, and engagement, subsequently decreasing the probability of career plateauing. Within the SAPS, there is a lack of opportunities for growth and development, and there is no career development programme (Mathevani, 2012) which may allude to perceptions of career plateauing (hierarchical/structural plateau, job content plateau, maintenance plateau, and psychological plateau), lack of job satisfaction, motivation, and work engagement. This prevents employees from engaging in lifelong learning and securing employability. The present study addresses the gaps in research by investigating the impact of career plateauing on job satisfaction, motivation, and work engagement.

2.6 CHAPTER SUMMARY

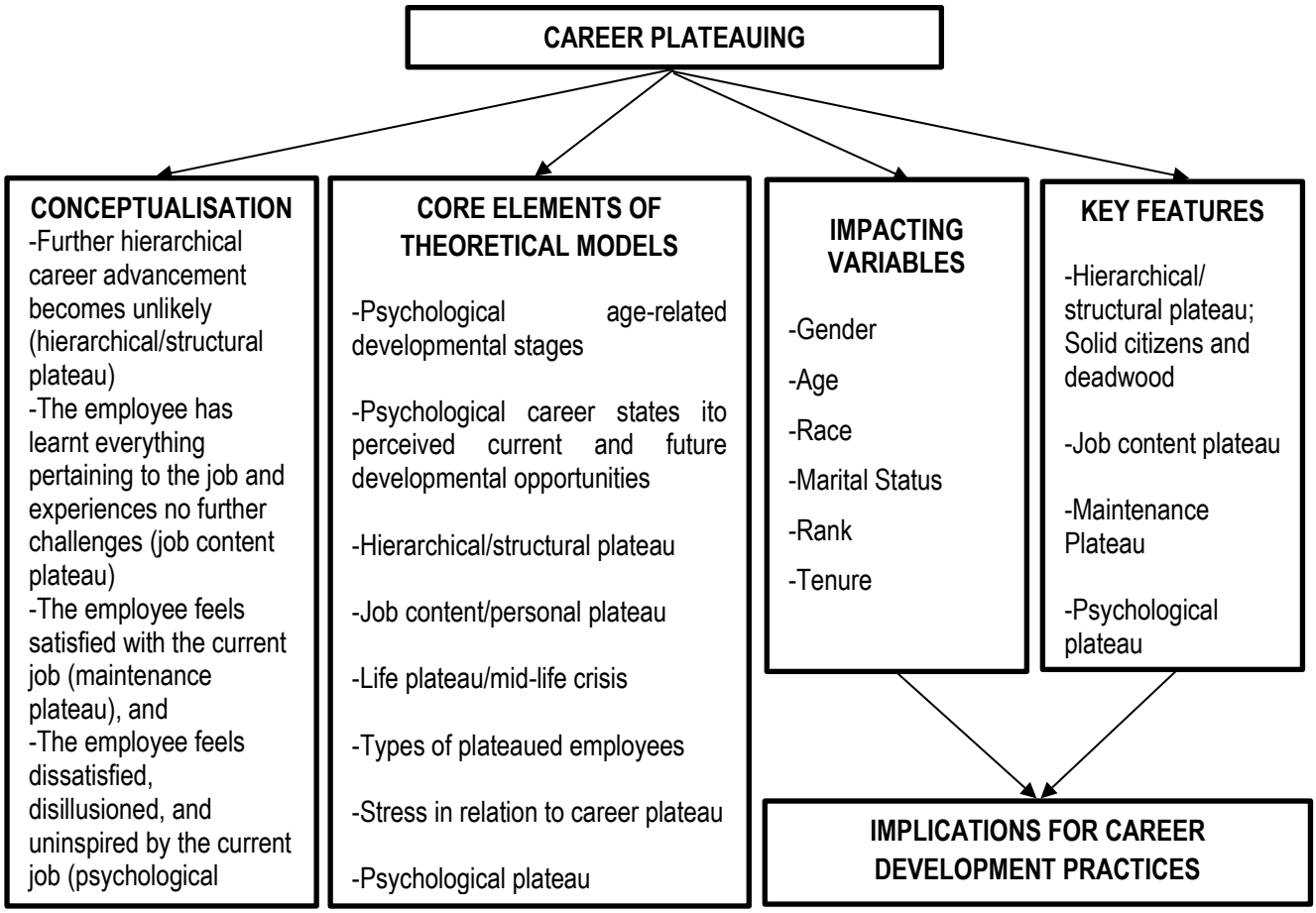
The aim of Chapter 2 is to contextualise the meta-theoretical framework of the study and to discuss how the concepts of career and career development have evolved from the traditional and contemporary view highlighting the implications for subjective experiences of work in relation to career plateauing, job satisfaction, motivation, and work engagement. More specifically the focus is on the current nature of careers in the South African Police Service critically evaluating this within the context of the contemporary career. Finally, the current trend in careers was discussed showing how this can overcome career plateauing and promote job satisfaction, motivation, and work engagement. The nature of careers in the South African Police Service was highlighted indicating how it complies with the modern trends.

Chapter 3 will focus on developing an integrated theoretical model of career plateauing by critically evaluating the various definitions and theoretical models pertaining to career plateauing. The variables that affect career plateauing as well as the implications of career plateauing for career development in the South African Police Service, will also be discussed.

Chapter 3 CAREER PLATEAUING

This chapter addresses the first literature research aim pertaining to the theoretical conceptualisation of career plateauing and its implications for career development in the South African Police Service (SAPS). This chapter also aims to critically discuss and compare various models of career plateauing. The variables impacting career plateauing will also be discussed and an integrated theoretical model of career plateauing will be proposed. Figure 3.1 describes the core aspects of career plateauing and its implications for career development practices.

Figure 3.1*The Core Aspects of Career Plateauing*



3.1 CONCEPTUALISATION

Career plateauing generally means the situation in which an individual has limited vertical and horizontal movement in terms of her/his job (Hassan, Ismail, & Uli, 2010). A plateaued employee is a person whose career is at a stage where the likelihood of further hierarchical promotion is very low (Savery, 1990) or has ceased (Greenhaus *et al*., 2010). A career plateau was initially defined by Ference *et al*. (1977) as the point where an employee's likelihood of additional hierarchical promotion becomes unlikely. This definition limits career plateauing to hierarchical career advancement in the organisation. In response, Bardwick (1986) expanded the definition to include structural and job content plateauing. Structural plateauing is similar to the definition on career plateauing proposed by Ference *et al*. (1977) as it occurs when an individual's vertical movement within an organisation declines. Job content plateauing occurs when an employee has learnt everything pertaining to the job and subsequently experiences no further challenges. Job content plateauing stems from the content of the job itself rather than an inability to move upward in the organisation (Beheshtifar & Modaber, 2013). Like Bardwick (1986), Yang (2016) defines career plateau as a point in a person's career where he or she perceives low likelihood of future promotions, or a point where she or he feels unchallenged due to lack of new job responsibilities.

In addition, content plateau is not only associated with the contents of the job, but also with whether the job provides employees with opportunities to master new skills to promote their employability and marketability, and ensures that employees remain professionally qualified and are up to date in their profession (Su *et al*., 2017). Similarly, Lee (2003) distinguishes between the concepts of career plateau and professional plateau. The career plateau focuses on progression within the organisation, while professional plateau focuses on progression in the profession. The professional plateau concentrates on the contents of the job, as well as whether the job provides employees with the opportunity to learn new skills to improve their employability and marketability. Feldman and Weitz (1988) integrated these two aspects of structural plateauing and job content plateauing and described a career plateau as the likelihood of not receiving work assignments that allow for increased responsibility and challenge. According to Heilmann, Holt, and Rilovick (2008), career plateaus are indicative of employees' feelings toward growth and development both extrinsically through promotion and intrinsically through challenging work.

Joseph's (1996) analysis of Bardwick's (1986) structural/content framework yielded the inclusion of the attitude of the individual. Most of the research on career plateau regards career plateau as something happening to the individual. It is also possible that a career plateau is

something that is initiated by the individual. Joseph (1996) indicates that voluntary career plateau arises when the individual makes the decision to plateau for a variety of reasons such as family or to avoid stress or responsibility (Beheshtifar & Modaber, 2013). Individuals may simultaneously experience more than one type of career plateau. According to McCleese and Eby (2006), employees who are experiencing structural plateau may be at higher risk of being negatively affected by a job content plateau. A double plateau occurs when an individual experiences both structural and job content plateau simultaneously (Herbst-Bergin, 2014).

According to Tremblay, Roger, and Toulouse (1995), a plateau is linked to employment stability or a lack of mobility. An objective plateau is observable and results from remaining at one level or in the same position for a long period of time, whereas a subjective plateau is an individual's perception of limited possibilities for advancement (Tremblay *et al*., 1995). Chao (1990) highlighted that it is important to examine the perceptions of career plateauing rather than focusing only on objective measures of plateau such as age and job tenure. Chao (1990) prefers to view the plateau as a continuum by examining one's career in terms of degree or magnitude. Similarly, the outcome of Lentz and Allen's (2009) study, emphasises the need for organisations to focus on the perception of plateauing. It should not be assumed that the employee with fewer promotions or less job responsibility is more plateaued than other employees. Neville and Henry (2017) found that some librarians are satisfied and challenged within their current position and have no desire to be promoted or to have additional administrative responsibilities. These librarians will remain productive and satisfied and are often valuable additions in the organisation.

There are studies explaining the concept career plateau, identifying the causes or sources, investigating the effect on employee attitudes and organisational performance (Choudhary *et al*., 2013). As conceptualised, career plateaus reflect employees' feelings toward growth and development both extrinsically through promotion and intrinsically through challenging work (Heilmann *et al*., 2008). Organisational plateauing occurs when managers believe that an individual is not ready for a promotion or additional reward. Personal plateauing is an individual decision and occurs when an individual feels that there is limited benefit in going any further in one's career (Clark, 2004). Most of the research on career plateau is based on the work done by Stoner, Ference, Warren, and Christensen (1980) and their exploratory study of the managerial career which was conducted between 1972 and 1973. They stated that a career plateau is an aspect of all managerial careers and highlight that it is neither positive nor negative but may impact job performance (Vandrew, 2012).

According to Peterson and Jun (2007), plateauing is a term that covers a variety of situations and symptoms. The plateaued employee is defined as an individual whose productivity is constant or has declined over a period of time as a result of a lack of motivation (Hall, 1997). There is research evidence to show that such a plateau can be either beneficial or harmful (Clark, 2004). The concept of career plateau is often linked to negative work outcomes such as lack of career satisfaction and job satisfaction. Employees who experience career plateau experience low morale when they continue to work in the same job over a lengthy period of time (Lee, 2003). Thus, it may be possible that even though employees are experiencing a career plateau in the organisation they are still satisfied and motivated because but they are progressing professionally in their jobs and are confident that they can find other employment (Lee, 2002). Individuals experience frustration and dissatisfaction regardless of whether it is a structural career plateau or a content plateau (Su *et al*., 2017). Employees' career plateau tendencies could negatively affect organisations' operations, unless the necessary steps are taken to reverse the career plateau tendencies. Dissatisfied and frustrated employees are more likely to display higher psychological career plateau tendencies and turnover intentions than satisfied employees and may not be as committed and loyal to the organisation (Foster, Lonial, & Shastri, 2011).

According to Cheng and Su (2013), career plateaus negatively influence both individuals and organisations. The findings of their study suggest that the pyramidal structure of the military may create the perception that their careers have reached a plateau. Many employees reach a career plateau because restructuring in the military organisation minimises promotion opportunities. Taiwanese employees perceive that their career has reached a plateau when they repeatedly are unable to secure a better position or higher rank (Cheng & Su, 2013). According to Su *et al*. (2017), due to an officer's shorter military career and the closed system of military, officers believe that limited learning and challenging opportunities would make it more difficult for vertical movement within the organisation or in finding another job outside the military which ultimately creates a conducive environment for career plateauing. Montgomery (2002) indicates that even though plateauing is regarded as a negative condition, it does not have to be. If an individual is prepared in advance for it, it can become an opportunity for growth and change in all areas of life as well as for readjusting one's priorities.

The common theme from all the definitions of career plateauing is a low chance for hierarchical advancement in an organisation and a lack of challenging work (Bardwick, 1986; Ference *et al*., 1977; Heilmann *et al*., 2008; Tremblay *et al*., 1995). Bardwick's (1986) description of career plateauing incorporates both structural and job content plateauing which is pertinent to the current study as SAPS employees work in an environment where they are exposed to limited

opportunities for promotions, growth, and development, and remain in the same post for lengthy periods. Thus, there is a high probability for both structural and job content plateauing. Lee (2003) expanded on Bardwick's (1986) definition of job content plateauing and introduced the professional plateau which focuses on continuous learning, employability, and marketability. These aspects of the professional plateau are significant for career development in the SAPS since there are fewer promotions therefore the focus should be on developing employees so that they can still be satisfied with their job and also be able to find employment elsewhere.

However, what appears to be lacking in the conceptualisations of career plateauing are the psychological feelings of plateauing. In this study, psychological plateauing relates to the feelings individuals experience as a result of job content plateau and hierarchical/structural plateau. These two forms of career plateauing generally relate to feelings of dissatisfaction with job content because of lack of challenging assignments and new initiatives (job content plateau) and the lack of career advancement and upward promotion in the hierarchy (hierarchical/structural plateau). Psychologically, individuals may become disillusioned by the job, feel uninspired, and lose their passion for the job (psychological plateau). Individuals who experience maintenance plateau generally feel satisfied in their current job and are unconcerned with promotions at the present stage of their jobs (i.e. they are pleasantly plateaued). High maintenance plateau is likely to be associated with lower levels of psychological plateauing. The researcher's conceptualisation of the psychological plateau is based on Hall's (1997) view of the career plateaued employee as someone whose productivity is constant (maintenance plateau) or has declined over a period of time as a result of a lack of motivation by the current job (psychological plateau and job content plateau).

The psychological plateau does refer to the feelings associated with job content plateau and hierarchical/structural plateau. However, the items for job content plateau focus on lack of challenges and work opportunities, and the items for hierarchical/structural plateau focus on lack of promotions/advancement. The items included for the psychological plateau goes further than those for job content plateau and hierarchical/structural plateau as it focuses purely on feelings related to work performance and productivity. So based on this, it is necessary to have a separate concept of psychological plateau as it measures different aspects to job content plateau and hierarchical/structural plateau. Even though the feelings addressed by the psychological plateau are as a consequence of job content plateau and hierarchical/structural plateau, the aim of the psychological plateau is to measure antecedents as it will determine employees' experience of job satisfaction, motivation, and work engagement in the current study.

For the purpose of this study, career plateauing will be defined as a situation where (1) further hierarchical career advancement becomes unlikely (hierarchical/structural plateau), (2) the employee has learnt everything pertaining to the job and experiences no further challenges (job content plateau), (3) the employee feels satisfied with the current job (maintenance plateau), and (4) the employee feels dissatisfied, disillusioned, and uninspired by the current job (psychological plateau).

The above conceptualisation of career plateauing is applicable to the SAPS due to its flat organisational structure. It incorporates the concepts of hierarchical/structural plateau and job content plateau which are related to flatter organisational structures where there are fewer opportunities for vertical advancement and employees remain in one position for a long period of time. Psychological plateauing is a new plateau construct that is measured by the current study and it refers to the feelings experienced during a hierarchical/structural plateau and job content plateau. The maintenance plateau represents individuals who are not interested in promotions and are satisfied in their current job and is therefore inversely related to the psychological plateau.

3.2 THEORETICAL MODELS

Table 3.1 is a summary of the core elements of career plateauing as described by the different models/theories proposed by the various authors. The key aspects of Super's (1957) developmental theory and career stage theory, Levinson *et al*.'s (1978) theory of career development, Ference *et al*.'s (1977) model of managerial careers, Bardwick's (1986) model of career plateau, Leibowitz *et al*." (1990) model of plateaued performers, and Elsass and Ralston's (1989) career plateau stress cycle will be discussed. The different approaches to career plateauing will promote a better understanding of the concept by highlighting the important aspects of career plateauing.

Table 3.1 *Core Elements of Career Plateauing*

Element of career plateauing	Super (1957)	Levinson et al. (1978)	Ference et al. (1977)	Bardwick (1986)	Leibowitz et al. (1990)	Elsass and Ralston (1989)	Hall (1997)
Psychological age-related developmental stages	✓	✓					
Psychological career states ito perceived current and future development opportunities			✓				
Hierarchical/ structural plateau			✓	✓			
Job content/personal plateau				✓			
Life plateau/mid-life crisis				✓			
Types of plateaued employees					✓		
Stress in relation to career plateau						✓	
Psychological plateau		✓					✓

Table 3.1 shows that there are certain overlapping areas relating to specific elements of career plateauing. Psychological age-related developmental stages are pertinent to both Super (1957) and Levinson *et al*.'s (1978) theories and are relevant to career plateauing because the maintenance stage and mid-life transition stage are reflective of a critical stage where decisions taken will determine the occurrence of a career plateau. Hierarchical/structural plateau applies to Ference *et al*.'s (1977) and Bardwick's (1986) theories. Psychological career states in terms of perceived current and future development opportunities, is another key feature of Ference *et al*.'s (1977) theory. Job content/personal plateau are also the main

elements of Bardwick's (1986) theory. Central to Leibowitz *et al*.'s (1990) theory is the types of plateaued employees. Elsass and Ralston's (1989) theory focuses on stress in relation to career plateauing. Although Hall (1997) does not coin the concept of psychological plateau, implicitly, his conceptualisation of the plateaued employee points to the psychological aspects of career plateauing that affect productivity and work performance.

Career plateauing is associated with employees' career stages that allude to psychological needs for growth and development over the lifespan. The next section therefore critically reviews theories of career stage and career development.

3.2.1 Super's developmental theory and career stage theory

Traditional theories of careers, like Super's (1990) career life stages, regarded the career life cycle as a predictable progression of career life stages. These career life stages are clearly differentiated from one another and each stage of the cycle is characterised by specific psychological tasks (Coetzee & Roythorne-Jacobs, 2012). Super (1957) stated that developmental tasks tend to dominate certain stages of life, such as childhood, adolescence and early adulthood and these have to be perfected by the individual to progress successfully to the next life stage (Buys, 2014).

Progression from one developmental task to the next symbolises advancement in one's career in terms of growth and development because the employee is not stagnant and subsequently less prone to career plateauing.

3.2.1.1 Developmental stages

Super's (1957) model of career development provides an understanding of the various career stages a person undergoes throughout her or his lifespan (Ferreira, 2012). Savickas (2008) explained that developmental stages have been replaced by learning cycles because unstable organisations do not allow for predictable career paths which diminish the concept of career stages. Employees now engage in self-management behaviours which consists of taking more responsibility for understanding their needs, setting goals, and managing their own careers. Thus, there has been a shift from career development to career management. According to Super (1980), developmental stages are accompanied by vocational developmental tasks. He explained that from age 15 to 25, individuals learn to master certain developmental tasks like career exploration and career decision-making (Buys, 2014).

Super (1980) stated that career maturity is achieved once all of the developmental tasks across the five stages of career development are mastered. During the growth phase, as children become more independent, they are able to think about the future and concentrate more on achievement in the present. Children become more proficient in their work habits and attitudes, and start thinking about different occupations in light of developing interests and abilities. At the beginning of adolescence, when the exploration phase occurs, work options narrow to those that the youth considers possible in a developmental task known as crystallisation. Crystallisation leads to specification, where the adolescent makes educational and vocational choices that suit her/his environmental context and goals. Thereafter, the developmental task of implementation commences where the individual looks for relevant training and employment. Between the ages of 25 and 45, during the establishment phase, Super (1980) proposed that most people work through the tasks of stabilising, consolidating, and advancing. When individuals start training or working, they try to stabilise within the environment and the position held. Effort goes into consolidating work behaviour and refining organisational and professional work relationships. Once individuals become more established in their chosen careers, there is often a striving to advance, although Super's (1980) theory acknowledges that advancing is a task that can happen in other phases as well (White, 2014).

The successful completion of each developmental task results in psychological advancement in an employee's career. The individual will not be stagnated in their career and will not be subjected to career plateauing. They will be satisfied, engaged, and motivated in their work environment.

3.2.1.2 Life stages

Super's (1990) career stage theory adds to our understanding of how people go through different stages or experiences in their career development process and how each stage has certain elements that enable the person to strive towards a successful career (Ferreira, 2012). According to Super's (1957) developmental theory, individuals advance through a series of life stages that are accompanied by specific age-related milestones. The exploration stage mainly focuses on the development of self-awareness and the exploration of career options through trial-and-error reality testing (typically between the ages of 15-24). In the establishment stage, the individual searches for employment, develops a career pattern that will carry her/him throughout the remainder of her/his career, and learns to integrate the roles of worker, spouse, and parent (typically between the ages of 25-44). The maintenance stage places emphasis on enhancing one's skills, keeping one's position despite challenges from

younger colleagues and lifestyle issues, including physical and mental health (typically between the ages of 45-64). Finally, the decline or disengagement phase highlights the transition away from full-time employment into retirement (typically at the age of 65 and over). Thus, movement in terms of one's career occurs more in the earlier career stages as opposed to the later stages (Lyons, Schweitzer, Ng, & Kuron, 2012).

Lyons *et al*. (2012) found that even though the Boomers (born between 1945 and 1964) and Matures (born prior to 1945) showed a pattern of decreasing job changes in the later stages of their careers (ages 45-65), they displayed increases in their number of changes of employer over that same period. This indicates that a greater proportion of the job changes in their later careers coincided with changes of employer than might be expected taking into account the settling down period predicted by Super's (1957) career development theory.

According to George and Jones (2012), employees in the mid-career stage have generally been working between 20 and 35 years and find it challenging to remain productive. Many employees experience the height of career success during the mid-career stage whilst others, however, need to come to terms with career plateaus, obsolescence, and major career changes. Employees in early career stages mainly focus on activities that promote their careers and strive to help the organisation as a whole. Plateaued employees, who often know their organisation well, are sometimes in an especially good position to engage in activities such as starting a major company-wide recycling program or organising social activities such as company picnics (George & Jones, 2012).

For example, Huberman (1995) states that teachers do not pass through the different stages in a linear fashion but tend to move in and out of different stages at different times during their careers. In other words, teachers can bypass a specific phase or go back to a phase experienced earlier in their career. Therefore, a teacher's career is filled with plateaus and regressions. The plateaus that teachers experience usually occur during their mid-career years, anywhere from seven to eighteen years of teaching experience. Huberman (1989) states that some teachers in mid-career may also begin to reflect on their past and future as teachers. Beyond mid-career, teachers who do find satisfaction, become content and retire feeling fulfilled. Teachers who do not find job satisfaction become disengaged and retire feeling bitter (Farrell, 2014). Milstein (1990) found that due to routine and repetitive work some teachers in their mid-career can become plateaued. The findings of group discussions conducted by Farrell (2014) with three teachers in the mid-career stage suggested that they reached a career plateau due to a lack of advancement, and longevity, which is similar to the results of a study by Meister and Ahrens (2011).

Based on the findings of Milstein (1990), and Meister and Ahrens (2011), it can be deduced that the lack of advancement in the SAPS where employees remain in the same rank for many years (Mathevani, 2012) can contribute to a career plateau in the mid-career stage of their working lives.

3.2.1.3 Criticisms

Super's (1957) developmental theory is regarded as the most comprehensive theory, contributing tremendously in the career development field. It is holistic and humanistic, and the life career development stages are still relevant for today's career development (Cook, 2011; Mubiana, 2010). Super's (1957) theory has been used successfully in other countries and among different ethno-cultural groups for the career development of youth and young adults (Freeman, 1993). However, Stead and Watson (1998) maintain that Super's (1957) developmental stages do not reflect career paths of Black youths. Even though Super's (1957) theory has been criticised for not taking into account factors such as race, ethnic discrimination, and unemployment, the consideration of several life roles could be applicable to the South African context (Bosch, de Bruin, Kgaladi, & De Bruin, 2012). Mubiana (2010) states that Super's (1957) theory cannot be generalised unless it is adapted to suit the local context in which it is to be used. Super (1957) was also criticised for applying his theory to women's careers when it had been developed specifically on young men (Freeman, 1993). Super (1957) acknowledged that chance events can impact on career development but did not explain how or when this might happen, or how individuals might respond to such occurrences (Hirschi, 2010). When using this theory, it is imperative to take into account the different aspects that influence individual career development. Individuals do not always achieve the same level of career development to promote good career decisions (Mubiana, 2010).

Table 3.2 is a summary of the key aspects pertaining to Super's (1957) career stages. It highlights the five stages of the career development process that a person progresses through during their lives. These five stages include growth (0-14 years), exploration (15-24 years), establishment (25-44 years), maintenance (45-64 years) and disengagement (65+ years). In the growth stage, children and adolescents are introduced to various occupations. The exploration stage entails preparing for an occupation and entering the work environment. The establishment stage focuses on effectively functioning at work and moving forward in one's career. In the maintenance stage, individuals work towards keeping their position. The disengagement stage places emphasis on slowing down and retiring.

Moving successfully through these career stages represents growth and development in terms of an individual's career which signifies avoidance of a career plateau.

Table 3.2 *Key Features of Career Stages*

Age	Stage	Key Features
0-14 years	Growth	Childhood focus on the occupational world; development of concern about future as a worker; greater personal control over career activities; ideas about how to make choices, and confidence to do so
15-24 years	Exploration	Learning what one might become; exploring self (e.g. interests and abilities) and the world of work and occupations in depth and making tentative matches; making occupational choices in line with one's self-concept and actualising these choices in career behaviour; developing skills, experimenting with jobs, stabilising a job to make it secure
25-44 years	Establishment	Ongoing implementation of self-concept to bring about integration of self, and own values, in society; stabilising choice within organisational and occupational parameters, adjusting the self-concept if necessary; advancement or transfer to new or higher responsibility; toward the end of the stage, reflecting on the past and the future of the career
45-64 years	Maintenance	Reflecting on the career and deciding on continuation or change; if change is necessary, recycling through the previous stages; holding steady in position, maintaining performance, conserving what has been accomplished, and remaining interested; renewing and innovating where possible
65+	Disengagement	Adjusting to declining energy, decelerating, delegating to others, withdrawing, retiring, organising a new life structure in which paid work is not central

Sources: Savickas (2002); Super (1957).

3.2.2 Levinson et al.'s theory of career development

Levinson *et al*. (1978) proposed a model which is based on the concept of life cycle/seasons and adult development. The life cycle is a series of eras each consisting of a bio-psycho-social character, which contributes to the whole. Each era is an age-related stage, lasting from five to seven years and is differentiated by transitional periods of questioning and re-assessment. Major changes usually occur during the transitional period (Pringle & Dixon, 2003). Levinson (1996) described a transitional period as consisting of the three developmental tasks of the termination of the current life structure, individuation where issues are attempted to be resolved, and initiation where the new structure is formed (Arosi, 2013). Transitions allow individuals to break away from the past and move towards constructing the future. It is an opportunity for learning, and for personal and professional growth. A transitional period promotes new self-knowledge and understanding. This transformation occurs at the onset of each transition (Woo, 2012). Opportunities for learning, and personal and professional growth will encourage satisfaction, engagement, and motivation thereby decreasing the probability for career plateauing. Furthermore, the psychological plateau may trigger a transition and change in the life cycle in the form of new growth in individuals' careers. In modern day careers, transitions are more frequent due to uncertainties of jobs.

3.2.2.1 Life Stages

Levinson *et al*. (1978) conducted interviews with 40 American men, all between the ages of 35 and 45, 10 from each of four occupations: business executives, university-employed biologists, novelists, and factory workers. Published biographies were also studied in order to understand the stages of development of men beyond the age of 45 years. Based on the data collected, Levinson *et al*. (1978) divided men's lives into four stages, namely pre-adulthood, early adulthood, middle adulthood, and late adulthood. Each stage is related to each other by a period of transition. Adulthood is generally comprised of relatively stable periods, where the individual strives to attain a desired life structure that alternate with shorter transitional periods of questioning, reappraisal and often change (Inkson, Dries, & Arnold, 2015). Table 3.3 indicates the main characteristics ascribed by Levinson to each period up to the age of 50 years.

Similar to Super (1957), Levinson *et al*.'s (1978) theory of adult development described career development in terms of age specific stages. Individuals in their 30s and 40s are described as being in the middle adulthood phase of their career where a career plateau is often

experienced. As with Super (1957), the participants in the research conducted by Levinson *et al*. (1978) encountered a career plateau in their 30s and 40s (Smith-Ruig, 2009).

Hofstetter and Cohen (2014) found that employees at all career stages, that experienced a job plateau, faced an increase in turnover intentions contributing to undesirable aspects of the work environment (such as lack of support from the organisation). According to Inkson *et al*. (2015), some of the age-related changes may lead to re-appraisal of the life structure. A decision to remain in the current life structure usually leads to a career plateau.

3.2.2.2 Criticisms

Levinson *et al*.'s (1978) theory has provided the basis for later models of women's career development. Their work was significantly modified by Bardwick's (1980) research on women's career development which questions Levinson *et al*.'s (1978) assumption of the self as centre (Pringle & Dixon, 2003). Inkson *et al*. (2015) stated that Levinson and his colleagues have highlighted the individual's internal, subjective career rather than outward manifestations. They have interpreted ambiguous data to fit a particular theory, rather than making their theory flexible enough to accommodate a variety of data. In some ways, Levinson *et al*.'s (1978) theory can be viewed as being consistent with Super's (1957) theory. For instance, they both portray individuals as exploring possibilities and aiming to find their niche in the world of work, more especially in early life and career. They both associate stages with ages. However, Super (1957) did not portray careers as moving between transitional and stable phases, and, relative to Levinson *et al*. (1978), his notion of mid-career was not about maintaining one's existing position (Inkson *et al*., 2015).

Table 3.3 depicts the series of stages, of Levinson *et al*.'s (1978) theory, that adults go through as they develop. Early adult transition (17-22 years) entails becoming more independent by making choices about adult life. Entering the adult world (23-28 years) involves exploring different roles and making important choices. In the age 30 transition (29-33 years), individuals evaluate their choices and adjust accordingly. During the settling down (34-40 years) period, individuals are determined to achieve their goals. Midlife transition (41-45 years) is a review of the life structure that was previously adopted. Entering middle adulthood (46-50 years) is where individuals commit to decisions taken in order to develop greater stability.

Reviewing the life structure during mid-life transition and the decisions taken thereafter to ensure stability in one's career, will be significant in promoting learning opportunities as well

as personal and professional growth so that the employee does not experience a career plateau.

Table 3.3 *Key Features of Life Stages*

Age	Stage	Key Features
17-22 years	Early adult transition	Financial and emotional separation from parents; first attempts at adult roles
23-28 years	Entering the adult world	First stage of early adulthood; exploration of different roles while keeping options open; simultaneously trying to create a stable life structure
29-33 years	Age 30 transition	Reflection and possible redirection; reappraisal of current life structure, concern that it may soon be too late for radical change; focusing on one's Dream
34-40 years	Settling down	Last stage of early adulthood; developing a life structure that supports the Dream; finding one's niche in work, family, and leisure; meeting society's expectations and timetables for career success; culminates in Becoming One's Own Man (BOOM). A period of potentially great rewards but also great demands on personal resources
41-45 years	Midlife transition	Reappraisal of life structure: 'What have I done with my life? What do I truly want?'; focused by observation of progress toward the Dream, perceptions of aging, and other changes in family; can result in personal crisis
46-50 years	Entering middle adulthood	Implementing decisions made in the midlife transition

Source: Levinson *et al*. (1978). Note: This table does not go beyond the age of 50 years because Levinson did not study men older than that age.

3.2.3 Ference et al.'s model of managerial careers

Ference *et al*. (1977) conducted the earliest comprehensive study of plateauing. They argue that the hierarchical structure of organisations leads to fewer positions than aspirants at each higher rung of the organisational ladder. This limited vertical movement or chance for

promotion means that individuals are more likely to be hierarchically plateaued which will impact negatively on satisfaction, motivation, and engagement.

3.2.3.1 Career states

Figure 3.2 is Ference *et al*.'s (1977) model of managerial careers where four career states are reflected namely, stars, solid citizens, learners, and deadwood. These career states are described according to the likelihood of future promotion and current performance in the organisation.

Figure 3.2 *A Model of Managerial Careers*

Current Performance	Likelihood of Future Promotion	
	Low	High
High	Solid Citizens (effective plateauees) Organisationally Plateaued Personally Plateaued	Stars
Low	Deadwood (ineffective plateauees)	Learners (comers)

Source: Ference, Stoner, & Warren (1977, p. 603)

Ference *et al*.'s (1977) model categorised managerial career states according to one's current performance and the likelihood of future promotion. The career states reflected in the model are stars, solid citizens, learners, and deadwood (Ference *et al*., 1977). Stars are managers who perform at a high level and are likely to be promoted (high potential outstanding employees), solid citizens are those who are high performers but have a low likelihood of promotion, learners are low performers with a high likelihood of promotion (newcomers or recently promoted managers who have not mastered the position yet), and deadwood are managers who are low performers with a low likelihood of future promotion (Ference *et al*., 1977). Thus, solid citizens and deadwood are categorised as plateaued employees, because they represent employees with a low likelihood of future promotions. Ference *et al*. (1977) also highlighted that solid citizens, who are effectively hierarchically plateaued, contribute to the largest group of managers in organisations. However, attention is rarely focused on these

employees because learners are provided with assessment and training, stars receive managerial development, and deadwood are offered training or outplacement (McCleese & Eby, 2006; Thomas, 2009).

3.2.3.2 Criticisms

Warren, Ference, and Stoner (1975) paved the way for future research in many ways. Firstly, they identified a career plateau as a compelling issue that is steadily growing. Secondly, they developed the vocabulary that is used in most research on career plateauing. Thirdly, they regarded plateaus as a normal occurrence that frequently appears as part of one's career. Lastly, these authors suggested areas for further research including how to identify and manage plateauees, the individual's perception of their status, and the criteria used to measure the presence of a plateau. Although there has been some criticism of the use of negative terminology such as deadwood, the concepts are widely used by researchers (Crockford, 2001). These terms carry highly judgemental connotations (Shecket, 1995b).

3.2.4 Bardwick's model of career plateau

According to Stoner *et al*. (1980), an organisational plateau results when the employee has the ability to perform at a higher level but is unable to due to the structure of the organisation where no opportunities exist. A personal plateau occurs when the employee does not want to have a higher-level job. Using Stoner *et al*.'s (1980) research as a basis, Bardwick (1986) developed the concept of job content plateau and distinguished between the concepts of content plateau and organisational plateau.

3.2.4.1 Structural and content plateauing

While structural plateauing may be inevitable, content plateauing can be avoided. When an individual experiences structural and content plateauing, a life plateau or mid-life crisis follows. If employees are unwilling to look for jobs outside of their current organisation, they may have to remain in the same position for longer, with the risk of reaching a content plateau where their job no longer provides them with any opportunities or challenges (Bardwick, 1986; McCleese & Eby, 2006). Empirical research (Burke, 1989; Lemire, Saba, & Gagnon, 1999; Lapalme, Tremblay, & Simard, 2009) has supported the assumption that employees on structural plateaus experience higher levels of psychological distress and feel less committed, mainly generated by increased levels of anxiety and lower morale. In contrast, Lepalme *et al*.

(2009) did not find a significant relationship between content plateauing and perceived organisational support.

According to Bardwick (1986), employees exposed to hierarchical or content plateauing are frequently neglected by the organisation and this makes employees feel that they are not respected and valued by the organisation. Subsequently, employees feel a lack of organisational support, possibly leading to negative consequences both for them and for the organisation (Lapalme *et al*., 2009). Allen, Poteet, and Russell (1998) related job attitudes of managers to hierarchical (structural) plateauing and content plateauing. Their survey, which comprised of over 600 managers in state government, revealed that managers react more negatively to job content plateaus than hierarchical plateaus. Managers that were both hierarchical and content plateaued displayed lowest levels of commitment and satisfaction. Allen *et al*. (1998) propose that employers must be proactive in identifying content plateaued employees so that they can assist and enlighten them about the impact of content plateauing in an attempt to maintain job performance.

3.2.4.2 Criticisms

By concentrating on women's experiences, Bardwick (1980) made several valuable additions to Levinson *et al*.'s (1978) theory, however, her work is now viewed as being historically bound. For instance, in the early transition era for women (17-18 years), she added the development of sexuality and the internalisation of gender to women's role in education, careers, and relationships. By using Levinson *et al*.'s (1978) model as a foundation and building on it, women's life/career development is still seen as drawn from men's experiences. Both Levinson *et al*. (1978) and Bardwick (1980) made no substantial contribution to the developmental processes occurring in the later period of a person's life (Lepalme *et al*., 2009).

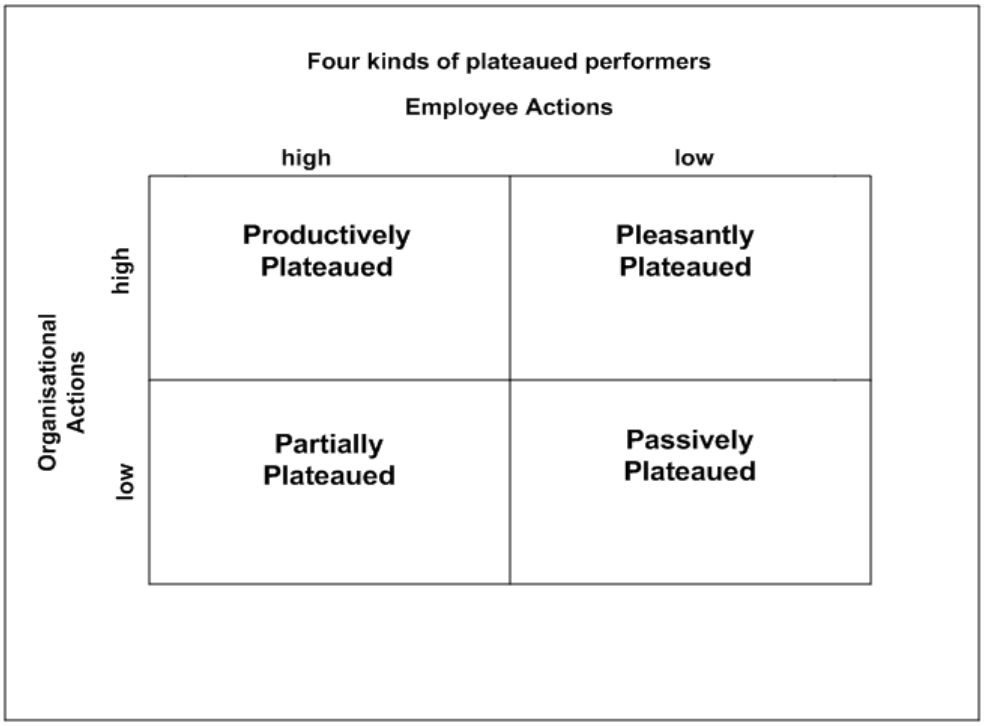
3.2.5 Leibowitz et al.'s model of plateaued performers

Leibowitz *et al*. (1990) developed a model of plateaued performers based on employee and organisational actions. Employee actions included behaviours initiated by the individual with regard to career development while organisational actions includes a variety of interventions provided by the organisation such as job enrichment and training programs.

3.2.5.1 Types of plateaued employees

Figure 3.3 is a summary of Leibowitz *et al*.'s (1990) four types of plateaued performers in a career structure. Employees are described as being productively plateaued, pleasantly plateaued, partially plateaued, and passively plateaued regarding their actions as well as organisational actions.

Figure 3.3 *Achievers in a Plateauing Career Structure*



Source: Leibowitz, Kaye, & Farren (1990, p. 30)

According to Leibowitz *et al*.'s (1990) model, there are four types of plateaued workers namely productively plateaued, partially plateaued, pleasantly plateaued, and passively plateaued. Productively plateaued employees are risk-takers and thrive in a challenging work environment. They are appreciated by their co-workers and are loyal to their employer. Partially plateaued employees are experts in their field and are involved in projects that are stimulating. They have strong personal networks and engage in activities that make them feel less plateaued. Pleasantly plateaued employees are not concerned with promotions and advancing in the organisation. They are content with their job and are happy to remain with their employer for years to come. Passively employed employees have remained in the same position for longer than five years and there is nothing new left to learn about the job. They are not creative and do not initiate change (Leibowitz *et al*. 1990).

3.2.5.2 Criticisms

The researcher did not come across any criticisms levelled against Leibowitz *et al*.'s (1990) model in the available literature. However, unlike other career plateauing models such as that of Ference *at al*. (1977), Leibowitz *et al*. (1990) do not use negative terminology to describe the different types of plateaued employees. Although this model takes into account that content plateauing affects employees in different ways, and acknowledges the demographics of age, other demographics such as gender and race, was not considered as aspects impacting on career plateauing.

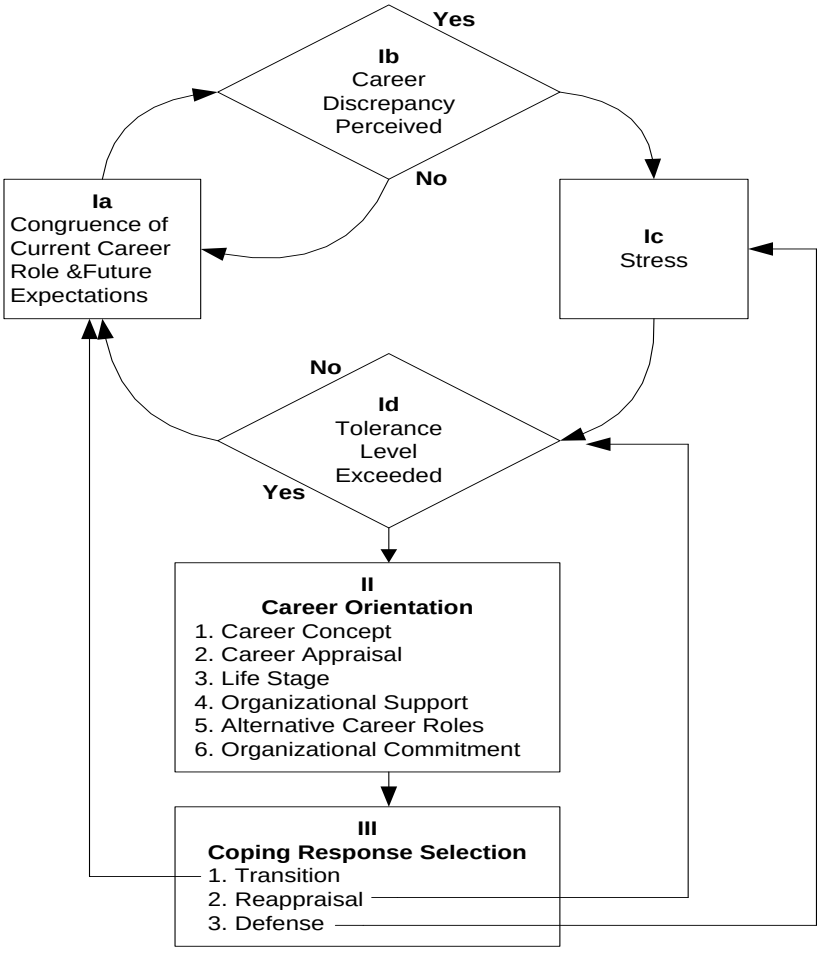
3.2.6 Elsass and Ralston's career plateau stress cycle

In order to understand why some employees, react positively to a career plateau while others do not, career plateaus must be understood as a stress process (Fernandez, 1995). Elsass and Ralston (1989) developed a model of the stress cycle brought about by the career plateau. They determined that career plateaued workers develop coping responses to deal with their career state. These coping strategies include absenteeism, denial, and withdrawal. Also, the valuing of rewards by workers is a basis for this negative response (Conner, 2013).

3.2.6.1 Factors influencing the performance of plateaued employees

Figure 3.4 is a model of the career plateau stress cycle proposed by Elsass and Ralston (1989). The career orientation of the individual establishes the relationship between stress and the type of coping response chosen to deal with the career plateau.

Figure 3.4 *A Model of the Career Plateau Stress Cycle*



Source: Elsass & Ralston (1989, p. 39)

Elsass and Ralston's (1989) model of career plateau stress examines various individual and organisational factors that influences the performance of plateaued employees. It could be a useful guide for research as it shows that both the individual and organisation can influence the level of stress associated with plateauing. Moderating variables such as career concept, career appraisal, life stage, organisational support and commitment, and career-role alternatives contributed to defining the relationship between stress and type of coping response to career plateau stress selected by the employee. Transition (change) and reappraisal (re-evaluation) are two response modes that can have either positive or negative effects on job performance. The third response mode was defence which is a negative reaction to stress such as denial or alcohol and/or drug abuse. Thus, the degree of stress associated with a plateau depends largely on personal and organisational factors which may lessen or heighten stressful effects.

The results of Beheshtifar and Modaber's (2013) study indicate that a significant relationship exists between occupational stress and hierarchical and job content plateau. McCleese, Eby, Scharlau, and Hoffman (2007) also found both types of plateaus to be stressful. In contrast, Allen *et al*. (1998) and Hurst *et al*. (2012) found that hierarchical plateaus were associated with higher stress among employees, but job content plateaus were not. Occupational stress causes hierarchical plateaus in the form of limited promotion, less opportunity to move up, and no chance to develop and grow. Also, occupational stress causes job content plateaus by means of an unchallenging job, less opportunity for learning, routine duties, limited responsibilities, and loss of high skills to perform duties (Beheshtifar & Modaber, 2013).

Hurst and Eby (2010) maintain that individuals' experiences of stress due to plateauing may depend on how they appraise their situation. The results of their study revealed that both hierarchically plateaued and job content plateaued employees did not associate high stakes with their situations (primary appraisal) and did not feel as if they could not change their situations (secondary appraisal). However, they did take into consideration that individuals may have initially regarded their situations as stressful and later re-evaluated their plateaus after using coping mechanisms. Some plateaued employees may resort to job withdrawal which may be their only solution for dealing with their plateaus. Job withdrawal comprises of coping behaviours such as reducing working hours and lessening responsibility (McCleese, *et al.*, 2007). Thus, if employees do not advance or lack challenges in their position over a long period of time, she/he might refrain from exerting extra effort or taking on additional responsibilities to decrease the stress experienced from being plateaued (Hurst *et al*., 2012).

3.2.6.2 Criticisms

The Elsass and Ralston (1989) model is of importance as it highlights the need to perceive the career plateau response as a process at the individual level in an attempt to understand a manager's response. Although Elsass and Ralston (1989) have included organisational and situational moderators in their model, individual difference variables that are pertinent to career plateau, and especially to the area of stress and coping should also be considered. Furthermore, introducing a measure of performance as an indicator of career plateau response will enhance the theoretical work of Elsass and Ralston (1989) and the understanding of the career plateau process (Fernandez, 1995).

3.2.7 Summary of theoretical models

All of the models discussed provide an understanding of career plateauing. Both Super (1957) and Levinson *et al*. (1978) attached age specific stages to career development and found that individuals often experience a career plateau in their 30s and 40s. However, Super (1957) did not consider the different factors that affect individual career development and Levinson *et al*. (1978) focused on the individual's internal, subjective career disregarding outward manifestations. Ference *et al*. (1977) associated career plateauing only with limited vertical movement in the organisation and did not take into account job content plateau. Furthermore, the use of negative language such as deadwood may be perceived as quite judgemental by research participants. Bardwick (1986) built on Ference *et al*.'s (1977) research by introducing the concept of job content plateau. Bardwick (1980) also made significant contributions to Levinson *et al*.'s (1978) model by focussing on women's experiences. However, both Levinson *et al*. (1978) and Bardwick (1980) have not contributed to the career development processes that take place during the latter part of a person's life. Leibowitz *et al*. (1990) have described and distinguished between four types of plateaued performers based on employee actions and organisational actions. Elsass and Ralston (1989) maintain that the career plateau must be viewed as a stress process and have examined individual as well as organisational factors that impact on plateaued employees' performance. Elsass and Ralston (1989) have not considered individual difference variables that are important to career plateau, stress, and coping.

Bardwick's (1986) model of career plateau appears to be the most applicable for the current study as, unlike the other models, it incorporates as well as differentiates between the concept of hierarchical/structural plateau as well as job content/personal plateau. In the context of the SAPS, employees are exposed to both types of plateauing since there are limited positions for promotion and employees may not experience adequate opportunity for growth and development in their career. In a situation where individuals may be structurally and job content plateaued, Bardwick (1986) made provision for the concept of life plateau/midlife crisis.

3.3 VARIABLES IMPACTING CAREER PLATEAUING

In this section, the variables that can influence career plateauing will be discussed. These variables include gender, age, race, marital status, rank, and tenure.

3.3.1 Gender

Drucker-Godard *et al*. (2015) found that women feel slightly more plateaued than men whilst Allen *et al*. (1998) found that women were much more highly plateaued than men. Women were more likely to experience either a hierarchical or job content plateau than were men, but men were more likely than women to be classified as either double plateaued (both hierarchical and job content plateaued) or non-plateaued. Similarly, women reported higher levels of job content plateaus than men (McCleese & Eby, 2006; Shecket, 1995a). According to Foster *et al*. (2011), mentoring either directly or indirectly reduces career plateau tendencies ultimately closing the gap in position due to gender.

3.3.2 Age

Near (1985) and Savery (1990) concluded that employees on a plateau tend to be older than those who continue to progress in their careers. The feeling of plateauing is common among aging managers and professionals who have been in the same position for too long while advancement opportunities have been offered to others (Lemire *et al*., 1999). Plateaued women middle managers were older, with an average age of 46-50 as compared to non-plateaued women middle managers whose average age was 41-45 (Thomas, 2009). This is consistent with Evans and Gilbert (1984) who defined a plateaued employee as one whose age was over 45.

In contrast, as evidenced by other findings (Lee, 2003; Peterson & Jun, 2007; Yang, 2016), the incidence of plateauing does not correlate with age. Managers should avoid equating age with employees' perception of career plateau as older employees often perform better than their younger counterparts. Chao (1990) found that younger age groups had more negative and higher levels of plateauing. The findings of Armstrong-Stassen's (2008) study revealed that not all older workers will experience job content plateauing, making age by itself an inadequate predictor of job content plateauing.

The effect of age on hierarchical plateauing was such that the biggest change occurred around the age-30-transition-period where perceptions of hierarchical plateauing were significantly higher than those from the early adulthood period, but significantly lower than those from the settling down period of early adulthood and beyond (Allen, Russell, Poteet, & Dobbins, 1999).

3.3.3 Race

According to Brown-Wilson (2008), race also has been shown to impact career plateauing, reducing prospects and opportunities which may lead to diminished ability, motivation or both and ultimately resulting in self-limiting behaviours. Compared to White managers, Black managers felt less accepted in their organisations, perceived themselves as having less discretion on their jobs, received lower ratings from their supervisors on their job performance and promotability, were more likely to have reached career plateaus, and experienced lower levels of career satisfaction (Greenhaus, Parasuraman, & Wormley, 1990). However, as individuals will have encountered this situation throughout their career, it does not help our understanding of what changes may occur in later life since no research, thus far, has been identified which helps clarify this (Brown-Wilson, 2008). Powell and Butterfield (1997) found that race indirectly affected promotion decisions through key job-relevant variables, to the disadvantage of applicants of colour.

3.3.4 Marital status

The research results of a study conducted by Thomas (2009) showed that a difference in career plateauing exists for the groups relating to marital status. Near (1985) and Morrison (1996) found that plateaued employees were more likely to be married than single. However, Shecket (1995a) found that there was no significant relationship between marital status and the degree of plateauing experienced by respondents.

3.3.5 Rank

Promotion indicates that an employee's salary is increased, creating further opportunities for upward development. Promotion is a goal that an individual strives to achieve at every stage in their career development. This specifically applies to members of the military; whose rank symbolises their success in their military career. Many career officers experience a career plateau as a result of restructuring in the military organisation which limits promotion opportunities. Taiwanese career officers perceive that their career has hit a plateau when they are repeatedly unable to advance to a better position or higher rank (Cheng & Su, 2013).

In examining police officers, Burke (1989) identified employees with more than sixteen years of service remaining at the constable rank as being plateaued. The relationship between rank

and plateau is supported by research of Bardwick (1986) and Veiga (1981) that reveals plateaus tend to occur later in ones' tenure at an organisation, after several promotions.

3.3.6 Tenure

Crockford (2001) claims that tenure is a significant factor in plateauing and that the longer the tenure, the more likely it is that the individual will experience a plateau. Similarly, Tremblay and Roger (1995) found that plateaued employees had the longest tenure. Allen *et al*. (1999) state that advancement opportunities decrease the longer an individual works within an organisation. Seniority is less likely to result in perceptions of being job content plateaued as boredom and a lack of growth opportunities may occur at any stage during an individual's tenure within an organisation. Thus, it is expected that organisational tenure will be positively related to hierarchical plateauing, but not related to job content plateauing. Chao (1990) explains that the relationship between a perceived plateau and career planning may differ across job tenures. Individuals who perceive a career plateau early in their job tenure may engage heavily in career planning in an attempt to reverse the plateau, whereas individuals who perceive a career plateau and have a long job tenure may believe that any further career planning is futile. Individuals who do not perceive a career plateau may be involved in career planning irrespective of their job tenure.

According to Shecket (1995b), mixed results and contradictory findings pertaining to the effects of career plateauing appear to be significantly related to how plateauing is defined. Bardwick (1986) regards employees as plateaued when they have been in the same position for five years or more. Viega (1981) indicates that managers are plateaued when they are in their current position for more than seven years whilst Burke (1989) uses fifteen years or more on the job as plateauing criteria. Chao (1990) argued that these job tenure discrepancies differ in chronological period and also ignore that the plateauing experience may occur in varying degrees.

From the above discussion, it can be concluded that career plateauing is not correlated with age (Lee, 2003; Peterson & Jun, 2007). Research by Morrison (1996), Near (1985), Shecket (1995a), and Thomas (2009) yielded conflicting results for the relationship between marital status and career plateauing which means that more research needs to be conducted in this area. The differing job tenure chronological period in relation to career plateauing as indicated by Bardwick (1986), Burke (1989), and Viega (1981) does not take into account that career

plateauing can occur in varying degrees (Chao, 1990) and this should be the focus of future research.

3.4 EVALUATION AND SYNTHESIS

Super's (1957) mid-career stage where individuals can either experience career success and have job satisfaction, motivation, and work engagement or they can be career plateaued is similar to Levinson *et al*.'s (1978) mid-life transition where re-appraisal of the life structure occurs. If individuals choose to stay in the current life structure, they usually experience career plateaus. Transitions, on the other hand, offer a chance for learning and growth which promotes job satisfaction, motivation, and work engagement. Elsass and Ralston (1989) used the concepts of transition and re-appraisal as coping responses to the career plateau which determines the positive or negative impact on job performance. Ference *et al*.'s (1977) solid citizens and deadwood who have a low likelihood for promotions and are plateaued are similar to Bardwick's (1986) structurally plateaued employee but differ from Leibowitz *et al*.'s (1990) pleasantly plateaued employees who are not worried about their advancement in the organisation. Unlike solid citizens and deadwood, pleasantly plateaued employees can still enjoy job satisfaction, motivation, and work engagement. Leibowitz *et al*.'s (1990) passively plateaued employee has been in the same position for more than five years and therefore has nothing new to learn about the job. The passively plateaued employee can be described as experiencing Bardwick's (1986) life plateau or midlife crisis.

The conceptualisation of career plateauing is based on Bardwick's (1986) view of career plateauing (job content plateau and hierarchical/structural career plateau) and the seminal work of Hall (1997) which suggests forms of maintenance plateauing and psychological plateauing. In this regard, this study adds to the extant literature on career plateauing. All four forms of career plateauing are relevant to the SAPS with its flat organisational structures and years of tenure employees may have in one job level. Both types of plateauing are pertinent to the SAPS because employees may be exposed to few opportunities for promotions and growth in their career.

Bardwick's (1986) model of career plateauing is relevant to this study because this theory provides a theoretical understanding of career plateauing. Bardwick (1986) states that the major cause of career plateauing is increased competition for top positions in the organisation which is occurring during slower economic growth. An increase in the education and training of the workforce and a reduction in the number of available management positions mean that

there is room at the top of the organisation for only about one per cent of all employees. Thus, she believes that plateauing should be considered a normal career development stage. The type of plateau that is experienced depends on the source of the plateau. Organisational sources result in structural plateaus and content plateaus. Personal sources cause psychological plateaus (Bardwick, 1986; Stoner *et al.*,1980). In this study, the flatter organisational structure of the SAPS and modern-day organisations are a source of career plateauing.

Career plateau is not necessarily connected with hierarchical positions. Task and responsibility have become critical variables for development opportunities beyond rank and title (Bardwick, 1983). Based on Bardwick's (1986) model, two basic forms of career plateauing will be used for the purpose of this study, namely structural plateau, and job content plateau. Structural plateauing is similar to the definition on career plateauing proposed by Ference *et al*. (1977) as it occurs when an individual's vertical movement within an organisation declines. Job content plateauing occurs when an employee has learnt everything pertaining to the job and subsequently experiences no further challenges. Career plateau will be measured as a continuous multidimensional construct consisting of hierarchical/structural plateau, job content plateau, maintenance plateau, and psychological plateau.

The psychological age-related developmental stages of Super (1957) and Levinson *et al*. (1978), and more specifically the concept of maintenance, will also be included for the purpose of this study as it relates to the concept of career plateauing. Super's (1957) maintenance stage focuses on enhancing one's skills, and if this does not happen, routine work may evoke feelings of discouragement and disinterest or a psychological plateau. This psychological plateau may prompt changes or transitions (Levinson, 1996) involving upskilling during Levinson *et al*.'s (1978) life cycle.

3.5 THEORETICAL FRAMEWORK AND ITEMS OF THE CAREER PLATEAUING EXPERIENCES SCALE

The review of the literature guided the theoretical framework and items of the career plateauing experiences scale (CPES). Table 3.4 is a summary of the key aspects of career plateauing that will be included in the CPES. Each element of career plateauing is explained, and examples of scale items are provided as well.

It is important to note that the maintenance plateau is a positive psychological state, while psychological plateauing, job content plateauing, and hierarchical/structural plateauing reflect less positive cognitive-affective states. One can therefore assume that the maintenance career plateau will relate negatively to psychological plateauing, job content plateauing, and hierarchical/structural plateauing. On the other hand, one assumes negative associations among psychological plateauing, job content plateauing, and hierarchical/structural plateauing. In similar vein, one assumes positive associations between maintenance plateauing and job satisfaction, motivation and work engagement, and negative associations between psychological plateauing, job content plateauing and hierarchical/structural plateauing, and job satisfaction, motivation, and engagement. The positive side of psychological plateau is that it may trigger a transition into a new life cycle of growth and learning (Levison, 1996). On the other hand, the shadow side of the maintenance plateau is that employees may become complacent and neglect upskilling for sustained employability (Savickas, 2012).

Table 3.4 *Key Features of Career Plateauing*

DEFINITION OF CAREER PLATEAUING	For the purpose of this study, career plateauing will be defined as a situation where (1) further hierarchical career advancement becomes unlikely (hierarchical/structural plateau), (2) the employee has learnt everything pertaining to the job and experiences no further challenges (job content plateau), (3) the employee feels satisfied with the current job (maintenance plateau), and (4) the employee feels dissatisfied, disillusioned, and uninspired by the current job (psychological plateau).		
ELEMENT OF CAREER PLATEAUING	**CORE DESCRIPTION**	**EXAMPLES OF SCALE ITEMS**	**RESEARCH LITERATURE: AUTHORS/SOURCES**
Hierarchical/structural plateau; Solid citizens and deadwood	Solid citizens and deadwood are categorised as plateaued employees, because they represent employees with a low likelihood of future promotions.	1. I am worried that promotions may no longer be given to me. 2. I do not expect to move higher than my current level. 3. My opportunities for future promotion is limited. 4. I am unlikely to achieve a higher job title. 5. I am not advancing any further in my organisation.	Ference *et al*. (1977) Bardwick (1986)
Job content plateau	A job content plateau occurs when the job no longer provides any opportunities or challenges.	1. I am no longer challenged by my job. 2. I do not receive challenging work assignments. 3. I am unable to learn and grow in my current job. 4. I am not given the opportunity to try out new ideas. 5. My job is routine and repetitive.	Bardwick (1986)

ELEMENT OF CAREER PLATEAUING	CORE DESCRIPTION	EXAMPLES OF SCALE ITEMS	RESEARCH LITERATURE: AUTHORS/SOURCES
Maintenance plateau	Being pleasantly plateaued; feeling satisfied with current job level	1. In general, I am satisfied with my job. 2. I enjoy performing my daily work activities. 3. I like working in this organisation. 4. I am not concerned if I never get promoted. 5. I am happy with the promotions I have received thus far in my career.	Super (1957)
Psychological plateau	Feeling dissatisfied, disillusioned and a lack of passion for the job; these psychological feelings result in poor work performance and loss of self-confidence which may trigger a life cycle of new growth	1. I am experiencing less confidence in my work performance. 2. Recently I have noticed a deterioration in my work performance. 3. My interest in work has decreased. 4. There is a lack of passion in my work. 5. I often feel irritated by my work performance.	Levinson (1996) Hall (1997)

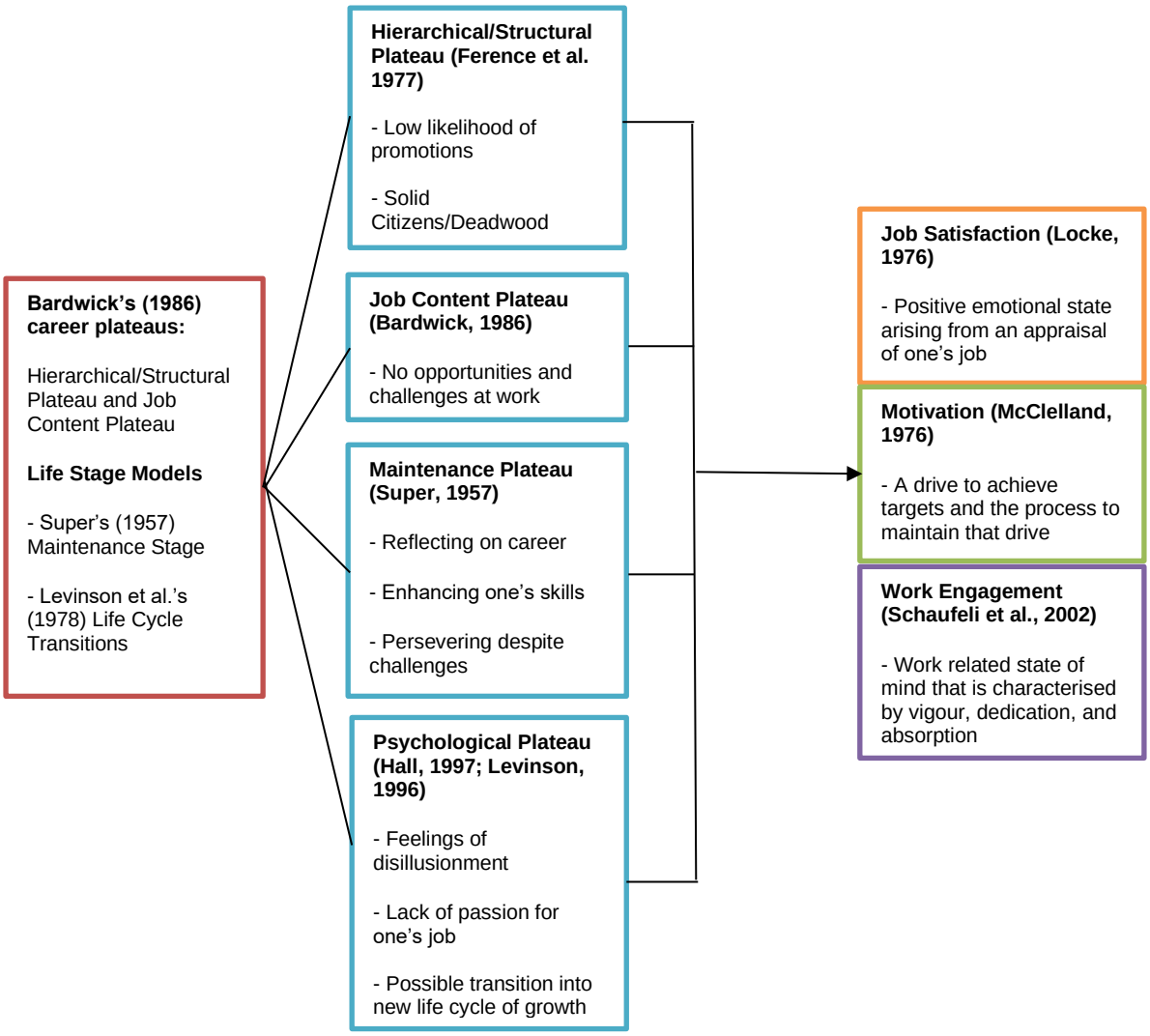
The items in Table 3.4 have been developed as part of the item generation phase of scale development as indicated in the research literature review of this study. The deductive scale development process was used in developing the CPES. Tuan (2012) states that the deductive approach relies on a thorough understanding and review of the literature in order to develop the scale items. According to Morgado, Meireles, Neves, Amaral, and Ferreira (2017), since item generation is a critical aspect of the scale development process, the quality of generated items depends on the way in which the construct is defined and should include a thorough literature review as its foundation. In this study, an in-depth literature review was conducted on career plateauing and it identified Bardwick's (1986) concept of hierarchical/structural plateau and job content plateau, Super's (1957) concept of maintenance plateau, and Hall's (1997) view of psychological plateau as the most appropriate elements of career plateauing for this study. DeVellis (2012) indicated that before a scale is administered, it must be given to a panel of experts for their outlook and opinion on the items and format. They can remove or suggest other items when evaluating the relevance, clarity, and conciseness of all items. The next stage of scale development involved having the items reviewed by subject matter experts both academically and from the SAPS.

Mathevani's (2012) research shows that it takes long for employees in the SAPS to be promoted to a higher rank. This leads to hierarchical and job content plateauing as well as dissatisfaction (psychological plateau) amongst employees. The respondents in Mathevani's (2012) research were also dissatisfied with the limited opportunities for growth and development provided by the SAPS. Thus, the concept of hierarchical plateau, job content plateau, and psychological plateau is applicable to the SAPS context. Employees of the SAPS, that were likely to experience career plateauing, were asked to review the items developed for the CPES as displayed in Table 3.4. Based on employees' feedback, the items were refined for research purposes.

If the enhancement of skills does not occur during Super's (1957) maintenance stage, Milstein (1990) indicated that the subsequent mundane and monotonous work contributes to a psychological career plateau in mid-career or psychological feelings of disillusionment and lack of passion for the current job irrespective of the career stage. Dissatisfaction with job content and upward promotion opportunities may also trigger psychological feelings of disillusionment with the job and result in lower levels of passion and engagement (Bai & Liu, 2018; Kotze, 2018). Satisfaction with the maintenance plateau may result in lower psychological plateau experiences. The optimistic aspect of psychological plateau is that it may elicit a transition into a new life cycle of growth and learning (Levinson, 1996). The negative side of the maintenance plateau is that employees may become too comfortable and disregard enhancing their skills for sustained employability (Joo & Reddy, 2012; Wang *et al*., 2014). A transitional period promotes new self-knowledge and understanding. This transformation occurs at the onset of each transition (Woo, 2012). Opportunities for learning, and personal and professional growth will encourage satisfaction, engagement, and motivation thereby decreasing the probability for career plateauing.

Maurer and Chapman (2013) found that training and development of staff contributes to job satisfaction. According to Mathevani (2012) training and development make employees feel satisfied and motivated. Career plateaus result in a loss of motivation for employees which may result in a psychological plateau (Bhavani & Prasad, 2013). Drucker-Godard *et al*., (2015) found that a lack of development is an indication that an individual's career will not develop, and this leads to decreased feelings of job satisfaction and increased feelings of career plateauing. Career development in the form of challenging tasks increases employees work engagement and lower feelings of psychological plateauing (Tladinyane *et al*., 2013). Figure 3.5 illustrates the core elements of a proposed model for the current study.

Figure 3.5 *Core Elements of Proposed Model*



In summary, the core elements of career plateauing were established by critically evaluating the various definitions and theoretical models relating to career plateauing. Based on the type of organisation where the current study will be conducted, Bardwick's (1986) concept of career plateauing (job content plateau and hierarchical/structural career plateau) and the pivotal contribution of Super (1957), Levinson *et al*. (1978) and Hall's (1997) work pertaining to aspects of maintenance plateauing and psychological plateauing are applicable to the SAPS due to its flat organisational structure and the long tenure of employees in one rank (solid citizens and deadwood). The manner in which career plateaued employees experience job satisfaction, motivation, and work engagement will also form part of this study.

The item generation procedure of both Morgado *et al*. (2017) and DeVellis (2012) were adhered to in the current study. The deductive scale development process confirmed that the most relevant definition of career plateauing, for the current study, incorporates the concepts

of hierarchical/structural plateau, job content plateau, maintenance plateau, and psychological plateau. After the scale items were confirmed, it was given to subject matter experts at the SAPS and the University of South Africa (UNISA) for their input. Chapter 5 will expand on the research method protocols followed in the design/development of the scale.

3.6 IMPLICATIONS FOR CAREER DEVELOPMENT PRACTICES

The relationship between a perceived plateau and career planning may vary across various job tenures. An individual who perceives a career plateau early in her or his job tenure may resort to career planning in order to reverse the plateau, whereas an individual who perceives a career plateau and has long job tenure may feel that career planning is useless and avoid such activities (Chao, 1990). An individual who does not perceive a career plateau may be involved in career planning irrespective of her or his job tenure (Chao, 1990). Coping mechanisms can assist the individual in reducing the negative outcomes that are initially associated with a career plateau creating a workforce that is both productive and satisfied with their career development (Chao, 1990). According to Jung and Tak (2008), providing career plateaued employees with emotional support may assist in stabilising their emotions but not in solving career-related problems. These employees should be given more opportunities and advice for competence and career adaptability development to help them to overcome their perceived career plateau. Managers should be trained to provide subordinates with feedback to enhance their competences and help them to set career goals and implement action plans (Jung & Tak, 2008).

Management can reduce the occurrence of a career plateau by supporting their employees' career development within the organisation (Boresli, 2015). Armstrong-Stassen (2008) found that older managerial and professional employees who believed that their jobs were a significant part of their lives and who felt that they have the ability to learn and develop new skills were less likely to experience job content plateauing. This finding shows that organisations that value the contribution made by their older employees, are concerned about their well-being, and are committed to their older employees, are more likely to be willing to provide their older employees with learning and development opportunities, and challenging and meaningful jobs (Armstrong-Stassen, 2008).

Plateaued employees have options available to them when experiencing a career plateau and may respond in different ways. Responses to the career plateau are relevant to this study because employees of the SAPS may use several of these responses to reduce the effects of

the career plateau. A career plateaued employee who is influential (a formal or informal leader, likeable peer) might initiate a negative (such as absenteeism and withdrawal) or relatively passive (i.e. solid citizen) response due to their perception of being in a state of career plateau (Conner, 2014). Stoner *et al*. (1980) list several responses to the career plateau. Individuals may build a wall around themselves and their jobs. They may build an empire or engage in activities outside of the workplace. Some employees may rationalise the job as challenging when in fact it does not provide job satisfaction whilst others may engage in skills development. Individuals may adjust their career aspirations and work hard to expand their job duties. Another option is seeking an internal transfer or looking for a different job within a new organisation. They may change careers leading to a major change of life (Stoner *et al*., 1980). Su *et al*. (2017) found that military officers chose to maintain their self-image or to look for other job opportunities offering higher salary, power, and status when they perceived structural plateauing. According to Godshalk and Fender (2015), work attitudes vary according to the different reasons for reaching a career plateau.

Bardwick's (1986) concept of content plateauing was the focus of a research study of sixteen veteran community college educators conducted by Shecket (1995b). All of the educators in the study experienced job content plateauing because they were subjected to repetitive duties over their years of employment. Some coping strategies included increased faculty involvement, committee work, professional growth and development, and interdisciplinary collaboration. Shecket (1995b) found that community college instructors reach a structural plateau early in their careers (Vandrew, 2012). This early plateau is similar to the career of employees in the SAPS where fewer positions are available as one moves up the pyramidal, hierarchical structure of the organisation. Therefore, the results of Shecket's (1995b) study should be instructive to career plateauing within the SAPS.

According to Tims, Bakker, and Derks (2012) and Wrzesniewski and Dutton (2001), work role expansion is a type of job crafting which focuses on changing task boundaries and increasing challenges by including elements of work and related activities not originally part of the employees' job description. It is a form of role crafting that is self-initiated to modify one's work role and work activities to improve one's well-being. According to Wrzesniewski and Dutton (2001), metacognition is a form of job crafting that it is completely cognitive and is characterised by increasing cognitive activity instead of psychological withdrawal. It is a type of resource crafting that does not involve visible behavioural changes to the tasks but rather active cognitive changes individuals make to their jobs through organisation, sense-making, and manipulation of one's own psychological state (Bruning & Campion, 2018). Thus, job crafting can alleviate boredom and lack of challenges, associated with job content plateau, by

means of work role expansion. The psychological feelings of disillusionment and lack of passion related to psychological plateauing, can be addressed through metacognition by preventing psychological reduction.

It can be concluded that career planning is linked to perceived plateau which varies with job tenure and that there are different responses to career plateauing (Conner, 2014; Godshalk & Fender, 2015; Stoner *et al*., 1980; Su *et al*., 2017). Employees may perceive being plateaued even when relatively newly appointed, as a result of a lack of opportunities available to them due to organisational constraints (Godshalk & Fender, 2015). According to Chao (1990), individuals are more willing to engage in career planning to reverse the career plateau if this occurs early in their job tenure. Research conducted by Armstrong-Stassen (2008) revealed that older employees in managerial positions were less prone to job content plateauing due to their ability to enhance their skills. Job crafting can be used to address issues related to career plateauing in the SAPS environment where flatter organisational structures contribute to hierarchical/structural plateauing and subsequently job content plateauing and psychological plateauing.

The deductive scale development process was used in developing the CPES. According to Gabriel (2015), the deductive approach can be advantageous if it is done properly thereby promoting content validity of the developed scale, whilst it can be disadvantageous if the researcher does not have a good understanding of the constructs being investigated and it can be very time consuming. The CPES not only includes the concept of hierarchical/structural plateauing and job content plateauing but also incorporates the aspects of maintenance plateauing and the under-researched construct of psychological plateauing. This will make the newly developed scale more applicable to an organisation like the SAPS as it may happen that due to few vacant positions, staff may become both hierarchically/structurally and job content plateaued which may lead to experiencing a psychological plateau or a maintenance plateau.

3.7 CHAPTER SUMMARY

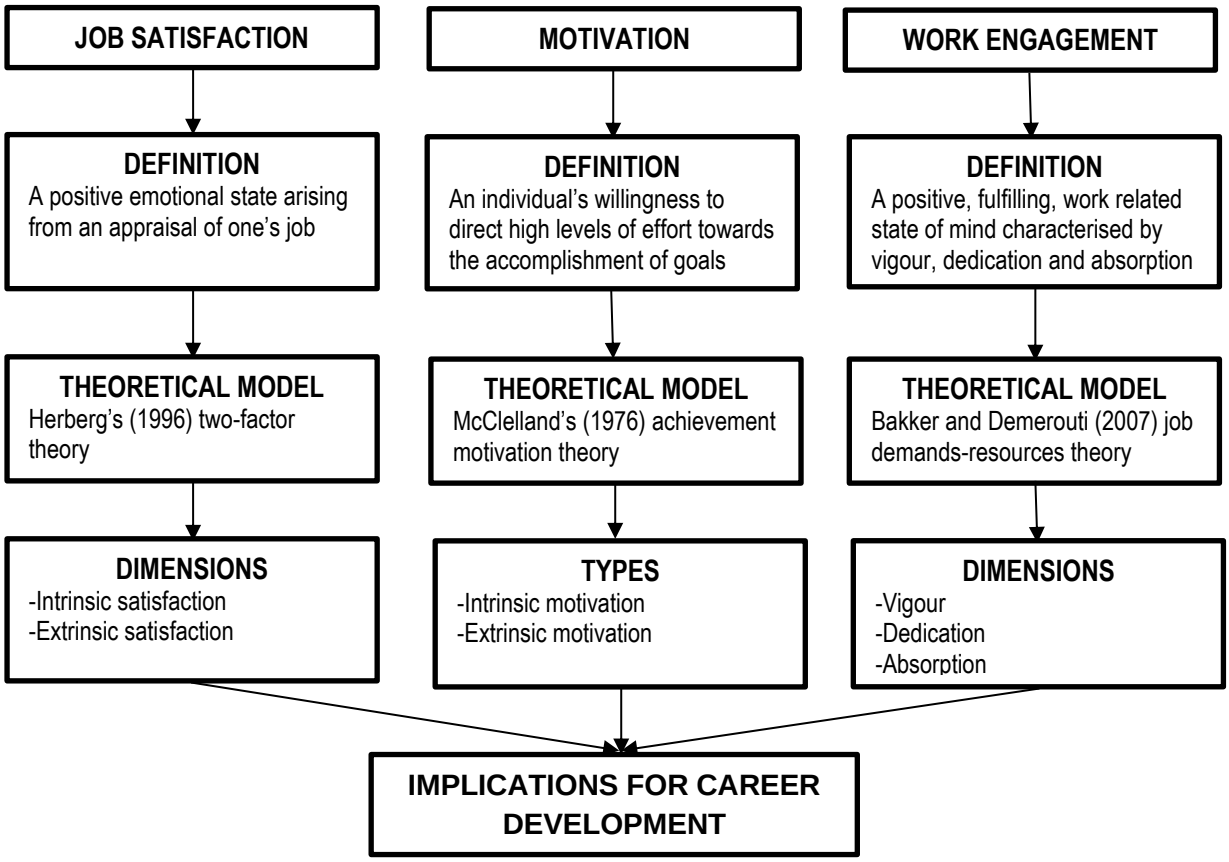
Chapter 3 aimed to conceptualise the construct of career plateauing by means of a comparative examination of the basic literature and research on this construct. The variables influencing the development of a career plateau was critically discussed. The item generation procedures of both Morgado *et al*. (2017) and DeVellis (2012) were followed and the career plateauing experiences scale (CPES) was developed. The chapter concluded with an

explanation of the implications of the theoretical model of career plateauing for career development in the South African Police Service. Research aim 1 has been achieved by establishing the nature and theoretical elements of career plateauing and critically evaluating the implications for staff members' career development in the South African Police Service. Chapter 4 focuses on the conceptualisation of the constructs of job satisfaction, motivation, and work engagement from a theoretical perspective.

Chapter 4 JOB SATISFACTION, MOTIVATION AND WORK ENGAGEMENT

The purpose of this chapter is to focus on research aim 2 of the literature review, namely, to conceptualise job satisfaction, motivation, and work engagement from a theoretical perspective. The various definitions and theoretical models will be discussed. Figure 4.1 illustrates the main aspects of job satisfaction, motivation, and work engagement, and how they impact on career development.

Figure 4.1 *Conceptualisation of Job Satisfaction, Motivation and Work Engagement, and its Implications for Career Development*



4.1 JOB SATISFACTION

In this section, the notorious definitions provided by Locke (1976) and Spector (1997) on the concept of job satisfaction, will be discussed. Thereafter, the theoretical models of Maslow (1943), Herzberg (1966), Alderfer (1969), and Vroom (1964) will be discussed.

4.1.1 Conceptualisation

Job satisfaction is a multifaceted phenomenon which is associated with various definitions and perspectives (Jalagat Jr., 2016). This vastly researched concept was defined by Locke (1976, p.1304) as “a pleasant or positive emotional state resulting from the appraisal of one’s job or job experiences” (Jaiswal & Joge, 2018). Locke (1976) incorporated both cognition (appraisal) and affect (emotional state), and therefore assumed that job satisfaction is the outcome of the interaction of thoughts and feelings. It may be viewed as the degree to which a job fulfils an employee's expectations. Locke (1976) also focused on the significance of values and how these values are reflected in one’s job thereby indicating the relative significance of different expectations (Sabbagha, 2016).

Spector (1997) defined job satisfaction as the way in which people feel about their job and its different aspects. Job satisfaction and job dissatisfaction can occur in any work setting that make employees like or dislike their job (Anderson, 2017). Spector (1997) refined Locke’s (1976) definition by describing job satisfaction as an overall feeling about the job or specific facets of the job. Spector (1997) identified a list of aspects of job satisfaction which are important for testing or understanding the concept. These aspects include appreciation, communication, co-workers, fringe benefits, job conditions, the nature of the work itself, organisation itself, organisation policies and procedures, pay, personal growth, promotion opportunities, recognition, security, and supervision (Joseph, 2017). According to Bhat (2018), job satisfaction can be affected by various factors such as the work environment, salary, and the degree of fulfilment in their work. In organisations where employees have a high level of job satisfaction, complaints, grievances, absenteeism, turnover, and termination tend to decrease and there tends to be an improvement in punctuality, an increase in workers’ morale, and an increase in the quality of output (Bhat, 2018).

Job satisfaction refers to how employees feel about their jobs and the various aspects of their job. It is the degree to which employees like (satisfaction) or dislike (dissatisfaction) their jobs (Sabbagha, 2016). Job satisfaction is a key aspect of work motivation, which is an important determinant of one’s behaviour in an organisation (Culibrk, Delic, Mitrovic, & Culibrk, 2018).

4.1.2 Theoretical models of job satisfaction

The content-based theories of Maslow (1943), Herzberg (1966), and Alderfer (1969) will be discussed. Content-based theories are concerned with investigating the needs and motives

that cause employees to behave in a specific way. The focus is on identifying the variables which influence fulfilment rather than the process employees follow to fulfil their needs. Thus, these theories are often called individual theories, as they disregard the organisational aspects of work motivation, such as job characteristics or working environment, but are more interested in the individual and the influence of an individual's needs on work motivation. Job satisfaction is a fundamental component of work motivation, which is an essential determinant of one's behaviour in an organisation (Culibrk *et al*., 2018).

4.1.2.1 Maslow's hierarchy of needs theory

Maslow's (1943) hierarchy of needs is a well-known pioneer theory of job satisfaction and motivation and concentrates on both lower-level and higher-level needs (Sahito & Vaisanen, 2017). Maslow's (1943) hierarchy of needs (Figure 4.2) indicates that people have five basic needs that act as motivating forces in a person's life and are explained in terms of a pyramid (Guss, Burger, & Dorner, 2017).

Figure 4.2 *Maslow's Hierarchy of Needs*

Source: Ilgunov & Khutter (2016, p. 8)

The needs lower in the pyramid are described as primary motivators. Lower order needs must be met prior to satisfying higher order needs. The most basic needs include physiological needs, followed by safety and security needs, psychological needs, and self-esteem needs.

An individual may attain the self-fulfilment stage of self-actualisation once the lower needs have been met. According to Maslow (1943, 1954), the first four groups of needs or lower order needs are external motivators because they drive behaviour based on deficiency or fulfillment. Once an individual fulfils a need, the next unsatisfied need is released and becomes the strongest motivator (Guss *et al*., 2017). Physiological needs include food, water, shelter, and sleep; safety and security needs refer to security of income such as salary and employment, a place to stay, health care, and well-being; belongingness or psychological needs encompasses relationships with others such as family members, friends, and work colleagues; self-esteem needs include status, respect, and promotions; and self-actualisation needs are the recognition of potentials, abilities, and fulfilment of capacities. People strive to satisfy their lower-level needs first before they can work towards their higher-level needs (Sahito & Vaisanen, 2017).

Table 4.1 is an adaption of Maslow's (1943) hierarchy of needs to organisations. According to Greus and Sleath (2018), it is possible to use different methods for motivating staff at each level of the pyramid. The method used may suit different organisations depending on the size of the organisation, the number of employees, and the personal circumstances of their employees.

Table 4.1 *An Adaption of Maslow's (1943) Hierarchy*

Maslow's Hierarchy	**What the employee requires**	**What the job provides**
Physiological	Need for money to access basic needs	Any work providing enough money is acceptable
Safety	Having some form of guaranteed pay in the future	Little chance of losing the job. Pay includes a pension
Belonging	Enjoy the working atmosphere, get along with colleagues	Friendly colleagues with an organisation that allows team interactions
Esteem	Receive recognition for good work	Awards, performance reviews, simple congratulations from superiors
Self-actualisation	Chances to develop and see themselves improving	Opportunities for further training and promotion

Source: Greus and Sleath (2018, p.17)

A weakness of Maslow's (1943) hierarchy of needs is that it lacks support in the form of empirical data. The theory is constructed in ideal conditions where it is assumed that all people are similar, and the characteristic of personal circumstances are not investigated. These limitations threaten the validity of the theory (Graham & Messner, 1998; Mullins, 2002). People differ in the degree to which they believe that a need has been adequately satisfied and the degree to which they are motivated to pursue need satisfiers (Smit, Cronje, Brevis, & Vrba,

2011). Regardless of the inadequate empirical research, Maslow's (1943) work is still applicable and predicts and explains human behaviour in different work conditions increasing or decreasing their productivity (Singh, 2016)**.** Maslow's (1943) theory has also left out the behavioural elements, which explain the primary and secondary reinforces that contribute to stage progressions (Harrigan & Commons, 2015). One of the most common criticisms of Maslow's (1943) theory is that individuals move from one level of the pyramid to the next and only desire another layer of needs when previous layers have been fulfilled (Greus & Sleath, 2018; Ilgunov & Khutter, 2016). According to Mawere, Mubaya, van Reisen, and van Stam (2016), Maslow's (1943) theory is not a universal motivational theory as it does not take into account non-Western contexts and cultures.

Despite these limitations, practitioners continue to use the concept of needs satisfaction to motivate and enhance individual performance. It is understandable that one may not be able to benefit from achieving higher-order needs if one has no shelter to live in and no food to eat. Whilst individuals might momentarily pursue a higher-level need, the yearning for food and shelter would most certainly become the main goal again (Sabbagha, 2016). According to Omole, Ajani, Odunjo, and Olaide (2019), Maslow's (1943) main premise that people have a pyramid hierarchy of needs that they will satisfy from bottom to top, is applicable to the work setting, and has been used to explain job satisfaction. Financial compensation and healthcare are some of the benefits which assist an employee to meet their basic physiological needs. However, these needs are seldom completely satisfied as employees are continually striving to meet their needs at any given point in time (Omole *et al*., 2019).

4.1.2.2 Herzberg's two-factor theory

Herzberg's (1966) two-factor theory is an extension of Maslow's (1943) theory. Herzberg (1966) built on Maslow's (1943) theory by examining stimulators that meet employees' needs (Tilekar & Pachpande, 2014). Hertzberg's (1966) theory is one of the most important theories on contentment as it states that job satisfaction and job dissatisfaction are two different dimensions. Content theories focus on satisfying the needs of employees in order for them to perform efficiently. An important factor from Herzberg's (1966) theory is human relations, more specifically the relationship to peers or subordinates that can be causes of either satisfaction or dissatisfaction. Thus, human relations are critical for achieving job satisfaction (Jalagat Jr., 2016). Hertzberg's (1966) theory emphasises that job satisfaction and job dissatisfaction are not two ends of the same continuum. This means that factors that contribute to job satisfaction vary from factors that contribute to job dissatisfaction. Hence, the absence of factors that

increase job satisfaction would not automatically be responsible for job dissatisfaction and vice versa (Joseph, 2017).

The central theme of the two-factor theory is the difference between motivation and hygiene factors, or intrinsic and extrinsic factors. Herzberg, Mausner, and Snyderman (1959) referred to motivation factors as intrinsic to the job and hygiene factors as extrinsic to the job. Thus, motivation factors contribute to increasing and improving job satisfaction whereas hygiene factors contribute to reducing job dissatisfaction (Alshmemri, Shahwan-Akl, & Maude, 2017). According to Holston-Okae and Mushi (2018), Herzberg's (1966) motivation-hygiene theory refers to the relationship between employees' job satisfaction and job dissatisfaction in the employee's work environment. Herzberg *et al*. (1959) conducted interviews with 200 engineers and accountants to understand the motivating factors behind employees' work satisfaction or dissatisfaction. They found that motivational factors can impact positively on employees' job attitudes because employees' self-actualisation needs are satisfied. Achievement, recognition, positive feedback, additional responsibilities, advancement, promotion, and the job itself are examples of motivation factors (Herzberg *et al*., 1959). Herzberg (1966) identified achievement, recognition, employees' perceptions, responsibility, advancement, and the possibility of growth as motivational constructs affecting employees' motivation and job satisfaction (Holston-Okae & Mushi, 2018).

Table 4.2 is a summary of Herzberg's (1966) two-factor theory displaying the motivation and hygiene factors.

Table 4.2 *Herzberg's Motivation and Hygiene Factors*

Motivation Factors	**Hygiene Factors**
Advancement	Interpersonal relationship
Work itself	Salary
Possibility of growth	Policies and administration
Responsibility	Supervision
Recognition	Working conditions
Achievement	

Source: Alshmemri *et al*. (2017, p. 13)

According to Alshmemri *et al*. (2017), advancement is the upward movement and positive position of the employee in the workplace. The job content can affect employees' satisfaction and dissatisfaction depending on whether the job is too easy or too difficult, interesting, or boring. Possibilities for growth refer to opportunities for professional growth and promotions. Responsibility is the authority and freedom to make decisions. Positive recognition occurs

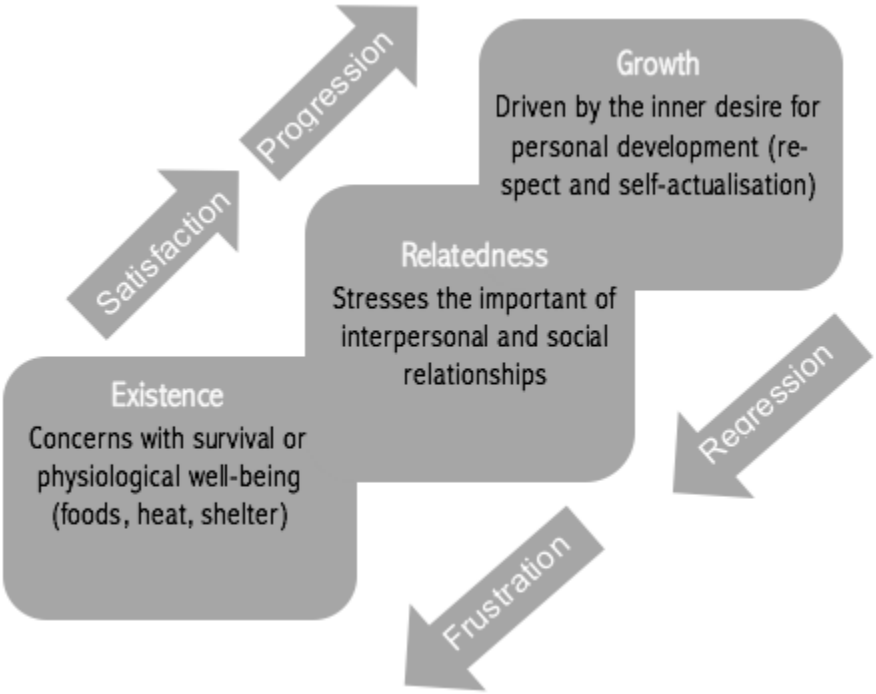
when employees receive praise or rewards for achieving work goals whilst negative recognition refers to criticism and blame for the work done. Positive achievement includes being successful in work tasks whereas negative achievement includes the inability to make progress or poor decision-making at work. Interpersonal relationships include interactions and discussions both in the work environment and during break times. Salary includes all types of compensation in the workplace. Policies and administration refer to the management as well as the quality of workplace policies and guidelines. Supervision focuses on the competence and fairness of the supervisor. Working conditions includes the physical surroundings and facilities of the job (Alshmemri *et al*., 2017).

Anderson (2017) stated that when Herzberg (1966) initially separated the motivational factors of his study into hygiene and motivational factors, there was criticism regarding the propensity for these factors to overlap (Locke, 1976). For instance, the act of eating can provide both nourishment and pleasure (Anderson, 2017). Many researchers have conducted studies that produced contrary findings from those of Herzberg (1966). For instance, Wiley (1997) conducted one of the most popular studies contradicting the findings of Herzberg's (1966) two-factor theory stating that the theory was valid regardless of gender, age, occupational level, and background. Maidani (1991) conducted a similar study to Herzberg *et al*. (1959) with engineers and accountants in private and public organisations in Florida. The findings supported that motivation factors are the major reasons for job satisfaction. However, the study found that both motivation and hygiene factors can be sources of job satisfaction. According to Sabbagha (2016), Herzberg (1966) did not take into account that due to individual differences, individuals might have different needs and subsequently different motivators.

4.1.2.3 Alderfer's existence relatedness-growth (ERG) theory

According to Thiagaraj and Thangaswamy (2017), Alderfer (1969) simplified Maslow's (1943) hierarchy of needs into three basic human needs namely existence, relatedness, and growth (ERG) so that it was more in line with data obtained from empirical research. Maslow's (1943) hierarchical structure was retained but the levels were reduced from five to three, and an overlap existed in the middle layers. The ERG theory sees different needs from different levels existing in a sort of continuum where, while there is a hazy precedence for a lower level need, it can still very well exist in the presence of a higher level need (Thiagaraj & Thangaswamy, 2017). Figure 4.3 represents Alderfer's (1969) ERG theory. The ERG theory emphasises the subjective state of need satisfaction and how the satisfaction of some needs influences the desire for other needs (Sabbagha, 2016).

Figure 4.3 *An Adaptation of Alderfer's ERG Theory*



Source: Oanh (2016, p.11)

According to Oanh (2016), Alderfer's (1969) existence needs category combines Maslow's (1943) physiological needs and safety needs which are essential needs for survival and safety. These needs include food, shelter, and safe working conditions. The Relatedness needs category corresponds to the social needs level of Maslow's (1943) needs theory which comprises of needs that are pivotal for maintaining interpersonal relationships and for connecting with other individuals. Extrinsic motivation also belongs to this category of Relatedness needs. The Growth needs category is a combination of the esteem needs and self-actualisation levels of Maslow's (1943) theory. These needs encompass developing and growing as well as attaining self-improvement and intrinsic motivation through accomplishment (Oanh, 2016).

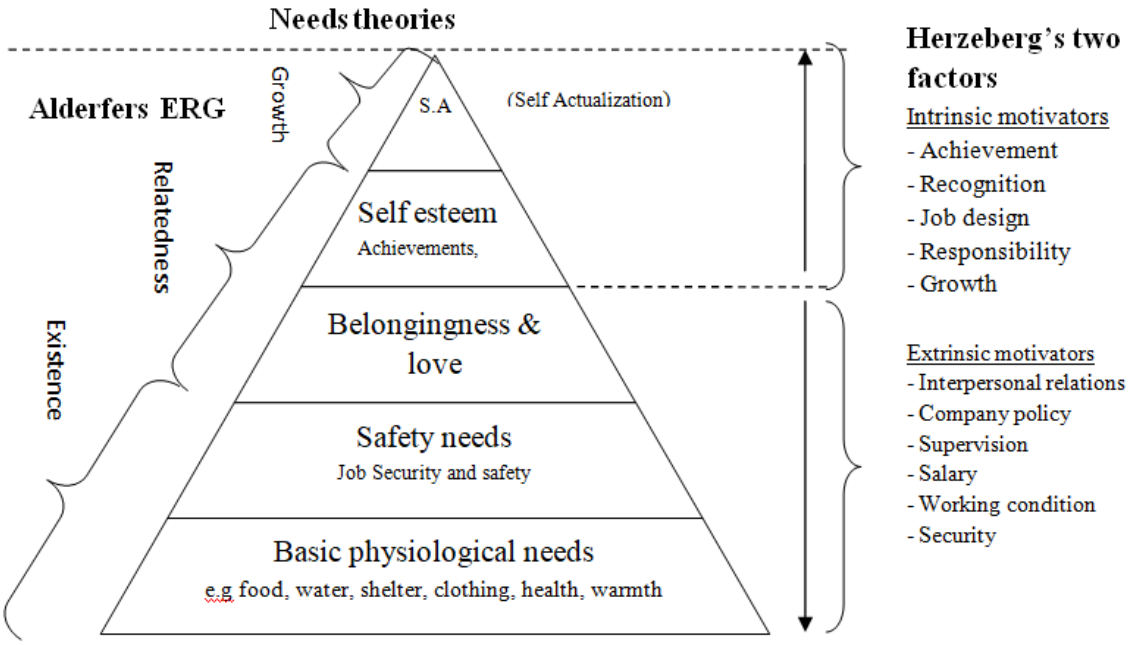
Alderfer's (1969) ERG theory recognises that people are different and there are variables that can affect the needs of an individual. ERG theory states that because an individual needs to satisfy several motivators at the same time, an employer who only tries to satisfy one need at a time results in it ineffectively motivating its employees (Sabbagha, 2016). Alderfer's (1969) ERG theory contradicts the notion that the higher up the needs hierarchy the better it is but rather that the different needs work simultaneously. For instance, the employee will not be

encouraged if a manager focuses on one need at a time. If an employee's course towards satisfaction is hampered, she/he will still pursue this path but at the same time she/he will regress towards more satisfied needs. Thus, the ERG theory not only provides a different category of needs, but also their relationships, progression, and regression of their satisfaction (Mehta & Kumar, 2016).

4.1.3 Summary of theoretical models of job satisfaction

The content-based theories of Maslow (1943), Herzberg (1966) and Alderfer (1969) were discussed. The similarities and differences as well as the strengths and weaknesses of each theoretical model were highlighted. Figure 4.4 illustrates the overlapping areas and differences of Maslow's (1943) hierarchy of needs, Herzberg's (1966) two-factor theory and Alderfer's (1969) ERG theory. Both Herzberg (1966) and Alderfer's (1969) theories emanate from Maslow's (1943) theory. The similarities are that the five levels of Maslow's (1943) theory were retained, however, these were reduced to two levels by Herzberg (1966) and three levels by Alderfer (1969). The difference is that motivation or intrinsic motivators increase job satisfaction whilst hygiene or extrinsic motivators decrease job satisfaction (Herzberg, 1966). Also, existence, relatedness, and growth needs work simultaneously (Alderfer, 1969).

Figure 4.4 *Similarities and Differences of Maslow, Herzberg, and Alderfer's Content-based Theories*



Source: Adapted from Finnigan (2016) in Odhong, Were, and Jonyo (2018, p. 66347)

The different dimensions of job satisfaction will be discussed below.

4.1.4 Dimensions of job satisfaction

According to Lee (2014), as job satisfaction is intangible, conceptualising this concept is important. Exploring the job satisfaction of police officers is vital because of the vast differences in their initial expectation of the job and the reality of the job. By combining the emotional aspect of Locke's (1976) definition of job satisfaction, and Spector's (1997) dichotomy of satisfaction (like or dislike) of a job, Strumpfer and Mlonzi (2001) define job satisfaction as an emotional state of either liking or disliking one's job because of either a global feeling or a set of related attitudes that produce either satisfaction or dissatisfaction.

Locke (1976) indicated that there are four features of job satisfaction that include expectancies, needs, values, and need-value conflicts. Expectancies refer to whether or not an employee can achieve an expected outcome from his or her job. Needs are the fulfilment of individuals' physical and psychological needs. Physical needs are the prerequisites for a healthy, well-functioning body such as food, water, and rest. Psychological needs are the requirements for a healthy, effectively functioning consciousness such as sensory stimulation, self-esteem, and pleasure. Values are "what a person consciously or subconsciously desires, wants, or seeks to attain" (Locke, 1976, p.1304). Needs are innate human basic needs whilst values are acquired by what people want in life. Need-value conflicts refer to the existence of needs which promotes specific action, and subsequently the pursuit of specific values. Once these values are achieved, they may not produce the same degree of pleasure. Thus, overall job satisfaction occurs when all of these aspects are satisfied (Lee, 2014).

According to Spector (1997), there are three vital components of job satisfaction. Firstly, organisations must ensure respect for and fair treatment of its employees regardless of their position so that a high level of job satisfaction will ultimately reflect good emotional and mental state of employees. Secondly, the level of job satisfaction determines the behaviour of employees which affects the overall functioning of the organisation. Job satisfaction leads to positive behaviour whereas job dissatisfaction leads to negative behaviour of employees. Thirdly, job satisfaction is one of the aspects that determine the success of an organisation (Jalagat Jr., 2016).

Locke (1976) identified and summarised five job dimensions namely, rewards (e.g. pay); working conditions and fringe benefits; co-workers or supervisors; the nature of the work itself;

and the organisation itself. Spector (1997) expanded on Locke's (1976) five facets to include nine facets of job satisfaction which were considered as either intrinsic satisfaction or extrinsic satisfaction. Intrinsic satisfaction is related to the impact of the nature of job tasks and includes promotion, contingent rewards, and nature of work. Extrinsic satisfaction is associated with aspects external to the work situation that are not part of the specific task and includes pay, supervision, benefits, operating procedures, co-workers, and communication (Sabbagha, 2016).

In this study, job satisfaction will be measured by the short form of the MSQ which comprises of 20 questions representing three scales, namely intrinsic satisfaction, extrinsic satisfaction, and general satisfaction. The 20 job satisfaction items include: (1) ability utilisation, (2) achievement, (3) activity, (4) advancement, (5) authority, (6) company policies and practices, (7) compensation, (8) co-workers, (9) creativity, (10) independence, (11) moral values, (12) recognition, (13) responsibility, (14) security, (15) social service, (16) social status, (17) supervision-human relations, (18) supervision-technical, (19) variety, and (20) working conditions (Weiss *et al*., 1967). The constructs of intrinsic satisfaction, extrinsic satisfaction, and general satisfaction are pertinent to employees from the SAPS as both internal and external factors contribute to their general satisfaction.

A discussion on the antecedents of job satisfaction follows.

4.1.5 Antecedents of job satisfaction

Weiss *et al*. (1967) have identified 20 factors of job satisfaction in their study, 8 of which are organisational factors and include advancement, co-workers, compensation, supervision, human relations, recognition, company policies, and security. In most public institutions and in the South African public sector, promotions and recognition are embedded in performance management systems and are, in terms of policy provisions, based on performance. Promotion and career advancement are linked to increased salary, job responsibilities, authority, and job status. In contrast to employees that do not expect promotions and career advancement, those that anticipate being promoted in the future are more likely to experience unsatisfactory working conditions (Mohajane, 2017). Promotion includes increases in salary, being supervised less, more challenging work, more work responsibilities, and freedom to make decisions. Thus, promotions lead to enhancing an employees' spirit. Rigid organisational policies provoke negative job emotions and flexible policies result in job satisfaction (Abdolsha, Khatibi, & Moghimi, 2018). Compensation is an influential factor of job satisfaction especially when the employee perceives this pay as fair and equitable (Abdolsha

et al., 2018). Competitive and equitable rewards that are based on fair procedures enhance job satisfaction whilst procedures that are viewed as biased or discriminatory enhance job dissatisfaction (Mohajane, 2017). Pieters (2018) found that employees tend to be more satisfied with their jobs when organisational procedures are adhered to and are applied consistently and fairly, and when supervisors treat employees with the necessary respect.

Similar to rewards, employee recognition is mainly used by managers in most public institutions to improve job satisfaction. Appreciative feedback, which managers can provide during performance appraisals, is a way to acknowledge good performance. This type of recognition enhances job satisfaction and validates employees' performance (Mohajane, 2017). The results of Omole *et al*.'s (2019) study showed that salary and work motivation jointly predicted job satisfaction among secondary school teachers. The study also found that factors such as rewards and recognition are essential for job satisfaction because salary alone cannot be an adequate form of extrinsic motivation. Obiebi and Irikefe's (2018) research revealed that a significant impact of motivation exists on job satisfaction and performance.

According to Mohajane (2017), supervision may either have a negative or a positive influence on job satisfaction. Support-oriented leadership styles tend to be more effective in increasing job satisfaction than autocratic leadership styles. Job satisfaction may be adversely affected where employees perceive their work environment in a negative manner due to ineffective communication and conflict amongst co-workers that is not addressed. Thus, a good working environment is crucial for enhancing job satisfaction (Mohajane, 2017). Khalid, Irshad, and Mahmood's (2012) research focussed on the impact of working conditions, pay and promotion, fairness and job security, and experience of professional workplace relationships on employees' job satisfaction levels. Khalid *et al*. (2012) found that pay, work efficiency, supervision, and harmonious relationships with co-workers are the most important factors that contribute to job satisfaction. Peng, Chen, and Yen (2019) found that job security is significantly and positively related to job satisfaction among Taiwanese participants but is not significant amongst mainland Chinese participants. A study conducted by Stefanovska-Petkovska, Bojazdiev, Handjiski, and Trajkovska (2017) re-visited Herzberg's (1966) two-factor theory and the influence of work environment characteristics on job satisfaction. The results showed that four hygiene factors (satisfaction with responsibility, opportunities for advancement, work itself, and good feelings about the organisation) and four motivational factors (effective supervision, good relationship with co-workers, work, and job safety) considerably predict job satisfaction (Stefanovska-Petkovska *et al*., 2017).

The variables that influence job satisfaction will be discussed next.

4.1.6 Variables impacting job satisfaction

In this section, the variables that can influence job satisfaction will be discussed. These variables include gender, age, race, marital status, rank, and tenure.

4.1.6.1 Gender

Lee's (2014) research revealed that gender played a significant role in terms of police officers' job satisfaction. In contrast, the research findings of Bhat (2018), Culibrk *et al*. (2018), Ramadhani (2014), and Van der Schyff, Botha, and Ellis (2018) showed no significant difference between gender and job satisfaction. Damazo's (2017) as well as Gaunya, Oruta, and Lidava's (2016) research also showed that there was an insignificant difference between police officer's job satisfaction and gender. Gaunya *et al.* (2016) mentioned that the reason for this insignificant difference is because feedback had a significant influence on police officer's job satisfaction and should therefore be supported.

4.1.6.2 Age

Herzberg *et al*. (1957) describes the relationship between age and job satisfaction in the form of a U-shape with three distinct stages. At the beginning of their careers, employees display high levels of job satisfaction, which decreases in middle age, then increases again in the years prior to retirement. Similarly, Lytle (2014) stated that it is possible that younger employees are more enthusiastic about their career, while older employees may be more optimistic about retirement. More specifically, police officers 40 years or older were more likely than younger police officers to be satisfied with their job. However, Culibrk *et al*. (2018) found a significant correlation between age and job satisfaction, where older employees are less satisfied in their jobs. Ramadhani (2014) and Msuya (2016) also found a significant difference between age and job satisfaction. Damazo (2017) attributed the significant difference between police officer's job satisfaction and age to the fact that older police officers have lower levels of job satisfaction as a result of the years on the force. Gaunya *et al*. (2016), on the other hand, found that age was not a significant predictor of job satisfaction amongst police officers.

4.1.6.3 Race

According to Lee (2014), race is significantly related to police officers' job satisfaction. Boke and Nalla (2009) also found that race was the only substantial individual factor affecting police job satisfaction. However, Miller, Mire, and Kim (2009) found no important relationship

between race and police job satisfaction. Van der Schyff *et al*. (2018) also found that there were no significant differences amongst race groups and job satisfaction.

4.1.6.4 Marital status

Msuya's (2016) research findings showed a significant difference between single and married employees with job satisfaction. These findings might be due additional responsibilities such as taking care of the family, among the married employees, which depends on a stable job condition in order to meet critical family responsibilities (Msuya, 2016). Damazo's (2017) research findings revealed that there was a significant difference between police officer's job satisfaction and marital status. Kemunto, Adhiambo, and Joseph (2018) found that married employees experienced higher job satisfaction.

4.1.6.5 Rank

Autonomy and empowerment may allow for more independence and flexibility at work. As a result, patrol officers, who have less autonomy than higher ranking police officers, may experience a lower level of job satisfaction. This suggests that as officers age they may become more satisfied and rank, authority, and control could account for this job satisfaction (Lytle, 2014). According to Gaunya *et al.* (2016), police officers in Kenya enjoy some privileges such as private work spaces, higher salaries and flexible work hours along with their higher rank and increased responsibility. Thus, senior police officers have better working conditions than junior level police constables which may account for their high level of job satisfaction. Participants' senior ranks may be accompanied by status and good connections within the national police service environment which may increase job satisfaction. Another possible reason for the high job satisfaction of these police officers is linked to their desire to excel. The study also found that police officers that are subjected to continuous shift work tend to experience low job satisfaction (Gaunya *et al.* (2016). Ramadhani (2014) also found that employees' job position was significantly related with job satisfaction. In contrast, Damazo (2017) indicated that there was no significant difference between police officer's job satisfaction and rank.

4.1.6.6 Tenure

According to Ramadhani (2014), there was a significant difference between length of service in an organisation and job satisfaction. Damazo (2017) found that there were significant differences in police officer's job satisfaction and tenure. Unlike Damazo (2017), Gaunya *et*

al. (2016) stated that tenure was an insignificant predictor of job satisfaction amongst police officers. Riza *et al*. (2015) found that employees experienced less job satisfaction as their tenure increased. They indicated that job satisfaction displayed a cyclical effect where it constantly decreased beyond the first year of employment and continued to decrease until employees switched organisations. Thereafter, employees' job satisfaction experienced a boost and then started to decrease again (Riza *et al.*, 2015).

4.1.7 Consequences of job satisfaction

When employees experience a high level of job satisfaction, complaints, grievances, absenteeism, turnover, and termination tends to decrease to the barest minimum and there will be improvement in employees' punctuality, morale, and quality of output (Bhat, 2018). According to Borovec and Balgac (2016), low levels of job satisfaction leads to negative behaviour such as absenteeism, low quality output, resistance to change, and higher staff turnover. Lukosi (2015) found that the effects of employee job dissatisfaction are turnover and absenteeism. The outcome of this on organisational performance includes loss of knowledge, poor organisational performance, decreased productivity, low level of involvement, and organisational commitment.

There are great benefits gained from ensuring that employees are happy and engaged. Employees who are content with their job and the organisation they work for may encourage others to apply for positions at their organisation. When employees are satisfied with their jobs, they may talk about their organisation which sends a positive message to the community, potentially resulting in more business sales and utilisation of its services (Reukauf, 2018). Logically, when employees are satisfied with their job, they will be happy and more likely to become successful employees (Jalagat Jr., 2016).

According to Borovec and Balgac (2016), the immense impact of job satisfaction on police officers' work emerges mainly from the nature of police work and the manner in which dissatisfied employees may negatively affect the rendering of services as well as the image and public perception of police amongst citizens. Optimistic attitudes about work, positive changes in the work environment, supervision, encouragement, and the work itself may improve productivity and the quality of service. According to Lokesh, Patra, and Venkatesan (2016) job satisfaction reduces stress levels, burnout, and employee turnover which contribute towards improving the performance of officers. However, the absence of job satisfaction may result in decreased productivity and effectiveness, poorer quality of service, decreased

efficiency, and poorer morale amongst employees (Ercikti, Vito, Walsh, & Higgins, 2011; Harter, Schmidt, Asplund, Killham, & Agrawal, 2010). Alexander, Walker, Innes, & Irving (1993), James & Hendry (1991) and Koslowsky (1991) indicated that high levels of police absenteeism and resignations were also linked to low levels of job satisfaction (Sommerfeldt, 2010).

4.2 MOTIVATION

In this section, the various definitions provided on the concept of motivation will be discussed. Thereafter, the theoretical models of Maslow (1943), Herzberg (1966), Alderfer (1969), McClelland (1976) and Vroom (1964) will be discussed.

4.2.1 Conceptualisation

Work is a significant source of identity and can be either fulfilling or frustrating which determines the characteristics of the individual and the nature of work (George, Sabapathy, & Varghese, 2017). The global trend that is aimed at improving the level of work productivity amongst employees, whilst dealing with the challenge of an increased multigenerational workforce that requires each generation to be effectively motivated, has resulted in the need for understanding how to motivate employees to let them give 100% in their work (Heyns & Kerr, 2018). Therefore, the motivation of employees is a sensitive topic in the workplace that ultimately determines the amount of effort that employees are willing to invest in the organisation to commit to good performance (Kuranchie-Mensah & Amponsah-Tawiah, 2016).

Motivation can be described as a set of energetic forces that can emanate from both within as well as outside of an individual, to activate work-related behaviour and to decide its form, direction, intensity, and duration (Latham & Pinder, 2005; Pinder, 1998). These energetic forces cannot be directly observed but can be operationally measured through factors like rewards, incentives, and motivators (Huang, 2014). Many rewards do not necessarily result in a high level of motivation. For instance, an employee may earn high-level extrinsic rewards (such as salary) but may not be motivated due to believing her/his efforts deserve a higher salary, she/he does not require money, or she/he pays more attention to the gratification of the job itself (Huang, 2014).

Motivation is an individual's willingness to direct high levels of effort towards the accomplishment of goals (Osemeke & Adegboyega, 2017; Robbins, 2005). Robbins (2005)

indicated that motivation occurs when effort is exerted towards organisational goals which are guided by the satisfaction of individual needs. According to Jost (2014), an employees' effort encompasses three aspects which includes direction, strength, and persistency. The direction of efforts refers to the various work options that the employee can choose from. The strength of efforts relates to the level of commitment the employee has when executing the work option that was chosen. The persistency of efforts occurs when the employee perseveres with the selected work option and duration of work performance despite obstacles that are encountered (Jost, 2014). Robbins (2005) described a need as an internal state that makes certain outcomes seem attractive. When a need is left unsatisfied, it causes strain and stimulates drives within an individual, producing behaviour to seek goals that if attained, will satisfy the need and lead to a decrease in pressure (Robbins, 2005). Jost (2014) stated that needs are either physiological (primary or basic needs which are integral for survival such as air and water) or psychological (secondary needs that are innate and are learnt such as money and power).

According to McClelland (1976), achievement motivation, also known as need for achievement, is described as the impetus to enhance one's performance and desire to succeed in one's undertakings. Individuals who are achievement-oriented tend to take more risks, embark on innovative and engaging tasks, set specific goals, and possess an internal locus of control. These individuals are usually driven by a personal sense of accomplishment instead of the rewards related to their success (Gizdarska, 2017). Acquah (2017) also indicated that employees with high achievement needs are inclined to excel in their work and appreciate the acknowledgement they receive for their effort, however, they are more likely to avoid high risk situations where the possibility of failure is high.

According to Acquah (2017), the characteristics of individuals, jobs, and the work situation are basic categories of variables that contribute to motivation in the work environment. Employees' personalities determine their attitude about their jobs. Whilst managers and supervisors can do little to control these personal variables, they can control other variables responsible for a decrease in employees' motivation (Acquah, 2017). For the purpose of this study, motivation is defined as a drive to achieve targets and the process to maintain that drive (Lee, 2010). More specific to this study is the concept of achievement motivation which is an internal psychological drive that enables individuals to pursue work that they find valuable and drives them to attain their goals whilst simultaneously competing and comparing themselves with others (Lee, 2010). The concept of achievement motivation is relevant here because, in general, the nature of police work can be quite dangerous, requiring a great amount of self-motivation on the part of employees.

4.2.2 Theoretical models of motivation

According to Badubi (2017), both content and process theories must be used to effectively motivate employees. The content-based theories of Maslow (1943), Herzberg (1966), Alderfer (1969), and McClelland (1976) as well as the process theory of Vroom (1964) will be used to explain what motivates people in the workplace. Whilst content theories assume that individuals have a similar set of human needs and are motivated to satisfy these needs, process theories focus on the rational cognitive process and state that even though most people may have similar needs, the significance and placement of these needs are very subjective and different for everyone (Osemeke & Adegboyega, 2017).

Since Maslow (1943), Herzberg (1966), and Alderfer's (1969) theories have been discussed in detail under theoretical models of job satisfaction, the discussion in this section will focus on how these theories relate to motivation.

4.2.2.1 Maslow's hierarchy of needs theory

Nwannebuife (2017) stated that in order to effectively motivate employees in the workplace, managers have to determine and comprehend the current needs of their staff. Maslow's (1943) model emphasised that lower level needs such as physiological and security requirements must be fulfilled before the pursuit of higher-level motivators such as esteem and self-fulfilment can be initiated. Even though Maslow's (1943) theory has its shortcomings, it has been able to establish those needs that are specific to an individual and its impact on an individual's performance or productivity in an organisation. Thus, to ensure that employees remain highly productive so that there is consistent growth, stability, and success in the organisation, Maslow's (1943) theory states that the needs of employees must be taken into consideration first (Nwannebuife, 2017).

According to Rahman and Nurullah (2014), the lower level needs will not motivate employees unless circumstances change. Individuals possess varying levels of motivation and may have different goals that are incompatible with organisational goals. Hence, managers must be able to identify employees' relative strength at each level in Maslow's (1943) model to best motivate employees for the continuous success of the organisation. For instance, managers should take into account the level of employee motivational preferences when compiling a better remuneration package. The lower level motivational preference of employees includes pay, benefit, bonus, and other financial benefits. The level of motivational preference of employee's

need for respect, satisfaction, career growth, and advancement are also significant (Rahman & Nurullah, 2014).

According to Smit *et al*. (2011), Maslow's (1943) theory emphasises significant categories of needs whilst differentiating between higher-order and lower-order needs. The importance of personal growth and self-actualisation in the workplace is also highlighted. South African managers can apply Maslow's (1943) theory by making provision for the physiological and security needs of their workforce. They can also incorporate their workers in groups and teams so that they can be motivated to fulfil their social needs and promote working environments where higher-order needs (esteem and self-actualisation) can be attained (Smit *et al*., 2011).

4.2.2.2 Herzberg's two-factor theory

Herzberg's (1966) theory offers insight into the factors that can cause job satisfaction and job dissatisfaction, respectively. The two-factor theory persuades employers to motivate their employees and to maintain motivation with two different sets of factors. The two-factor theory also proposes that managers should eradicate factors that contribute to job dissatisfaction and should rather highlight factors associated with promotional opportunities as well as opportunities for personal growth, recognition, and responsibility (Namweda, 2017).

According to Smit *et al*., (2011), Herzberg (1966) stated that hygiene factors are linked to employees' negative feelings about their work and do not enhance employee motivation. He regards salary as a hygiene factor which will not motivate employees since individuals work to earn money and will be dissatisfied if they do not earn anything. However, if a monetary reward is associated with performance, such as a merit bonus or a promotion, it provides recognition of the employee's performance and becomes a motivator. Herzberg's (1966) contribution to understanding motivation in the workplace encompasses the spotlight on the significance of the work itself in the motivation of employees which has resulted in an interest in job enrichment. He emphasised the limited impact of more money, fringe benefits, and better working conditions (hygiene factors) on motivation, and the powerful influence of factors such as achievement, recognition, responsibility, and opportunities for advancement and growth (motivators) (Smit *et al*., 2011).

Herzberg's (1966) theory does not take into account individual differences, therefore it cannot be concluded that his proposal regarding motivation is readily applicable to all types of organisations. In other words, Herzberg's (1966) theory needs to be re-examined in order to

comprehend which motivation factors are more significant in various organisations (Osemeke & Adegboyega, 2017).

4.2.2.3 Alderfer's existence relatedness-growth (ERG) theory

In terms of motivation, the ERG theory indicates that organisations must sustain good communication and relations between its employees as well as between the employer and employees. Existence occurs when organisations promote a healthy and safe working environment that is governed by mutual respect and tolerance where employees can interact amicably. Relatedness involves managing social relations needs through acknowledgment, group security, and enhancing employees' reputation. Growth includes making equal provision for employees to develop and grow. Employees will be de-motivated if growth is hampered (Bajis, Chaar, Penm, & Moles, 2016).

Unlike Maslow (1943), Alderfer (1969) indicated that more than one level of needs can motivate an individual simultaneously, for instance, a need for friendship (relatedness) and a need for promotion (growth) can influence the motivation of an individual at the same time. The management implications of the ERG theory are that it comprises of a 'frustration-regression' component where an employee may be motivated to gratify a lower-order need if higher-order needs remain unfulfilled.

4.2.2.4 McClelland's achievement motivation theory

McClelland's (1976) theory of needs highlights needs like the higher-order (social and esteem) needs of Maslow's (1943) hierarchy. McClelland's (1976) theory of needs is also called the achievement motivation theory and focuses on individual needs as well as environmental factors, which unite to form three basic human motives of need for achievement, need for power, and need for affiliation (Sahito & Vaisanen, 2017). According to McClelland (1976), it is not the achievement, affiliation, or power motivation individually that is of fundamental importance. Rather, it is managers' comprehensive motivation profiles, that is, the relative strengths of these three motivation factors which are essential (Andersen, 2018).

People who take responsibility, look for challenges and strive to find a solution to problems and to achieve their ultimate goals are regarded as having a high need for achievement. These individuals obtain promotions, professional development, and success much faster (Sahito & Vaisanen, 2017). The need for power is the need to make others behave in a way that they do not normally behave. The need for affiliation is the yearning for friendly and close

interpersonal relationships. McClelland (1976) indicated that all employees have these three types of motivation regardless of age, sex, race, or culture. The type of motivation that each individual is driven by is determined by their life experiences and their cultural beliefs. McClelland (1976) suggests that those in top management positions should have a high need for power and a low need for affiliation. He also believes that even though individuals with a need for achievement can make effective managers, they are not generally suited to being in top management positions (Osemeke & Adegboyega, 2017). Success in the workplace depends upon an accurate matching of job requirements. Placing an employee with high achievement needs in a position suitable for an employee with high affiliation needs will lead to a mismatch and possible underperformance (Thiagaraj & Thangaswamy, 2017).

McClelland's (1976) theory stipulates that employees have expectations which must be taken into consideration by management and concentrates on behavioural patterns that may influence performance in the workplace. This theory of motivation makes supervisors aware that individual employees have their own expectations that may differ from time to time (Namweda, 2017). An integral aspect of McClelland's (1976) theory is that individuals can obtain the need for achievement since they are not static and can develop their own abilities. It may be feasible to alleviate South Africa's scarcity of efficient managers by motivating the achievement needs of employees with the capacity to become managers (Smit *et al*., 2011).

According to Redmond (2010), needs theories are generally more descriptive, however, McClelland's (1976) theory is a combination of description and prescription allowing organisations to proactively promote fruitful corporate behaviour through training programmes and matching motivational needs with work situations (Sabbagha, 2016). Ashwathapa (2005) mentioned that one of the criticisms of this theory is that it maintains that needs are not permanently acquired. McClelland (1976) is the only theorist who argues that needs can be altered socially through education and training. Another limitation is the methodology that is used to support this theory. Even though the projective techniques of Thematic Apperception Test (TAT) have several advantages over structured questionnaires, the interpretation of the responses is more subject to the researcher's bias (Ashwathapa, 2005).

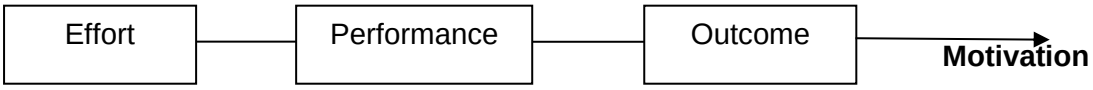
4.2.2.5 Vroom's expectancy theory

Victor Vroom (1964) developed the expectancy theory which is based on how the three elements of effort, performance, and rewards are connected to one another. Employees will be motivated to utilise a high level of effort when they believe that their effort will lead to good performance which subsequently will lead to rewards (Baakeel, 2018). Thus, the strength of a

tendency to behave in a certain way depends on the strength of an expectation that such behaviour will be followed by a specific outcome that appeals to the individual. In this way, employees can be motivated to enhance their performance when they are confident that better performance will result in good performance appraisal in the form of some reward (Thiagaraj & Thangaswamy, 2017).

Figure 4.5 represents Vroom's (1964) expectancy theory. Vroom recognised that effort, performance and outcomes are related to employee motivation. Numerous components consisting of expectancy, instrumentality and valence were utilised in supporting the theory (Nwannebuife, 2017).

Figure 4.5 *Vroom's Expectancy Theory*



Expectancy	Instrumentality	Valence
Perceived likelihood that effort leads to quality performance	Perceived likelihood that quality performance leads to preferred outcomes	Value of Expected outcomes to the worker

Source: Nwannebuife (2017, p. 40)

Oanh (2016) indicated that the expectancy is the perception that one's effort will lead to an outcome which is the accomplishment of desired performance goals. The instrumentality is the perception that if an employee attains performance expectations, she/he will receive a better reward. The valence signifies the value an employee attaches to the rewards (Oanh, 2016). This theory is based on perception which means that even though managers may feel that they have provided all aspects that are appropriate for motivation, this may appeal to the majority of employees in the organisation, however, it does not guarantee that all the employees will be motivated by it (Nwannebuife, 2017).

Vroom's (1964) expectancy theory is more interested in the cognitive antecedents that go into motivation and the manner in which they relate to each other. The theory is a cognitive process theory of motivation that is based on the premise that individuals trust that they will be motivated if they believe that strong effort will result in good performance and good performance will result in desired rewards (Lunenburg, 2011). Vroom's (1964) theory attempted to clarify how motivation impacts on employees' behaviour in the workplace by

providing an explanation as to why people choose a specific behaviour over another and what they assume the outcome of that selected behaviour will be. In summary, the expectancy theory describes the mental or cognitive processes that an individual experiences when making decisions in the workplace (Singh, 2016). Vroom's (1964) theory is applicable to organisations because it does not only recognise the reasons why an employee performs her/his job but also gives employers an insight on why they perform their jobs at specific levels. For instance, the motivation for going to work and completing assigned tasks is a secure paycheck. On the other hand, this theory can provide in depth information as to the reasons why employees choose to preserve perfect attendance and carry out their tasks while producing high quality performances (Nwannebuife, 2017). Thus, individuals make decisions about their level of performance based on which level will lead to the best possible outcomes. All three linkages of effort, performance, and outcome must be present for motivation to happen and the absence of any of linkages will lead to lower levels of motivation (Grimard, 2018).

According to Sabbagha (2016), there are numerous criticisms against Vroom's (1964) expectancy theory. When employers use the theory in the workplace, being aware of the fact that individual needs and wants vary, enables them to regularly re-assess the effectiveness thereof. For instance, valence beliefs can transform as employees understand that their actual satisfaction with an outcome is different (e.g. lower or higher) than the satisfaction they expected (Grant & Shin, 2012). Shinde (2018) stated that the expectancy theory appears to be optimistic because individuals perceive a high degree of association between performance and rewards. In many organisations the application of this theory is limited as reward is not directly related to performance since it is also connected to other aspects such as position, effort, responsibility, and education (Shinde, 2018). According to Ashwathapa (2005), converse to the assumption of the expectancy theory that individuals make decisions intentionally, there are several occasions where decisions are made in the absence of conscious thought especially in routine jobs. The theory has restricted use as it is only suitable for situations where the effort-performance and the performance-reward associations are distinctly perceived by employees. It does not take into consideration that many individuals in organisations are rewarded in terms of seniority, education, and positions rather than on their actual performance (Ashwathapa, 2005).

4.2.3 Summary of theoretical models of motivation

All of the content-based motivational theories of Maslow (1943), Herzberg (1966), Alderfer (1969), and McClelland (1976) state that certain needs must be fulfilled in order to propitiate behaviour and sustain it. Individuals possess different needs and are motivated in different ways. When these needs are not met, they cause de-motivation. Unlike Maslow (1943), Herzberg (1966) and Alderfer (1969), McClelland (1976) takes into account situational factors and believe that human needs transforms due to life experiences and the opinions of their culture. Therefore, McClelland's (1976) theory is a very suitable motivational tool as it is applicable to any organisation and it also considers situational factors (Osemeke & Adegboyega, 2017).

In contrast to the content-based theories of Maslow (1943), Herzberg (1966), Alderfer (1969), and McClelland (1976), the process theory of Vroom (1964) emphasises that the concept of needs is not adequate to explain work motivation and must incorporate expectations, values, and perception which are imperative to understand why people conduct themselves in certain ways and why they are eager to devote effort to attain their goals (Culibrk *et al*., 2018). Vroom's (1964) theory differs from the content-based theories of Maslow (1943), Herzberg (1966), Alderfer (1969), and McClelland (1976) as it does not offer particular proposals on what motivates employees. Rather, Vroom's (1964) theory provides a series of cognitive variables that reveals individual differences in work motivation. Individuals do not only act as a result of powerful internal drives, incomplete needs, or availability of rewards. People are rational beings whose principles, perceptions, and likelihood estimates affect their behaviour (Lunenburg, 2011).

The different types of motivation will be discussed below.

4.2.4 Types of motivation

Intrinsic motivation and extrinsic motivation are the two different types of motivation. Intrinsic motivation refers to an inner force or self-desires that directs workers towards assessing their potential, observing and acquiring knowledge in order to meet their personal, and organisational goals. Individuals who are intrinsically motivated have an internal drive to seek new challenges that creates behaviours and encouragement to execute tasks without any external effects. Intrinsic motivation stems from the individual's contentment with the job or task itself and without external pressure or a desire for reward (Hee, Kamaludin, & Ping, 2016;

Makki & Abid, 2017). Delaney and Royal (2017) also indicated that intrinsic motivation includes work activities that are in line with individual needs and values and tends to arise when work provides meaning for the employee. Their research revealed that the primary driver of intrinsic motivation is challenging and interesting work in the absence of institutional barriers to success. Thus, an organisation's enabling structures and processes are crucial aspects of intrinsic motivation. Delaney and Royal's (2017) research also showed that intrinsic motivation is determined by appreciation for employee differences, opportunities to develop innovative ways of working, and acknowledgement or praise from immediate managers. According to Singh (2016), intrinsic motivators are psychological feelings that employees derive from undertaking meaningful work and performing it well.

Extrinsic motivation is the opposite of intrinsic motivation and refers to an external force or the performance of an activity that enables employees to accomplish a desired outcome in terms of personal and organisational goals (Hee *et al*., 2016; Makki & Abid, 2017). According to Delaney and Royal (2017), extrinsic motivation is driven by prescribed incentives where employees get tangible profits in the form of rewards or status. Although this is mainly obtained by means of financial gains, it is imperative for organisations to take into account the indirect ways in which employees may achieve the same outcome, such as promotions, high performance ratings, exposure to senior leaders, or leading a team or project. The availability of career opportunities drives extrinsic motivation by providing new projects, experiences, and lateral as well as vertical roles which externally affirms one's capabilities resulting in greater status or visibility (Delaney & Royal, 2017). Huang (2014) stated that extrinsic rewards refers to rewards that lead to extrinsic motivation and encompasses both tangible and intangible aspects such as money, promotion, job security, and health benefits.

Although extrinsic and intrinsic motivations may appear to be poles apart in terms of how they motivate behaviour resulting in different outcomes, they are still very much linked to one another and can be used together to build an efficient workplace. Since these motivation categories are sensitive to organisational context, being aware of what motivators work best in a specific situation is key to motivating employees (Delaney & Royal, 2017; Singh, 2016). According to Singh (2016, p.200), employees are motivated by a blend of factors such as 'thoughts, feelings, and beliefs besides the interplay of numerous social factors at the workplace'. It may appear as if intrinsic motivators overshadow extrinsic motivators, however, there are benefits once a balance is achieved between both of these motivation categories (Singh, 2016).

The achievement motivation questionnaire (AMQ) developed by Pottas *et al*. (1980) will be used to measure a respondent's degree of achievement motivation in the current study. It was developed to measure five dimensions of achievement motivation, namely, persistence, awareness of time, action orientation, aspiration level, and personal causation (Erwee, 1986). The achievement motivation questionnaire (AMQ) is consistent with McClelland's (1976) definition and theory of achievement motivation which is applicable to any organisation and considers situational factors (Osemeke & Adegboyega, 2017).

The next discussion will focus on the antecedents of motivation.

4.2.5 Antecedents of motivation

McClelland's (1976) achievement motivation theory identified individual needs as well as environmental factors (intrinsic and extrinsic factors), which combine to form three basic human motives of need for achievement, need for power, and need for affiliation (Sahito & Vaisanen, 2017). According to Johnson, Irizarry, Nguyen, and Maloney (2018), McClelland's (1976) achievement motivation theory can provide a better understanding of a group of individuals and their desires so that steps can be taken to ensure that individual needs are met. For instance, a power motivated person may require a distinct path for advancement, an achievement motivated person may require constant challenges, and an affiliation motivated person may require consistent appraisal and feedback. Individuals motivated by power should be awarded responsibility and control. Achievers should be provided with challenges and recognition. Those motivated by affiliation should exist in a warm and welcoming community (Johnson *et al*., 2018).

The findings of Hanaysha and Hussain's (2018) research revealed that employee empowerment had a significant positive impact on employee motivation. Similarly, Owoyele's (2017) research identified autonomy and empowerment, trust, and recognition as the most important intrinsic factors influencing employee motivation. According to Wadhwa and Verghese (2015), empowerment occurs when power, authority with accountability, and responsibility are transferred from superiors to their co-workers. Hanaysha and Hussain's (2018) research also showed that employee training and teamwork had significant positive effects on employee motivation. Training enables employees to have a better understanding of how their job fits into their organisation's objectives, structure, and mission. Employees experience more motivation and enthusiasm about their work when they realise that what they do is vital to their organisation's success. According to Odukah (2016), employees that receive

training are knowledgeable and are able to accomplish their personal goals which results in employees being motivated. Hanaysha and Hussain (2018) stated that teamwork strengthens employee's sense of security, self-confidence, work behaviour, and relationships amongst co-workers. Since teamwork provides better opportunities for the organisation to attract and retain talented individuals as it fosters learning new skills, the organisation can achieve its goals and increase employees' level of motivation (Hanaysha & Hussain, 2018).

Odukah's (2016) research findings indicated that employee motivation was influenced by employees' performance recognition which is similar to Owoyele's (2017) findings. Odukah (2016) mentioned that since vague targets and objectives, as well as poor communication can lead to low motivation, and eventually, to poor work performance, managers must provide the necessary guidance, direction, and support on goals and performance standards. Defining standards of performance and providing feedback on performance is an effective way of providing sufficient job challenge to employees. Good organisational policies should be clear and detailed as to what is expected from employees. Odukah (2016) also found that employee motivation was influenced by training and development which is similar to Hanaysha and Hussain (2018). In addition, Odukah (2016) identified that working conditions influenced employee motivation because employees prefer working conditions that they regard as safe which promotes motivation at work.

Njambi (2014) found that job enrichment, organisational information management, and effective dissemination of information were the most significant extrinsic factors that influenced employee motivation. The study indicated that appreciation of employees by the organisation, the degree of skill requirement, influence of employee perception of the job, employee view on skill development, and the perception about contributing to the company's growth were the most important intrinsic factors influencing employee motivation (Njambi, 2014). Owoyele (2017) also found that job enrichment, organisational information management and effective distribution of information were the most significant extrinsic factors that influenced employee motivation. Furthermore, the research findings revealed that a good working environment, good leadership styles, salaries, and other forms of incentives provided by the organisation were the most significant extrinsic factors that influenced employee motivation (Owoyele, 2017). According to the research findings of Rybnicek, Bergner, and Gutschelhofer (2019), individuals with a high need for achievement, affiliation or power are more effectively rewarded by a closely equivalent reward. Rewards that are not a close match to an employee's needs may be rewarding but to a much lesser degree. Therefore, reward systems that take into consideration the importance of matching rewards with individual needs provide the opportunity of having a higher impact on the employee's motivation (Rybnicek *et al*., 2019).

Ferreira's (2017) study on intrinsic and extrinsic motivational factors revealed that the intrinsic variables that best explain motivation include personal goals and skills acquired. The extrinsic variables that best explain motivation include transparency and loyalty in interactions with bosses, and trust in the company. Individuals who possess a better attitude and who are active in their organisation's business growth, are more motivated and achieve a higher level of performance. Ferreira's (2017) research findings also showed that intrinsic factors such as autonomy and responsibility, and extrinsic factors such as interpersonal relationships, work environment, working conditions, and participation in objectives play an integral role in overall motivation.

The variables that influence motivation will be discussed next.

4.2.6 Variables impacting motivation

In this section, the variables that can influence motivation will be discussed. These variables include gender, age, race, marital status, rank, and tenure.

4.2.6.1 Gender

Armstrong (2015) found that males experienced higher levels of intrinsic motivation than females, but that there was no significant difference between the genders in terms of extrinsic motivation. In contrast, Makki and Abid (2017) found that females are more intrinsically motivated as compared to males. In addition, they discovered that there is no significant difference between males and females with regard to extrinsic motivation, but a significant difference exists between males and females on intrinsic motivation. Research conducted by Snelgar, Shelton, and Giesser (2017) revealed that South African females were more motivated by intrinsic and extrinsic factors than South African males. These researchers feel that females may be a little more intrinsically motivated than their male counterparts because women tend to be more in touch with their emotions and subsequently more able to be rewarded by them. George *et al*. (2017) found that there was no significant difference between male and female employees.

4.2.6.2 Age

According to Ashwathapa (2005), individuals display different amounts of motivation at different stages of their life where motivation is high at the initial stage, then steadily decreases, starts increasing up to a certain point, and ultimately decreases to a low degree.

Kuranchie-Mensah and Amponsah-Tawiah's (2016) findings from four mining companies, show that the level of motivation amongst age groups does not differ significantly. These results contradicted the qualitative findings and statements made by Ashwathapa (2005) regarding the level of motivation and stages of life (Kuranchie-Mensah & Amponsah-Tawiah, 2016).

Heyns and Kerr (2018) conducted research on multigenerational workforces and employee motivation within a South African Rand Water pump station and found that the different generations are motivated similarly by intrinsic and extrinsic motivation. Dissimilarly, Kooij, De Lange, Jansen, Kanfer, and Dikkers (2011) and De Lange, Bal, Van der Heiden, De Jong, and Schaufeli (2011) have empirical evidence indicating that whilst extrinsic motivation decreases with age, intrinsic motivation increases with age (Heyns & Kerr, 2018).

According to Snelgar *et al*. (2017), the age group consisting of individuals between 50 and 59 years of age has the highest mean score for both intrinsic motivation and extrinsic motivation suggesting that this age group has the highest levels of intrinsic motivation and extrinsic motivation. Sommerfeldt (2010) found that police officers become less motivated as they advance in age.

4.2.6.3 Race

Raganella and White (2004) found that differences in motivation were not significantly different for Whites, Blacks, or Hispanics. Adkins (2015) also found no statistical differences in motivation by race.

4.2.6.4 Marital status

Ates and Yilmaz (2018), Delgado, Yap, and Luces (2018) as well as George *et al*. (2017) found that the work motivation scores for married and single employees do not vary significantly. A study by Singh and Sharma (2016) revealed that marital status had a substantial difference on work motivation.

4.2.6.5 Rank

Sommerfeldt (2010) indicated that motivation pertaining to police work, had no impact on rank. Hwang (2008), who studied police officers in Korea, found that promotions and rank did not affect motivation.

4.2.6.6 Tenure

According to Chai, Teoh, Razaob, and Kadar (2017) as well as George *et al*. (2017), there was no significant difference in work motivation and tenure. In contrast, Delgado *et al*. (2018) found that employees with longer tenure experienced a higher level of work motivation. Sommerfeldt's (2010) research showed that tenure had a massive influence on police motivation.

4.2.7 Consequences of motivation

A significant relationship exists between the level of work motivation and job performance. Employees who are highly motivated tend to display outstanding performance in their job (Delgado *et al*., 2018). According to Nwannebuife (2017), when employees are motivated, their morale also increases due to elevated performance and productivity levels which subsequently improves overall organisational performance. Therefore, in order to maintain high levels of organisational performance or productivity, managers must ensure that their workforce stays motivated (Nwannebuife, 2017). Motivated employees invest more time and energy into their jobs, discover innovative ways to be efficient, and give more thought and creativity to job tasks, all of which leads to enhanced performance. The length of time that such motivation continues, and whether it has short-term or long-term implications, depends on its source (Delaney & Royal, 2017). According to Olusadum and Anulika (2018), both intrinsic and extrinsic motivations are immense forces that impel the workforce or individual employees to improve their performance. They established that motivation and staff performance are significantly related and have empirically found that managers must regard the motivation of the workforce as a yardstick in order to achieve organisational stability and growth (Olusadum & Anulika, 2018).

The research conducted by Armstrong (2015) revealed that both intrinsic and extrinsic motivation have a positive correlation with job satisfaction, indicating that employees who are more motivated in their work also experience greater satisfaction. The results of Singh and

Sharma's (2016) study indicated that work motivation significantly predicted job satisfaction. Khan and Iqbal's (2013) research results show a strong positive relationship between intrinsic motivation and employee engagement where an increase in intrinsic motivation leads to an increase in engagement levels. Delaney and Royal (2017) found that motivation is a key component of engagement which means that if organisations invest more to extrinsically motivate their employees they will achieve higher levels of overall engagement. Employees can be classified into three groups where those who are high on both intrinsic and extrinsic motivation are possibly most engaged; those who are low on both intrinsic and extrinsic motivation tend to be detached from the organisation; and those who are high on intrinsic and low on extrinsic motivation are likely to experience the most tension and may be at risk of complete disengagement from the organisation (Delaney & Royal, 2017).

According to Badubi (2017), there are disastrous consequences for organisations that do not prioritise the motivation of its employees which can disrupt the success of these organisations. If employees are motivated, they will perform their work thoroughly resulting in efficient production. Therefore, organisations should always motivate their employees in order to achieve organisational goals.

4.3 WORK ENGAGEMENT

In this section, the numerous definitions on the concept of work engagement will be discussed. According to Altunel, Kocak, and Cankir (2015), work engagement is a concept that appears under positive psychology. Positive psychology proposes that psychology is not mainly concerned with reversing negative and adverse conditions but rather focuses on strengths and enhancing the positive facets of individuals as its primary purpose. The theoretical models of Kahn (1990), Maslach and Leiter (1997), and Bakker and Demerouti (2007) will also be discussed.

4.3.1 Conceptualisation

According to Naidoo (2014), Kahn (1990) was the first person to conceptualise engagement, defining personal engagement as the simultaneous reflection and expression of an individual's ideal self in work behaviours that promote a link to work and to others encompassing personal presence (physical, cognitive, and emotional), as well as energetic and complete professional role performance. Saks (2006) conducted a study to test Kahn's (1990) model and discovered that the three psychological conditions of meaningfulness, safety, and availability are

significantly related to work engagement. Tshilongamulenzhe and Takawira (2015) supported Kahn's (1990) viewpoint on work engagement as it provided a well-rounded and distinct definition of work engagement and took into account both personal and organisational resources in predicting work engagement. It is a multi-dimensional concept that includes behavioural and attitudinal aspects which result in a positive experience in the workplace (Tshilongamulenzhe & Takawira, 2015). Kuok and Taormina (2017) stated that whilst Kahn (1990) described engagement as individuals conveying their personal selves into their job, Maslach and Leiter (1997) suggested an approach that regarded work engagement as the antithesis of burnout whereby burnout can be prevented as engaged employees are dynamic and view their work as challenging. Schaufeli *et al*. (2002, p.74) felt that Maslach and Leiter's (1997) burnout inventory cannot be used on its own to measure the burnout-engagement continuum and proceeded to define work engagement as "a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption" (Kuok & Taormina, 2017).

According to Perera, Vosicka, Granziera, and McIlveen (2018), Klassen, Yerdelen, and Durksen (2013) proposed a multi-dimensional concept of engagement pertaining to teachers and consisting of cognitive-physical, emotional, and social dimensions. The definition of work engagement by both Kahn (1990) and Schaufeli *et al*. (2002) contributed to the cognitive-physical and emotional aspects of engagement suggested by Klassen *et al*. (2013). Devoting energies to performance roles at work, as indicated in Klassen *et al*.'s (2013) definition of cognitive-physical engagement, is in accordance with Kahn's (1990) view on work engagement. The conceptualisation of cognitive-physical and emotional engagement in Klassen *et al*. (2013) corresponds to Schaufeli *et al*.'s (2002) vigour and absorption dimensions, and the emotional dimension respectively. Schaufeli *et al*.'s (2002) and Klassen *et al*.'s (2013) dimensions relate to similar types of energies, however, the former focuses on perceived states and the latter focuses on experienced states of work engagement similar to Khan (1990) (Perera *et al*., 2018).

Green Jr., Finkel, Fitzsimons, and Gino (2017) state that Schaufeli *et al*.'s (2002) definition of work engagement is commonly used; however, different schools of thought have adopted different views of the nature of work engagement. Central to Green Jr. *et al.*'s (2017) conceptualisation of work engagement is emotional experiences which act as a source of energy inherent in work engagement. They emphasise that work engagement is the experience of energy which is a stimulus or motivated behaviour. Unlike a positive affective state such as job satisfaction, which displays a state of fulfilment, the energy existing in work engagement may result in positive work behaviours and outcomes. The emotional component

of work engagement sustains the energy that employees display in their work activities (Green Jr. *et al*., 2017).

Schaufeli and Bakker (2004) adopted Schaufeli *et al*.'s (2002) definition of work engagement in their study of burnout and engagement. Vigour refers to "high levels of energy and mental resilience while working''; dedication is characterised by being strongly involved in one's work and experiencing a sense of "significance, enthusiasm, inspiration, pride, and challenge''; and absorption refers to being "fully concentrated and happily engrossed'' in work in a way that causes time to pass quickly (Schaufeli & Bakker, 2004, p.295). According to Listau (2016), even though there are several definitions of work engagement, the definition most commonly used is the one provided by Schaufeli and Bakker (2004, p.295), which defines work engagement as "a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption".

For the purposes of the current study the well-validated definition of work engagement developed by Schaufeli *et al*. (2002) will be used where engagement is defined as a positive, fulfilling, work related state of mind that is characterised by vigour, dedication, and absorption and will be measured by the Utrecht work engagement scale (UWES). Bakker and Demerouti's (2007) job demands-resources (JD-R) model will apply to the present study.

4.3.2 Theoretical models of work engagement

According to Bakker and Albrecht (2018), it is vital, for organisational reasons, to understand what employees' general levels of engagement are and that employees experience irregular levels of engagement whilst working. The theoretical models of Kahn's (1990) needs-satisfying approach, Maslach and Leiter's (1997) burnout-antithesis approach and Bakker and Demerouti's (2004) JD-R model will be discussed and will assist in understanding fluctuations in engagement.

4.3.2.1 Kahn's needs-satisfying approach

This approach was briefly discussed in the previous section on the definition of engagement. Kahn (1990) proposed that employees become engaged when their three psychological conditions or needs of meaningfulness (i.e. the feeling of being rewarded for investing in one's self and in work performance), psychological safety (i.e. the ability to display and make use of one's self without the dread of unfavourable outcomes), and availability (i.e. the belief that one

possesses the physical and mental resources to engage oneself at work) are met. Meaningfulness is affected by the task and role features of the job. Psychological safety is mostly impacted by the social environment, such as, interpersonal relationships, group dynamics, management style, and social norms. Lastly, availability is reliant on the personal resources that employees can convey to their work performance, such as physical energy (Schaufeli, 2013).

Kahn (1990) made use of Alderfer's (1969) ERG theory. Kahn's (1990) engagement antecedents of safety, meaningfulness, and availability generally relate to Alderfer's (1969) growth, relatedness, and existence needs, respectively. Alderfer's (1969) frustration-regression principle states that employees are able to advance and regress to meet their needs, indicating that as needs go satisfied or unsatisfied, motivation varies. Similarly, Kahn (1990) indicated that the occurrence or nonexistence of antecedent conditions could result in engaged or disengaged employees (Weston, 2016).

Research conducted by Kuok and Taormina (2017) provided support for Kahn's theoretical approach which stipulates that work engaged employees involve their cognitive, emotional, and physical states. They further supported Kahn's (1990) notion that work engagement and burnout can co-exist, and that these constructs should be measured independently. Even though Kahn (1990) suggested that work engagement comprises of the three dimensions of cognitive, emotional, and physical states, he did not operationally define or measure these constructs (Kuok & Taormina, 2017).

4.3.2.2 Maslach and Leiter's burnout-antithesis approach

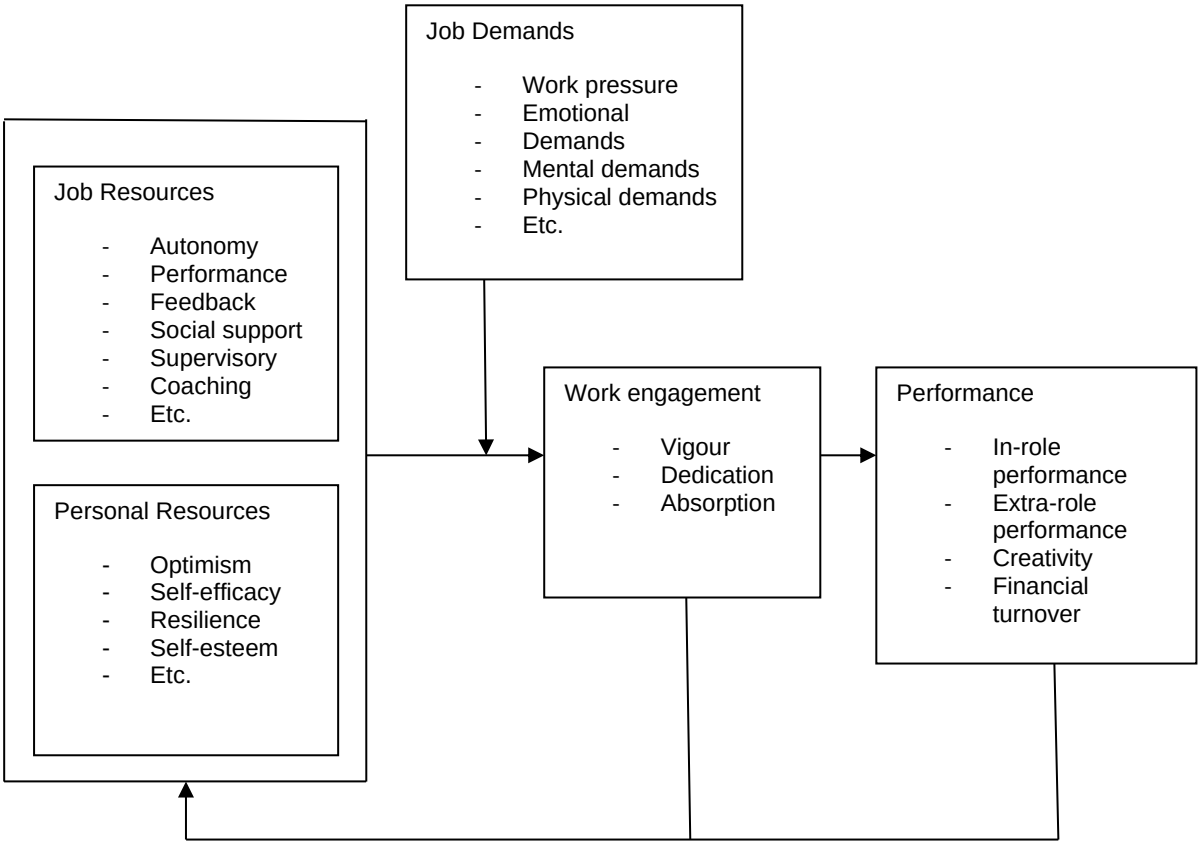
According to Maslach and Leiter (1997), work engagement is on the opposite end of the burnout continuum. They emphasised that three dimensions of work engagement (energy, involvement, and efficacy) are the complete opposites of the three dimensions of burnout (emotional exhaustion, cynicism, and professional efficacy). Engaged employees experience energy (willing to give their time and effort), are involved (view work tasks as meaningful) and possess a sense of achievement which arises from work activities. Maslach and Leiter (1997) regard burnout as the corrosion of engagement, where energy becomes exhaustion, involvement becomes cynicism, and efficacy becomes ineffectiveness (Maturure, 2016).

Kuok and Taormina (2017) state that there is an innate abnormality in the Maslach, Schaufeli, and Leiter (2001) measure where an employee cannot be work engaged if she/he experiences any degree of burnout at work.

4.3.2.3 Bakker and Demerouti's job demands-resources model

Demerouti *et al*. (2001) were the first to introduce the JD-R model in an attempt to comprehend the antecedents (e.g. work engagement) of burnout. The JD-R model was created as an open, heuristic model where different demands and resources can be assigned to the initial model (Demerouti *et al*., 2001). Bakker and Demerouti (2007) discovered that personal resources significantly arbitrate the relationship between job resources and work engagement. Personal resources contribute considerably in describing the fundamental psychological instruments of the motivation process of the JD-R model (Ramasodi, 2016). According to Gawke, Gorgievski, and Bakker (2017), Bakker and Demerouti's (2004) J-DR model combines numerous job stress and motivational approaches, and summarises how employee well-being and performance are affected by job characteristics (job demands and resources), personal resources, and proactive employee behaviours (job crafting). The JD-R theory suggests that employees excel in work environments that are characterised by high job demands (challenges) merged with high job or personal resources. When employees have enough resources available at work, they are more equipped to deal with the challenges they find at work and achieve personal and organisational goals, which promotes work engagement and improved performance. If job challenges exceed the available resources, employees will experience exhaustion, which impedes well-being and performance (Bakker, Demerouti, & Sanz-Vergel, 2014). Figure 4.6 illustrates Bakker and Demerouti's (2007) JD-R model where job resources and personal resources are utilised by individuals when they are faced with job demands. This ignites the motivational process resulting in work engagement and subsequently promoting job performance.

Figure 4.6 *Bakker and Demerouti's Job Demands-Resources Theory*



Source: Maturure (2016, p.33)

According to Schaufeli (2013), the JD-R model presumes that work engagement emanates from the intrinsically motivating nature of resources, whereby two types of resources are distinguished. Job resources refer to job characteristics that are useful in attaining work goals, decreasing job demands, or fostering personal growth and development. Personal resources are facets of the self that are related to resiliency and that refer to the capacity to control and influence one's environment successfully. According to this model, resources promote engagement in terms of energising employees (vigour), encouraging their persistence (dedication), and making them concentrate on their efforts (absorption) leading to positive outcomes such as job performance. Work engagement mediates the link between job and personal resources, and positive outcome which is referred to as the motivational process (Schaufeli, 2013).

According to Schaufeli and Bakker (2004), when the JD-R model is applied to engagement, ample resources result in engagement, whereas too many demands reduce the ability to become engaged. As employees use resources to address demands and evade the subsequent stress, they lose resources that sustain engagement levels. Thus, fluctuations in

work stress may result in fluctuations of engagement levels since the stress process utilise resources that would have been given to engagement. From the viewpoint of the JD-R model, if employees are using resources to cope with stressors (demands), they will have lesser resources to become engaged at work. For instance, Schaufeli and Bakker (2004) discovered that engagement was directly related to the occurrence of resources (Weston, 2016). Schaufeli (2012) stated that the JD-R model presumes that challenging jobs that are characterised by plenty of job resources, enhance work engagement, which leads to various positive consequences such as organisational commitment, higher performance, and low absenteeism and turnover.

Kuok and Taormina (2017) stated that Schaufeli *et al*.'s (2001) dimensions were problematic and fake because these measures were not derived separately but was instead created to be the opposite of an existing burnout measure. This makes the UWES scales essentially negatively correlated with the three burnout factors therefore the UWES scales are not autonomous measures. Kuok and Taormina (2017) also mentioned that Schaufel *et al*. (2002) needed to amend and/or remove items for both the burnout and the engagement dimensions, and efficacy loaded on the wrong factor. According to Ramos, Jenny, and Bauer (2016), the dualism between job demands and job resources may not be sufficient in terms of the importance of workers' age. It implicitly presumes that all job demands are equally taxing, and all job resources are equally gratifying thereby disregarding age-related shifts in physical and cognitive abilities, motivation, and decision-making processes (Ramos *et al*., 2016).

4.3.3 Summary of theoretical models of work engagement

The theoretical models of Kahn (1990), Maslach and Leiter (1997), and Schaufeli *et al*. (2002) highlight the antecedents which affect work engagement, but do not explain the reasons why employees react differently to these antecedents. Maturure (2016) mentioned that even though Maslach and Leiter (1997) and Schaufeli *et al*. (2002) explain work engagement from two different perspectives, the common idea is that they both view engagement as characterised by energy, involvement, and efficacy. Maslach and Leiter (1997) accentuate energy, involvement, and efficacy which are positive aspects turning into negative aspects, whilst Schaufeli *et al*. (2002) emphasise vigour, dedication, and absorption which are all positive elements (Maturure, 2016).

The various dimensions of work engagement will be discussed next.

4.3.4 Dimensions of work engagement

Kuok and Taormina (2017) mentioned that Kahn (1990) first indicated that work engagement is a distinct variable that could have several levels which means it is a single element along one continuum that could vary from very low to very high. Work engagement is an independent construct; however, employees can convey themselves either physically, cognitively, and emotionally, while executing their work roles. Despite being a unipolar dimension, individual participation can range from disengaged (low level) to fully engaged (high level). Kahn (1990) depicted this interaction as personal disengagement and personal engagement. Rothmann and Rothmann (2010) also identified the physical, cognitive, and emotional categories as the three components of work engagement. The physical element arises when an employee becomes physically involved in work and displays a positive affective state; the cognitive aspect occurs through attentiveness at work as well as experiencing absorption and involvement; and the emotional feature is expressed through feeling linked to one's job or others whilst working (Maturure, 2016). According to Saks (2006), work engagement is a unique construct that comprises of cognitive, emotional, and behavioural elements that are connected with individual task performance.

Maslach and Leiter (1997) described work engagement in relation to burnout where work engagement and burnout are on opposite ends of a continuum. The three dimensions of work engagement are energy, involvement, and efficacy. Burnout is a negative product of work engagement where investment in energy results in emotional exhaustion, involvement results in cynicism, and efficacy results in ineffectiveness (Maslach & Leiter, 1997). Maslach *et al*. (2001), used burnout theory and regarded work engagement as the opposite of burnout, where burnout is on the negative end and work engagement is on the positive end of a bipolar dimension. Engaged employees possess a positive affective-motivational state of fulfilment, whereas burned-out employees possess a negative emotional state/experience at work. The bipolar dimension consists of mutually exclusive poles, which suggest that an employee could be either burned out or work engaged, but not both (Kuok & Taormina, 2017).

Schaufeli and Bakker (2004) stated that work engagement should be defined separately of burnout and that they are not opposites of the spectrum. Burnout and work engagement, with their contrary concepts, should be measured separately and with different instruments (Schaufeli *et al*., 2002). Bakker and Demerouti (2007) agreed with the notion of Schaufeli e*t al*. (2002) that burnout and work engagement are two independent constructs which are multidimensional in nature (Gallie, 2016). According to Schaufeli *et al*. (2002), work engagement consists of vigour, dedication, and absorption. Vigour refers to an elevated

amount of energy and mental resilience while working, and the eagerness to invest effort in one's work despite challenges; dedication refers to being extremely involved in one's work and experiencing a sense of importance, enthusiasm, encouragement, pride, and challenge; and absorption refers to being so completely centred on and happily engrossed in work that time goes by very quickly (Naidoo, 2014).

Green *et al*. (2017) recognised the three key features of work engagement as the main sources of emotional energy, and comprise of a positive emotional experience, an energy force, and relational exchanges. The experience of energy is the most crucial defining characteristic of work engagement, and it is strongly tied to positive emotional occurrences. Since work engagement is the outcome of employees' emotional experiences at work, interactions with others may strongly impact engagement, either maintaining or undermining work engagement (Green *et al*., 2017).

The UWES developed by Schaufeli *et al*. (2002) is a self-report questionnaire which will be used to measure levels of engagement in this study. The UWES consists of three subscales, namely vigour, dedication, and absorption. These subscales correspond with Schaufeli *et al*.'s (2002) definition of work engagement and Bakker and Demerouti's (2007) JD-R model which includes the aspects of vigour, dedication, and absorption that are applicable to this study.

A discussion on the antecedents of work engagement follows.

4.3.5 Antecedents of work engagement

Schaufeli and Bakker (2004) described work engagement as a motivational process that flourishes where both job and personal resources are readily available. According to Bakker and Demerouti (2008), job resources (supervisory coaching, financial rewards, performance feedback, autonomy, and career opportunities) and personal resources (optimism, self-efficacy, and self-esteem) engage employees who react by working hard (vigour), getting involved (dedicated), and being happily immersed (absorbed) in their work (Maturure, 2016). Job resources are the physical, social, or organisational facets of the job that may: (a) decrease job demands; (b) be useful in achieving work goals; or (c) promote personal growth, learning, and development (Bakker & Demerouti, 2008). Personal resources are positive self-evaluations that are associated with resiliency and refer to the ability to effectively control and have an influence on the environment (Hobfoll, Johnson, Ennis, & Jackson, 2003). According to the JD-R model, job and personal resources become more significant and acquire their

motivational potential when employees are faced with high job demands (Schaufeli, 2012). Kahn (1990) stated that job characteristics such as skills variety, performance feedback, autonomy, task identification, and task significance enable employees to be more engaged in their work. Based on the work of Kahn (1990) and Maslach *et al*. (2001), Saks (2006) recognised various antecedents of work engagement, namely job characteristics, perceived organisational and supervisor support, rewards and recognition, and procedural and distributive justice (Mokalake, 2015).

Sonnentag (2017) indicated that employees with high levels of job resources and personal resources tend to be highly engaged in their work despite not experiencing positive task characteristics such as regular feedback, autonomy, or task significance. The results of a study conducted by Kim, Han, and Park (2019) revealed that in order to maximise organisational outcomes (higher job performance and lower turnover intention), organisations should be proactive in leveraging job resources and personal resources, mainly focusing on enhancing employees' work engagement. Organisations should compile or adjust relevant programmes and/or policies by selecting appropriate resources to facilitate the engagement of employees in their work (Kim *et al*., 2019).

Several studies have indicated that a positive relationship exists between job resources and work engagement (Altunel *et al*., 2015; Bakker, 2011; Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004). According to Bakker (2011), job resources can either play an intrinsic motivational role by encouraging the learning, growth, and development of employees, or an extrinsic motivational role in that they are integral in achieving specific work goals (Mokalake, 2016). Since job resources play an intrinsic and extrinsic motivational role through the satisfaction of basic needs or through the achievement of work goals, it will probably result in higher levels of engagement (Schaufeli and Bakker, 2004).

Research by Bai and Liu (2018) concluded that the career growth of employees has a significant positive influence on their work engagement. This reveals that if employees feel that they can accomplish more career growth in the organisation, they will be more involved in the organisation and they will develop a strong sense of belonging and responsibility towards the organisation. Furthermore, they will be more enthusiastic and energetic in their work. Whilst striving to improve the organisation's performance, they will achieve their professional goals by developing new skills and enhancing their professional abilities and accomplishments (Bai & Liu, 2018). Similarly, Hoole and Hotz (2016) found that career management significantly predicted work engagement. Career management entailed combining learning experiences with the purpose of improving employees' skills, knowledge,

and competencies. Employees then have a chance to grow and develop as well as progress in their careers. This type of reward inspires employees to become productive and engaged in their work. Certain rewards are better predictors of work engagement than others, therefore organisations should refrain from one-size-fits-all reward strategies (Hoole & Hotz, 2016).

The results of Venz, Pundt, and Sonnentag's (2018) research revealed that using selective optimisation with compensation (SOC), will enable work engagement despite the lack of other resources because selective optimisation with compensation replaces other resources. By modifying their goals, elevating the investment of available resources to pursue those goals, and simultaneously compensating for the shortage of resources, employees can remain engaged regardless of the status of other resources (Venz *et al*., 2018). Kotze (2018) found that satisfaction with job resources had statistically significant positive influences on the two components of work engagement (vigour and dedication). Satisfaction with job resources had a stronger positive impact on dedication than on vigour. This shows that when employees regard their organisations as respectful and caring towards them, they will be more dedicated and emotionally invested in their jobs. If employees are dissatisfied with the way the employer is treating them, they will become cynical, uncaring, or disconnected from their jobs (Kotze, 2018). Young, Glerum, Wang, and Joseph (2018) found that personality traits consistently accounted for more variance in vigour compared with dedication or absorption, although they were unable to establish if the variance explained by personality traits is considerably different across engagement facets. Altunel *et al*. (2015) found that job resources (autonomy, social support, coaching, opportunities for personal development, and task significance) are a good predictor of work engagement which is consistent with the study conducted by Bakker and Demerouti (2008).

According to Gawke *et al*. (2017), employee intrapreneurship can significantly and positively impact on employee work engagement. When individuals adopt intrapreneurial behaviour, they enhance their personal resources which leads to increased and more stable levels of work engagement over time. The outcome of a study conducted by Gawke *et al*. (2017) shows that employee intrapreneurship may have favourable consequences for employee well-being through its ability to improve personal resources which effectively increases and maintains levels of work engagement. According to Kahn (1990), employee perceptions should explain differences in engagement levels amongst employees, and he maintained that employee attitudes and perceptions of their work environment affect their work engagement. Noesgaard (2018) found that enhanced employee perceptions of professionalism, experienced via meaning, pride, significance, and confidence which is associated with their career development, results in a positive influence on engagement.

Job crafting is a popular and effective bottom-up strategy to improve work engagement, because it enhances the meaning of work and the fit between person and organisation (Bakker & Albrecht, 2018). Harju, Hakanen, and Schaufeli (2016) found that searching for challenges may be a way to prevent employees from experiencing boredom at work and a way to enhance their work engagement. Seeking challenges can also kick-start other job crafting activities, through which employees attain more resources for their jobs (Harju *et al*., 2016). According to Thomas (2018), when employees use job crafting tactics to change their balance of job demands and job resources, this indicates proactive, bottom-up ways in which employees can change the tasks and boundaries of their jobs. Although an employee proactively initiating changes is a central aspect of job crafting, an employer might be able to encourage job crafting by providing a stimulating work environment. Thomas (2018) found that employees who are proactive in crafting their job-related tasks and environments tend to undertake psychologically satisfying activities and will be more engaged in their work.

The variables that influence work engagement will be discussed next.

4.3.6 Variables impacting work engagement

In this section, the variables that can influence work engagement will be discussed. These variables include gender, age, race, marital status, rank, and tenure.

4.3.6.1 Gender

Schaufeli and Bakker (2003) and Sharma, Goel, and Sengupta (2017) found that men generally exhibited higher levels of work engagement than women. Boikanyo and Heyns (2019) found that women were more engaged in terms of absorption but had similar level of engagement in terms of vigour and dedication. Jaworek (2017) observed that women are slightly more engaged at work than men in terms of the total scores on the UWES, as well for dedication and absorption. No gender differences were detected for vigour. These findings are partially dissimilar to that of Schaufeli and Bakker (2003), who found that men are more dedicated and absorbed in their work than females. The findings of Tshilongamulenzhe and Takawira's (2015) study revealed that there is no statistically significant relationship between gender of employees at a South African university and the three sub-scales of the UWES (vigour, dedication, and absorption). Bartlett (2015) and Sonn (2015) also observed no significant gender differences in terms of work engagement.

4.3.6.2 Age

Both Bartlett (2015) and Sharma *et al*. (2017) highlighted that older respondents possess higher their levels of work engagement. Boikanyo and Heyns (2019) found that employees in the 41-59 age category were slightly more engaged than the other age groups. Schaufeli and Bakker (2003) also discovered marginal differences between age and work engagement. In Sonn's (2015) study, there were significant differences between participants in the age group below 39 in terms of vigour and cynicism. Respondents under the age of 39 were more likely to be emotionally overextended and exhausted and were more likely to distance themselves emotionally and cognitively from their work. Jaworek (2017) found that older employees were more vigorous, dedicated, and absorbed in their work than younger employees.

4.3.6.3 Race

Boikanyo and Heyns (2019) found that the mixed-race group was the most engaged, followed by the Indian race group while the Black race group was the least engaged. Bartlett (2015) also found differences in terms of ethnic groups and the impact on work engagement. The Indian race group displayed the highest level of work engagement, followed by the African race group, White race group, and the Coloured race group. (Bartlett, 2015). In contrast, Sonn (2015) did not discover any significant differences between the participants' biographical variable of race with regard to the work engagement variable.

4.3.6.4 Marital status

According to Sharma *et al*. (2017), there were no significant difference between marital status and work engagement. Schaufeli and Bakker (2003) revealed that regarding married couples, they influenced their spouse's levels of vigour and dedication.

4.3.6.5 Rank

Schaufeli and Bakker (2003) indicated differences between managers and junior employees in terms of work engagement. Research conducted by Boikanyo and Heyns (2019) showed that employees in the middle and senior management levels were the most engaged whilst junior employees were the least engaged. Jaworek (2017) and Bartlett (2015) found that significant differences existed with regard to work level where managers have higher levels of work engagement. According to Bartlett (2015), employees in higher occupational levels tend to experience more pressure to be more engaged in their work. Hontake and Ariyoshi (2016)

discovered no relation between rank of nurses in Japan and work engagement. Also, Sonn (2015) observed no significant differences between occupational level and work engagement.

4.3.6.6 Tenure

Sharma et al. (2017) found that work engagement increases as the work experience of an employee increases. Similarly, Bartlett (2015) revealed that tenure is positively correlated with work engagement. According to Boikanyo and Heyns (2019), employees with 0–2 years' experience were the most engaged, while the level of engagement did not vary for the rest of the employees.

4.3.7 Consequences of work engagement

According to Tshilongamulenzhe and Takawira (2015), work engagement continues to be one of the most significant aspects of organisational theory that employers should focus on globally because engaged employees promote positive outcomes in the organisation. An employer's interest in their own work engagement re-addresses the energy, participation, and efficiency that employees contribute to the job. Competitive organisations rely on accomplished, capable, and engaged employees in order to develop and retain numerous strategies which facilitate efficient production and delivery of goods and services. These employees are scarce globally, and South Africa is not spared from the current talent battle (Tshilongamulenzhe & Takawira, 2015). Schneider, Yost, Kropp, Kind, and Lam (2018) regard work engagement as one of the fundamental human elements of organisations through which work attributes are achieved in the form of positive organisational outcomes. Organisations are more likely to be efficient if their employees are fully engaged. Therefore, if organisations choose to focus on carrying out their strategic objectives in the absence of an engaged workforce, they will obtain minimal strategic success (Schneider *et al*., 2018).

The results of Matthysen and Harris' (2018) study revealed that high levels of work engagement will produce high levels of readiness to change. Engaged employees are more equipped to handle job demands during change processes which eventually will affect whether change implementation is successful. Employee's work engagement and an organisation's change processes influence employees' readiness to change (Matthysen & Harris, 2018). Engaged employees have the ability to resist the temptation to be pre-occupied and to disconnect when faced with challenges in the workplace (Gawke *et al*., 2017). Schaufeli and Bakker (2004) indicated that engaged employees are energetic, enthusiastic, and are able to

recover from difficulties. They feel as if time goes by fast when they are working. According to Jawahar and Liu (2017), engaged employees are energetic, mentally strong, committed, and immersed in their work. Kahn (1990) depicted engaged employees as immersing themselves in their jobs which leads to effective work performance. Schaufeli (2012) stated that in comparison to disengaged employees, those who are engaged employees are more committed to the organisation, are absent less, experience more positive emotions, and they do not plan on leaving their job. Furthermore, they display personal initiative and have a strong desire to learn. Engaged employees are willing to put more effort into their work (Schaufeli, 2012).

According to Chauvet (2016), employees who experience higher levels of work engagement feel immersed and challenged, are eager, and experience immense energy in their work. These employees were found to be more satisfied with their work. Work engagement and job satisfaction of employees were highly connected resulting in lower levels of turnover intention of employees (Chauvet, 2016). Robyn and Du Preez (2013) found that work engagement was significantly correlated with job satisfaction and turnover intention. Boikanyo and Heyns (2019) stated that organisations with engaged employees have higher employee retention because of decreased turnover and decreased intention to leave. These organisations also boast higher output, success, development, and customer satisfaction (Boikanyo & Heyns, 2019). The results of a study conducted by Guglielmi *et al*. (2016) revealed that the higher the employee satisfaction, the more employees are engaged and committed to their job, which subsequently should increase job satisfaction. Masvaure, Ruggunan, and Maharaj (2014) in their study on a mining company in Zimbabwe, discovered that a positive relationship occurred between job satisfaction, work engagement, and the intrinsic motivation of employees.

4.4 EVALUATION AND SYNTHESIS

Locke (1976) defines job satisfaction as a positive emotional state arising from an appraisal of one's job and is the most used research definition of job satisfaction (Rehman & Waheed, 2011). Locke (1976) mentioned that common aspects of job satisfaction were work, pay, promotions, recognition, benefits, working conditions, and co-workers. Locke's (1976) definition of job satisfaction is most applicable as the core definition for this study. Herzberg's (1966) two-factor theory, where motivation factors (advancement, work itself, possibility of growth, responsibility, recognition, and achievement) and hygiene factors (interpersonal relationship, salary, policies and administration, supervision, and working conditions), influence job satisfaction. Locke's (1976) definition of job satisfaction and Herzberg's (1966)

theoretical model are in line with Weiss *et al*.'s (1967) Minnesota satisfaction questionnaire (MSQ) which is the instrument that will be used in this study to measure job satisfaction. The MSQ measures general satisfaction as well as intrinsic factors (such as advancement, recognition, and achievement) and extrinsic factors (such as company policies, working conditions, and compensation).

For the purpose of this study, motivation will be defined as an individual's willingness to direct high levels of effort towards the accomplishment of goals (Osemeke & Adegboyega, 2017; Robbins, 2005). More specific to this study is the concept of achievement motivation. According to McClelland (1976), achievement motivation, also known as need for achievement, is described as the tendency to enhance one's performance and desire to succeed in attaining goals. McClelland's (1976) definition and theoretical approach is aligned with Pottas *et al*.'s (1988) achievement motivation questionnaire (AMQ) which will be used to measure motivation in the current study.

Schaufeli *et al*.'s (2002) definition of work engagement which is defined as a positive, fulfilling, work related state of mind that is characterised by vigour, dedication, and absorption is applicable to the present study. The job demands-resources (JD-R) model of Bakker and Demerouti (2007) will apply to this study and includes the aspects of vigour, dedication, and absorption. Schaufeli *et al.*'s (2002) definition of work engagement and the JD-R model corresponds with Schaufeli *et al*.'s (2002) Utrecht work engagement scale (UWES) which includes dimensions of vigour, dedication, and absorption and will be used to measure work engagement.

4.5 INTEGRATION

Based on the below discussion, there is support for research hypothesis H_3: Individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement. Career plateauing consists of hierarchical/structural plateau, job content plateau, maintenance plateau, and psychological plateau. Job satisfaction consists of intrinsic and extrinsic satisfaction. Motivation consists of intrinsic and extrinsic motivation. Work engagement consists of vigour, dedication, and absorption.

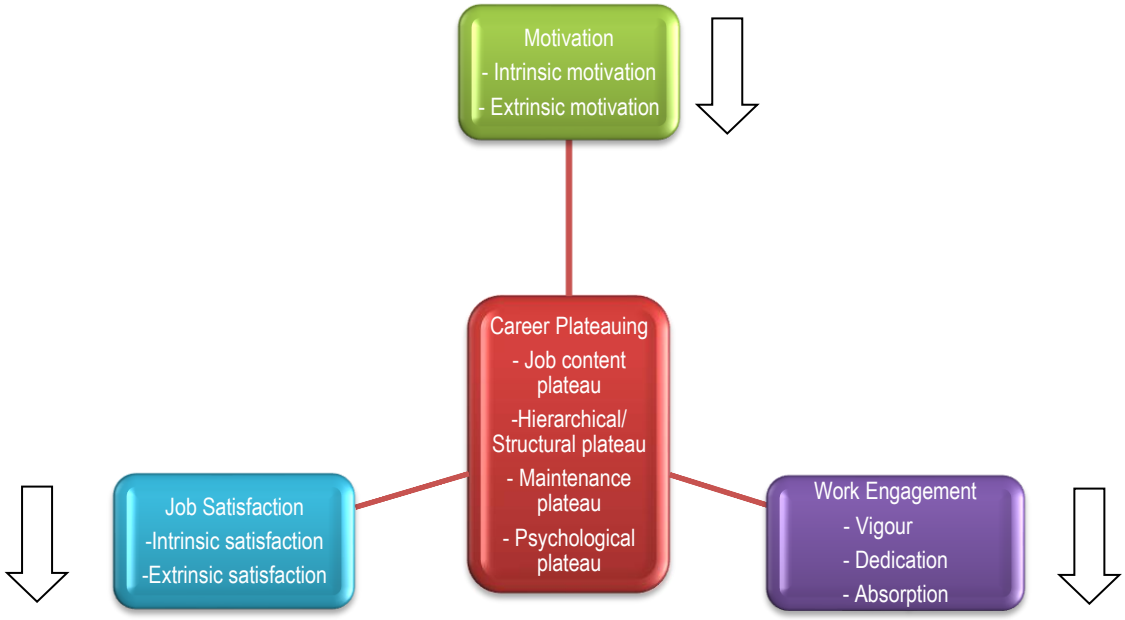
Herzberg (1966) recognised achievement, recognition, employees' perceptions, responsibility, advancement, and the possibility of growth as motivational constructs affecting employees' motivation and job satisfaction (Holston-Okae & Mushi, 2018). People who take responsibility, seek challenges, try to find a solution to problems, and try to achieve their goals

are regarded as having a high need for achievement. These individuals obtain promotions, professional development, and success much quicker (Sahito & Vaisanen, 2017). This is in accordance with Mclelland's (1976) achievement motivation theory. According to Schaufeli (2013), the JD-R model presumes that work engagement emanates from job resources and personal resources. Job resources refer to job characteristics that are useful in achieving work goals, reducing job demands, or fostering personal growth and development. Schaufeli (2012) stated that the JD-R model assumes that challenging jobs that are characterised by plenty of job resources, enhance work engagement. Schaufeli (2013) indicated that personal resources are aspects of the self that are related to resiliency and that refer to the capacity to control and influence one's environment successfully.

Job crafting is pertinent for career development in the SAPS because of unchallenging job demands that employees are faced with as a result of limited job promotions brought about by the flat organisational structure. According to Rudolph, Katz, Lavigne, and Zacher (2017), job crafting is positively related to job satisfaction and work engagement. By increasing challenging job demands and decreasing hindering job demands, employees are able to alter the quantity or quality (content) of their job tasks (Rudolph *et al*., 2017). Tims, Bakker, and Derks (2013) found that job crafting (increasing social and structural job resources) had a positive relationship with changes in well-being (work engagement, job satisfaction, and reduced burnout), through a better work environment (Bakker & Oerlemans, 2019).

Drucker-Godard *et al*. (2015) found that a lack of development is an indication that an individual's career will not develop, and this results in decreased feelings of job satisfaction and increased feelings of career plateauing. Hierarchical plateaus and job content plateaus trigger the manifestation of the psychological plateau which may lead to a loss of motivation for employees (Bhavani & Prasad, 2013). According to Mathevani (2012), training and development makes employees feel satisfied and motivated. Maurer and Chapman (2013) found that training and development of staff contributes to job satisfaction. Career development in the form of challenging tasks and job crafting interventions increases employees' work engagement (Tladinyane, Coetzee, & Masenge, 2013). Figure 4.7 illustrates that an increase in career plateauing leads to a decrease in job satisfaction, motivation, and work engagement.

Figure 4.7 *The Influence of Career Plateauing on Job Satisfaction, Motivation, and Work Engagement*



4.6 CHAPTER SUMMARY

The aim of Chapter 4 was to conceptualise the constructs of job satisfaction, motivation, and work engagement by critically examining and comparing the basic literature and research on these constructs. The variables that impact job satisfaction, motivation, and work engagement were also critically discussed. The chapter concluded with an explanation of the definitions and theoretical models of career plateauing that are applicable to job, satisfaction, motivation, and work engagement. Research aim 2 has been achieved by conceptualising job satisfaction, motivation, and work engagement from a theoretical perspective. Chapter 5 will focus on the empirical research.

Chapter 5 RESEARCH METHOD

This chapter will delineate the empirical investigation and will explain the statistical approach that will achieve the empirical aim of this study. The study population and sample will also be described in this chapter. The measuring instruments will be examined and thereafter the data gathering, and statistical processing methods will be discussed. Finally, the formulation of the research hypotheses will be stipulated.

5.1 INTRODUCTION

The empirical research comprises of the following eleven steps:

Step 1: determination of the research design
Step 2: determination and description of the sample
Step 3: measurement scale development
Step 4: choosing and motivating the psychometric battery
Step 5: ethical considerations and administration of the psychometric battery
Step 6: capturing of criterion data
Step 7: formulation of research hypotheses
Step 8: statistical processing of data
Step 9: reporting the results
Step 10: interpretation and integration of the research results
Step 11: discussion of results and the formulation of conclusions, limitations, and recommendations

Step 1 to 8 will be discussed in this chapter, step 9 will be addressed in Chapter 6, and step 10 and 11 will form part of Chapter 7.

5.2 RESEARCH DESIGN

A cross-sectional design is a basic tool frequently used by researchers to collect data about individuals at a single point in time. Since the cross-sectional study is not repeated, it is very efficient in terms of time, and is relatively cheap to conduct. If there are clear theoretical assumptions about a relationship between variables, a cross-sectional design can be an effective tool to test hypotheses and to check whether moderators might be involved (Spector, 1997; Stockemer, 2019). Common method variance and the inability to establish causal

conclusions are the two main limitations of cross-sectional designs. The relationships among variables may be due to factors that bias measures and act as a basis for common method variance. Common method variance refers to an unplanned effect on the assessment of the variables being investigated (Spector, 1997). The correlational or causal direction between the independent and dependent variable is not always clear because instead of one variable influencing the other, both variables might mutually reinforce each other. Therefore, even if a researcher finds support for the hypothesis, the direction of this association cannot be established (Stockemer, 2019). Despite these limitations, cross-sectional design continues to be popular amongst researchers especially when they explore associations between under-researched phenomena. Exploratory cross-sectional studies form a good foundation for future longitudinal studies that are focused on establishing cause-effect relations.

The current research made use of cross-sectional design to evaluate critically and to investigate the relationship dynamics, the interrelationships and the overall relationship between career plateauing (as independent variable) and job satisfaction, motivation, and work engagement (as dependent variables) when controlling for gender, age, race, marital status, rank, and tenure. The researcher chose this research design as it is an efficient method considering the scarce resources, time constraints (researcher and participants), and that it is intended to be breaking new ground and original research that restricts its focus to the relationship between career plateauing, job satisfaction, motivation, and work engagement jointly in a single study.

5.3 DETERMINATION AND DESCRIPTION OF THE SAMPLE

The population included fulltime employees working in a diverse SAPS environment. According to Sekaran and Bougie (2013), the term population refers to the total group of individuals, events, or aspects that are of importance to the researcher's investigation. According to Statistics South Africa's Quarterly Employment Statistics, there are approximately 188 943 persons employed by the SAPS at the time of writing (Quarterly Employment Statistics, 2019). A sample refers to a subset of the population and consists of some of the elements from the population (Sekaran & Bougie, 2013). A purposive sample of N=750 employees from different gender, age, race, marital status, rank, and tenure groups was targeted in order to achieve at least 500 usable questionnaires. The inclusion/exclusion criteria were that employees had to: (1) be in the rank of Constable, Sergeant, Warrant Officer, Captain, Lieutenant Colonel, or Colonel, and (2) have access to the SAPS intranet. The data

was collected from a non-probability sample, in the form of a purposive sample, of SAPS employees across the country.

Probability and non-probability sampling are the two major types of sampling techniques. In probability sampling, the components of the population have, to some degree, a known chance of being chosen for the study. In a non-probability sample, the subjects in the population do not have a pre-determined chance of being selected for the study (Sekaran & Bougie, 2013). Purposive sampling, which is also known as judgmental, selective, or subjective sampling, is a type of non-probability sampling that relies on the judgement of the researcher when it comes to choosing the units that are to be studied. Purposive sampling allows researchers to make theoretical, analytical, and logical generalisations from the sample that is being studied. Purposive samples can be largely prone to researcher bias as the sample has been created based on the judgement of the researcher and this can ultimately affect representativeness of the sample (Sharma, 2017). Participants were required to complete electronic versions of the biographical questionnaire and four measuring instruments. The electronic questionnaires were made available via a research link that was placed on the SAPS intranet. Reminders to complete this questionnaire was also sent through the intranet by the Communications section. A total of N=410 usable questionnaires were returned resulting in a response rate of 55%.

The profile of the sample will be described in terms of the socio-demographic variables of age, race, marital status, rank, and tenure. These demographic variables were included in the sample because they were part of the literature review's exploration of the variables that influence the constructs of career plateau, job satisfaction, motivation, and work engagement.

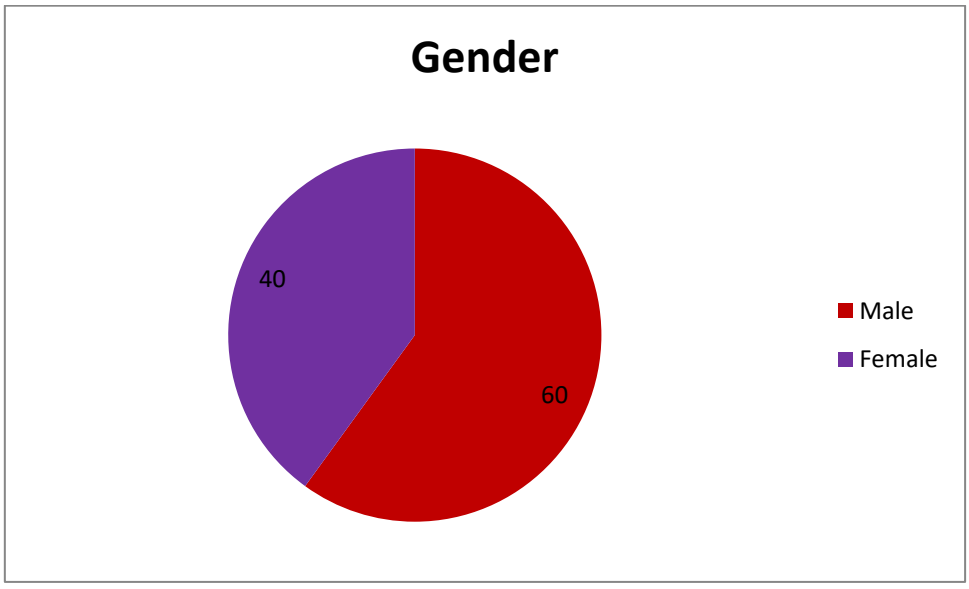
5.3.1 Composition of gender groups in the sample

Table 5.1 and Figure 5.1 depict the gender distribution in the total sample (N=410). The sample consisted of n=247 (60%) male respondents and n=163 (40%) female respondents.

Table 5.1 *Gender Distribution of the Sample*

Gender		
	Frequency	**Percentage**
Male	**247**	**60**
Female	**163**	**40**
Total (N)	**410**	**100**

Figure 5.1 *Sample Distribution by Gender (N=410)*



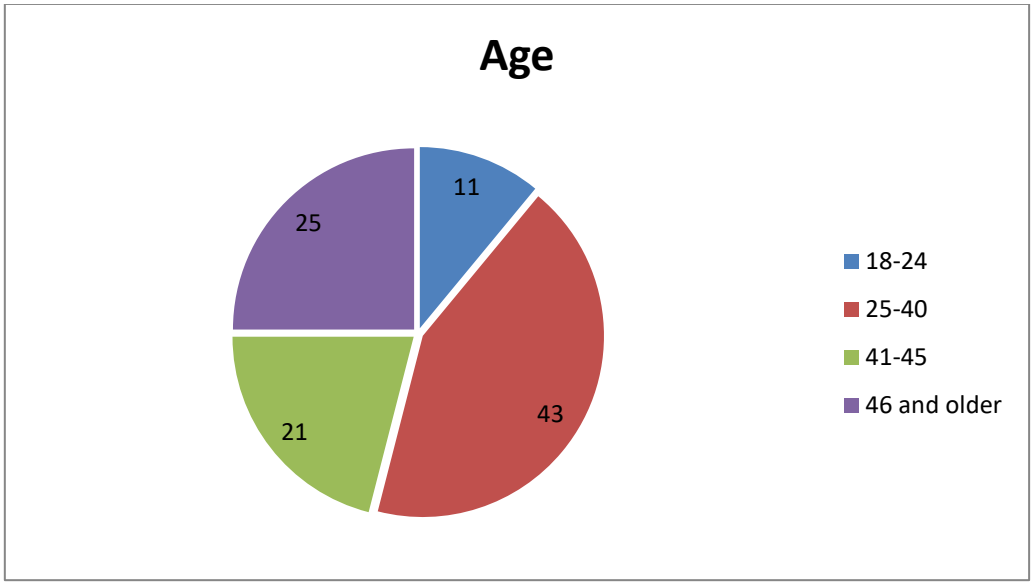
5.3.2 Composition of age groups in the sample

Table 5.2 and Figure 5.2 display the composition of age groups in the total sample (N=410). The age of the respondents was measured in the categories of 18-24 years, 25-40 years, 41-45 years, and 46 years and older. The sample consisted of n=175 (43%) of respondents in the 25-40 years category, n=103 (25%) of respondents in the 46 years and older category, n=87 (21%) of respondents in the 41-45 years category, and n=45 (11%) in the 18-24 years category.

Table 5.2 *Age Distribution of the Sample*

Age		
	Frequency	**Percentage**
18-24 years	**45**	**11**
25-40 years	**175**	**43**
41-45 years	**87**	**21**
46 years and older	**103**	**25**
Total (N)	**410**	**100**

Figure 5.2 *Sample Distribution by Age (N=410)*



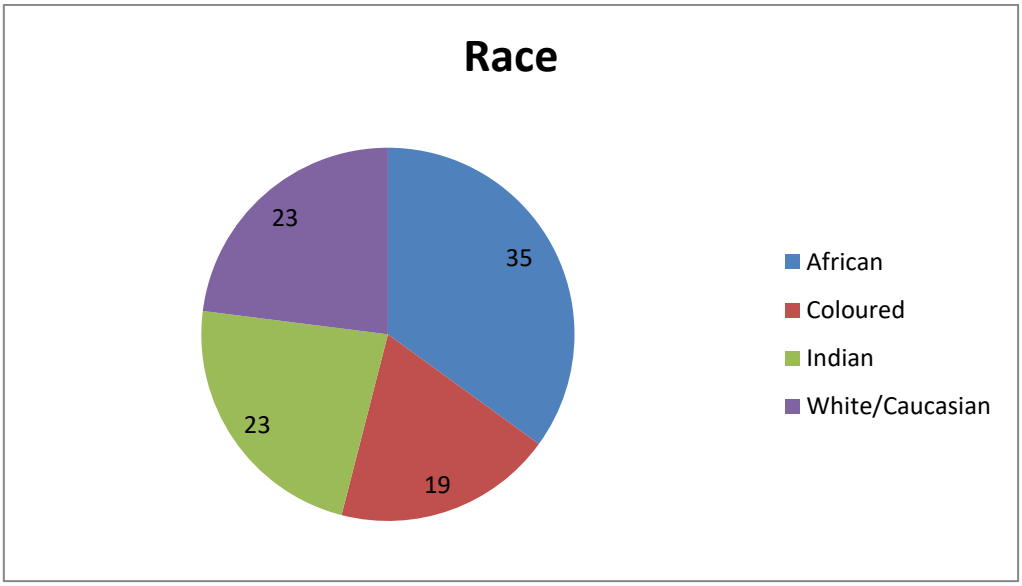
5.3.3 Composition of race groups in the sample

Table 5.3 and Figure 5.3 illustrate the different race distribution in the total sample (N=410). The sample comprised of n=143 (35%) African respondents, n=95 (23%) Indian respondents, n=93 (23%) White/Caucasian respondents, n=78 (19%) Coloured respondents, and n=1 (0%) Multiple Ethnicity/Other.

Table 5.3 *Race Distribution of the Sample*

Race		
	Frequency	**Percentage**
African	**143**	**35**
Coloured	**78**	**19**
Indian	**95**	**23**
White/Caucasian	**93**	**23**
Multiple Ethnicity/Other	**1**	**0**
Total (N)	**410**	**100**

Figure 5.3 *Sample Distribution by Race (N=410)*



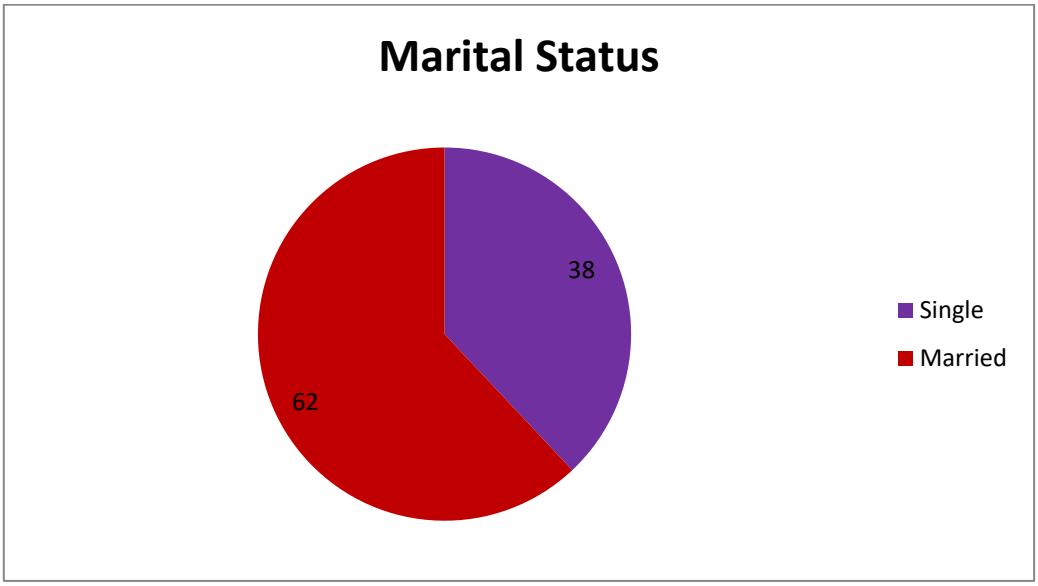
5.3.4 Composition of marital status groups in the sample

Table 5.4 and Figure 5.4 describe the marital status distribution of respondents in the total sample (N=410). The sample consisted of n=254 (62%) married respondents and n=156 (38%) of single respondents.

Table 5.4 *Marital Distribution in the Sample*

Marital Status		
	Frequency	**Percentage**
Single	**156**	**38**
Married	**254**	**62**
Total (N)	**410**	**100**

Figure 5.4 *Sample Distribution by Marital Status (N=410)*



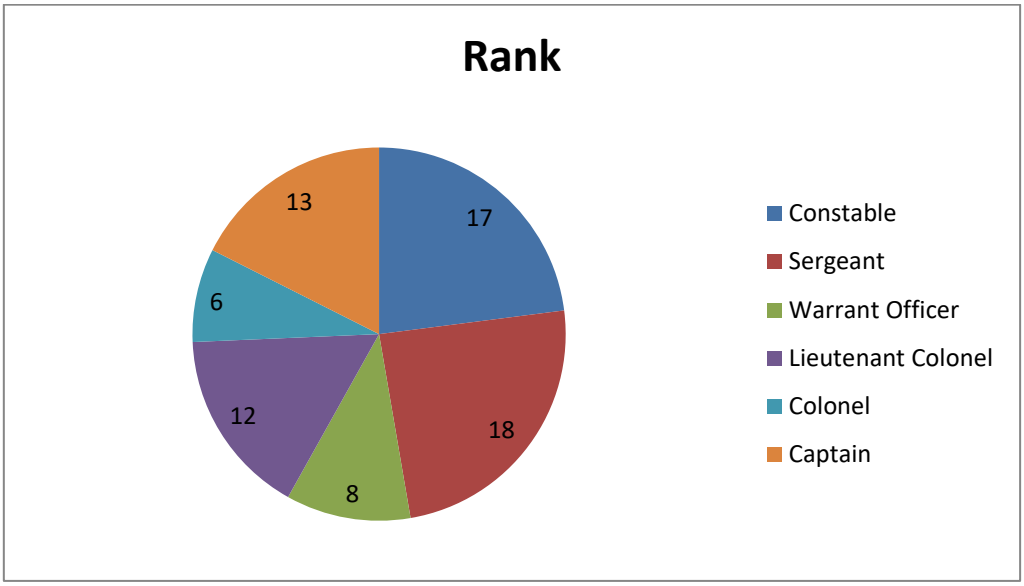
5.3.5 Composition of rank groups in the sample

Table 5.5 and Figure 5.5 display the rank distribution of respondents in the total sample (N=410). The sample comprised of n=103 (25%) Constables, n=77 (19%) Captains, n=70 (17%) Sergeants, n=66 (16%) Warrant Officers, n=53 (13%) Lieutenant Colonels, and n=41 (10%) Colonels.

Table 5.5 *Rank Distribution in the Sample*

Rank		
	Frequency	**Percentage**
Constable	**103**	**25**
Sergeant	**70**	**17**
Warrant Officer	**66**	**16**
Lieutenant Colonel	**53**	**13**
Colonel	**41**	**10**
Captain	**77**	**19**
Total (N)	**410**	**100**

Figure 5.5 *Sample Distribution by Rank (N=410)*



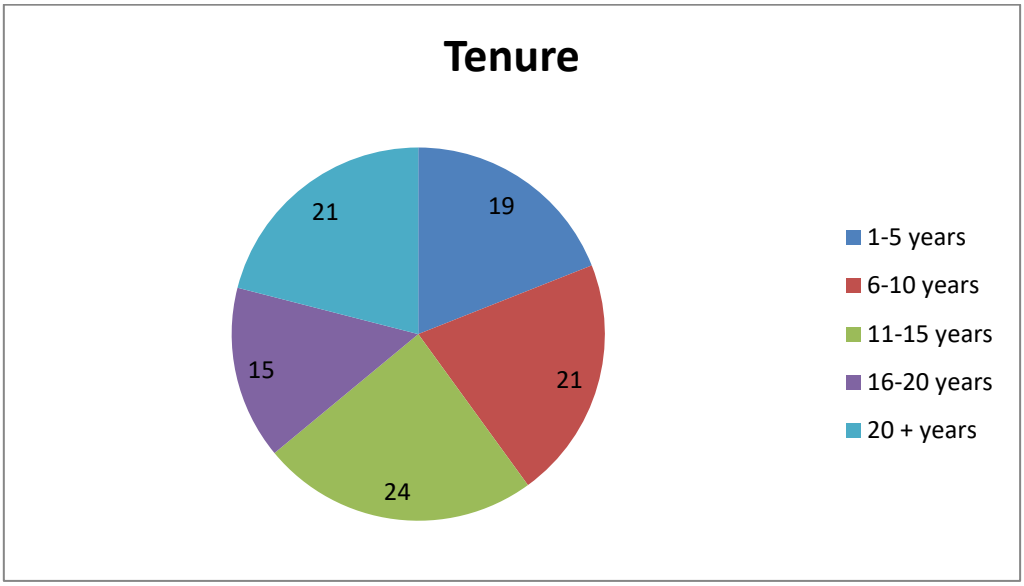
5.3.6 Composition of tenure groups in the sample

Table 5.6 and Figure 5.6 illustrate the tenure distribution of respondents in the total sample (N=410). The tenure of the respondents was measured in the categories of 1-25 years, 6-10 years, 11-15 years, 16-20 years, and 20 years or more. The sample consisted of n=100 (24%) of respondents in the 11-15 years category, n=87 (21%) of respondents in the 20 years and more category, n=84 (21%) of respondents in the 6-10 years category, n=77 (19%) of respondents in the 1-5 years category, and n=62 (15%) of respondents in the 16-20 years category.

Table 5.6 *Tenure Distribution in the Sample*

Tenure		
	Frequency	**Percentage**
1-5 years	**77**	**19**
6-10 years	**84**	**21**
11-15 years	**100**	**24**
16-20 years	**62**	**15**
20 + years	**87**	**21**
Total (N)	**410**	**100**

Figure 5.6 Sample Distribution by Tenure (N=410)



5.3.7 Summary of the sample demographic profile

The empirical research results for the demographic variables of gender, age, race, marital status, rank, and tenure revealed that the respondents were predominantly male police officers, African, married, and at the rank of Constables. The participants in the sample were also mainly in the 25-40 years age category and were primarily in the 11-15 years tenure category.

5.4 MEASUREMENT SCALE DEVELOPMENT

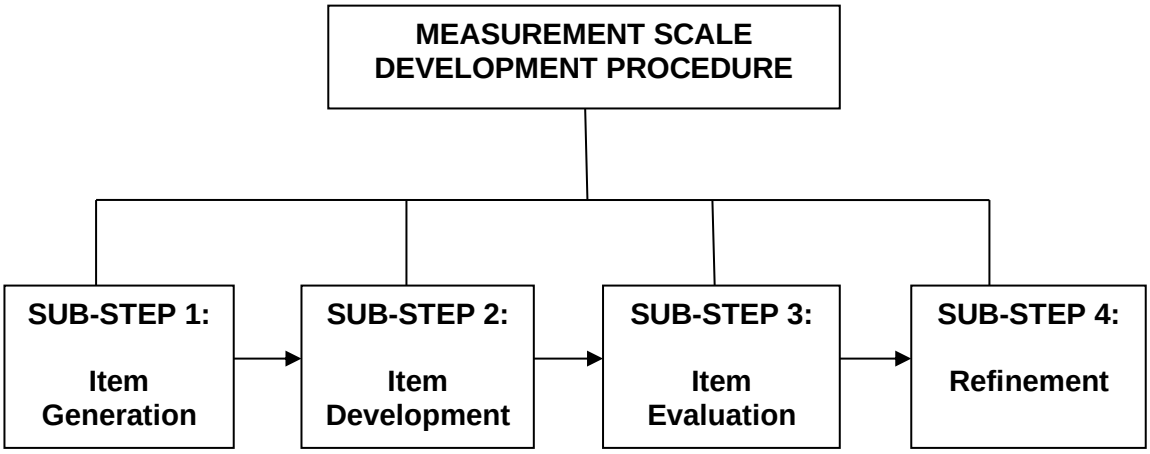
The development of the career plateauing experiences scale (CPES) was in line with the existing scale development protocols. According to DeVellis (2003), scales are measurement instruments that strive to reveal theoretical variables that cannot be directly observed. Scales are developed to measure phenomena that are believed to exist based on theory but cannot be directly assessed. The development of a measurement scale that would lead to valid and reliable results is a challenging task in any research field (Slavec & Drnovsek, 2012).

According to Netemeyer, Bearden, and Sharma (2003), scale development is comprised of four steps. Step one involves defining constructs and determining domain content by conducting a thorough literature review. Wymer and Alves (2012) stated that weak conceptual development is considered to be a main weakness in scale development because a measure is worthless if the variable it has been designed to measure is not defined properly. In step

two, items are generated for the study and the appropriateness of the items is determined. A measure's dimensionality is concerned with the homogeneity of items. Step three consists of designing and conducting studies to test the scale. Step four involves finalising the scale based on data collected in the previous step (Netemeyer *et al*., 2003).

Similarly, Slavec and Drnovsek (2012) proposed ten scale development steps which are grouped into three phases. The first phase focuses on the theoretical importance and existence of the construct, the second phase entails the representativeness and appropriateness of data collection, and the third phase involves the statistical analysis and statistical evidence of the construct (Slavec & Drnovsek, 2012). Researchers are urged to review the overall scale length. Longer scales tend to be more reliable and promote a better measure of the conceptual domain of the construct. However, scales that require more than fifteen minutes to complete can hamper respondents' motivation to complete the scale (Wymer & Alves, 2012). The sub-steps followed during the development of a measurement scale are illustrated in figure 5.7.

Figure 5.7 *Measurement Scale Development Procedure*



5.4.1 Sub-step 1: Item generation

Researchers can make use of literature reviews, consultation with experts, and content analysis of existing data sets and resources to identify item content. Since this stage of measurement scale development provides the basis for the entire process, it is imperative that it is grounded in theory (Robinson, 2018). According to Dimitrov (2012), the content specification of a measuring instrument entails operationalising the construct by generating a comprehensive list of potential items and then selecting a representative sample of items from

this list (Kyriazos & Stalikas, 2018). The process of item generation should aim at creating an item pool two to four times more than the desired length of the final scale. Factor analysis is also an integral part of scale development as it standardises the scale scores (Kyriazos & Stalikas, 2018). The use of exploratory factor analysis (EFA) and Rasch modelling to examine this aspect of the newly developed CPES will be detailed in Chapter 6.

The purpose of validation procedures is to support the scale's construct validity, that is, how well the scale measures what it intends measuring. Construct validity is adversely affected if the construct is not properly defined. Item generation effectiveness is determined by the clarity of the construct definition. The construct definition assists in generating suitable scale items (face validity) and allows for an evaluation of the scale items' ability to adequately cover the construct's conceptual field (content validity) (Wymer & Alves, 2012). Once the construct has been clearly defined, items can be generated either through deductive scale development or inductive scale development. The inductive approach is selected when the conceptual basis for a construct does not provide dimensions that are easily identifiable, for which items can be developed. This approach may be helpful when it is difficult to develop items for an abstract construct. However, it may be problematic to generate items that will be conceptually consistent in the absence of a definition of the construct being examined (Hinkin, 1998).

In deductive scale development, the theoretical foundation provides adequate information to develop the initial set of items. This approach necessitates an understanding of the phenomenon to be examined and a detailed review of the literature to develop the theoretical definition of the construct being investigated. An advantage of deductive scale development is that if it is correctly conducted, it will assist in ensuring content validity in the final scales. Also, through the development of sufficient construct definitions, items should capture the domain of interest. The disadvantages of the deductive approach are that it is extremely time-consuming and expects researchers to have a working knowledge of the phenomena under examination (Hinkin, 1998). This study adopted the deductive scale development approach to generate items. The literature review aims of the research, and the conceptualisation of the construct and its sub-dimensions directed the generation of items. In addition, the use of subject matter experts aided in assessing the face validity and content validity of the CPES.

In the present study, a distinct association was established between the generated items and their theoretical domain. This was achieved by providing an in-depth theoretical framework in Chapter 2 (Meta-theoretical context of the study: Individual career behaviour within the South African Police Service environment) and Chapter 3 (Career plateauing), as well as accurately and thoroughly matching items to construct definitions.

5.4.2 Sub-step 2: Item development

The second step in scale development entails developing a set of scale items that completely convey all aspects of the construct's definition (Wymer & Alves, 2012). According to Foster and Parker (1995), questions should be compiled in a clear and precise manner. Generally, questions should: avoid jargon or specialist terminology, unless it is familiar with the targeted participant population; eliminate ambiguity and be specific; avoid combining topics; not include negatively worded questions, as these can create confusion; and avoid leading questions, as these can bias respondents' answers by suggesting how they should respond. Furthermore, items should be kept as short and concise as possible, for clarity (Robinson, 2018). Reliability is regarded as a component of the validation process. Reliability used to be largely emphasised among methodologists, however in practice, correlations among similarly worded scale items tend to result in favourable reliability statistics (Wymer & Alves, 2012). These aspects were taken into consideration in the empirical study relating to the CPES.

The number of items in a scale is usually pre-determined, either by the researchers who published it or during the factor analytic development process. However, often in research, some problematic items are recognised and may therefore have to be removed. Therefore, it is practical to include an extra item, at least a minimum of four items in a scale, where possible (Robinson, 2018). According to Thurstone (1947), scales should have a simple structure whereby each measure should possess the simplest factor constitution. The aim is to retain a minimum of four to six items for the majority of constructs, however, the final number of items should be determined by evidence in support of the construct validity of the measure. At least twice as many items will be required for the final scale since roughly only half of the initial items are used in the final scale (Lewis, Weiner, Stanick, & Fischer, 2015). As long as statistical criteria are fulfilled, the choice of the number of items to use for each scale is likely to be determined by practical considerations. Researchers should aim to achieve an optimal balance between parsimony and ample theoretical coverage of the principal variables, eliminating excess preliminary items if necessary (Robinson, 2018).

Exploratory factor analysis (EFA) is valuable for testing whether the factor structure of the data endorses researchers' theory of the construct. Item loadings and cross-loadings are useful gages for identifying problematic items requiring deletion or refinement (Wymer & Alves, 2012). EFA is carried out on the responses to the preliminary items, to detect the factor structure within the items and thus the preliminary psychometric scales. Once the final factor structure has been confirmed, the internal reliability of the scales should then be assessed. The ideal minimum sample size for EFA has been often debated, with larger samples and

larger item-to-participant ratios considered as more beneficial (Robinson, 2018). Confirmatory factor analysis (CFA) is useful in scrutinising the overall measurement model fit and spotting problematic items by inspecting error terms effects (Wymer & Alves, 2012).

A potential set of items were identified for inclusion into the measure as they were relevant to the construct under enquiry. The pool of items was critically reviewed by six experts in the selected research field from the University of South Africa (UNISA) and four employees from the SAPS. The subject matter specialists were selected based on their relevant knowledge and expertise on the topic being investigated in the current study. They were asked to review each of the CPES items and to provide input on the clarity of the item, relevance of the item and were also asked to provide suggestions on how to improve on each item.The aim of the review process was to establish to a large degree whether the items were clearly worded, whether the items adapted to the chosen response format, whether the response options for each item were credible, and whether the wording was familiar to the target population. An initial pool of 51 items was generated during this stage, based on the literature review.

5.4.3 Sub-step 3: Item evaluation

Items are evaluated by researchers for clarity of expression, to confirm that they are easily understandable and can measure exactly what is required (Robinson, 2018). Determining the construct is frequently based on a review of related literature, in conjunction with consultation with subject matter experts. Thereafter, a concise, distinct, and accurate definition of the construct is generated. Construct validation is applied to evaluate scale dimensionality and norming and is a crucial step in scale development after the item pool is examined by experts and/or pretesting (Kyriazos & Stalikas, 2018). According to Dimitrov (2012), expert reviews may include: content reviews, which comment on the initial pool of items regarding their relevance, precision, and completeness; sensitivity reviews, which evaluates potential item bias; and standard setting, whereby experts identify cut-off scores for criterion-referenced choices on levels of performance or diagnostic classifications (Kyriazos & Stalikas, 2018).

In the current study, the item pool was evaluated to confirm if they measure the construct under enquiry. Six experts in the subject field of research from UNISA and four employees from the SAPS reviewed the pool of 51 items to evaluate the face and content validity, the relevance, significance and clarity of the items, and the item difficulty level. The outcome indicated clean ranking of each item in terms of precision, relevance, significance, and difficulty.

5.4.4 Sub-step 4: Refinement

According to Wymer and Alves (2012), the combined EFA and CFA approach enables researchers to base their decisions for item refinements and deletions from more comprehensive information. This process may decrease the number of samples and studies necessary to create a valid scale (Wymer & Alves, 2012).

Items were revised to enhance content validity in accordance with the expert feedback. Items were also examined to determine if they were appropriately structured bearing in mind the target population. The revised draft instrument consisted of 20 items (as summarised in Table 3.4 in Chapter 3) which were administered to employees from the SAPS. A seven-point Likert rating response scale, ranging from (1) Not Agree at All to (7) Very Strongly Agree was employed. All of the items were categorised into the relevant dimension, comprising of five items per dimension (Appendix A).

From the above four steps of scale development, it can be deduced that the development of the CPES followed scale development protocols to ensure the face validity, content validity, and reliability of the scale for research purposes.

5.5 CHOOSING AND MOTIVATING THE PSYCHOMETRIC BATTERY

The psychometric properties of the measuring instruments that will measure the independent variable (career plateauing) and the dependent variables (job satisfaction, motivation, and work engagement) will be discussed.

In addition to the four measuring instruments, a biographical questionnaire was compiled and used to collect information regarding the respondent's gender, age, race, marital status, rank, and tenure. The questionnaire comprised of a set of multiple-choice questions, where the respondents selected the option that was pertinent to them. The biographical data provided significant information for the analysis of career plateauing, job satisfaction, motivation, and work engagement amongst the various biographical groups.

5.5.1 Career Plateauing Experiences Scale (CPES)

The career plateauing experiences scale (CPES) was used to measure career plateauing in the present study (see Appendix A).

5.5.1.1 Development of the career plateauing experiences scale (CPES)

A questionnaire, labelled the CPES, was developed by the researcher to measure career plateauing. An English questionnaire was developed because English is the current *lingua franca* within the SAPS. The questionnaire could therefore be distributed to all employees without discrimination. The deductive scale development process was used in developing the CPES. Tuan (2012) mentioned that the deductive approach relies on a thorough understanding and review of the literature in order to develop the scale items. The CPES consists of 20 items that measures four aspects of career plateauing. The four subscales of the CPES contain five items each as reflected in Chapter 3.

5.5.1.2 Description of the career plateauing experiences scale (CPES)

Closed-ended questions were used together with a seven-point Likert rating response scale: (1) Not Agree At All, (2) Very Slightly Agree, (3) Slightly Agree, (4) Moderately Agree, (5) Mostly Agree, (6) Strongly Agree, and (7) Very Strongly Agree.

Researchers usually prefer to use closed-ended questions because the alternative answers are set in a way that can be easily quantified. Likert rating scales are the most popular form of multi-item scales. They present the respondents with a set of statements about a person, thing or concept and the respondents are required to indicate how strongly they feel, positively or negatively, about the statements (Whitely, 2002). The respondents were asked to respond according to how strongly they agreed or disagreed with the statements relating to career plateauing. The questions were carefully worded to avoid ambiguity and took the context of the study into consideration. The four subscales include hierarchical/structural plateau, job content plateau, maintenance plateau, and psychological plateau as indicated in Chapter 3.

5.5.1.3 Administration and scoring of the career plateauing experiences scale (CPES)

DeVellis (2012) indicated that before a scale is administered, it must be given to a panel of experts for their outlook and opinion on the items and format. They can remove or suggest other items when evaluating the relevance, clarity, and conciseness of all items. The next stage of scale development involved having the items reviewed by ten subject matter experts both academically and from the SAPS.

Computer-based questionnaires were used, taking approximately five minutes to complete.

As shown in Appendix A and in Table 3.4 (Chapter 3), Items 11, 12, 13, 14, 15 (five items) are used for measuring hierarchical/structural plateau, for example: “I am worried that I will no longer be promoted”. Items 16, 17, 18, 19, 20 (five items) are used for measuring job content plateau, for example: “I am no longer challenged by my job”. Items 1, 2, 3, 4, 5 (five items) are used for measuring maintenance plateau, for example: “In general, I am satisfied with my job”. Items 6, 7, 8, 9, 10 (five items) are used for measuring psychological plateau for example: “I feel incapable of performing my tasks/job adequately”.

5.5.1.4 Interpretation of the career plateauing experiences scale (CPES)

Individuals, who score high on hierarchical plateau, will experience a career plateau due to a low likelihood of promotions. Individuals, who score high on job content plateau, will experience a career plateau because of lack of challenging work tasks. If individuals score high on both hierarchical and job content plateau, they will experience a psychological plateau. Individuals, who score high on maintenance plateau, are satisfied in their current job and not interested in promotions/advancement and may therefore be pleasantly plateaued. High scores on psychological plateau signal feelings of dissatisfaction, disillusionment, and low passion for the job.

5.5.1.5 Psychometric properties of the career plateauing experiences scale (CPES)

The CPES was empirically tested for construct/factorial validity and internal consistency reliability as explained in the Results Chapter (Chapter 6).

5.5.1.6 Motivation for using the career plateauing experiences scale (CPES)

Yang, Niven, and Johnson (2019) reviewed 40 years of research on career plateau and found that hierarchical and job content plateau are the most researched categories of career plateaus. Although the current research also focuses on hierarchical and job content plateau, the CPES also includes the maintenance plateau and psychological plateau. The maintenance plateau is based on Super’s (1957) maintenance career stage and the psychological plateau is based on the seminal work of Hall (1997) and Levinson *et al*. (1978) on psychological states of dissatisfaction, disillusionment, and lack of passion as triggers of life cycle transitions. Therefore, the researcher developed the CPES so that it could incorporate not only hierarchical and job content plateau but also maintenance plateau and psychological plateau.

5.5.2 Minnesota Job Satisfaction Questionnaire (MSQ)

The shortened version of the Minnesota job satisfaction questionnaire (MSQ) (Weiss, Dawis, England, & Lofquist, 1967) was used for this study.

5.5.2.1 Development of the Minnesota job satisfaction questionnaire (MSQ)

The MSQ was developed on the basis of the work adjustment theory which states that employees aim at fulfilling their needs and desires via their working environment. The MSQ consists of 100 items that measures 20 facets of satisfaction, however, a short form of the scale (totalling 20 items) has been used successfully in measuring overall satisfaction (Levy, 2010). The 20 items of the short form of the MSQ was developed by selecting one item, from each scale, that was most pertinent to each scale. The instrument was developed by Weiss *et al*. (1967) to measure the extent of employees' satisfaction regarding various facets of work and the work environment.

5.5.2.2 Description of the Minnesota job satisfaction questionnaire (MSQ)

The short form of the MSQ comprises of 20 questions from the long form that represents three scales, namely intrinsic satisfaction, extrinsic satisfaction and general satisfaction. The 20 questions are ranked on a five-point Likert scale: (1) Very Dissatisfied, (2) Dissatisfied, (3) Neither, (4) Satisfied, and (5) Very Satisfied. The 20 job satisfaction items include: (1) ability utilisation, (2) achievement, (3) activity, (4) advancement, (5) authority, (6) company policies and practices, (7) compensation, (8) co-workers, (9) creativity, (10) independence, (11) moral values, (12) recognition, (13) responsibility, (14) security, (15) social service, (16) social status, (17) supervision-human relations, (18) supervision-technical, (19) variety, and (20) working conditions (Weiss *et al*., 1967).

5.5.2.3 Administration and scoring of the Minnesota job satisfaction questionnaire (MSQ)

The short form MSQ is written at a fifth-grade reading level and takes around five minutes to complete. The scores for each respondent's intrinsic, extrinsic, and general satisfaction are calculated by adding the scores for the relevant items. Items 1, 2, 3, 4, 7, 8, 9, 10, 11, 15, 16, 20 (twelve items) are used for measuring extrinsic satisfaction, for example: "Being able to keep busy all the time…". Items 5, 6, 12, 13, 14, 19 (six items) are used for measuring intrinsic satisfaction, for example: "The way my boss handles his/her workers…". Items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 (20 items) are used for measuring general

satisfaction. The general satisfaction score will range between 20 and 100. The response choices for the MSQ are weighted as: (1)-Very Dissatisfied; “D” (2)-Dissatisfied; “N” (3)-Neither Satisfied nor Dissatisfied; “S” (4)-Satisfied; “VS” (5)-Very Satisfied (Weiss et al., 1967).

5.5.2.4 Interpretation of the Minnesota job satisfaction questionnaire (MSQ)

Raw scores for each scale of the MSQ are converted into percentile scores which are significant in interpreting this questionnaire and are obtained from the most relevant norm group for the individual. If a norm group does not exist for a particular occupation, the MSQ raw scores can be converted to the percentile scores using the Employed Disabled or Employed Non-Disabled norms, depending on the employee’s status in terms of disability. A percentile score of 75 or higher indicates a high degree of satisfaction; a percentile score of 25 or lower represents a low level of satisfaction; and scores in the middle range of percentiles (26-74) indicates average satisfaction. It is possible to interpret MSQ raw scores for all scales by ranking them. These rankings depict areas of relatively higher or lower satisfaction (Weiss *et al*., 1967).

5.5.2.5 Psychometric properties of the Minnesota job satisfaction questionnaire (MSQ)

Hoyt’s reliability coefficients that were obtained for the short form MSQ scales were high and ranged from 0.84 to 0.91 for intrinsic satisfaction, 0.77 to 0.82 for extrinsic satisfaction, and 0.87 to 0.92 for general satisfaction. The median reliability coefficients were 0.86 for intrinsic satisfaction, 0.80 for extrinsic satisfaction, and 0.90 for general satisfaction (Weiss et al., 1967). According to Cook, Hepworth, Wall, and Warr (1981) the questionnaire is reliable and valid in measuring total job satisfaction. Similarly, Buitendach and Rothmann (2009) conducted a study on the validation of the MSQ in selected organisations in South Africa, and found that there was construct equivalence for both White and Black groups, the two subscales (extrinsic and intrinsic) job satisfaction were sufficiently internally consistent, falling well above the 0.70 level. Concurrent validity has been established for the long form of the MSQ. Since the items for the short form of the MSQ has been extracted from the long form, the validity that was ascertained for the long form, can be inferred to the short form (Weiss *et al*., 1967).

5.5.2.6 Motivation for using the Minnesota job satisfaction questionnaire (MSQ)

The MSQ short form was selected for the current study because in addition to general satisfaction, it also measures intrinsic and extrinsic satisfaction. The administration time for the short form MSQ is also shorter as opposed to the long form. The MSQ short form was

chosen over the long form since it provides an overall general satisfaction score and administration time is shorter. The MSQ allows for measuring job satisfaction in relation to specific facets of the job and the work environment and this is useful since employees display satisfaction due to different reasons.

5.5.3 The Achievement Motivation Questionnaire (AMQ)

The achievement motivation questionnaire (AMQ), compiled by Pottas *et al*. (1988), was used to measure the need for achievement in this study.

5.5.3.1 Development of the achievement motivation questionnaire (AMQ)

Pottas *et al*. (1988) developed an AMQ in order to measure a respondent's degree of achievement motivation. It was developed to measure five dimensions of achievement motivation, namely, persistence, awareness of time, action orientation, aspiration level, and personal causation (Erwee, 1986). It is a standardised questionnaire that was developed in South Africa and provides a multi-dimensional perspective on achievement motivation (Pottas *et al*., 1988).

5.5.3.2 Description of the achievement motivation questionnaire (AMQ)

Pottas *et al.*'s. (1988) AMQ consists of 84 forced choice items where each item describes two persons, A and B. One of the persons exhibits achievement-oriented behaviour whilst the other exhibits opposite behaviour. The respondent has to choose which person in each item best depicts her/him. Factor analyses of results obtained from a various South African male and female first-year university students yield two major factors. The first factor was categorised as goal directedness (AA) and comprised of three clusters, namely persistence (A); awareness of time (B); and action orientation (C). The second factor was characterised as personal excellence (BB) and consisted of two clusters, namely (a) aspiration level (D); and personal causation (E) (Pottas *et al*.,1988). According to Pottas (1981) the personal excellence factor explains the basis of the reason to attain success, namely the basic drive which drives the individual to achieve. The goal directedness factor highlights the behavioural processes that allow the individual to direct energy, produced by the basic motive to accomplish a particular goal.

5.5.3.3 Administration and scoring of the achievement motivation questionnaire (AMQ)

The subjects completed the English version of the questionnaire which was comprises of 84 items. The respondents had to indicate on each item which one of the two descriptions was the best depiction of her/him. The sub-factors of persistence and aspiration level were measured by responses to 21 items; awareness of time was measured by response to 20 items; action orientation was measured by responses to nine items, and the sub-factor personal causation was measured by responses to thirteen items (Erwee, 1986). Goal directedness (AA) is scored by adding the scores for the sub-factors of persistence (A), awareness of time (B) and action orientation (C). Each of these three sub-factors are scored individually. Personal excellence (BB) is scored by adding the scores for the sub-factors of aspiration level (D) and personal causation (E). Each of these sub-factors is scored individually (Bothma & Schepers, 1997). The PM score was scored by adding the scores for all five sub-factors. The AMQ takes approximately 20 minutes to complete (Pottas *et al*., 1988).

5.5.3.4 Interpretation of the achievement motivation questionnaire (AMQ)

Individuals who achieve high scores in persistence (A) tend to persevere in searching for solutions to complex problems regardless of unfavourable conditions. In terms of awareness of time (B), high scorers plan in advance for any possibility and feel guilty about ineffective use of time. Those who score highly on action orientation (C), tend to depict themselves as active and energetic people, and use their time effectively. Individuals who obtained high scores for aspiration level (D) are inclined to undertake demanding and challenging tasks, take calculated risks, and set high performance standards for themselves as well as others. In terms of personal causation (E), high scorers trust their own abilities and skills, and believe that they can accomplish tasks efficiently (Pottas *et al*.,1988).

5.5.3.5 Psychometric properties of the achievement motivation questionnaire (AMQ)

The instrument is considered to be culture appropriate for the South African population as norms for the questionnaire were established using the responses of Black and White respondents. A factor analytic approach was used for construct validity in order to ensure that achievement motivation is measured as accurately as possible. The reliability of the questionnaire was determined using the Kruder Richardson 20 formula (Pottas *et al*., 1988). According to Spangenberg (1990), the reliabilities for White and Black students (male and female) and White managers (male and female) are above 0.70 for all scales except for

personal causation which revealed variable coefficients. The reliabilities for the total score vary between 0.89 and 0.92 (Spangenberg, 1990).

5.5.3.6 Motivation for using the achievement motivation questionnaire (AMQ)

Since the AMQ has been locally constructed and has been proven to be a valid and reliable questionnaire in the South African context, it was selected for the current study. Furthermore, the AMQ can be used cross culturally because norms exist for the various language groups, and for both the White and Black population groups.

5.5.4 The Utrecht Work Engagement Scale (UWES)

The Utrecht work engagement scale (UWES) was used in the present study to measure work engagement.

5.5.4.1 Development of the Utrecht work engagement scale (UWES)

The UWES was developed by Schaufeli and Bakker (2003) and initially comprised of 24 items, but after psychometric analysis, seven items were found to be unsound and were subsequently eliminated resulting in the seventeen-item version of the UWES.

5.5.4.2 Description of the Utrecht work engagement scale (UWES)

The UWES (Schaufeli *et al*., 2002) is a self-report questionnaire using a seven-point frequency point rating scale ranging from 0 (never) to 6 (every day) which is used to measure levels of engagement. The UWES consists of seventeen items and is divided into three subscales, namely vigour, dedication, and absorption. Six items measure vigour, five items measure dedication, and six items measure absorption. Items 1, 4, 8, 12, 15, and 17 represent the construct vigour; for example: "*A always plans his/her programme a long time ahead; B seldom plans his/her programme a long time ahead*". Items 2, 5, 7, 10 and 13 refer to the construct dedication, for example "*A persists with every task which he/she tackles; B finds it difficult to persist"*. Items 3, 6, 9, 11, 14, and 16, makes up the construct absorption, for example: "*A is inclined to make careless errors in his/her work; B is usually accurate in his/her work*" (Schaufeli & Bakker, 2003).

5.5.4.3 Administration and scoring of the Utrecht work engagement scale (UWES)

The UWES-17 is scored on a seven-point frequency-rating scale, ranging from 0 (never) to 6 (always) and takes approximately five to ten minutes to complete. The final score for each subscale is between 0-6. The total highest score is 102 when scores are added for all items of the UWES-17. A higher score is a reflection of higher work engagement (Schaufeli & Bakker, 2003).

5.5.4.4 Interpretation of the Utrecht work engagement scale (UWES)

Individuals who score high on vigour tend to have more energy, zest, and stamina at work than individuals who score low on vigour. Individuals who score high on dedication are enthusiastic about their work because it is regarded as meaningful, inspiring, and challenging. They also experience pride and strong feelings about their work. Individuals who score low on dedication do not feel enthusiastic, challenged, inspired, or proud about their work. Individuals who score high on absorption are happily engrossed in their work, to the extent that they experience difficulties in detaching from work and forget everything around them as time flies by. Individuals who score low on absorption do not feel immersed in their work (Schaufeli & Bakker, 2003).

5.5.4.5 Psychometric properties of the Utrecht work engagement scale (UWES)

According to Schaufeli and Bakker (2003), all scales of the UWES are highly internally consistent. The UWES has been psychometrically evaluated in more than ten countries, including South Africa (Goliath-Yarde & Roodt, 2011; Schaufeli *et al*., 2002; Storm & Rothmann, 2003), and has established cross-national validity due to its three-factor model. The Cronbach alpha ranges between 0.80 and 0.90 (Ugwu, 2013). Coetzee and de Villiers (2010) determined alpha coefficients for the three subscales between 0.78 and 0.88. Similarly, Storm and Rothmann (2003) conducted a study in the SAPS for a sample of 2 398 police officers and reported sufficient internal consistency with the following alpha coefficients for the UWES in South Africa: vigour: α=0.78, dedication: α=0.89 and absorption: α=0.78. Ruddy's (2018) study revealed that the reliability of the constructs was high with a Cronbach alpha score of 0.75 for the construct vigour, 0.86 for dedication, and 0.79 for the construct absorption. The overall Cronbach alpha was 0.91 (Ruddy, 2018).

5.5.4.6 Motivation for using the Utrecht work engagement scale (UWES)

The UWES is regarded as the most suitable instrument because the current study is conducted within the positive psychology paradigm. Furthermore, in terms of a psychometric instrument, the UWES has been proven to be acceptable for use with different race groups both internationally (Schaufeli *et al*., 2002) and in South Africa (Storm & Rothmann, 2003). The current research adopts a one-dimensional approach when measuring overall work engagement in relation to career plateauing, job satisfaction, and motivation. This study also implements a three-dimensional approach when measuring the sub-constructs of work engagement in relation to career plateauing, job satisfaction, and motivation.

5.6 ETHICAL CONSIDERATIONS AND ADMINISTRATION OF THE PSYCHOMETRIC BATTERY

De Vos, Delport, Fouche, and Strydom (2011) defined ethics as a set of moral principles which refer to the quality of research procedures with regard to adherence to professional, legal, and social obligations to the research participants. The following procedures were adhered to in the proposed research to ensure that the necessary ethical requirements and ethical responsibilities were satisfied.

Ethical clearance, attached in Appendix B, was obtained from the University's Research Ethics Committee (Ref. No.: 2013/CEMS/IOP/00141). Permission to conduct the study was obtained from the SAPS. Data collection was done through electronic questionnaires which were accessed via a hyperlink that was sent to respondents. The questionnaires were administered through the Lime Survey platform, which is a web application that was installed on the SAPS intranet. After participants accessed the Lime Survey questionnaire, they were directed to a covering letter inviting them to voluntarily participate in the study and explaining the reason for the study, confidentiality agreements as well as guidelines on how to complete the questionnaire. The covering letter further highlighted that completing the questionnaire will be considered informed consent and an agreement to use the results for research purposes only. The research was conducted in an honest, fair, and transparent manner. Fair and unbiased selection criteria were used to obtain research participants who were treated as unique human beings within the context of their work environment.

According to Condition 7 of the POPI Act (2013), security measures must be implemented to achieve confidentiality and integrity of personal information. In the current study, anonymity of

the research participants was assured as they were not asked to provide information pertaining to their identity. Also, a coding system was applied when recording responses and capturing data. Confidentiality of the research participants was maintained since the completed questionnaires obtained via Lime Survey was stored on the UNISA server so that no third party could access this information. The researcher made sure that the research participants were not exploited or subjected to direct or indirect coercion when participating in the research study. The research will be beneficial to the organisation and feedback will be provided on the research results.

5.7 CAPTURING OF CRITERION DATA

Responses from the participants on each of the items in the four questionnaires were captured in an electronic database which was converted to an SPSS data file.

The IBM Statistical Programme for Social Sciences (SPSS) software Version 23 for the Microsoft Windows platform (SPSS Inc., 2015) and SAS software version 9.4 (SAS, 2013) were used to analyse the data. Both descriptive statistics as well as inferential statistics were used in the analysis of the data to establish the internal consistency or reliability as well as the validity of the measuring instruments (Gallie, 2016).

5.8 FORMULATION OF RESEARCH HYPOTHESES

The research hypotheses were formulated in order to achieve the objectives of the study. Aamodt (2010) defined a hypothesis as an educated prediction about the answer to a question. This prediction is usually based on a theory, previous research, or logic. The following hypotheses which are of relevance to the present research are summarised in Table 5.7 below.

Overarching research hypotheses were stated in order to achieve the overall aim of the doctoral study. The doctoral study deals with various variables to address the complexity of analysis required for a thesis. For reasons of parsimony, the overarching research hypotheses were more suitable for achieving the overall purpose of the doctoral research rather than the micro-level research hypotheses that one would expect in a research article.

Table 5.7 *Research Hypotheses*

Research aim	Research hypothesis	Statistical procedure
Research aim 1: To operationalise the elements of the theoretical framework for career plateauing empirically into a valid and reliable career plateauing experiences scale (CPES). *Sub-aim 1.1*: To assess the psychometric properties (internal consistency reliability and construct validity) of the newly developed career plateauing experiences scale (CPES). *Sub-aim 1.2*: To assess the nature of the interrelationships between the sub-scale dimensions of the career plateauing experiences scale (CPES).	H_{a1}: The elements of the theoretical framework for career plateauing can be operationalised into a valid and reliable career plateauing experiences scale (CPES).	Exploratory Factor Analysis RASCH modelling Scale intercorrelations Confirmatory factor analysis
Research aim 2: To assess the direction and magnitude of the statistical inter-relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the South African Police Services context.	H_{a2}: There is a statistically significant interrelationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement.	Correlation analysis
Research aim 3: To assess whether individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement.	H_{a3}: Individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement.	Multiple Regression analysis
Research aim 4: To assess if there is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.	$H_{a4:}$ There is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.	Structural Equation Modelling
The biographical variables of gender, age, race, marital status, rank, and tenure will be treated as control variables. The following research aims are posed:		
Research aim 5: To assess whether gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement.	$H_{a5:}$ Gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement.	Multiple regression analysis
Research aim 6: To assess whether individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement.	H_{a6}: Individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding the variables manifested in the best fit model.	Tests for significant mean differences

Note: Ha (alternative hypothesis)

5.9 STATISTICAL PROCESSING OF DATA

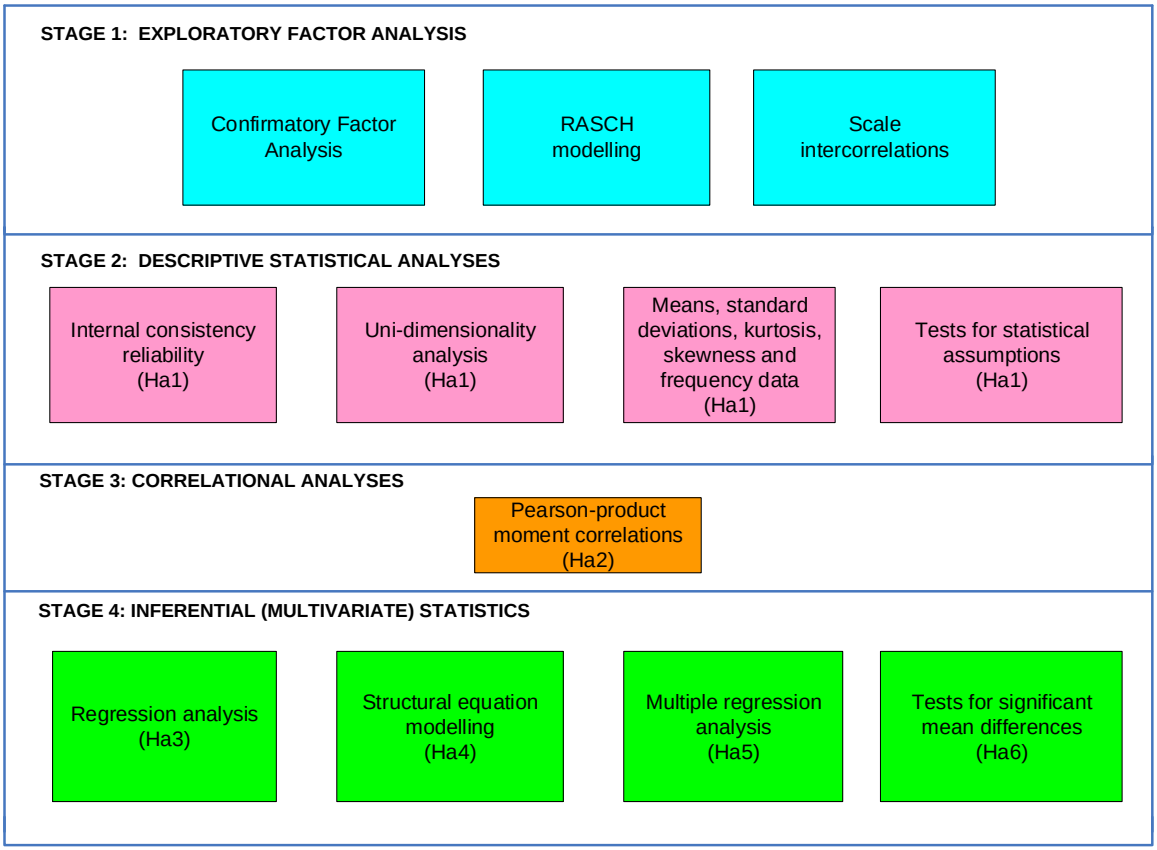
The statistical procedure that is relevant for this study included factor analysis and descriptive statistics (Exploratory factor analysis (EFA), Confirmatory factor analysis (CFA), Cronbach's alpha coefficients, Raykov's composite reliability coefficient, Rasch analysis for uni-dimensionality of measures, means, standard deviations, kurtosis and skewness, and frequency data), correlational analysis (Pearson-product moment correlations), and inferential and multivariate statistics (regression analysis, structural equation modelling, multiple regression analysis, and tests for significant mean differences).

The process began with the preliminary descriptive analysis, which included screening of all cases and variables to ensure data accuracy prior to further statistical analysis. This was followed by a detailed description of the sample in terms of respondents' personal (gender, age, race, and marital status) and work-related details (rank and tenure). The next step in the descriptive statistical analyses involved an assessment of the psychometric suitability of the measuring instruments followed by a description and interpretation of the constructs-level data through measures of central tendency (means) and dispersion (standard deviations, skewness, and kurtosis).

The subsequent step entailed bi-variate correlational analyses to test the strength of the relationships between the independent and dependent variables. The final step included inferential and multivariate analyses to test the research hypotheses as outlined in Table 5.7.

The current study will make use of null hypotheses testing in order to test the hypotheses that were formulated in Table 5.7. The null hypothesis states that there is no relationship between the variables that are being investigated. The alternate hypothesis (Ha) indicates that there is no relationship between the variables being investigated (Howitt & Cramer, 2017). Figure 5.8 below depicts the data investigation process which comprises of four major stages each consisting of various steps of statistical analysis.

Figure 5.8 *Statistical Processing of Data*



5.9.1 Stage 1: Preliminary statistical analysis

The aim of the preliminary statistical analysis was, firstly, to ensure that the data was accurately recorded and useable and, secondly, to obtain a quantitative summary of the data that can provide an overall understanding of the sample distribution. The preliminary statistics included measures of distribution (frequency and percentage), central tendency (mean) and dispersion (range, standard deviation, skewness, and kurtosis).

The preliminary statistical analysis stage included the following steps:

(1) Screening all recorded cases for accuracy, missing data, outliers, and unengaged responses
(2) Screening all variables to have a general view of the variation in the data
(3) Describing the sample distribution in terms of both personal and work-related characteristics.

5.9.1.1 Case screening

In terms of case screening, the preliminary data analysis included various actions that were undertaken to screen all recorded cases for accuracy, missing data, outliers, and unengaged responses.

Questionnaires were distributed and accessed electronically where respondents recorded their responses in a pre-coded format. This improved the accuracy of the data since nobody recorded the responses on behalf of the respondents. Respondents were obligated to answer all questions which lead to no missing data. Furthermore, SAS software version 9.4 (SAS, 2013) was used to calculate frequency statistics for each of the scale items. These frequencies highlighted the minimum and maximum values as well as the means and standard deviations which were examined to ensure data accuracy. All of the items fell within the possible range of values thereby indicating that the data was accurate. Missing data occurs where some variables cannot be analysed as a result of the absence of valid values. It is highly uncommon for a researcher to not have missing data. Missing data has an adverse impact on the generalisability of the research results. Some missing data can be overlooked but others must be rectified by acknowledging and accommodating them in the analysis (Hair *et al*., 2014). If responses are missing for a large number of participants, there may be something wrong with the measure which needs to be addressed (Howitt & Cramer, 2017). Be that as it may, in this case, all questions had to be completed for the questionnaire to be considered complete.

Possible ethical concerns were addressed by indicating that participation in the survey was completely voluntary and were allowed to exit the survey at any point before final submission. This means that if respondents felt uncomfortable or dissatisfied in answering any of the questions, they could withdraw from the survey. The disadvantage of forcing respondents to answer all questions is that it may negatively impact on the response rate (as shown in the 101 incomplete questionnaires). The advantage is that partially completed questionnaires are discarded so that only accurate and usable responses were retained in the database.

Examining all the cases for outliers also formed part of the case screening. Outliers are observations with a unique combination of characteristics which indicates that they are different to other observations. These differences can arise on a single variable (univariate outlier), between two variables (bivariate outlier), or amongst a set of variables (multivariate outlier). Researchers must decide whether to omit or resolve and include the outlier in the sample to be analysed (Hair *et al*., 2014). Researchers must not remove or exclude any of the data that are perceived as being inconvenient or hampering statistical significance. Plausible

reasons must exist in order to remove possible outliers (Howitt & Cramer, 2017). There were no outliers in this study because of the use of pre-coded responses for categorical or demographical data as well as the use of Likert scales to measure the relevant constructs. This finding ensured that all of the completed questionnaires were used for further statistical analysis.

Lastly, it is imperative to determine whether the sample size was sufficient to have acceptable statistical power. According to Howitt and Cramer (2017), the larger the sample, the greater the likelihood that the results will be statistically significant. Kyriazos (2018) stated that statistical power refers to the approximate sample size that is suitable for an analysis. An adequate statistical power assists in observing factual relationships in a dataset (Kyriazos, 2018). A general rule of thumb to calculate and to establish the size of an adequate sample is $N \geq 50 + 8m$ (m is the number of independent variables in the study) (De Vaus, 2006). Based on this formula, the required sample size in the current study was N=58 since there was one independent variable and, therefore, the sample size of N=410 used in this study was considered adequate for achieving satisfactory statistical power. A satisfactory sample size was important for identifying effects through correlation and regression analyses.

5.9.1.2 Variable screening

The second step in the preliminary data analysis involved an in-depth screening of all the research variables in order to attain a general understanding of the variation in the data. Visual inspections, in the form of histograms, of the data as well as calculating the means, standard deviations, skewness, and kurtosis for all variables enabled the researcher to identify deviations from the normal distribution. The visual inspection involved the plotting of histograms with a normal curve which were applied to the distribution to check whether the actual distribution resembled the normal distribution (Hair *et al*., 2014). In this way, the researcher was able to recognise the possible main areas of deviations from the norm that could contribute to enhancing the model fit. In addition, all cases were included in the analysis because the variances and standard deviations for all the responses were examined to reveal if there were any unengaged responses. Skewness and kurtosis were assessed and were above the prescribed norm except for one item which had to be removed. Taking into account the central limit theorem which states that provided the sample is adequate in size (N=410), the sampling distribution will approximate a normal distribution regardless of the shape of the sample data (Field, 2013).

5.9.1.3 Description of the categorical data

The frequencies and percentages of the categorical data were displayed in both graphical and tabular format as indicated in section 5.2. A frequency table usually consists of four columns and displays the number of times or percentage that each categorical variable or value occurs. The first column shows the identified categories. The second column indicates the raw frequency or the number of times a single value arises. The third column displays the percentage of observations for each category and is calculated by dividing the number of observations in a category by the total number of observations. The fourth column labelled 'cumulative percentage', lists the percentage of individuals up to a certain category (Stockemer, 2019). The description of the sample included the respondents' personal (gender, age, race, and marital status) and work-related (rank and tenure) characteristics.

5.9.1.4 Assessing the psychometric suitability of the scale measures

The psychometric suitability of the scale measures for the newly developed career plateauing experiences scale (CPES) were assessed according to the following three steps:

Step 1: Conducting exploratory factor analysis (EFA) to confirm the factor structure of the newly developed CPES.

Step 2: Conducting confirmatory factor analysis (CFA) to confirm the construct validity of the factor structure of the newly developed CPES.

Step 3: Conducting additional CFAs to confirm the construct validity, uni-dimensionality, and internal consistency reliability of the CPES. Utilising the best fit measurement model of the CPES to test the research hypotheses that involved the other scales and variables.

These steps were performed to achieve the following research aim:

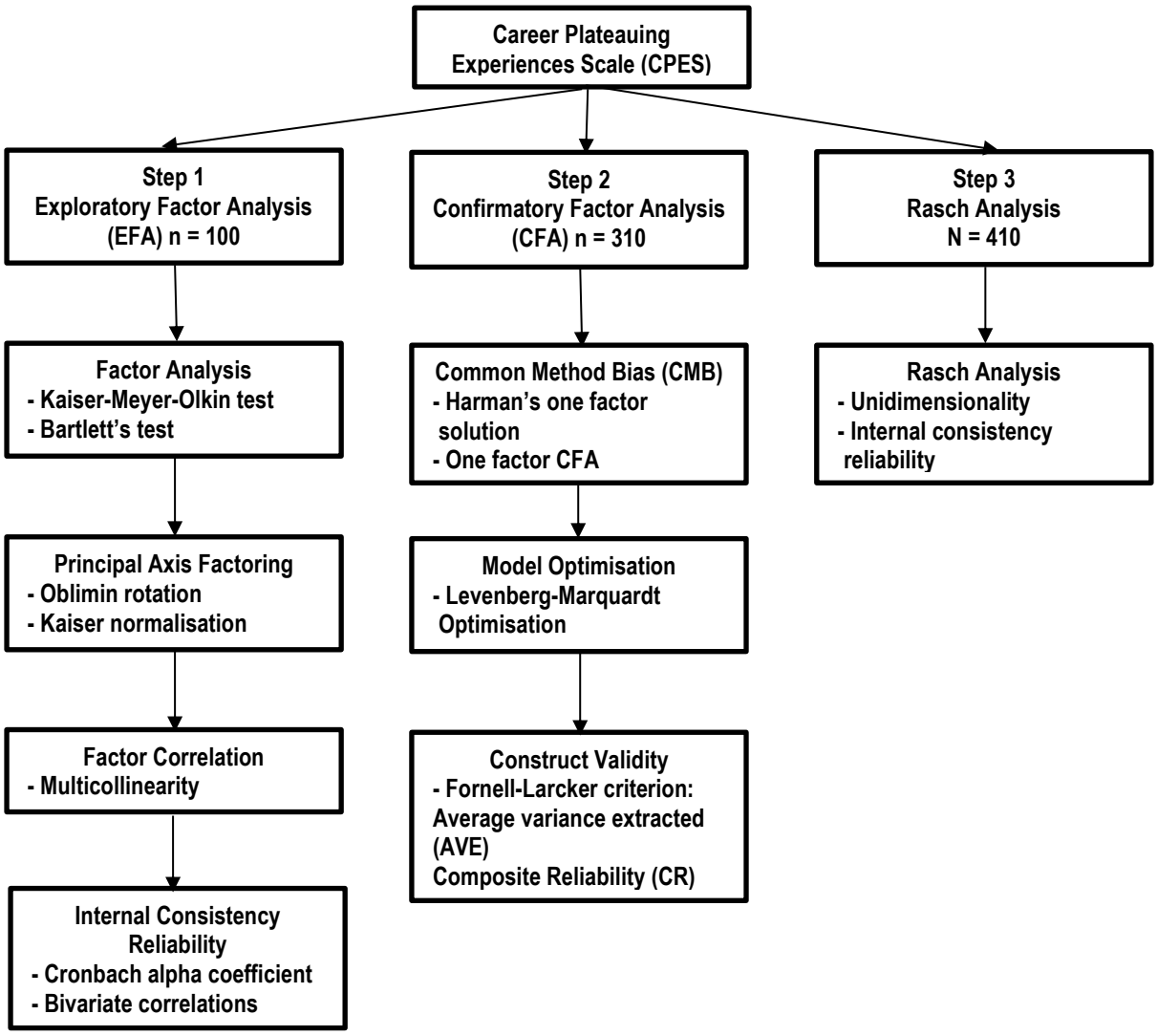
Research aim 1: To operationalise the elements of the theoretical framework for career plateauing empirically into a valid and reliable career plateauing experiences scale (CPES) (this research aim relates to research hypothesis H1).

***Sub-aim 1.1*:** To assess the psychometric properties (internal consistency reliability and construct validity) of the newly developed career plateauing experiences scale (CPES).

***Sub-aim 1.2*:** To assess the nature of the interrelationships between the sub-scale dimensions of the career plateauing experiences scale (CPES).

Figure 5.9 indicates the steps that were followed to assess the factor structure and construct validity of the CPES.

Figure 5.9 *Assessing Validity and Reliability of the CPES*



Step 1 included a randomly selected sample (n=100) drawn from the full sample (N=410) to test the dimensionality and factorial validity of the CPES. Step 2 included a randomly selected sample (n=310) of the full sample (N=410) to test the measurement model fit and initial structural validity of the CPES by means of CFA. Sample participants of n=100 were not included in n=310. Once the measurement model fit and structural validity of the CPES were

established, Step 3 included Rasch and reliability analysis which were conducted on the total sample (N=410).

The data were imported on a SPSS file and analysed using the IBM statistical programme SPSS (Statistical Package for Social Sciences) software version 23 for the Microsoft Windows platform (SPSS Inc., 2015) and SAS software version 9.4 (SAS, 2013). Rasch analysis (Software version 1.0.0, 2013) was also applied.

(a) Step 1: Exploratory factor analysis (EFA)

Factor analysis is an interdependence technique used to define the underlying structure among variables so that the data from the original variables can be reduced without losing much information. The distinctive characteristic of exploratory factor analysis (EFA) is that the factors are obtained from the statistical results rather than from theory (Hair *et al*., 2014). Thus, EFA is applied without knowing how many factors actually exist or which variables are appropriate for each construct.

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1974) and Bartlett's Test of Sphericity (Bartlett, 1954) were computed as part of the EFA as the CPES is a newly developed questionnaire. According to Sreejesh, Mohapatra, and Anusree (2014), a KMO score larger than 0.8 shows good sampling adequacy and a KMO score larger than 0.9 shows excellent sampling adequacy. The KMO value of 0.86, as indicated in Table 5.8, shows that the sampling adequacy is good to conduct the EFA. The Bartlett sphericity test, where the probability should be 0.05 or lower, was statistically significant ($p < 0.000$) which indicated that the variables were correlated considerably enough to conduct the EFA (Sreejesh *et al*., 2014). The results of the Bartlett sphericity test provided the confirmation that the researcher needed to continue with the factor analysis and to identify the underlying factors.

Principal axis factoring (PAF) was used to extract the factors with Oblimin rotation to obtain a new set of factor loadings. According to Osborne (2015), orthogonal and oblique are the two types of rotation methods. Orthogonal rotations produce factors that are uncorrelated whilst oblique methods allow the factors to correlate. Common oblique rotations include direct oblimin, quartimin, and promax. Oblique rotation was selected for the current study because these rotations can accurately model uncorrelated and correlated factors, whereas orthogonal rotations cannot accommodate correlated factors as effectively (Osborne, 2015). The factors should have an Eigenvalue greater than one (Kaiser, 1960) to ensure internal consistency.

Costello and Osborne (2005) recommended that statistical factor loading thresholds of 0.50 or higher should be applied in order to determine the number of items to retain in each construct or psychometric scale. Furthermore, items loading below 0.30 should not be included in the construct (Robinson, 2018). Items that have significant loadings on more one factor are called cross-loading and makes the interpretation of factors much more difficult (Hair *et al*., 2014).

The items that did not meet the above inclusion criteria were considered for exclusion from the CFA. The groups of items were also scrutinised and compared with the theorised constructs and dimensions. The items that loaded on theoretically inappropriate factors or failed to resemble the theorised dimensions, were also considered for exclusion from the measurement model.

The measures used and criteria applied in the EFAs are summarised in Table 5.8.

Table 5.8 *Summary of Measures and Criteria used in the Exploratory Factor Analyses*

Measure/Index	**Description**	**Criteria Applied**
Sample size (Kyriazos, 2018)	The number of participants or cases in a sample.	In terms of factor analysis (EFA and CFA) the sample size should large enough to promote statistical power and generalisability. n = 50: Very poor n = 100: Poor n = 200: Fair n = 300: Good n = 500: Very good n = 1000: Excellent
Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1974)	The KMO test is a measure, ranging between 0 and 1, calculated to assess whether the entire correlation matrix and each individual variable is suitable for factor analysis.	0.90s or above: Marvellous 0.80 or above: Meritorious 0.70 or above: Middling 0.60 or above: Mediocre 0.50 or above: Miserable Below 0.50: Unacceptable
Bartlett's test of sphericity (Bartlett, 1954)	This test provides the statistical significance that the correlation matrix consists of significant correlations among variables in a measure.	The probability should be 0.05 or less ($p < .000$) for a suitable factor analysis.
Eigenvalue (Kaiser, 1960)	Represents the amount of variance in the total sample accounted for by each factor.	Factors that obtain eigenvalues > 1 should be retained.

Measure/Index	Description	Criteria Applied
Factor loadings (Costello & Osborne, 2005)	Correlation between the original variables and factors which explain the nature of the factors. Squared factor loadings describe the percentage of variance that exists in an original variable as explained by the factor.	A factor loading of 0.50 or higher is regarded as significant. Items loading below 0.30 should be omitted.

Sources: Hair *et al*. (2014); Kyriazos (2018); Osborne (2015); Robinson (2018); Sreejesh *et al*. (2014)

(b) Stage 2 and 3: Confirmatory factor analysis: Assessing construct validity of the CPES

In contrast to exploratory factor analysis (EFA), confirmatory factor analysis (CFA) aims to check if the theoretical specification of the factors is in accordance with the actual data (Hair *et al*., 2014). Thus, CFA can be used to verify the factor structure identified in the EFA. Various CFA analyses were conducted to confirm the factor structures of the 20 measures, to examine their discriminant and convergent validity and to sort out issues of common method variance (CMV) (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The results of the EFAs as well as the theoretical conceptualisation of the constructs, in the literature review (Chapter 3-4), specified the number of underlying factors and the loading of each item onto a particular factor. The maximum likelihood method and various fit indices (see Table 5.9) were used to establish the best model fit for each measure (Patten & Newhart, 2018).

Model fit entails comparing the theory to reality by assessing the similarity of the estimated covariance matrix (theory) to reality (the observed covariance matrix). The values of any goodness of fit (GOF) measure are a product of a mathematical comparison of these two matrices. The closer the values of these two matrices, the better the model fit. The chi-square (χ^2) is the fundamental measure of differences between the observed and estimated covariance matrices (Hair *et al*., 2014). Thus, according to Patten and Newhart (2018), the null hypothesis can be confirmed by using the chi-square test which tests for differences between the frequencies that are observed and the expected frequencies.

The chi-square value is calculated specifically to obtain the probability that the null hypothesis is correct. When the null hypothesis is rejected at 0.05 level (i.e. p = 0.05), there are five chances in 100 that the null hypothesis is correct. This means that the researcher is taking five chances in 100 of being wrong by rejecting the null hypothesis at this level. The values of chi-square that indicate significance depend on the degrees of freedom (*df*), which provides

an important parameter in the calculations and is equal to the number of categories minus 1. Once chi-square values are calculated, they are compared to a table of values that indicate the minimum value of significance at different *p*-values and degrees of freedom (Patten & Newhart, 2018). According to Hair *et al*. (2014), normed chi-square is a GOF measure which is the ratio of chi-square to the degrees of freedom (χ^2:*df*) for a model. The χ^2:*df* ratios on the order of 3:1 or less are generally related to better-fitting models, except where there are larger samples (greater than 750) or other mitigating circumstances, such as a high degree of model complexity. It is extensively used because apart from the software program, it can be calculated from the model results (Hair *et al*., 2014).

According to Schumacker and Lomax (2016), the Goodness of Fit Index (GFI) and the Adjusted Goodness of Fit Index (AGFI) indices can be used to compare the fit of two different alternative models with the same data. It can also be used to compare the fit of a single model using different data, such as separate data sets for males and females in a multiple group model. The GFI is based on the ratio of the sum of the squared differences between the observed and reproduced matrices to the observed variances (Schumacker & Lomax, 2016).

According to Noudoostbeni, Kaur, and Jenatabadi (2018), the acceptable GFI range is between 0 and 1, where 1 shows a perfect fit and implies that measures equal to or larger than 0.90 signify a good fit. AGFI is also measured between 0 and 1, where 1 or above (AGFI > 1.0) indicates a perfect fit. As in the case of GFI, AGFI values equal to or bigger than 0.90 represent a good fit (Noudoostbeni *et al*., 2018). The AGFI fit indices is calculated using the degrees of freedom. This is done by adjusting GFI by a ratio of the degrees of freedom used in a model to the total degrees of freedom available. The AGFI is affected by sample size where the value of the AGFI indices increases when the sample size increases (Civelek, 2018; Hair *et al*., 2014).

Hair *et al*. (2014) stated that individual standardised residuals (SRs) allows a researcher to identify potential problems with a measurement model but do not reflect overall model fit. The root mean square residual (RMR), which is the square root of the mean of these squared residuals has the same problem as residuals in that they are related to the scale of the covariances. An alternative statistic is the standardised root mean residual (SRMR) which is useful for comparing fit across models. Lower RMR and SRMR values reflect better fit and higher values reflect worse fits, which puts the RMR, SRMR, and root mean square error of approximation (RMSEA) into a category of indices sometimes known as badness of fit measures where high values suggest poor fit. An SRMR over 0.1 suggests a problem with fit

(Hair *et al*., 2014). The SRMR has an acceptable level when less than 0.05 (Schumacker & Lomax, 2016).

Noudoostbeni *et al*. (2018) indicated that the Normed Fit Index (NFI) is useful for contrasting and comparing the fit of a suggested model against a baseline null model. This index defines all observed variables as uncorrelated (Noudoostbeni *et al*., 2018). According to Schumacker and Lomax (2016), the NFI is a measure that rescales chi-square into a 0 (no fit) to 1.0 (perfect fit) range (Bentler & Bonett, 1980). Higher values show better fit where values higher than 0.90 are acceptable, while values higher than 0.95 are a good fit (Civelek, 2018).

The Comparative Fit Index (CFI) measures the improvement in non-centrality (Schumacker & Lomax, 2016) and compares the saturated model with the independent model (Civelek, 2018). The CFI is linked to the group of fit indices based on independent models. In the independent model, there is no relationship among the dimensions that constitute the research model (Civelek, 2018). According to Hair *et al*. (2014), the CFI is normed so that values range between 0 and 1, with greater values representing better fit. CFI values above 0.90 are conventionally associated with a model that fits well (Hair *et al*., 2014).

The RMSEA is a measure of fit that explicitly tries to correct for both model complexity and sample size by comparing the mean differences of each expected degree of freedom that can occur in the population with each other (Civelek, 2018; Hair *et al*., 2014). According to Schumacker and Lomax (2016), the degrees of freedom are regarded as a measure of model complexity. The number of variable relations in the model increase as the degrees of freedom increase. This relationship between sample size and degrees of freedom is incorporated into the RMSEA value, which is standardised (Schumacker & Lomax, 2016). Large samples refer to more than 500 respondents and lower RMSEA values indicate better fit (Hair *et al*., 2014). The RMSEA provides a measure of close fit when the computed value is between 0.05 and 0.08. Although RMSEA considers the model degrees of freedom and sample size, values between 0.05 and 0.08 specify the most desirable standing and more optimal fit outcomes (Noudoostbeni *et al.*, 2018).

The Akaike Information Criterion (AIC) are called model comparison adaptation indices (Civelek, 2018). Schumacker and Lomax (2016) stated that the AIC provides an index of model fit and model parsimony (over-identified model). Parsimony indicates the number of estimated parameters essential for a particular level of model fit. An over-identified model is compared with a restricted model. The model parsimony goodness of fit indices take into consideration the number of parameters needed to achieve a specific value for chi-square.

Lower values for AIC imply a better model fit provided that there is a specified number of parameters in a model (Schumacker & Lomax, 2016).

Jakobensen and Jensen (2015) stated that the data collected from the same respondents to gather information on both independent and dependent variables, lead to concerns about CMV or same-source bias. According to Chang, Van Witteloostuijn, and Eden (2010), the test that is commonly used by the researchers to examine the CMV in their studies is the Harman one-factor analysis which is a post hoc process that is undertaken after data collection to check whether a single factor is responsible for variance in the data (Tehseen, Ramayah, & Sajilan, 2017). The basic assumption of Harman's one-factor (or single-factor) test is that if a significant amount of CMV is present, either a single factor will arise from the factor analysis or one general factor will account for the majority of the covariance among the measures (Podaskoff *et al*., 2003).

In this study, the results of the Harman's single-factor test were interpreted together with the model fit statistics obtained from a one-factor CFA solution and multi-factor CFA solution to assess for CMV. All of the items for the research constructs were loaded onto a single latent factor for assessing the single-factor model. The model fit statistics were assessed in terms of the criteria indicated in Table 5.9. The single-factor model was compared with the alternative multidimensional models in order to determine the best fit model. The outcome of the Harman's single-factor test indicated that most of the variance in the data could be accounted for by a general factor. The CFA results determined the dimensionality of the measurement model for the current sample.

Table 5.9 *Summary of Measures/Indices and Criteria used in the Confirmatory Factor Analyses*

Measure/Index	Description	Criteria Applied
Absolute fit indices are a direct measure of how well a researcher's theory fits the sample data.		
Chi-square (χ^2 or CMIN)	A statistical measure of difference used to compare the observed and estimated covariance matrices. It is the only measure that has a direct statistical test as to its significance, and it forms the basis for many other goodness-of-fit measures.	If the χ^2 is statistically significant, the null hypothesis is rejected. The absence of statistical significance (i.e. $p > 0.05$) supports the null hypothesis.
Normed Chi-square (χ^2 or CMIN/df)	If the χ^2 value is significant in relation to the degrees of freedom, the observed and	An acceptable model fit is reflected by the ratio of χ^2 to df which should be ≤ 3.

Measure/Index	Description	Criteria Applied
	implied covariance matrices differ from one another.	
Goodness of Fit Index (GFI)	The GFI is the ratio of the sum of the observed and reproduced matrices to the observed variances that a particular model is able to explain.	Ranges between 0 (no fit) to 1 (perfect fit). Values close to 0.90 or 0.95 reflect a good fit.
Adjusted Goodness of Fit Index (AGFI)	Adjusts the GFI by a ratio of the degrees of freedom used in a model to the total degrees of freedom available.	Ranges between 0 (no fit) to 1 (perfect fit). Values adjusted for *df*, with 0.90 or 0.95 a good model fit.
Standardised Root Mean Squared Residual (SRMR)	Compares fit across models through the average value of the standardised residuals between observed and predicted co-variances.	Values less than 0.05 indicates a good model fit.
Relative or incremental fit indices: represent the degree to which the estimated model fits relative to an alternative baseline model.		
Normed Fit Index (NFI) (Bentler & Bonett, 1980)	Compares the fit of a suggested model against a baseline null model.	Ranges between 0 (no fit) to 1 (perfect fit). Values close to 0.90 or 0.95 reflects a good model fit.
Comparative Fit Index (CFI)	Measures the improvement in non-centrality and compares the saturated model with the independent model.	Ranges between 0 (no fit) to 1 (perfect fit). Values above 0.90 are generally associated with a model that fits well.
Fit indices based on the non-central chi-square distribution: These measures assume that no model is "correct" but that it can only be "approximately correct"		
Root Mean Square Error of Approximations (RMSEA)	Measure of fit that explicitly tries to correct for both model complexity and sample size.	Values of 0.05 to 0.08 indicates close fit.
Information theoretic fit measures: These measures express the extent to which the present model will cross-validate in future samples of the same size from the same population		
Akaike Information Criterion (AIC) (Akaike, 1987)	Compares values in alternative statistical models.	Lower values for AIC imply a better model fit.

Sources: Hair *et al*. (2014); Patten and Newhart (2018); Schumacker and Lomax (2016)

The construct validity of the measuring scales were established through standardised loading estimates calculated in the CFAs; computing the average variance extracted (AVE), maximum shared variance (MSV) and average shared variance (ASV); and calculating the internal consistency reliability (Cronbach's alpha) and composite reliability (Raykov's rho) coefficients for each measure.

Construct validity refers to the merging of observed variables that are related to the same latent variable (convergent validity) and separation of observed variables from one another that are related to other latent variables (discriminant validity) (Civelek, 2018). According to Howitt and Cramer (2017), convergent validity indicates that variables which are measuring the same thing should correlate significantly with each other. Discriminant validity stipulates that if variables are measuring different things, they should not correlate strongly with each other. Since convergent validity and discriminant validity are opposites of one another, they should both be considered when assessing the validity of a measure (Howitt & Cramer, 2017).

In the current study, convergent validity was confirmed by computing the factor loadings, AVE, internal consistency reliability and composite reliability. The standard value of each coefficient in the measurement model refers to the factor loadings of the CFA (Civelek, 2018). According to Anderson and Gerbing (1988), the size of the factor loading is important because it determines the degree of convergent validity. High loadings on a factor would indicate that they converge on a common latent construct (Hair *et al*., 2014). Fornell and Larker (1981) indicated that AVE is a measure of the level of variance captured by a construct in relation to the level of variance due to measurement error. An AVE value higher than 0.7 is regarded as very good and 0.5 is acceptable (Alarcon & Sanchez, 2015). According to Hair *et al*. (2014), an AVE measure should be calculated for each latent construct in a measurement model. An AVE less than 0.5 indicates that more error occurs in the items than variance explained by the latent factor structure imposed on the measure (Hair *et al*., 2014).

Hoekstra, Vugteveen, Warrens, and Kruyen (2019) stated that Cronbach's alpha is the most commonly used measure to examine the reliability of measurement instruments. Once the appropriate level of alpha is attained, researchers may use a test without taking the dimensionality or criterion validity of the test which affects validity into account. Furthermore, items may be omitted due to a low alpha value which may also harm validity. In the current study, the Cronbach's alpha was used to measure the internal consistency reliability of the measuring instrument. Cronbach's alpha values larger than 0.7 (Nunally & Bernstein, 1994) suggests that the internal reliability of the scale used is sufficient although it may decrease to 0.60 in exploratory research (Hair *et al*., 2014). Cronbach's alpha is a measure based on correlations between items in a construct (Civelek, 2018). Patten and Newhart (2018) stated that when researchers use correlation coefficients to describe reliability, they are referred to as reliability coefficients. This coefficient ranges from 0 to 1, where a score of 0 indicates no reliability and a score of 1 indicates perfect reliability. Estimates of internal consistency reliability examines the extent to which the items within the test are measuring the same concepts (Patten & Newhart, 2018).

Raykov (1997) indicated that composite reliability (CR) is another value that is used to calculate the reliability of the scale for each dimension. The CR value is computed from the factor loads found in the CFA. CR values greater than or equal to 0.7 reveals that there is acceptable CR (Civelek, 2018). CR is a less biased estimate of reliability than Cronbach's alpha (Alarcon & Sanchez, 2015).

Discriminant validity is the level of measurement indicating the extent to which a structure in a measurement model differs from other structures (Civelek, 2018). In order to assess discriminant validity in the current study, the theoretical models were compared to other alternative models, including one-factor models to test for uni-dimensionality. Furthermore, acceptable discriminant validity was confirmed for two constructs (job content plateau and hierarchical/structural plateau) where MSV and ASV were both lower than AVE. Partial discriminant validity was determined for one construct (maintenance plateau) because ASV was less than AVE but MSV was greater than AVE. Poor discriminant validity was established for one construct (psychological plateau) because ASV and MSV were both greater than AVE. According to Fornell and Larcker (1981), the AVE value alone does not reveal discriminant validity but the square root of the AVE value of each construct is larger than the inter-dimensional correlation value it can be concluded that discriminant validity exists (Alarcon & Sanchez, 2015; Civelek, 2018; Hair *et al*., 2014).

Establishing the construct validity of the measurement models was beneficial for confirming the psychometric suitability of the scale measures within the South African context. Factor analyses also supported the internal consistency and internal validity of the scale measures thereby establishing psychometric suitability of the measurement scale for the South African context.

Table 5.10 summarises the measures and criteria used to determine the construct validity of the measurement models.

Table 5.10 *Construct Validity of the Measurement Models*

Indicator	Description	Criteria Applied
Convergent validity: The extent to which indicators of a specific construct have a high shared variance.		
Factor loadings	High loadings on a factor indicate that they converge on a common point, the latent construct.	Standardised loading estimates are significant if they are at least ≥ 0.5 and ideally ≥ 0.7

Indicator	Description	Criteria Applied
Average variance extracted (AVE)	AVE is the mean variance extracted for the items loading on a construct and is a summary indicator of convergence.	AVE should be ≥ 0.5 to suggest adequate convergent validity.
Reliability coefficient (Cronbach's alpha, α)	Reliability coefficients are estimates of internal consistency reliability and examines the extent to which the items within the test are measuring the same concepts and are intercorrelated.	α ≥ 0.7 indicates adequate convergence or internal consistency.
Composite reliability (CR)	CR indicates the reliability of the scale for each dimension and is computed from the factor loads found in the CFA.	CR ≥ 0.7 indicates adequate and acceptable convergence or CR.
Discriminant validity: The extent to which a construct is truly distinct from other constructs.		
Confirmatory factor analysis (CFA)	Theorised models were compared to numerous alternative models, including one-factor models to test for uni-dimensionality.	The best-fit models were established by applying the criteria specified in Table 5.9.
Comparing average variance extracted (AVE), maximum shared variance (MSV) and average shared variance (ASV)	MSV refers to the square of the highest correlation between latent constructs. ASV refers to the mean of the squared correlation between latent constructs.	AVE should be greater than MSV and ASV to indicate adequate discriminant validity.

Sources: Alarcon and Sanchez (2015); Civelek (2018); Hair *et al*. (2014); Patten and Newhart (2018)

(*c) Rasch modelling*

The Rasch modelling technique was applied to the total sample of N=410. The Rasch item fit statistics aided in assessing the uni-dimensionality (homogeneity) of each of the four CPES dimensions. Once the EFA factor extraction process was completed, Rasch modelling was conducted using Winsteps software (Version 1.0.0, 2013). The Rasch model, which is named after the Danish mathematician and statistician Georg Rasch in the 1950s, is a prescriptive probabilistic mathematical concept.

Rasch statistics can be used to assess the construct validity of an instrument. It is famous for properties of invariance and interval scaling, which are achieved when the basic assumption of uni-dimensionality underlying the model is attained, that is when the data fit the model (Bond

& Fox, 2015; Boone & Noltemeyer, 2017). The Rasch model produces the required interval scale by converting the log-odds to logits and aligning persons with items (Linacre, 2016). The log-odds of person ability levels and item difficulties are calculated and used for their joint scale. By adjusting item difficulty and person proficiency, through individual person and item interaction, persons, and items are aligned on the same scale. This process includes numerous iterations where misfit is indicated if items and persons do not conform to the model (Bond & Fox, 2015).

The Winsteps programme is used to group items with the same scale, enabling items with the same scale to be analysed together thereby improving the quality of the instrument (Linacre, 2016). For the analysis of an instrument's functioning, the responses for each item should be captured in a database (Excel or SPSS) which can then be imported into Winsteps after thorough cleaning of the data (Bond & Fox, 2015; Linacre, 2016). In this study, the Rasch model was used to inspect the psychometric properties (uni-dimensionality or homogeneity and internal consistency reliability) of the newly developed CPES.

A uni-dimensional scale represents a single concept where the correlations of the items with each other are established by a single underlying dimension (Howitt & Cramer, 2017). Uni-dimensionality is an assumption of the Rasch Model, but constructs can comprise of composite variables and have more than one dimension (Linacre, 2016). Uni-dimensionality becomes critical when there are more than two constructs. In such a situation, each measured variable is hypothesised to relate to only one construct. Cross-loadings are hypothesised to be zero when unidimensional constructs occur (Hair *et al*., 2014). Fit statistics assists the researcher in determining whether each item contributes to the measure of each construct (Wright & Stone, 1979). The expected values of the mean square and standardised fit indices are 1.0 and 0.0, respectively, if the data fit the model. Fit is described as infit (weighted by the distance between the person position and item difficulty) and as outfit (an unweighted measure) (Green & Frantom, 2002). According to Linacre (2016), outfit statistics identifies outliers which are items that may be too difficult or too easy. Infit statistics describes the overall pattern, where higher ability means answering more difficult items correctly and lower ability makes this less likely (Linacre, 2016). In this study, infit statistics were used to assess the fit of items to the Rasch model and the uni-dimensionality of the measure.

According to Green and Frantom (2002), person fit to the Rasch model indicates whether individuals are responding to items in a consistent manner or if their responses are erratic. Responses may be inconsistent when people are bored and inattentive to the task, when they are confused, or when an item induces an unusually salient response from an individual.

Similarly, item fit indicates whether items function logically and provide a continuum useful for all respondents. An item may misfit because it is too complex, confusing, or because it measures a different construct (Green & Frantom, 2002). Bond and Fox (2007) stated that a person and item fit of at least 2.00 infers that participants would have most likely responded in a similar manner in other contexts. The mean person and item fit also determined if participants' responses underfitted (≥ 1.30) or overfitted (≤ 0.70). If participants responded to the items in a consistent manner, there would be no underfit and overfit. Furthermore, outfit statistics below 2.00 implies that the measurement scale provided valuable information.

According to Boone and Noltemeyer (2017), the Rasch analysis indices that can also be used to monitor the functioning of an instrument include a person reliability index, an item reliability index, an item separation index, and a person separation index. These indices enable researchers to examine the stability of person and item ordering (Boone & Noltemeyer, 2017). Green and Frantom (2002) describe separation measures as the spread of both items and persons in standard error units. In order for an instrument to be useful, separation should exceed 1.0, with higher values of separation demonstrating greater spread of items and persons along a continuum. Lower values of separation represent redundancy in the items and less variability of persons on the trait. Separation determines reliability where higher separation in person or item position produces higher reliability. Reliability of person separation is conceptually equivalent to Cronbach's alpha, but the formulas differ from one another.

Similar to Cronbach's alpha, perfect reliability would be 1.0 and random data would generate a relationship of 0.0 (Green & Frantom, 2002). According to Netemeyer *et al.* (2003), Cronbach's alpha is acceptable at 0.70 level of reliability at preliminary stages of research but should reach at least the 0.80 level of reliability. In the current research, reliability of person separation was used to establish if participants were adequately separated by items representing the construct and to indicate replicability of person placement for other items measuring the same construct. The reliability of item separation was also used to ensure that the measure correctly divided the people according to their ability. Thus, Rasch analysis focuses on internal consistency reliability for both persons and items. Howitt and Cramer (2017) define internal consistency reliability as the uniformity with which all of the items in a scale measure a specific variable. If a scale is internally reliable, any group of items from the scale will provide a measure that is similar to any other group of items taken from that scale (Howitt & Cramer, 2017).

Table 5.11 *Summary of Parameters for Measures used in RASCH Modelling*

Indicator	Description	Criteria Applied
Person/item separation	Spread of persons and items along a continuum	Separation ≥ 1.0
Reliability	Winsteps gives both an index and a reliability estimate (similar to Cronbach's alpha)	Cut-off point ≥ 0.70
Goodness of fit	Identifies and sometimes corrects measure disturbance of overfit and underfit.	Values ≥ 0.6 ≤ 1.4 Values ≤ 0.6 indicated redundancy, while values ≥ 1.40 show the presence of 'noise' or underfit.
Uni-dimensionality	Eigenvalues greater than two should be investigated. Two items that could be another dimension.	First contrast eigenvalue unit ≤ 2.0 Eigenvalue units ≥ 2.0 indicate multidimensionality

Source: Bond and Fox (2003); Bone and Noltemeyer (2017); Green and Frantom (2002); Linacre (2016)

5.9.1.5 Description of the construct-level data

Descriptive statistical analyses were applied in order to organise, analyse, and interpret the data at a construct level. Descriptive statistics were used to explain aspects of the data in relation to the research constructs, namely career plateauing, job satisfaction, motivation, and work engagement.

The means and standard deviations, which are measurements of central tendency, were applied in this study to determine the dimensions of the research constructs. The mean is usually referred to as the average and can be affected by outliers. It is calculated by dividing the total number of observations by the number of subjects (Stockemer, 2019). The standard deviation is a direct measure of variance. The variable responses of participants are usually conveyed in the form of the standard deviation of values, which is similar to the average degree to which the values digress from the mean of the sample (Howitt & Cramer, 2017). If the histogram is bell-shaped (normal distribution), 68.3% of the scores lie within one standard deviation above or below the mean, 95.5 % of the scores lie within two standard deviations above or below the mean, and 99.7% of scores lie within three standard deviations above or below the mean (Wegner, 2014).

The shape of the distribution of the data was also explained by calculating the kurtosis and skewness for the variables consisting of ordinal data (Hair *et al*., 2014). The skewness and kurtosis values are inspected to establish whether the variables in the data set are normally distributed (Civelek, 2018). Skewness refers to the extent to which the distribution is symmetrical and whether it consists of extreme values that result in a long tail to the distribution whereas kurtosis is the thickness of the distribution in relation to a normal distribution. Skewness and kurtosis values of zero occur in a normal distribution (Uttley, 2019). According to Cain, Zhang, and Yuan (2017), distributions with positive skewness have a longer right tail in the positive direction, and those with negative skewness have a longer left tail in the negative direction. If a distribution is leptokurtic (positive kurtosis), the distribution has a fatter tail than the normal distribution with the same variance. If a distribution is platykurtic (negative kurtosis), the distribution has a relatively flat shoulder and short tails (Cain *et al*., 2017).

5.9.1.6 Testing the assumptions of multivariate analysis

Statistical assumptions include normality, linearity, homoscedasticity, and multicollinearity. Researchers must decide whether to satisfy all statistical assumptions or risk a biased and flawed analysis (Hair *et al*., 2014).

(a) Normality

According to Hair *et al*. (2014), a fundamental assumption in multivariate analysis is normality, reflecting the shape of the data distribution for each metric variable and its correspondence to the normal distribution. If the variation from the normal distribution is huge, all resulting statistical tests are regarded as invalid. The Shapiro-Wilk test and the Kolmogorov-Smirnov test are commonly used to test normality. If the test yields a significant *p*-value, this proves that the data significantly deviates from a normal distribution (Hair *et al*., 2014). Oppong and Yao (2016) stated that multivariate normality entails firstly observing univariate normality and then bivariate normality. The pair of variables should be bivariate normal. For each pair of variables, a scatterplot together with a gamma plot can be used to test bivariate normality (Oppong & Yao, 2016). In the current study, the One-Sample Kolmogorov-Smirnov test was used to assess the distribution of the data.

Positive skewness was found for the overall CPES and for subscales job content plateau and psychological plateau. Negative skewness was found for subscales hierarchical/structural plateau and maintenance plateau of the CPES. Negative skewness was also found for the

MSQ, AMQ, and the UWES. The distribution was platykurtic (negative kurtosis) for all of the scales and ranged from - 0.30 to -1.14.

(b) Linearity

An implicit assumption of all multivariate techniques based on correlational measures of association is linearity. Since correlations reflect only the linear relationship between variables, nonlinear effects will not be reflected in the correlation value resulting in an underestimation of the actual strength of the relationship. Therefore, it is crucial to inspect all relationships in order to recognise any departures from linearity that may affect the magnitude of correlations (Hair *et al*., 2014). Linearity can be detected through box plots, scatterplots, histograms, or frequency distributions (Schumacker *et al*., 2016). There was no indication of curvilinear relationships in the current study thereby confirming that the relationships between the variables were adequately linear in order to continue with inferential and multivariate statistical analyses.

(c) Homoscedasticity

Another assumption, homoscedasticity, focuses mainly on the dependence relationships between variables. It stipulates that the dependent variable(s) display the same levels of variance across the range of predictor variable(s) (Hair *et al*., 2014). Homoscedasticity stipulates that the variance of one of the variables should be stable at all levels of the other variable, especially in terms of regression analysis (Uttley, 2019). If this dispersion is unequal across values of the independent variable, the relationship is said to be heteroscedastic (Hair *et al*., 2014). In the current study, homoscedasticity was assessed by visually scrutinising bivariate scatterplots for all possible variable pairs. There were no problems identified in the scatterplots.

(d) Multicollinearity and singularity

Multicollinearity and singularity exist in a correlation matrix when variables are too highly correlated (0.90 and above). When variables are multicollinear or singular, they contain redundant information that are not all required for analysis (Tabachnick & Fidell, 2019). Multicollinearity results in statistically insignificant coefficients which alters the results obtained from multiple linear regression analysis. Thus, the omission of multicollinear explanatory variables lead to the formulation of a reliable multiple linear regression model (Kim, 2019). If a bivariate correlation is too high the problem can be solved by removing one of the redundant

variables. If a multivariate correlation is too high, resolving the issue is more complex because multivariate statistics are needed to find the problematic variable (Tabachnick & Fidell, 2019).

In this study, correlation matrices revealed that multicollinearity was absent in the CPES, MSQ, AMQ, and the UWES. Multicollinearity is linked to a conditioning index larger than 30 for a given dimension and variance proportions larger than 0.50 for at least two different variables. Researchers should consider removing one of the two variables with a bivariate correlation of 0.80 or more in the same analysis as this might create a composite score from the redundant variables (Tabachnick & Fidell, 2019).

5.9.2 Stage 2: Correlational analyses

Empirical research 2: *To assess the direction and magnitude of the statistical inter-relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the South African Police Services context (this research aim relates to research hypothesis H2).*

The second stage of the statistical analysis involved the use of correlation analysis to assess the direction and strength of the relationships between the independent and dependent variables as reflected in Table 5.7. The Pearson's product-moment correlation coefficient (*r*) was calculated to indicate the association and magnitude of the relationship between the following variables as demonstrated in a sample of respondents employed in the SAPS environment:

(1) career plateauing as an independent variable and job satisfaction as the dependent variable;
(2) career plateauing as an independent variable and motivation as the dependent variable; and
(3) career plateauing as an independent variable and work engagement as the dependent variable.

In order to conduct a correlation analysis, the relationship between the independent and dependent variable must be linear. A correlation analysis indicates strength but does not provide any indication of the strength in impact, that is, of a relationship of an independent on a dependent variable. A correlation analysis indicates whether two variables are related and how closely they follow a positive or a negative direction but does not provide any indication

which variable is the cause, and which is the effect. In statistical terms, the correlation coefficient, also called the Pearson's product-moment correlation coefficient, is referred to as *r* (Stockemer, 2019). A correlation of zero is insignificant no matter how big the sample as it represents the null hypothesis. A correlation of 1 is rare as it reflects a linear relationship between two variables and occurs if the variable is correlated with itself either deliberately or by accident (Howitt & Cramer, 2017). When the correlation coefficient (*r*) is squared (r^2), the resulting measure is referred to as the coefficient of determination which measures the amount of variation in the dependent variable that is explained by the independent variable. The coefficient of determination ranges between 0 and 1. The nearer r^2 is to 1, the stronger the relationship between the independent variable and the dependent variable (Wegner, 2014).

The statistical significance value of 95% confidence interval level ($p \leq 0.05$) was used in this study. According to Bakker *et al*. (2019), if the *p* value is lower than 0.05 but the effect size is small, it may not be wise to invest in the intervention or to use the findings for theory development. Thus, it is important to take sample size into consideration when deciding on practical or theoretical relevance. For example, very large sample sizes are likely to have a statistically significant difference. In this situation, *p* values are less informative, and effect sizes are more relevant because they can indicate whether the difference found is important or not (Bakker *et al*., 2019).

Cohen (1988) referred to a medium effect size as a value of $d = 0.5$, corresponding to $r = 0.3$; a small effect size which he saw as $d = 0.2$, corresponding to $r = 0.1$; and a large effect size yielding $d = 0.8$, corresponding to $r = 0.5$ (Schafer & Schwarz, 2019). In accordance with Cohen's (1988) guidelines, a Pearson's *r* of between 0.10 and 0.29 was indicative of a small practical effect size, while $r \geq 00.30 < .50$ represented a medium practical effect and $r \geq 0.50$ a large practical effect. Even though all significant bivariate correlations were reported, a significance level of $r \geq 0.10$ (small practical effect size) was used for interpreting the results as the limit for rejecting the null hypothesis. According to Schumacker *et al*. (2016), bivariate correlations are associations between two variables. Significant bivariate correlations with practical effect sizes below 0.10 were regarded as negligible and did not provide adequate support for rejecting the null hypothesis.

5.9.3 Stage 3: Inferential (multivariate) statistics

In the current study, inferential (multivariate) statistics included multiple regression analysis, structural equation modelling (SEM), and tests for significant mean differences which were

used to draw conclusions about the data. The goal of all multivariate statistical techniques is to ensure that the assumptions of the statistical inference process are met since analysis consists of using a sample rather than the total population.

This stage involved the following steps:

- Multiple regression analyses were conducted to assess whether individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement (research hypothesis H3). Multiple regression analyses were also used to assess whether gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement (research hypothesis H5).

- SEM was conducted assess if there is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model (research hypothesis H4).

- Tests for significant mean differences were conducted to assess whether individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement (research hypothesis H6).

5.9.3.1 Multiple regression analyses

Research aim 3 and 5 of the empirical study were addressed by conducting multiple regression analyses.

Empirical research aim 3*: To assess whether individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H3).*

Regression analysis gives a way to objectively assess the magnitude and direction (positive or negative) of each independent variable's relationship (Hair *et al*., 2014). A steeper slope denotes a stronger impact of the independent variable on the dependent variable. The closer the points are to the line, the more it can be established with confidence that this relationship truly exists (Stockemer, 2019). Regression analysis was used in the present study to

determine whether individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement.

Empirical research aim 5: *To assess whether gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H5).*

Multiple regression analysis is an extension of bivariate regression analysis and tests the impact of multiple independent (predictor) variables on a dependent variable (Stockemer, 2019). In order to apply multiple regression analysis, the data must be metric or suitably converted, and the researcher must indicate which variable is to be dependent and which variables will be independent (Hair *et al*., 2014). In the current study, multiple regression analyses were used to investigate the influence of the relevant biographical variables (independent variables) on career plateauing, job satisfaction, motivation, and work engagement (dependent variables). Since the biographical variables were categorical in nature, the data containing more than two categories had to be transformed onto binary measures.

The adjusted R^2 is a measure of model fit that enables the comparison of different models. This process entails removing the non-statistically significant predictor with the lowest standardised coefficient from the complete model and repeating this until the adjusted R^2 no longer increases (Stockemer, 2019). This method determined the amount of variance each of the dependent variables possessed with regard to the independent variables (R^2).

5.9.3.2 Structural equation modelling

Structural equation modelling (SEM) was conducted to test empirical research aim 4.

Empirical research aim 4: *To assess if there is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model (this research aim relates to research hypothesis H4).*

SEM is a method that permits separate relationships for each of a set of dependent variables.

SEM is a statistical method used to test the relationships between observed and latent variables (Civelek, 2018). It not only assesses each of the relationships simultaneously, rather than in separate analyses, it also incorporates the multi-item scales in the analysis to account

for measurement error associated with each of the scales (Hair *et al*., 2014). SEM involves model specification, model identification, model estimation, model testing, and model modification. SEM combines measurement models (CFA) with structural models (path models) via latent variables. If the measurement models for the latent independent and dependent variables produce a good data to model fit, the associations amongst the latent variables are tested in the structural model (Schumacker *et al*., 2016).

In this study, the central focus of SEM was to determine whether the sample data reinforced the theoretically hypothesised model. A two-step approach was used (Hair *et al*., 2014). Firstly, CFA was conducted in order to assess the components of the measurement model so that the necessary adjustments can be made to obtain acceptable model fit (see section 6.7.4). EFA was used to establish the factor pattern of the CPES whilst CFA was used to confirm the construct validity of the scale (Civelek, 2018). Secondly, a path analysis model was drawn illustrating both direct and indirect effects of the variables representing the theoretical framework suggested in Figure 6.4. According to Civelek (2018), a path analysis model in SEM is a model established with only observed variables which can be both a dependent variable and an independent variable. The suggested structural model, which was grounded in theorised relationships between the variables, was compared to two alternative models to establish the best fit model in terms of the model fit criteria stipulated in Table 5.12.

Once the best-fit model is confirmed, it is necessary to indicate how well the endogenous variables (job satisfaction, motivation, and work engagement) were predicted. In accordance with Hair *et al*. (2014), this was attained by establishing if the parameter estimates were statistically significant and in the predicted direction. Furthermore, the variance-explained estimates were examined for the endogenous variables which are an analysis of the R^2.

5.9.3.3 Test for significant mean differences

The Mann-Whitney U test and Kruskal-Wallis test were used to achieve research aim 6 of the empirical study.

Empirical research aim 6: *To assess whether individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement (research hypothesis H6).*
Tests for significant mean differences was carried out, in the present study, in order to establish whether individuals from various biographical groups (gender, age, race, marital

status, rank, and tenure) differ significantly regarding the variables manifested in the best fit model.

Prior to testing for significant mean differences, tests for normality must be carried out in order to establish whether or not the data are normally distributed. Tests for normality determine the tests that will be used for significant mean differences (Salkind, 2016). In this study, the Kolmogorov-Smirnov test was used to determine the distribution of the data which revealed that the data were not normally distributed and were non-parametric. Thus, the Mann-Whitney U and Kruskal-Wallis non-parametric tests were used to determine the significant mean differences.

The Mann-Whitney U test was used for two independent samples to determine the significant mean differences between the sub-groups in terms of gender (male and female) and marital status (single and married). This test is a non-parametric alternative for the independent t-test. It is used for continuous data, to compare the means of two unrelated samples for significant differences (Stojanović, Andjelković-Apostolović, Milošević, & Ignjatović, 2018). The Kruskal-Wallis test was applied to the remaining four independent samples to determine the group differences for the sub-groups pertaining to age, race, rank, and tenure. The Kruskal-Wallis test is an extension of the Mann–Whitney U test when there are more than two groups (Stojanović *et al*., 2018).

5.9.4 Statistical and practical significance levels

Statistical significance establishes whether the research finding is due to chance whereas practical significance determines whether the research finding is substantive enough to accomplish the research objectives (Hair *et al*., 2014). Significance is represented by the *p*-value which is frequently described as a statistical significance of $p \leq 0.05$, showing that the research finding has a probability of 95% to not be caused by chance (Salkind, 2016). In the current study, the significance level was set at $p \leq 0.05$. By stipulating an acceptable statistical significance level, the researcher specifies the limits for error and indicates the probability of concluding that significance exists when it actually does not (Hair *et al*., 2014).

There are two fundamental errors, namely Type I error and Type II error, that occur in inferential statistics. Type I error or alpha (α) is a false positive where the hypothesis is incorrectly rejected despite being true (Howitt & Cramer, 2017). According to Patten and Newhart (2018), a researcher can never be completely sure that the correct decision was

made when rejecting the null hypothesis ($p \leq 0.05$) because there is always 5 in 100 chances possible that the null hypothesis is true. Once the level of the Type I error is indicated, the researcher also determines the Type II error or beta (β) (Hair *et al*., 2014). Type II error is a false negative where the hypothesis is not rejected despite being false.

Random sampling usually leads to random error which affects the research results. Thus, researchers use low probabilities to reduce this likelihood thereby decreasing the probability of a Type I error (Patten & Newhart, 2018). Type II errors are minimised by increasing the effect size in the population, increasing the sample size, and increasing the statistical significance level (Howitt & Cramer, 2017).

The criteria used to determine the statistical and practical significance of the research findings were detailed in the previous sections. Table 5.12 summarises the significance levels for each statistical technique used in the correlation and inferential (multivariate) analyses.

Table 5.12 *Criteria for Determining Statistical and Practical Significance for Correlation and Inferential (Multivariate) Analyses*

<table>
<tr><th colspan="3">Correlation Analysis</th></tr>
<tr><th>Statistical Procedures</th><th>Statistical Significance</th><th>Practical Significance</th></tr>
<tr><td rowspan="2">The Pearson’s product-moment correlation coefficient (r) was used to measure the effect size and to establish practical significance.</td><td>$p \geq 0.10$ = less significant
$p = 0.01 - 0.05$ = significant
$p = 0.001 - 0.01$ = very significant
$p < 0.001$ = extremely significant</td><td>Pearson’s r:
$r \geq 0.10 \leq 0.29$ = small practical effect
$r \geq 0.30 < 0.50$ = medium practical effect
$r \geq 0.50$ = large practical effect</td></tr>
<tr><td colspan="2">Thresholds set for rejecting the null hypothesis:
Significance levels of $p \leq 0.05$ and $r \geq 0.10$ (small practical effect size)</td></tr>
<tr><th colspan="3">Structural equation modelling</th></tr>
<tr><th>Statistical Procedures</th><th>Statistical Significance</th><th>Practical Significance</th></tr>
<tr><td>SEM makes use of measures that portray how well the theoretically hypothesised model describes the sample data (i.e. the observed covariance matrix among measured variables). Model fit is established by the relationship between the observed and latent variables from the suggested model.</td><td>The overall fit of the model was evaluated using various model fit indices (CMIN/df, GFI, AGFI, NFI, CFI, RMSEA, SRMR and AIC) as displayed in Table 5.9.</td><td>The extent of the variance of the endogenous variables that were described by the best-fit model was determined by estimating the value of squared multiple correlations $R^{2.}$</td></tr>
<tr><td></td><td colspan="2">Thresholds set for rejecting the null hypotheses:
Significance levels of $p \leq 0.05$, CMIN/df ≥ 0.05; GFI < 3; AGFI < 3; NFI ≥ 0.95; CFI; ≥ 0.95; RMSEA ≤ 0.05; SRMR < 0.05; lowest AIC</td></tr>
<tr><th colspan="3">Multiple regression analysis</th></tr>
</table>

Statistical Procedures	Statistical Significance	Practical Significance
Multiple regression was used to assess whether the independent variable (career plateauing) significantly predict the dependent variables (job satisfaction, motivation, and work engagement), and to determine the degree to which the biographical variables (gender, age, race, marital status, rank, and tenure) as independent variables significantly predict the dependent variables (career plateauing, job satisfaction, motivation, and work engagement) (R^2 values).	$p \geq 0.10$ = less significant $p = 0.01 – 0.05$ = significant $p = 0.001$ - 0.01 = very significant $p < 0.001$ = extremely significant	Adjusted R^2 values: ≤ 0.12 = small practical effect size ≥ 0.13 ≤ 0.25 = medium practical effect size ≥ 0.26 = large practical effect size
	Thresholds set for rejecting the null hypotheses: Significance levels of $p \leq 0.05$ and $R^2 \leq 0.12$ (small practical effect)	
Tests for significant mean differences		
Statistical Procedures	**Statistical Significance**	**Practical Significance**
The Kolmogorov-Smirnov test was used to evaluate the normality of the data distribution. Significant mean differences between the sub-groups were established using the Mann-Whitney U test (for two independent samples) and the Kruskal-Wallis test (for three or more independent samples).	$p \geq 0.10$ = less significant $p = 0.01$ - 0.05 = significant $p = 0.001$ - 0.01 = very significant $p < 0.001$ = extremely significant A significance level of $p \leq 0.05$ provided evidence that the tests for mean differences were significant and valid.	Cohen's d was used to examine the effect size of the mean differences: $d = 0.20$ small practical effect $d = 0.50$ medium practical effect $d = 0.80$ large practical effect
	Thresholds set for rejecting the null hypotheses: Significance levels of $p \leq 0.05$ and $d \leq 0.02$ small practical effect	

Sources: Civelek (2018); Cohen (1988); Hair *et al.* (2014); Salkind (2016)

5.10 CHAPTER SUMMARY

The first eight steps of the empirical research were addressed in this chapter. These eight steps entailed the determination of the research design; determination and description of the sample; measurement scale development; choosing and motivating the psychometric battery; ethical considerations and administration of the psychometric battery; capturing of criterion data; formulation of research hypotheses; and statistical processing of data. The four stages of the empirical investigation which included the preliminary (RASCH analysis), descriptive, correlational and inferential (multivariate) statistical analyses used in the processing of the data with the goal of addressing the empirical research aims as indicated in Chapter 1 (see section 1.3.2.2) were discussed in this chapter. Finally, the statistical and practical significance levels that were used in the interpretation of the data analyses were also described.

In Chapter 6, the results of the various statistical analyses are reported and discussed.

Chapter 6 RESEARCH RESULTS

Chapter 6 will report the results of the different statistical analyses that were undertaken in order to test the hypotheses that were formulated for the purposes of this research study. The literature review was used to formulate and substantiate the theoretical framework, sub-dimensions, as well as the items generated for each sub-dimension in the development of the career plateauing experiences scale (CPES). This chapter will report the results obtained by means of the statistical procedures described in Chapter 5. The preliminary statistical analysis, descriptive, correlational, and inferential (multivariate) statistical techniques pertaining to the following research aims are reported:

- **Research aim 1:** To operationalise the elements of the theoretical framework for career plateauing empirically into a valid and reliable career plateauing experiences scale (CPES).
    - ***Sub-aim 1.1*:** To assess the psychometric properties (internal consistency reliability and construct validity) of the newly developed career plateauing experiences scale (CPES).
    - ***Sub-aim 1.2*:** To assess the nature of the interrelationships between the sub-scale dimensions of the career plateauing experiences scale (CPES).

- **Research aim 2:** To assess the direction and magnitude of the statistical inter-relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the South African Police Services context.

- **Research aim 3:** To assess whether individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement.

- **Research aim 4:** To assess if there is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

- **Research aim 5:** To assess whether gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement.

- **Research aim 6:** To assess whether individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, and work engagement.

In terms of achieving research aim 1, the statistical procedures were conducted in three stages:

Stage 1: A random sample of n=100 was drawn from the total sample (N=410) that participated in the study. The subsample of n=100 was used to explore the factor structure of the newly developed CPES by means of an exploratory factor analysis (EFA). The sample served as the initial pilot sample.

Stage 2: A random sample of n=310 was drawn from the total sample (N=410) that participated in the study. The subsample of n=310 (which excluded the n=100 subsample) was used to confirm the construct validity of the factor structure of the newly developed CPES by means of confirmatory factor analysis (CFA).

Stage 3: Additional CFAs were then conducted on the CPES by involving the total sample (N=410) to confirm the construct validity, uni-dimensionality, and internal consistency reliability of the CPES. The best fit measurement model of the CPES was then utilised in the testing of the research hypotheses that involved the other scales and variables.

6.1 STAGE 1: PRELIMINARY STATISTICAL ANALYSIS: ASSESSING THE FACTOR STRUCTURE OF THE CAREER PLATEAUING EXPERIENCES SCALE

The section reports on the preliminary statistical procedures to assess the initial factor structure and internal consistency reliabilities of the newly developed CPES. Exploratory factor analysis (EFA) with the principal axis factoring extraction procedure was applied (SAS software, 2013). The tests for sampling adequacy, results of the EFA (scree plot, factor matrix, factor correlation matrix, and final factor structure) of the CPES are reported.

The following statistical procedures were applied in the EFA of the CPES (n=100):

(1) Kaiser-Meyer-Olkin test for sampling adequacy and Bartlett's test for sphericity to confirm that the data were suitable for factor analysis.

(2) Principal axis factoring, using Oblimin rotation with Kaiser normalisation as extraction methods to determine the underlying factors.

(3) Assessment of possible multi-collinearity between the retained factors of the CPES.

(4) Assessment of the internal consistency reliability and bivariate correlations of the CPES factor structure.

Before the EFA could be performed, the data had to be analysed to assess its suitability for factor analysis. The tests that were performed were the Kaiser-Meyer-Olkin test for sampling adequacy (KMO) and the Bartlett's test for sphericity. The results of the tests are reported in Table 6.1.

Table 6.1 *Kaiser-Meyer-Olkin Test for Sampling Adequacy and Bartlett's Test for Sphericity*

Kaiser-Meyer-Olkin test for sampling adequacy	0.86	
Bartlett's test for sphericity	Approx. Chi-square	2757.44
	df	190
	Sig.	0.000

Note: n=100

According to the results of the KMO (0.86; p = 0.000), the sample (n=100) was suitable for factor analysis. The KMO ranges from 0 to 1 and a result between 0.8 and 1 is considered good for factor analysis. In addition, the Bartlett's test for sphericity significance was used to assess the data for factor analysis. Since the significance p = 0.000, the data were suitable for factor analysis.

Principal axis factoring was applied using Oblimin rotation with Kaiser normalisation as extraction methods. As shown in Table 6.2, the extraction resulted in four factors with eigenvalues > 1. The four factors cumulatively explained 82.31% of the total variance. The scree plot clearly showed strong loadings for Factor 1, with sharply declining loadings for Factors 2, 3, and 4. The four factors were subjected to further rotation.

Table 6.2 *Factor Extraction using Principal Axis Factoring*

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings [a]
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	11.438	57.191	57.191	11.263	56.316	56.316	9.083
2	2.732	13.660	70.851	2.560	12.799	69.114	8.154
3	1.205	6.025	76.876	0.981	4.904	74.019	5.831
4	1.086	5.430	82.306	0.858	4.291	78.310	4.992
5	0.971	4.856	87.162				
6	0.511	2.554	89.716				
7	0.355	1.776	91.491				
8	0.338	1.688	93.179				
9	0.282	1.411	94.590				
10	0.246	1.232	95.822				
11	0.222	1.109	96.931				
12	0.157	0.783	97.713				
13	0.141	0.706	98.419				
14	0.110	0.550	98.968				
15	0.060	0.298	99.267				
16	0.048	0.240	99.506				
17	0.035	0.176	99.683				
18	0.026	0.131	99.813				
19	0.021	0.107	99.920				
20	0.016	0.080	100.000				

Table 6.2 further shows that the multidimensionality of the CPES could be ascribed to the presence of a general factor. Overall, when considering all four factors in Table 6.2, 82% of the variance was explained; this is above the 60% threshold for evidence of essential uni-dimensionality (an underlying general factor).

Figure 6.1 *Scree Plot for CPES (n=100)*

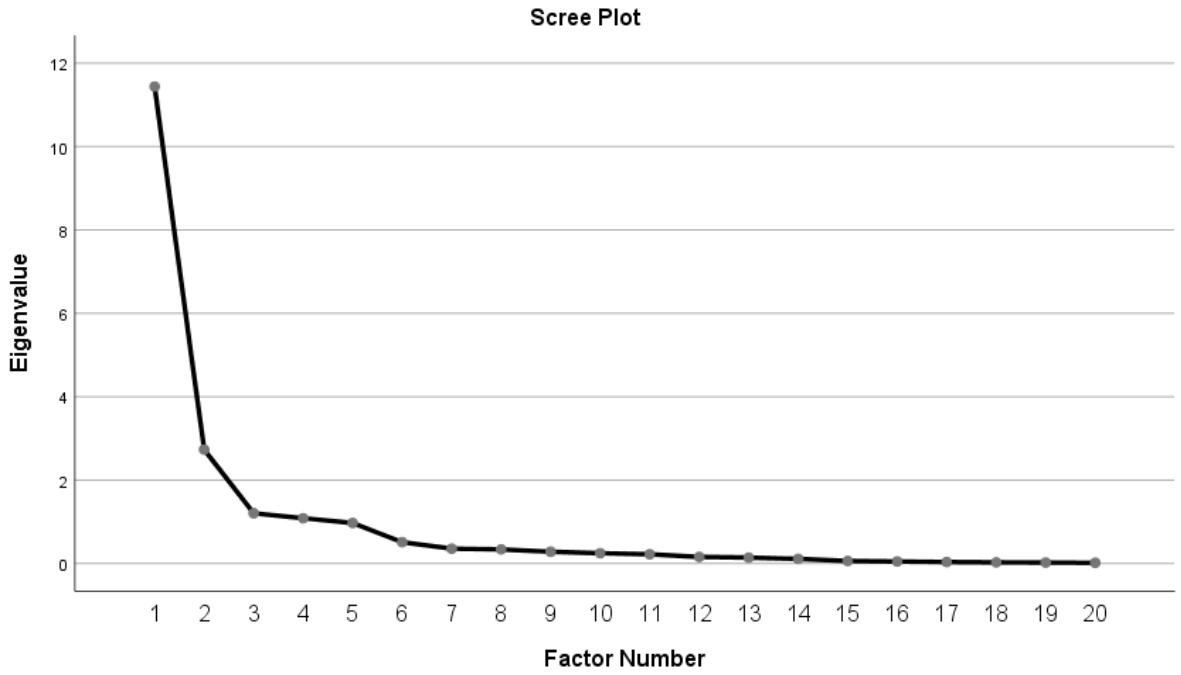


Table 6.3 summarises the factor loadings of items onto the four factors. Any given item was considered to belong to a particular factor if it had a factor loading of 0.50 or higher because of the factors loading strongly onto an overall factor. Theoretical expectations and the contents of factors and items were considered when decisions either to include or omit items were not clear-cut. The EFA focused on discovering an underlying (simple) structure and not on determining it. The purpose of the EFA was seen as assisting to explore whether the original four theoretically proposed factors could be reliably identified in order to conduct further statistical analyses in testing the research hypotheses. The EFA assisted in removing problematic items and identifying the factor on which the item had a better loading. It was also decided that each factor should have a minimum of four items to ensure assessment of adequate internal consistency reliability.

Two problematic items were identified by the EFA. The first item was CPES4: "*I am not concerned about being promoted*", under the maintenance plateauing dimension as the loading was 0.43. The item loaded 0.63 under the hierarchical/structural plateauing dimension which indicates that the item had a better loading under the hierarchical/structural plateauing dimension. However, the item was not moved because the maintenance plateauing dimension would have had less than four items.

The second item was CPES3: "*I am not currently looking for alternative employment*", under the maintenance plateauing dimension was completely omitted as the item loaded below 0.50 for all of the dimensions.

The only dimension that had an item removed is the maintenance plateauing dimension. The items for the job content plateauing dimension, hierarchical/structural plateauing dimension, and the psychological plateau dimension remained the same as in the theoretically proposed set of items.

Table 6.3 *Factor Matrix: Exploratory Factor Analysis of the CPES*

Description of item	Factor 1 Job content plateau	Factor 2 Hierarchical/ structural plateau	Factor 3 Maintenance Plateau	Factor 4 Psychological Plateau
CPES19: I am not given the opportunity to try out new ideas.	0.98			
CPES17: I do not receive challenging work assignments.	0.95			
CPES18: I am no longer able to learn and grow in my current job.	0.88			
CPES20: My job is routine and repetitive.	0.88			
CPES16: I am no longer challenged by my job.	0.88			
Factor 1: Total number of items = 5				
CPES14: I am unlikely to achieve a higher job title.		-0.98		
CPES13: My opportunities for future promotion is limited.		-0.98		
CPES15: I am not advancing any further in my organisation.		-0.95		
CPES11: I am worried that I will no longer be promoted.		-0.91		
CPES12: I do not expect to progress higher than my current job level.		-0.89		
Factor 2: Total number of items = 5				
CPES1: In general, I am satisfied with my job.			0.91	
CPES2: I enjoy performing my daily work activities.			0.90	
CPES5: I am satisfied with the training and development opportunities provided to me.			0.66	
CPES4: I am not concerned about being promoted.			0.43	
Factor 3: Total number of items = 4				
CPES8: My interest in work has decreased.				0.63
CPES9: I generally have a lack of passion for my work.				0.61
CPES7: Recently I have noticed a deterioration in my work performance.				0.88
CPES10: I often feel anxious about my work performance.				0.78
CPES6: I feel incapable of performing my tasks/job adequately.				0.77
Factor 4: Total number of items: = 5				
CPES overall number of items =19				

Note: n=100

The factors that had negative loadings could be ascribed to the negative wording of the items.

Table 6.4 summarises the extracted factors and their description.

Table 6.4 *Summary of Extracted Factors for the CPES*

Factor	Label	Original description	Revised description	Number of items
F1	Job content plateau	A job content plateau occurs when the job no longer provides any opportunities or challenges.	Job content plateauing occurs when an employee has learnt everything pertaining to the job and subsequently experiences no further challenges, opportunities to try out new ideas, and no further learning and growth. The job subsequently becomes routine and repetitive.	5
F2	Hierarchical / structural plateau	Hierarchical/structural plateau refers to a low likelihood of future promotions.	Career stagnation due to the absence of vertical movement in the organisation in the form of promotions.	5
F3	Maintenanc e Plateau	Feeling pleasantly plateaued and satisfied with current job level.	Feeling satisfied with current job and training and development opportunities; enjoy work activities; do not desire promotion.	4
F4	Psychologic al plateau	Feeling dissatisfied, disillusioned and a lack of passion for the job.	A lack of interest, passion and confidence in one's work leads to a deterioration in work performance. This may be an outcome of job content plateau and hierarchical/structural plateau which may trigger a life cycle transition pertaining to personal growth and development.	5

The empirical version of the CPES does not differ vastly from the theoretical framework (see Table 3.4, Chapter 3) after EFA was conducted. The items have remained the same for three dimensions namely job content plateau, hierarchical/structural plateau and psychological plateau, however, the initial theoretical structure has changed slightly. The slight change in theoretical structure and items have occurred only for the maintenance plateau dimension because one item was removed.

The next step was to assess for multicollinearity among the four factors. The factor correlation matrix is illustrated in Table 6.5.

Table 6.5 *Correlation Matrix for the Four-Factor CPES*

Factor		1	2	3	4
1	Job content plateau	1.00			
2	Hierarchical/structural plateau	-0.55	1.00		
3	Maintenance plateau	-0.46	0.44	1.00	
4	Psychological plateau	0.54	-0.22	-0.30	1.00

Note: n=100

It is clear from Table 6.5 that multi-collinearity was not present in the CPES four factor model. The correlation coefficient (*r*) for each factor with itself = 1.00, indicating that each factor correlates perfectly with itself, but for the four factors separately, *r* is sufficiently small (< 0.80) to indicate the absence of multi-collinearity.

Table 6.5 shows that job content plateau has an inverse relationship with hierarchical/structural plateau and maintenance plateau, and a positive relationship with psychological plateau. Hierarchical/structural plateau is negatively related to psychological plateau but positively related to maintenance plateau. Furthermore, maintenance plateau shares a negative relationship with psychological plateau.

The next step was to assess the internal consistency reliability and bivariate correlations of the four factors. Table 6.6 summarises the Cronbach's alpha coefficients and bivariate correlations for the four factors.

Table 6.6 *Internal Consistency Reliability and Bivariate Correlations: CPES*

Factor		Cronbach alpha coefficient	1	2	3	4	5
1	Job content plateau	0.96	1.00				
2	Hierarchical/ structural plateau	0.98	0.59***	1.00			
3	Maintenance plateau	0.88	-0.73***	-0.66***	1.00		
4	Psychological plateau	0.86	0.76***	0.42***	-0.67***	1.00	
5	Overall CPES	0.93	0.90***	0.80***	-0.66***	0.79***	1.00

Note: n = 100. *** correlations are significant at *p* = 0.001 level; ** correlations are significant at *p* = 0.01 level; * correlations are significant at *p* = 0.05 level.

Table 6.6 displays the internal consistency reliability coefficients and the bi-variate correlations among the four subscale dimensions of the CPES. The internal consistency reliability coefficients were above 0.70.

In terms of bi-variate correlations, the four subscale dimensions of the CPES ranged between ($r \geq 0.42$ and $r \leq 0.76$ at $p \leq 0.001$ (moderate to large practical effect size). These correlation values indicate construct validity of the four subdimensions. Hierarchical/structural plateau and job content plateau had negative correlations with maintenance ($r \geq -0.66$ and $r \leq -0.73$ at $p \leq 0.001$ (large practical effect size). The negative association suggests that low levels of maintenance plateau experiences are likely to be associated with higher levels of experiences with job content plateau and hierarchical/structural plateau. Maintenance plateau was also negatively correlated with psychological plateau ($r \geq -0.67$ at $p \leq 0.001$ (large practical effect size). The negative association suggests that low levels of maintenance plateau are likely to be associated with higher levels of psychological plateau. Hierarchical/structural plateau and job content plateau had positive correlations with psychological plateau ($r \geq 0.42$ and $r \leq 0.76$ at $p \leq 0.001$ (moderate to large practical effect size). The positive association suggests that high levels of psychological plateau experiences are likely to be associated with higher levels of experiences with job content plateau and hierarchical/structural plateau. The subscale dimensions also had significant positive correlations with the overall construct ($r \geq 0.79$ and $r \leq 0.90$ at $p \leq 0.001$ (large practical effect size) except for maintenance plateau ($r \geq -0.66$ at $p \leq 0.001$ (large practical effect size).

In summary, the EFA results provided evidence of the factor structure and internal consistency reliability of the four-factor structure of the CPES for further statistical analyses.

6.2 STAGE 2 AND 3: CONFIRMATORY FACTOR ANALYSIS: ASSESSING CONSTRUCT VALIDITY OF THE CAREER PLATEAUING EXPERIENCES SCALE

This section reports on the confirmatory factor analyses (CFA) conducted to assess the construct validity of the CPES. In stage 2, a random sample of n=310 was drawn from the total sample (N=410) that participated in the study. The subsample of n=310 (which excluded the n=100 subsample) was used to confirm the construct validity of the factor structure of the newly developed CPES.

In stage 3, additional CFAs were then conducted on the CPES by involving the total sample (N=410) to confirm the construct validity, uni-dimensionality, and internal consistency reliability

of the CPES. The best fit measurement model of the CPES (N=410) was then utilised in the testing of the research hypotheses that involved the other scales and variables.

Because the CPES was a newly developed scale, the following psychometric aspects were assessed by using the subsample of n=310 (i.e. excluding the EFA n=100 sample). As stated, a further CFA was also conducted by using the total sample of N=410.

1. Common method variance/bias (CMV) was first tested by using the Harman's one factor solution and a one factor CFA procedure (n=310)
2. The best fit measurement model of the CPES was assessed by means of a CFA conducted first on the n=310 and then on N=410. The best fit measurement model was then applied in all further statistical analyses.
3. The uni-dimensionality and internal consistency reliability of the best fit measurement model of the CPES was further assessed by means of the RASCH procedure (N=410)

6.2.1 Testing for common method bias: CPES

SAS software (2013) was used for testing for common method bias (CMB).

CMB was first tested by using the Harman's one factor solution and a one factor CFA procedure (n=310). CMB is a general concern with cross-sectional studies using self-report techniques to collect the data. According to Podsakoff *et al*. (2003), common method variance (CMV) or CMB, which is variance that is caused by the measurement method rather than the constructs the measures represent, is a potential threat in behavioural research.

CMB usually stems from studies in which the data for both the independent and dependent variable are collected from the same individual in the same measurement context using the same item context and similar item features (Podsakoff *et al*., 2003). Karimi and Meyer (2019) indicated that CMB threatens the reliability of scales. Even though the impact of CMB on the parameter estimates can be established, it does not reveal the effects of CMB on scale reliability. Their research results showed that CMB tends to inflate the reliability measures of scales, and that CMV does not have the same effect on all measures. They found that imposing equal CMV effects for all measures is not suitable because it has a negative effect on the model fit (Karimi & Meyer, 2019).

Harman's one-factor (or single-factor) test is a popular technique used to address CMV. The basic assumption of this technique is that if ample CMV occurs, either a single factor (over 50% variance explained by the single factor) will arise from the factor analysis or one general factor will justify most of the covariance among the measures (Podsakoff *et al*., 2003). Although Harman's one-factor test provides evidence on the absence or presence of CMV, it cannot eradicate the CMB that might exist in the study (Tehseen *et al*., 2017).

Table 6.7 *Harman's One-Factor Solution and One-Factor CFA: CPES*

		Chi-square	df	Chi-square/df	*p*	RMSEA	SRMR	CFI	NFI	AIC
Harman's one factor solution (n=310)	11%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
One factor CFA (n=310)	n/a	3888.58	152	25.58	<0.0001	0.29	0.13	0.55	0.55	3964.58
Four-factor solution (n=310)	n/a	890.01	146	6.10	<0.0001	0.14	0.08	0.91	0.90	978.91
Four-factor solution (model 1) (n=410)	n/a	1101.71	146	23.95	<0.0001	0.13	0.08	0.91	0.90	1189.71
Optimised four-factor solution (model 2) (n=410)	n/a	366.75	125	2.93	<0.0001	0.08	0.05	0.98	0.97	496.75

Table 6.7 shows that the Harman's one-factor solution for the four-factor CPES loaded onto one construct explained only 11% of the covariance between the scale variables. When the four factors of the CPES were loaded onto a single construct in the CFA one-factor model, the fit indices indicated a poor model fit. A value of < 3 for the chi-squared (chi-square/df ratio) is considered a good fit. The chi-square/df ratio in the one factor CFA model = 25.58, which was too high. The RMSEA and SRMR should preferably be between 0 and 1. A value closer to 0 represents a better model fit; a value < 0.05 is considered a good fit, between 0.05 and 0.10 is considered to be a moderate fit and > 0.10 represents a poor fit. CFI and NFI values of > 0.90 are considered to be an acceptable fit. The one factor CFA fit indices were as follows (Chi-square/df ratio = 25.58; $p < 0.0001$; RMSEA = 0.29; SRMR = 0.13; CFI = 0.55; NFI = 0.55). Overall, the one-factor CFA indicates a poor fit. These results suggested that common method bias was not a serious threat to interpreting the findings.

The next section reports on the construct validity (convergent and discriminant validity) of the final measurement model of the four-factor CPES.

6.2.2 Convergent and discriminant validity: CPES measurement model

The PRO CALIS procedure with maximum likelihood (SAS software, 2013) was used for the statistical analysis. Model optimisation was done by means of the Levenberg-Marquardt Optimisation for covariance structure analysis.

The four-factor solution CFA (n=310) indicated the following fit indices: (Chi-square/df ratio = 6.10; $p < 0.0001$; RMSEA = 0.14; SRMR = 0.08; CFI = 0.91; NFI = 0.90).

For the N=410 sample, the optimised four-factor CFA model (model 2) obtained a better fit than the multidimensional CFA models for the n=310 and N=410 samples with a lower AIC (496.75), chi-square/df ratio (2.93; $p < 0.0001$), RMSEA (0.08), SRMR (0.05), CFI (0.98), and NFI (0.97). Table 6.8 shows that CPES3: "*I am not currently looking for alternative employment*", from factor 3, was removed in the optimisation process. This best fit CFA measurement model (model 2: N=410) of the CPES was used in the further statistical analyses conducted.

In Table 6.8, the standardised path coefficients (factor loadings) of the best fit measurement model (four-factor) for the CPES are summarised.

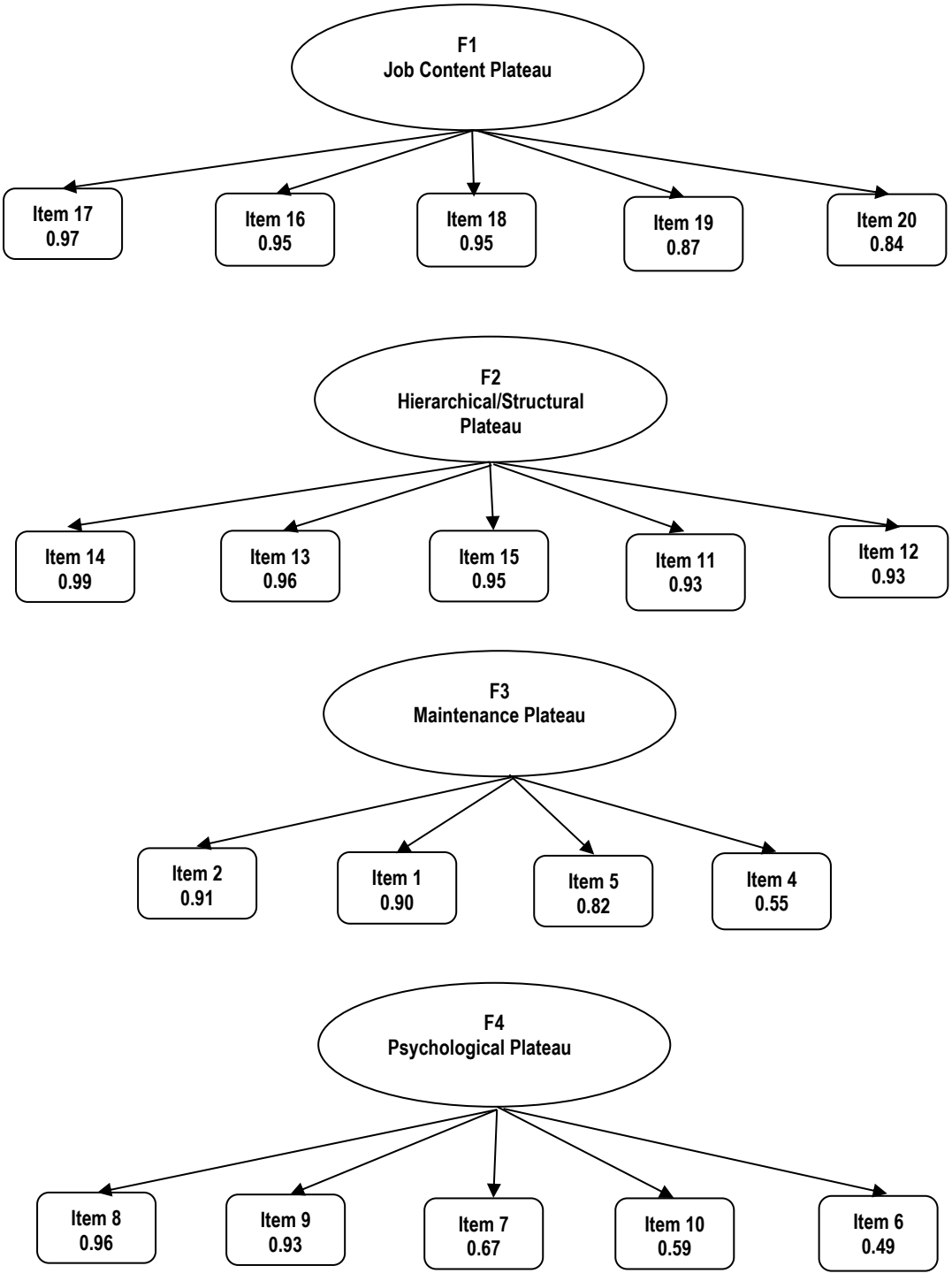
Table 6.8 *Standardised Path List for CPES (Best Measurement Model)*

Standardised Results for PATH List					
Path			**Estimate**	**Standard Error**	**t-Value**
Factor1	**===>**	**CPES19**	0.87	0.01	71.57
Factor1	**===>**	**CPES17**	0.97	0.00	225.38
Factor1	**===>**	**CPES18**	0.95	0.01	159.88
Factor1	**===>**	**CPES16**	0.95	0.01	154.01
Factor1	**===>**	**CPES20**	0.84	0.01	56.27
Factor2	**===>**	**CPES14**	0.99	0.00	396.62
Factor2	**===>**	**CPES13**	0.96	0.00	236.12
Factor2	**===>**	**CPES15**	0.95	0.00	192.73
Factor2	**===>**	**CPES11**	0.93	0.01	130.62
Factor2	**===>**	**CPES12**	0.93	0.01	127.99
Factor3	**===>**	**CPES1**	0.90	0.01	60.90
Factor3	**===>**	**CPES2**	0.91	0.01	64.62
Factor3	**===>**	**CPES5**	0.82	0.02	43.28
Factor3	**===>**	**CPES4**	0.55	0.04	15.08
Factor4	**===>**	**CPES8**	0.96	0.02	59.76
Factor4	**===>**	**CPES9**	0.93	0.02	51.85
Factor4	**===>**	**CPES7**	0.67	0.03	22.35
Factor4	**===>**	**CPES10**	0.59	0.03	17.31
Factor4	**===>**	**CPES6**	0.49	0.04	12.32

Note: N = 410. t-values > 2.56 ($p \leq 0.01$). t-values >1.96 ($p \leq 0.05$); Factor 1 = job content plateau; Factor 2 = hierarchical/structural plateau; Factor 3 = maintenance plateau; Factor 4 = psychological plateau.

Figure 6.2 illustrates the standardised path coefficients (factor loadings) of the best fit measurement model (four-factor) for the CPES.

Figure 6.2 *Structural Model of the CPES*



PATH analysis uses bivariate correlations to estimate the strength of structural relationships in a system of structural equations (Hair *et al*., 2014). The maximum likelihood estimation (estimate) for a PATH analysis should range between > 0.30 (average convergence), > 0.50 (good convergence), and > 0.70 (excellent convergence) for an indication of goodness of fit (Kelly, 2014). Table 6.8 and Figure 6.2 clearly indicate that the estimates for all the items

loading on the factors indicated a convergence estimate of > 0.49 (good convergence) to > 0.70 (excellent convergence), which implies acceptable goodness of fit. The t-values should be > 2.56 ($p \leq 0.01$) or t > 1.96 ($p \leq 0.05$). Since the significance level was set at $p \leq 0.01$, the t-values indicated significant loadings.

In addition, the Fornell-Larcker (1981) criterion was used to further assess the convergent validity of the CPES measurement model. The Fornell-Larcker (1981) criterion focuses on determining the amount of shared variance between the latent variables in a model, using the Average Variance Extracted (AVE) and Composite Reliability (CR) (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014).

AVE represents the average amount of variance that relates to items of a specific construct. An AVE value > 0.70 is accepted as a good statistic, while an AVE value of ≥ 0.50 is regarded as acceptable. These values indicate the construct reliability and convergent validity of a scale (Hair *et al*., 2014).

CR is a less biased estimate of reliability than the Cronbach's alpha coefficient and a CR coefficient of ≥ 0.70 is considered acceptable which is an indicator of good model fit (Alarcón & Sánchez, 2015). Measurement error refers to the extent to which the variable is a precise and consistent assessment of the concept being studied (Hair *et al*., 2014). It is the difference between the value measured through data collection and the accurate value of a specific variable. Poor scale construction or administration, and even the personal circumstances of a respondent can also be a source of measurement error (DeVellis, 2016).

Convergent validities stipulate that measures which are measuring the same thing should correlate significantly with each other. In contrast, discriminant validity measures appear to measure different things so they should not correlate strongly with each other. Therefore, both convergent and discriminant validity should be taken into account when assessing the validity of a measure (Howitt & Cramer, 2017). Discriminant validity is established when maximum shared variance (MSV) < AVE and average shared variance (ASV) < AVE (DeVellis, 2016). The convergent and discriminant validity of the CPES are indicated in Table 6.9.

Table 6.9 *Convergent and Discriminant Validity of the CPES Measurement Model*

Scale dimension	CR	AVE	MSV	ASV	Construct validity CR > AVE AVE > 0.50	Discriminant validity MSV < AVE ASV < AVE
Job content plateau	0.96	0.84	0.73	0.59	yes	ASV < AVE yes And MSV <AVE
Hierarchical/structural plateau	0.98	0.91	0.48	0.39	yes	ASV < AVE yes And MSV <AVE
Maintenance plateau	0.88	0.66	0.68	0.61	yes	ASV < AVE yes But MSV >AVE
Psychological plateau	0.86	0.56	0.73	0.58	yes	ASV > AVE And MSV >AVE

Note: N = 410; CR: composite reliability; AVE: average variance extracted; MSV: maximum shared variance; ASV: average shared variance

Table 6.9 reveals that the CR values are all above > 0.70 and AVE larger than 0.50 which indicate acceptable convergent validity and internal consistency reliability of the best measurement model of the multifactor CPES. However, some issues pertaining to discriminant validity may be present due to measurement error. Acceptable discriminant validity is established for subscales job content plateau and hierarchical/structural plateau because ASV < AVE and MSV < AVE. Partial discriminant validity is determined for the subscale maintenance plateau because ASV < AVE but MSV > AVE. There was evidence of poor discriminant validity for the subscale psychological plateau because ASV > AVE and MSV > AVE. Further refinement may be needed in future research in order to further improve the discriminant validity of the CPES.

To further establish the intra-dimensional discriminant validity of the four-factor CPES, the AVE was matched with the squared inter-construct correlations (SIC) related to each of the four factors of the CPES. For evidence of discriminant validity, the levels of AVE for each construct should be greater than the SIC of the constructs. The intra-dimensional discriminant validity using AVE and SIC are reported in Table 6.10.

Table 6.10 *Intra-Dimensional Discriminant Validity Using Average Variance Extracted and the Squared Inter-Construct Correlations of the CPES*

Factor		AVE	SIC F1	SIC F2	SIC F3
F1	Job content plateau	0.84	-	-	-
F2	Hierarchical/structural plateau	0.91	0.38	-	-
F3	Maintenance plateau	0.66	0.66	0.48	-
F4	Psychological plateau	0.56	0.73	0.31	0.68

Note: N=410; AVE: average variance extracted; SIC: squared inter-construct correlations

In Table 6.10, it is clear that the AVE for each scale dimension was equal to or greater than the SIC for each scale dimension, with the exception of Factor 4 (psychological plateau) in relation to the SIC values of factor 1 (AVE = 0.56 < SIC = 0.73); factor 2 (AVE = 0.56 > SIC = 0.31); and factor 3 (AVE = 0.56 < SIC = 0.68). Since the AVE > SIC for each of the inter-construct correlations of the CPES factors 1, 2, and 3, discriminant validity was acceptable and thus supported for the three factors (job content plateau, hierarchical/structural plateau, and maintenance plateau). The factor 4 subscale items need to be revisited in future research to improve discriminant validity for this subscale. This finding was taken into consideration in the interpretation of the findings.

6.2.3 Uni-dimensionality and reliability: CPES measurement model

RASCH analysis (Version 1.0.0, 2013) was performed on the sample N=410 to establish the uni-dimensionality and internal consistency reliability of the four-factor CPES. RASCH analysis produces infit and outfit statistics, as well as separation indices of which the ideal value = 2.00. The ideal value for infit and outfit statistics = 1.0 which indicates homogeneity.

The item separation for the dimensions of the CPES and overall CPES scale were adequate in terms of the guidelines of at least 2.00 and/or higher (Boone & Noltemeyer, 2017). The person separation indices for the dimensions of the CPES were lower than the proposed guideline of 2.00 for factor 3 (maintenance plateau) and factor 4 (psychological plateau) and higher for factor 1 (job content plateau) and factor 2 (hierarchical/structural plateau). The low person separation indices are an indication that the sub-scale dimensions did not separate or distinguish well among participants with diverse abilities, or that the participants misinterpreted the items, or that they did not answer the questions with the necessary intensity. Table 6.11 shows that the infit and outfit values were all either close to 1.00 or larger than 1.00, suggesting acceptable homogeneity of the CPES.

The ideal value for reliability in a RASCH person and item analysis equals or is higher than 0.70. Reliability smaller than 0.50 is an indication that differences between items can mainly be ascribed to measurement error. However, reliability is influenced by the number of items in each scale dimension and in the overall scale, and the number of response items provided in the response matrix (De Mars, 2017).

Table 6.11 *RASCH Summary Statistics and Internal Consistency Reliability Coefficients for the CPES*

Scale dimension	Average measure (*SD*)	Infit (*SD*)	Outfit (*SD*)	Separation	Reliability	Cronbach's Alpha
Factor 1 (Job content plateau)						
Person	-0.48 (1.28)	0.99 (1.24)	0.98 (1.27)	2.63	0.87	0.97
Item	0.00 (0.38)	1.02 (0.25)	0.98 (0.30)	6.02	0.97	
Factor 2 (Hierarchical/ structural plateau)						
Person	-0.07 (1.34)	1.08 (1.64)	1.03 (1.58)	2.68	0.88	0.98
Item	0.00 (0.27)	1.04 (0.37)	1.03 (0.38)	3.67	0.93	
Factor 3 (Maintenance plateau)						
Person	-0.13 (0.62)	1.04 (1.12)	1.16 (1.72)	1.63	0.73	0.83
Item	0.00 (0.45)	1.04 (0.67)	1.19 (0.82)	12.15	0.99	
Factor 4 (Psychological plateau)						
Person	-0.44 (0.56)	0.99 (0.92)	1.03 (1.20)	1.27	0.62	0.88
Item	0.00 (0.30)	1.01 (0.32)	1.03 (0.46)	5.99	0.97	
Overall CPES Scale						
Person	-0.15 (0.25)	1.01 (0.55)	1.11 (0.80)	2.01	0.80	0.81
Item	0.00 (0.25)	0.98 (0.59)	1.11 (0.91)	9.69	0.99	

Note: N=410

Table 6.11 indicates acceptable item reliability (≥ 0.93) for the four dimensions of the CPES as well as the overall CPES scale which shows that the items of the scale differentiated well among the measured variable. The Cronbach's alpha coefficients for the dimensions of the CPES and the overall CPES scale were above the threshold of ≥ 0.70 and ranged between 0.81 and 0.98. The internal consistency reliability of the overall CPES scale and dimensions of the CPES scale were above 0.70 indicating good internal consistency reliability.

Factor 1 (job content plateau) showed the highest person average measure (0.48; SD = 1.28) while factor 2 (hierarchical/structural plateau) showed the lowest person average measure (0.07; SD =1.34). The person fit for the dimensions of the CPES and the overall CPES scale revealed that the responses did not overfit (> 0.70). The overall results of Rasch item and the person fit suggest that the items of the CPES provided useful, rational, and practical information for all of the respondents and that they answered the questions in a consistent

manner. Furthermore, the infit and outfit values displayed a good fit of the data (close to 1.00), indicating the uni-dimensionality of the CPES.

In summary, the results provided evidence in support of research hypothesis H1: The elements of the theoretical framework for career plateauing can be operationalised into a valid and reliable career plateauing experiences scale (CPES).

6.3 CONFIRMATORY FACTOR ANALYSIS: ASSESSING CONSTRUCT VALIDITY OF THE MSQ, AMQ, AND UWES

The three scales, Minnesota satisfaction questionnaire (MSQ), achievement motivation questionnaire (AMQ) and Utrecht work engagement scale (UWES) were also subjected to tests for common method variance and construct validity of the measurement models of each scale before testing the research hypotheses.

6.3.1 Common method bias and construct validity of the MSQ

The following psychometric aspects were assessed:

1. Common method bias was first tested by using the Harman's one factor solution and a one factor CFA solution (n=310).
2. The best fit measurement model of the scale was assessed by means of a CFA conducted first on the n=310 and then on N=410. The best fit measurement model was then applied in all further statistical analyses.

Table 6.12 *Harman's One-Factor Solution and Multi-Factor CFA: MSQ*

		Chi-square	df	Chi-square/df	*p*	RMSEA	SRMR	CFI	NFI	AIC
Harman's one factor solution (n=310)	11%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
One factor CFA (n=310)		1506.24	135	11.16	<0.0001	0.19	0.07	0.77	0.75	1578.24
Four-factor solution (n=310)		1222.59	134	9.12	<0.0001	0.17	0.06	0.81	0.80	1296.59
Four-factor solution (model 1) (n=410)		1473.16	134	10.99	<0.0001	0.16	0.06	0.83	0.81	1547.16
Optimised four-factor solution (model 2) (n=410)		363.50	106	3.43	<0.0001	0.09	0.04	0.97	0.95	493.50

Table 6.12 shows that the Harman's one-factor solution for the four-factor MSQ loaded onto one construct explained only 11% of the covariance between the scale variables. When the four factors of the MSQ were loaded onto a single construct in the CFA one-factor model, the fit indices indicated a poor model fit. A value of < 3 for the chi-squared (chi-square/df ratio) is considered a good fit. The chi-square/df ratio in the model = 11.16, which was too high. The RMSEA and SRMR should preferably be between 0 and 1. A value closer to 0 represents a better model fit; a value < 0.05 is considered a good fit, between 0.05 and 0.10 is considered to be a moderate fit and > 0.10 represents a poor fit. CFI and NFI values of > 0.90 are considered to be an acceptable fit. The one factor CFA fit indices were as follows (Chi-square/df ratio = 11.16; $p < 0.0001$; RMSEA = 0.19; SRMR = 0.07; CFI = 0.77; NFI = 0.75). Overall, the one-factor CFA indicates a poor fit. These results suggested that common method bias was not a serious threat to interpreting the findings.

The four-factor solution CFA (n=310) indicated the following fit indices (Chi-square/df ratio = 9.12; $p < 0.0001$; RMSEA = 0.17; SRMR = 0.06; CFI = 0.81; NFI = 0.80). For the N=410 sample, the optimised four-factor CFA model (model 2) obtained a better fit than the multidimensional CFA models for the n=310 and N=410 samples with a lower AIC (493.50), chi-square/df ratio (3.43; $p < 0.0001$), RMSEA (0.09), SRMR (0.04), CFI (0.97) and NFI (0.95). This finding is an indication of discriminant validity.

6.3.2 Common method bias and construct validity of the AMQ

Problems were experienced in scoring the AMQ, therefore the AMQ was scored as an overall one factor scale only.

6.3.3 Common method bias and construct validity of the UWES

The following psychometric aspects were assessed:

1. Common method bias was first tested by using the Harman's one factor solution and a one factor CFA solution (n=310)
2. The best fit measurement model of the scale was assessed by means of a CFA conducted first on the n=310 and then on N=410. The best fit measurement model was then applied in all further statistical analyses.

Table 6.13 *Harman's One-Factor Solution and One-Factor CFA: UWES*

		Chi-square	df	Chi-square/df	*p*	RMSEA	SRMR	CFI	NFI	AIC
Harman's one factor solution (n=310)	13%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
One factor CFA (n=310)		907.05	119	7.62	<0.0001	0.15	0.04	0.89	0.88	975.05
Four-factor solution (n=310)		818.59	116	7.06	<0.0001	0.14	0.04	0.91	0.89	892.59
Four-factor solution (model 1) (n=410)		1046.67	119	8.79	<0.0001	0.15	0.04	0.91	0.90	1114.67
Optimised four-factor solution (model 2) (n=410)		339.74	99	3.43	<0.0001	0.09	0.02	0.98	0.97	447.74

Table 6.13 shows that the Harman's one-factor solution for the four-factor UWES loaded onto one construct explained only 13% of the covariance between the scale variables. When the four factors of the UWES were loaded onto a single construct in the CFA one-factor model, the fit indices indicated a poor model fit. A value of < 3 for the chi-squared (chi-square/df ratio) is considered a good fit. The chi-square/df ratio in the model = 7.62, which was too high. The

RMSEA and SRMR should preferably be between 0 and 1. A value closer to 0 represents a better model fit; a value < 0.05 is considered a good fit, between 0.05 and 0.10 is considered to be a moderate fit and > 0.10 represents a poor fit. CFI and NFI values of > 0.90 are considered to be an acceptable fit. The one factor CFA fit indices were as follows (Chi-square/df ratio = 7.62; $p < 0.0001$; RMSEA = 0.15; SRMR = 0.04; CFI = 0.89; NFI = 0.88). Overall, the one-factor CFA indicates a poor fit. These results suggested that common method bias was not a serious threat to interpreting the findings.

The four-factor solution CFA (n=310) indicated the following fit indices (Chi-square/df ratio = 7.06; $p < 0.0001$; RMSEA = 0.14; SRMR = 0.04; CFI = 0.91; NFI = 0.89). For the N=410 sample, the optimised four-factor CFA model (model 2) obtained a better fit than the multidimensional CFA models for the n=310 and n=410 samples with a lower AIC (447.74), chi-square/df ratio (3.43; $p < 0.0001$), RMSEA (0.09), SRMR (0.02), CFI (0.98) and NFI (0.97). This is an indication of discriminant validity.

Both the MSQ and UWES scales displayed acceptable construct validity since the four-factor solution provided the best model fit in comparison to the one-factor model.

6.4 CONFIRMATORY FACTOR ANALYSIS: ASSESSING DISCRIMINANT VALIDITY OF THE MEASUREMENT MODEL

The PRO CALIS procedure with maximum likelihood (SAS software, 2013) was used for the CFA statistical analysis. Model optimisation was done by means of the Levenberg-Marquardt Optimisation for covariance structure analysis.

CFA was conducted to assess whether the overall measurement model including all four scales (CPES, MSQ, AMQ, and UWES) and their constructs had discriminant validity before testing the research hypotheses. Two CFA models were tested:

Model 1: The overall constructs of the CPES, MSQ, AMQ, and UWES were loaded onto a one-factor model.
Model 2: The overall constructs of the CPES, MSQ, AMQ, and UWES were loaded onto a multifactor factor model.

Table 6.14 summarises the fit statistics for the two models.

Table 6.14 *Testing the Discriminant Validity of the Overall Measurement Model*

	Chi-square	df	Chi-square/df	*p*	RMSEA	SRMR	CFI	NFI	AIC
Model 1 One factor CFA	796.13	35	22.75	<0.0001	0.23	0.08	0.84	0.83	836.13
Model 2 Multifactor model	50.32	2	25.16	<0.0001	0.24	0.04	0.95	0.94	66.32

Note: N=410

As displayed in table 6.14, the first model that was tested was a one-factor solution for the overall measurement model which had poor data fit (Chi-square/df ratio = 22.75; $p < 0.0001$; RMSEA = 0.23; SRMR = 0.08; CFI = 0.84; NFI = 0.83; AIC = 836.13). Since the CFI and NNI values were below the threshold value of 0.90, a second model was tested in order to ensure the optimisation of the discriminant validity of the overall measurement model. The second model that was tested was a four-factor solution (Chi-square/df ratio = 25.16; $p < 0.0001$; RMSEA = 0.24; SRMR = 0.04; CFI = 0.95; NFI = 0.94; AIC = 66.32) which showed a significant improvement to the model fit. Since the four-factor solution provided a better fit, the overall measurement model had acceptable discriminant validity. The measurement model indicated adequate discriminant validity and subsequently, little concern about multicollinearity among the various scales. However, the high RMSEA (0.24) and chi-square/df were taken into consideration as a possible limitation in the interpretation of findings.

6.5 DESCRIPTIVE STATISTICS

Descriptive statistics entails arranging the raw scores and then summarising these scores in such a way that it makes them more meaningful. This section reports on the results for the means, standard deviations, skewness, and kurtosis of the CPES, MSQ, AMQ, and UWES. The means provide a description of the normal distribution of the data, while the skewness reflects how symmetrical this distribution is and whether the data are non-parametric. The standard deviation is a measure of variance or the extent to which data values stray from the mean of the sample, and the kurtosis specifies the number of outliers in the dataset. In the current study, the One-Sample Kolmogorov-Smirnoff Normal Test was used to determine the distribution of the data. The test results revealed that the data were not normally distributed, consequently the dataset for the N=410 sample was non-parametric.

Table 6.15 provides a summary of the CPES, MSQ, AMQ, and UWES scales in terms of their mean, standard deviation, skewness, and kurtosis.

Table 6.15 *Means, Standard Deviations, Skewness and Kurtosis: CPES, MSQ, AMQ, and UWES*

Factor	Cronbach alpha coefficient	Mean	SD	Skewness	Kurtosis
Job content plateau	0.96	3.16	2.24	0.60	-1.16
Hierarchical/structural plateau	0.98	4.50	2.45	-0.34	-1.57
Maintenance plateau	0.88	4.28	1.82	-0.04	-0.97
Psychological plateau	0.86	2.19	1.59	1.36	1.09
Overall CPES	0.94	3.49	1.14	0.43	-0.93
Overall MSQ	0.97	3.17	1.10	-0.13	-1.14
Overall AMQ	n/a	40.70	13.79	-0.57	-0.30
Overall UWES	0.98	4.98	1.66	-0.65	-0.64

Note: N=410

The four subscales of the CPES were measured on a seven-point Likert rating response scale where 1 indicated that respondents did not agree at all and 7 that respondents very strongly agreed with the statement relating to career plateauing. Individuals, who scored high on maintenance plateau, are satisfied in their current position and are not concerned with promotions/advancement. They are also content with the training and development opportunities available to them and may therefore be pleasantly plateaued. Individuals, who scored high on psychological plateau, may experience feelings of dissatisfaction, disillusionment, and lack of passion and interest in their job leading to deteriorated work performance. Individuals, who scored high on hierarchical/structural plateau, will experience career stagnation due to a low likelihood of promotions. Individuals, who scored high on job content plateau, are no longer challenged by their job and are subjected to repetitive work. If individuals score high on both hierarchical and job content plateau, they will experience a psychological plateau. The internal consistency reliability coefficients were above 0.70 for job content plateau (0.96), hierarchical/structural plateau (0.98), maintenance plateau (0.88), and psychological plateau (0.86).

The mean scores for job content plateau (mean: 3.16; SD: 2.24) and psychological plateau (mean: 2.19; SD: 1.59) were relatively low, implying that the participants did not have strong experiences of these forms of plateauing. The mean scores for hierarchical/structural plateau (mean: 4.50; SD: 2.45) and maintenance plateau (mean: 4.28; SD: 1.82) were relatively moderate, implying that although these forms were present in the sample of participants, they were not overly negative about their experiences of career plateauing. The overall CPES mean

score (mean: 3.49; SD: 1.14) was relatively low, also indicating less strong experiences of career plateauing, and relatively pleasantly plateaued. However, hierarchical/structural plateau had the highest mean score, implying some measure of dissatisfaction with upward promotion opportunities. The internal consistency reliability coefficient was above 0.70 for the overall CPES (0.94).

The 20 questions of the MSQ were ranked on a five-point Likert scale where 1 indicated very dissatisfied and 5 indicated very satisfied. Raw scores for each scale of the MSQ were converted into percentile scores where a percentile score of 75 or higher indicates a high degree of satisfaction; a percentile score of 25 or lower represents a low level of satisfaction; and scores in the middle range of percentiles (26-74) indicates average satisfaction. Table 6.15 indicates that the data were negatively skewed for the MSQ, with the skewness = -0.13 for the overall scale. Most of the data points were on the higher side of the scale. The mean = 3.17 and the standard deviation = 1.10 for the overall scale implying a moderate level of job satisfaction. The kurtosis of the overall scale was -1.14, indicating that there were few outliers. The kurtosis for a larger sample, such as the one used in this study, would be fairly high because of the sample size. The internal consistency reliability coefficient was above 0.70 for the overall MSQ (0.97).

The AMQ comprises of 84 questions where respondents had to indicate on each item which one of the two descriptions was the best depiction of him/her. Individuals who achieved high scores in persistence (A) tend to persevere in searching for solutions to complex problems regardless of unfavourable conditions. In terms of awareness of time (B), high scorers plan in advance for any possibility and feel guilty about ineffective use of time. Those who scored highly on action orientation (C), tend to depict themselves as active and energetic people, and use their time effectively. Individuals who obtained high scores for aspiration level (D) are inclined to undertake demanding and challenging tasks, take calculated risks, and set high performance standards for themselves as well as others. In terms of personal causation (E), high scorers trust their own abilities and skills, and believe that they can accomplish tasks efficiently (Pottas *et al*.,1980).

Table 6.15 indicates that the data were negatively skewed for the AMQ, with the skewness = -0.57 for the overall scale. Most of the data points were on the higher side of the scale. The mean = 40.70 and the standard deviation = 13.79 for the overall scale implying relatively high or moderate motivation. The kurtosis of the overall scale was -0.30, indicating that there were few outliers. The kurtosis for a larger sample, such as the one used in this study, would be

fairly high because of the sample size. The internal consistency reliability could not be assessed for the overall AMQ because of complexities in scoring the scale.

The seventeen items of the UWES appeared on a seven-point rating scale where 0 represented ‘never’ and 6 represented ‘every day’. The total highest score is 102 when scores are added for all of the items. A higher score is a reflection of higher work engagement. Table 6.15 indicates that the data were negatively skewed for the AMQ, with the skewness = -0.65 for the overall scale. Most of the data points were on the higher side of the scale. The mean = 4.98 and the standard deviation = 1.66 for the overall scale implying a relatively high level of work engagement which could potentially explain the less strong experiences of career plateauing. The kurtosis of the overall scale was -0.64, indicating that there were few outliers. The kurtosis for a larger sample, such as the one used in this study, would be fairly high because of the sample size. The internal consistency reliability coefficient was above 0.70 for the overall UWES (0.98).

6.6 BI-VARIATE CORRELATIONS

This section reports on the bivariate correlations between the demographic variables, and the CPES, MSQ, AMQ, and UWES. The data were imported on a SPSS file and analysed using the IBM statistical programme SPSS (Statistical Package for Social Sciences) software version 23 for the Microsoft Windows platform (SPSS Inc., 2015) and SAS software version 9.4 (SAS, 2013).

The correlational statistics are used to address Research Aim 2, namely, to assess the direction and magnitude of the statistical inter-relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the SAPS context. This aim relates to research hypothesis H2.

Table 6.16 reports the correlations between the demographic variables and the CPES, MSQ, AMQ, and UWES.

Table 6.16 *Bivariate Correlations between the Demographical Variables and the CPES, MSQ, AMQ, and UWES*

Variable		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Job content plateau	-												
2	Hierarchical/ Structural plateau	0.60***	-											
3	Maintenance plateau	-0.72***	-0.72***	-										
4	Psychological plateau	0.79***	0.54***	-0.71***	-									
5	Overall CPES	0.84***	0.86***	-0.69***	0.79***	-								
6	Overall MSQ	-0.79***	-0.65***	0.78***	-0.72***	-0.74***	-							
7	Overall AMQ	-0.31***	-0.25***	0.30***	-0.36***	-0.30***	0.25***	-						
8	Overall UWES	-0.74***	-0.60***	0.74***	-0.68***	-0.68***	0.79***	0.42***	-					
9	Age	-0.37***	0.55***	-0.48***	0.38***	0.49***	-0.43***	-0.15	-0.34***	-				
10	Tenure	0.44***	0.65***	-0.56***	0.47***	0.58***	-0.52***	-0.17	-0.42***	0.81***	-			
11	Gender	-0.14	-0.07	0.10*	-0.13**	-.012*	0.12*	-0.07	0.05	-0.05	-0.10*	-		
12	Marital Status	0.13**	0.18	-0.14	0.12*	0.16***	-0.17	-0.03	-0.14**	0.24***	0.29***	-0.01	-	
13	Race	0.07	0.16***	-0.04	0.06	0.16***	-0.09	0.06	-0.03	0.04	0.10*	0.07	0.09	-

Notes: N=410. ***$p \leq 0.001$ **$p \leq 0.01$ *$p \leq 0.05$

6.6.1 Correlations among the CPES variables

Table 6.16 shows that job content plateau and hierarchical/structural plateau were positively associated (r = 0.60; p = 0.0001; large practical effect). Job content plateau (r = -0.72; p = 0.0001; large practical effect) and hierarchical/structural plateau (r = -0.72; p = 0.0001; large practical effect was negatively associated with maintenance plateau. Job content plateau (r = 0.79; p = 0.0001; large practical effect) and hierarchical/structural plateau (r = 0.54; p = 0.0001; large practical effect) were positively associated with psychological plateau. Maintenance plateau was negatively associated with psychological plateau (r = -0.71; p = 0.0001; large practical effect). Maintenance plateau was negatively associated with overall plateauing (r = -0.69; p = 0.0001; large practical effect). Job content plateau (r = 0.84; p = 0.0001; large practical effect), hierarchical/structural plateau (r = 0.86; p = 0.0001; large practical effect), and psychological plateau (r = 0.79; p = 0.0001; large practical effect) were positively associated with overall career plateauing.

6.6.2 Correlations between the demographic variables and the CPES, MSQ, AMQ, and UWES

In terms of the demographic variables, age, tenure, gender, marital status, and race showed significant and positive associations with job content plateau, hierarchical/structural plateau, maintenance plateau, psychological plateau, overall CPES, and overall MSQ ($r \geq 0.10$ and $r \leq 0.58$ at $p \leq 0.05$; small to large practical effect size). Age, tenure, gender, and race showed significant and negative associations with job content plateau, maintenance plateau, psychological plateau, overall CPES, overall MSQ, and overall UWES ($r \geq -0.12$ and $r \leq -0.56$ at $p \leq 0.05$; small to large practical effect size). The negative associations suggest that there were significant differences among these subgroups pertaining to their mean scores.

Age was positively correlated with hierarchical/structural plateau, psychological plateau and overall CPES but negatively correlated with job content plateau, maintenance plateau, overall MSQ, and overall UWES. Tenure was positively correlated with job content plateau, hierarchical/structural plateau, psychological plateau, and overall CPES but negatively correlated with maintenance plateau, overall MSQ, and overall UWES. Gender was positively correlated with maintenance plateau and overall MSQ but negatively correlated with psychological plateau and overall CPES. Marital status was positively correlated with job content plateau, psychological plateau, and overall CPES but negatively correlated with the overall UWES. Race was positively correlated with hierarchical/structural plateau and the overall CPES.

Thus, gender, age, race, marital status, and tenure need to be taken into consideration when applying the overall CPES, overall MSQ, and overall UWES.

6.6.3 Correlations between the CPES and MSQ

As shown in Table 6.16, the overall CPES had a significant and negative correlation with the overall MSQ ($r = -0.74$; $p < 0.001$; large practical effect size) which indicates that an increase in career plateauing is likely to result in a decrease in job satisfaction. The correlation was below the threshold value of $r > 0.80$ for multi-collinearity concerns and suggests that the overall CPES and the overall MSQ had discriminant validity.

As shown in Table 6.16, job content plateau ($r = -0.79$; $p = 0.0001$; large practical effect), hierarchical/structural plateau ($r = -0.65$; $p = 0.0001$; large practical effect) and psychological

plateau (r = -0.72; p = 0.0001; large practical effect) had a significant and negative correlation with the overall MSQ which shows that an increase in job content plateau, hierarchical/structural plateau, and psychological plateau is likely to lead to a decrease in overall MSQ. Maintenance (r = 0.78; p = 0.0001; large practical effect) had a significant and positive correlation with overall MSQ which indicates that an increase in maintenance plateau is likely to result in an increase in overall MSQ.

6.6.4 Correlations between the CPES and AMQ

As shown in Table 6.16, the overall CPES had a significant and negative association with the overall AMQ (r = -0.30; p < 0.001; small practical effect size) which suggests that an increase in career plateauing is likely to lead to a decrease in work motivation. The correlation was below the threshold value of r > 0.80 for multi-collinearity concerns and indicates that the overall CPES and the overall AMQ had discriminant validity.

As shown in Table 6.16, job content plateau (r = -0.31; p = 0.0001; medium practical effect), hierarchical/structural plateau (r = -0.25; p = 0.0001; small practical effect), and psychological plateau (r = -0.36; p = 0.0001; medium practical effect) had a significant and negative correlation with the overall AMQ which shows that an increase in job content plateau, hierarchical/structural plateau, and psychological plateau is likely to lead to a decrease in overall AMQ. Maintenance plateau (r = 0.30; p = 0.0001; medium practical effect) had a significant and positive correlation with overall AMQ which indicates that an increase in maintenance plateau is likely to result in an increase in overall AMQ.

6.6.5 Correlations between the CPES and UWES

As shown in Table 6.16, the overall CPES had a significant and negative correlation with the overall MSQ (r = -0.68; p < 0.001; large practical effect size) which indicates that an increase in career plateauing may be linked to a decrease in work engagement. The correlation was below the threshold value of r > 0.80 for multi-collinearity concerns and suggests that the overall CPES and the overall UWES had discriminant validity.

As shown in Table 6.16, job content plateau (r = -0.74; p = 0.0001; large practical effect), hierarchical/structural plateau (r = -0.60; p = 0.0001; large practical effect), and psychological plateau (r = -0.68; p = 0.0001; large practical effect) had a significant and negative correlation

with the overall UWES which shows that an increase in job content plateau, hierarchical/structural plateau, and psychological plateau is likely to lead to a decrease in overall UWES. Maintenance plateau (r = 0.74; p = 0.0001; large practical effect) had a significant and positive correlation with overall UWES which indicates that an increase in maintenance plateau is likely to result in an increase in overall UWES.

6.6.6 Correlations between MSQ, AMQ, and UWES

As shown in Table 6.16, the overall MSQ had a significant and positive correlation with the overall AMQ (r = 0.25; p < 0.001; small practical effect size) and the overall UWES ($r \geq 0.79$; p < 0.001; large practical effect size). The overall AMQ had a significant and positive association with the overall UWES (r = 0.42; p < 0.001; medium practical effect size). The correlations were below the threshold of $r > 0.80$ which indicates that the overall MSQ, overall AMQ, and the overall UWES had discriminant validity.

The results suggest that an increase in job satisfaction is likely to lead to increases in work motivation and work engagement. Also, an increase in work motivation is likely to result in an increase in work engagement.

The correlational statistics indicated that there was supportive empirical evidence for research hypothesis H_2: There is a statistically significant interrelationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement.

6.7 INFERENTIAL STATISTICS: MULTIPLE REGRESSION ANALYSIS

This section reports on multiple regression analysis which was performed to test research hypothesis H_3: Individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement and research hypothesis H_5: Gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement. The results of multiple regression analysis are reported in Table 6.17.

6.7.1 Career plateauing as predictor of job satisfaction

Table 6.17 reports on the predictors of job satisfaction.

Table 6.17 *Regression Analysis: Career Plateauing as Predictor of Job Satisfaction*

Variable	Estimate (β)	Standard error	Type II SS	*F*	*p*
CPES F1 (Job content plateau)	-0.19	0.03	10.72	36.69	<0.0001
CPES F2 (Hierarchical plateau)	-0.06	0.02	1.70	5.81	0.02
CPES F3 (Maintenance plateau)	0.21	0.04	9.18	31.45	<0.0001
CPES F4 (Psychological plateau)	-0.08	0.04	1.15	3.93	0.05
Age	0.05	0.09	0.08	0.27	0.60
Gender	-0.04	0.07	0.13	0.44	0.51
Marital status	0.04	0.07	0.10	0.33	0.57
Tenure	0.04	0.08	0.06	0.22	0.64
Race	0.12	0.09	0.56	1.91	0.17
Rank	-0.15	0.09	0.80	2.74	0.10
Model (ANOVA)					
F	69.11				
p	<0.0001				
R^2	0.73				

Note: N=410

Table 6.17 shows that the career plateauing variables explained a statistically significant percentage (73%) of variance in job satisfaction (F = 69.11; p = <0.0001; R^2 = 0.73; large practical effect). Job content plateau (β = -0.19; p = 0.000), hierarchical/structural plateau (β = -0.06; p = 0.02) and psychological plateau (β = -0.08; p = 0.05) acted as significant negative predictors of job satisfaction. Maintenance plateau (β = 0.21; p = 0.000) acted as a significant positive predictor of job satisfaction. The control variables did not significantly explain the variance in job satisfaction.

6.7.2 Career plateauing as predictor of motivation

Table 6.18 reports on the predictors of job motivation.

Table 6.18 *Regression Analysis: Career Plateauing as Predictor of Motivation*

Variable	Estimate (β)	Standard error	Type II SS	*F*	*p*
CPES F1 (Job content plateau)	-0.46	0.64	61.24	0.52	0.47
CPES F2 (Hierarchical/structural plateau)	0.45	0.47	109.43	0.94	0.33
CPES F3 (Maintenance plateau)	0.10	0.73	2.11	0.02	0.89
CPES F4 (Psychological plateau)	-2.73	0.84	1230.67	10.52	0.00
Age	0.17	1.87	0.99	0.01	0.93
Gender	1.86	1.36	218.53	1.87	0.17
Marital status	-0.26	1.37	4.08	0.03	0.85
Tenure	-1.09	1.61	53.72	0.46	0.50
Race	-1.99	1.73	154.91	1.32	0.25
Rank	1.98	1.87	131.20	1.12	0.29
Model (ANOVA)					
F	3.46				
p	0.0003				
R^2	0.12				

Note: N = 410

Table 6.18 shows that the career plateauing variables explained a statistically significant percentage (12%) of variance in motivation ($F = 3.46$; $p = 0.0003$; $R^2 = 0.12$; small practical effect). The table further reveals that only psychological plateau (β = -2.73; $p = 0.001$) acted as a significant negative predictor of motivation. There were no significant positive predictors of motivation. The control variables did not significantly explain the variance in motivation.

6.7.3 Career plateauing as predictor of work engagement

Table 6.19 reports on the predictors of work engagement.

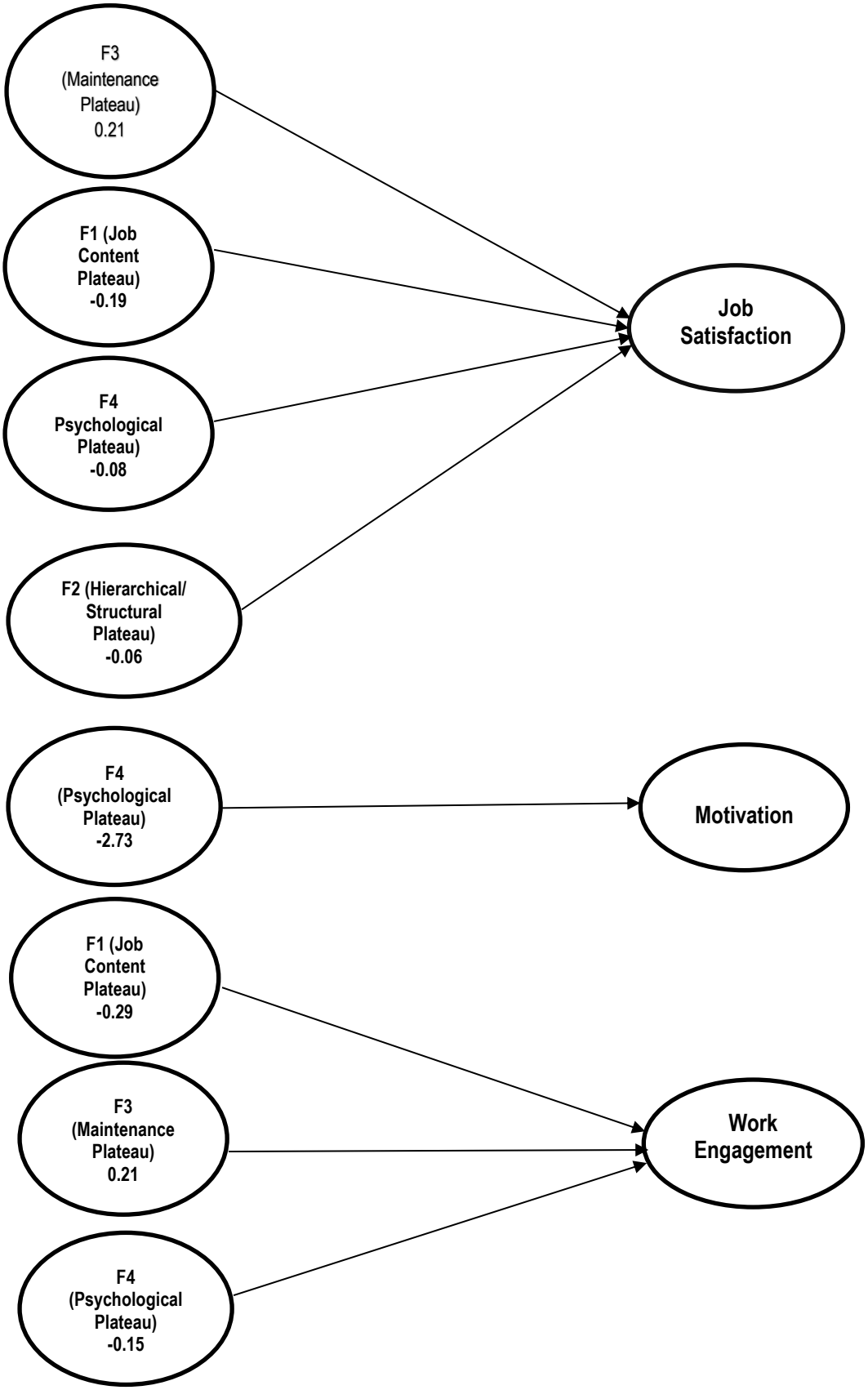
Table 6.19 *Regression Analysis: Career Plateauing as Predictor of Work Engagement*

Variable	Estimate (β)	Standard error	Type II SS	*F*	*p*
CPES F1 (Job content plateau)	-0.29	0.05	24.07	32.64	<0.0001
CPES F2 (Hierarchical/structural plateau)	-0.07	0.04	2.30	3.12	0.08
CPES F3 (Maintenance plateau)	0.21	0.06	10.05	13.63	0.00
CPES F4 (Psychological plateau)	-0.15	0.07	3.58	4.85	0.03
Age	-0.04	0.15	0.05	0.07	0.79
Gender	0.19	0.11	2.36	3.20	0.07
Marital status	0.14	0.11	1.22	1.66	0.20
Tenure	-0.06	0.13	0.16	0.21	0.65
Race	-0.02	0.14	0.01	0.01	0.90
Rank	-0.28	0.15	2.60	3.53	0.06
Model (ANOVA)					
F	46.59				
p	<0.0001				
R^2	0.65				

Note: N=410

Table 6.19 shows that the career plateauing variables explained a statistically significant percentage (65%) of variance in work engagement (F = 46.59; p = < 0.0001; R^2 = 0.65; large practical effect). The table further shows that job content plateau (β = -0.29; p = 0.000) and psychological plateau (β = -0.15; p = 0.03) acted as significant negative predictors of work engagement. Maintenance plateau (β = 0.21; p = 0.000) acted as a significant positive predictor of job satisfaction. The control variables did not significantly explain the variance in work engagement. Figure 6.3 Illustrates and summarises the best predictors of job satisfaction, motivation, and work engagement as identified by the multiple regression analysis.

Figure 6.3 *Summary of Career Plateauing as Key Predictor of Job Satisfaction, Motivation, and Work Engagement*



In summary, Figure 6.3 demonstrates that high job satisfaction and high work engagement were explained by maintenance plateau. Low job satisfaction and low work engagement were explained by job content plateau and psychological plateau. Low job satisfaction was also explained by hierarchical/structural plateau. Low motivation was explained by psychological plateau.

The above results provided supportive evidence for research hypothesis H_3: Individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement. However, no supportive evidence was provided for research hypothesis H_5: Gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement.

6.7.4 Structural equation modelling

The PRO CALIS procedure with maximum likelihood (SAS software, 2013) was used for the SEM statistical analysis. SEM was performed to test research hypothesis H5: There is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

Table 6.20 provides the goodness-of-fit statistics for the two models that were tested.

Table 6.20 *Model Fit Statistics: Comparison between Models*

	Chi-square	df	Chi-square/df	*p*	RMSEA	SRMR	CFI	NFI	AIC
Model 1 SEM (CPES, MSQ, AMQ, UWES)	570.78	68	8.39	<0.0001	0.13	0.12	0.91	0.90	644.78
Model 2 SEM (CPES, MSQ, UWES)	273.05	21	13.00	<0.0001	0.15	0.06	0.94	0.94	321.05

Notes: N=410

The structural model consists of exogenous and endogenous constructs. Exogenous constructs are equivalent to independent variables and are determined by factors outside of

the model. Endogenous constructs are equivalent to dependent variables and are theoretically determined by factors within the model (Hair *et al*., 2014). The first model comprised of the overall CPES construct which was treated as the exogenous variable and the CPES subconstructs (job content plateau, hierarchical/structural plateau, maintenance plateau, and psychological plateau). Overall MSQ and MSQ subconstructs (intrinsic satisfaction and extrinsic satisfaction), overall AMQ and AMQ subconstructs (action orientation, personal causation, aspiration level, awareness, and persistence), and overall UWES and UWES subconstructs (vigour, dedication, and absorption) were treated as the endogenous variables. Table 6.20 indicated a poor fit to the data in terms of chi-square/df and the RMSEA and SRMR for the model (Chi-square/df ratio = 8.39; $p < 0.0001$; RMSEA = 0.13; SRMR = 0.12; CFI = 0.91; NFI = 0.90; AIC = 644.78).

The second model comprised of the overall CPES construct which was treated as the exogenous variable which included the CPES subconstructs (job content plateau, hierarchical/structural plateau, maintenance plateau, and psychological plateau). Overall MSQ and MSQ subconstructs (intrinsic satisfaction and extrinsic satisfaction), and overall UWES and UWES subconstructs (dedication and absorption) were treated as the endogenous variables. Table 6.20 indicated model improvement and with the exception of the chi-square/df and RMSEA, an adequate fit to the data for the model (Chi-square/df ratio = 13.00; $p < 0.0001$; RMSEA = 0.17; SRMR = 0.06; CFI = 0.94; NFI = 0.94; AIC = 321.05).

Model 2 was regarded as the best fit SEM model which excluded motivation. The first model had a higher AIC value (644.78) than the second model which had an AIC of 321.05. However, the second model showed a better fit with the data since it had better CFI (0.94), NFI (0.94), SRMR (0.06) and lower chi-square value (273.05) than the first model (CFI = 0.91; NNI = 0.90; SRMR = 0.12; chi-square = 570.78). Model 2 was therefore accepted as the structural model with the optimal fit.

Table 6.21 provides a summary of the outcome of the standardised path coefficients (regression estimates) for the optimal fit structural equation model (SEM model 2). All path coefficients were significant at $p \leq 0.01$ ($t > 2.56$).

Table 6.21 *Standardised Path Coefficients for the Final Hypothesised Structural Equation Model*

Standardised Results for PATH List					
Path			Estimate	Standard Error	t-Value
CPES	**===>**	**Job content plateau**	0.89	0.02	55.01
CPES	**===>**	**Hierarchical/structural plateau**	0.71	0.03	25.49
CPES	**===>**	**Maintenance plateau**	-0.84	0.02	-44.87
CPES	**===>**	**Psychological plateau**	0.81	0.02	39.31
MSQ	**===>**	**Extrinsic satisfaction**	0.94	0.01	89.70
MSQ	**===>**	**Intrinsic satisfaction**	0.87	0.01	60.66
UWES	**===>**	**Vigour**	0.99	0.00	360.63
UWES	**===>**	**Dedication**	0.97	0.00	271.57
UWES	**===>**	**Absorption**	0.95	0.01	168.10
Job content plateau	**===>**	**MSQ**	-0.35	0.04	-8.20
Hierarchical/structural plateau	**===>**	**MSQ**	-0.14	0.04	-4.07
Maintenance	**===>**	**MSQ**	0.48	0.04	11.73
Maintenance	**===>**	**UWES**	0.53	0.04	13.35
Psychological plateau	**===>**	**UWES**	-0.32	0.04	-7.65

Notes: N=410. t-values > 2.56 ($p \leq 0.01$); t-values >1.96 ($p \leq 0.05$)

Once the structural model with the optimal fit had been identified, standardised path coefficients were assessed in order to assess the magnitude and direction of the regression pathways (model 2). According to Kline (2005), standardised path coefficients (regression estimates), which represent the path coefficient from the indicator to the construct, 0.30 and more in order to be significant.

The path coefficients showed that job satisfaction (MSQ) was significantly and negatively explained by job content plateau ($\beta = -0.35$; $p < 0.01$) followed by hierarchical/structural plateau ($\beta = -0.14$; $p < 0.01$). Maintenance plateau had the strongest and a significant positive link with job satisfaction ($\beta = 0.48$; $p < 0.001$).

In terms of work engagement (UWES), maintenance plateau again had the strongest and a significant positive link with engagement ($\beta = 0.53$; $p < 0.001$) followed by psychological plateau which had a significant negative link with engagement ($\beta = -0.32$; $p < 0.01$).

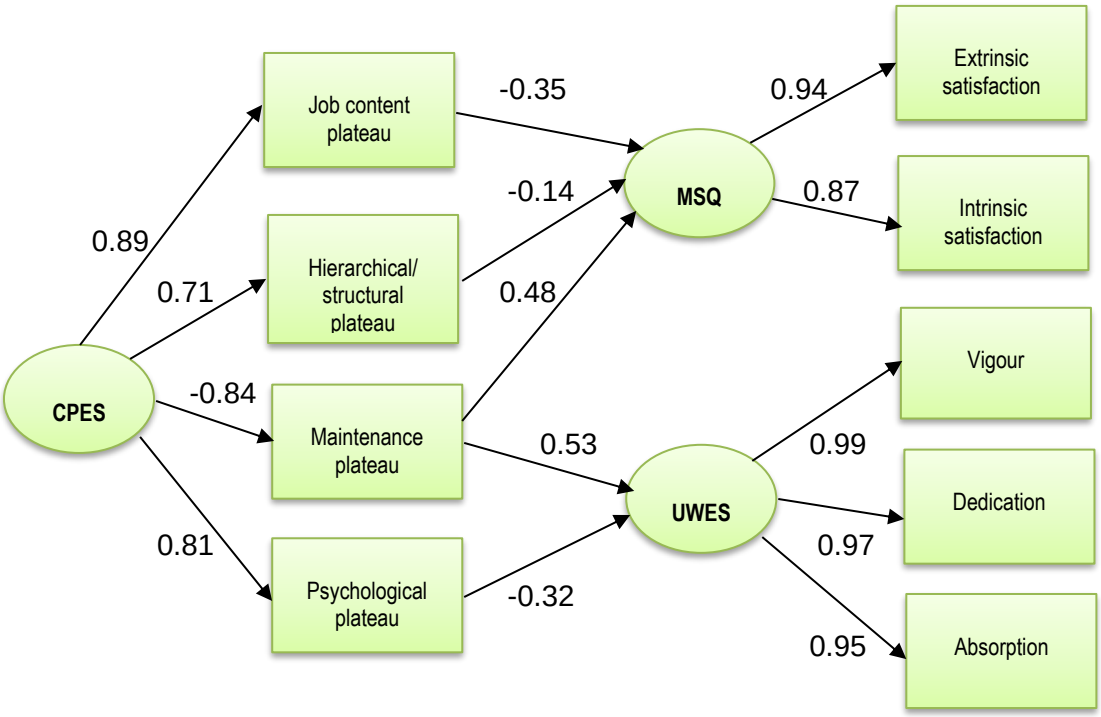
In summary, maintenance plateau seemed to have a significant positive association with higher levels of engagement and job satisfaction. Hierarchical/structural plateau and job content plateau seemed to significantly explain lower levels of job satisfaction. Psychological plateau seemed to explain significantly lower levels of engagement.

The final SEM model figure showed that career plateauing (including the subfactors of job content plateau, hierarchical/structural plateau, maintenance plateau, and psychological plateau) had a significant impact on job satisfaction (including the subfactors of intrinsic and extrinsic job satisfaction) and work engagement (including the subfactors of vigour, dedication, and absorption).

The subfactor of maintenance plateau had the most influence on job satisfaction where an increase in career plateauing leads to an increase in job satisfaction. The subfactors of job content plateau and hierarchical/structural plateau also impacted on job satisfaction where an increase in career plateauing results in a decrease in job satisfaction.

The subfactor of maintenance plateau had the greatest influence on work engagement where an increase in career plateauing is likely to lead to an increase in work engagement. The subfactor of psychological plateau also affected work engagement where an increase in career plateauing results is likely to lead to a decrease in work engagement. Figure 6.4 illustrates the standardised path coefficients of the final hypothesised model (SEM model 2).

Figure 6.4 *Final Structural Model*



Notes: All standardised path coefficient estimates = ** $p \leq 0.01$

In summary, as displayed in Figure 6.4, the SEM final best fit model highlighted the following: Overall CPES with its four subfactors of job content plateau, hierarchical/structural plateau, maintenance plateau, and psychological plateau acted as important antecedents of job satisfaction and engagement. More specifically, the CPES factors of job content plateau, hierarchical/structural plateau, and maintenance plateau acted as important antecedents of overall MSQ with its subfactors of intrinsic and extrinsic satisfaction. The CPES factors of maintenance plateau and psychological plateau acted as important antecedents of overall UWES with its three subfactors of vigour, dedication, and absorption.

The empirical results provided supportive evidence for accepting research hypothesis H_4: There is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

6.8 INFERENTIAL STATISTICS: TESTS FOR SIGNIFICANT MEAN DIFFERENCES

Stage 4 of the statistical analysis, namely, the test for significant mean differences, addressed research aim 6, namely, to assess whether individuals from various biographical groups

(gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement. In order to assess for mean differences between the various gender, age, race, marital status, rank, and tenure groups in the sample N=410, pair-wise, post-hoc comparisons were made, using Cohen's *d* to assess for the practical effect of significant mean differences. The tests for normality indicated that the data were non-parametric, which required the use of the independent-samples Mann-Whitney-U and Kruskall-Wallis tests in the assessment for mean differences between the groups.

6.8.1 Gender and Marital status

6.8.1.1 Mann-Whitney U test for significant mean differences: Gender and marital status

Table 6.22 displays the significant mean differences for gender and marital status.

Table 6.22 *Tests for Significant Mean Differences: Gender and Marital Status*

Variables	Socio-biographical subgroup	n	Mann-Whitney U Test Statistic	Standardised test statistic	Standard Error	Asymp.Sig. (2-sided)
Job content plateau	Gender: Male; Female	410	16782.50	-2.90	1152.92	0.00
Maintenance plateau		410	22536.50	2.06	1170.31	0.04
Psychological plateau		410	17310.50	-2.54	1108.82	0.01
Overall CPES		410	17400.00	-2.33	1173.54	0.02
Overall MSQ		410	22977.00	2.42	1174.10	0.01
Job content plateau	Marital Status: Single; Married	410	22826.00	2.64	1143.77	0.01
Hierarchical/ structural plateau		410	23928.00	3.64	1131.07	0.00
Maintenance plateau		410	16408.50	-2.93	1161.01	0.00
Psychological plateau		410	22463.00	3.31	1164.21	0.00
Overall CPES		410	23666.00	3.31	1164.21	0.00
Overall MSQ		410	15738.50	-3.50	1164.78	0.00
Overall UWES		410	16598.00	-2.76	1164.26	0.00

Note: $p < 0.05$

Table 6.22 shows that significant mean differences were observed for gender in terms of job content plateau, maintenance plateau, psychological plateau, overall career plateau, and overall job satisfaction.

Table 6.22 also shows the source of differences involved in significant mean differences for marital status in relation to job content plateau, hierarchical/structural plateau, maintenance plateau, psychological plateau, overall career plateau, overall job satisfaction, and overall work engagement.

6.8.1.2 Source of Significant Mean Differences: Gender

Table 6.23 shows the source of significant mean differences for gender.

Table 6.23 *Source of Significant Mean Differences: Gender*

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
Job content plateau	Male	247	3.38	2.26	Male-Female	-2.90	0.00	0.25
	Female	163	2.82	2.17				
Maintenance plateau	Male	247	4.14	1.85	Male-Female	2.06	0.04	0.19
	Female	163	4.49	1.78				
Psychological plateau	Male	247	2.32	1.62	Male-Female	-2.54	0.01	0.20
	Female	163	2.00	1.54				
Overall CPES	Male	247	3.59	1.16	Male-Female	-2.33	0.02	0.22
	Female	163	3.34	1.10				
Overall MSQ	Male	247	3.07	1.12	Male-Female	2.42	0.01	0.20
	Female	163	3.34	1.06				

Note: $p < 0.05$

According to Table 6.23, significant mean differences were observed between:

- males and females for job content plateau (t = -2.90; $p \leq 0.00$; d = 0.25; small practical effect),
- maintenance plateau (t = 2.06; $p \leq 0.04$; d = 0.19; small practical effect),
- psychological plateau (t = -2.54; $p \leq 0.01$; d = 0.20; small practical effect),
- overall career plateau (t = -2.33; $p \leq 0.02$; d = 0.22; small practical effect), and
- overall job satisfaction (t = 2.42; $p \leq 0.01$; d = 0.20; small practical effect).

Thus, the source of differences for gender was attributed to job content plateau, maintenance plateau, psychological plateau, overall career plateau, and overall job satisfaction.

Overall, males scored significantly higher than their female counterparts on job content plateau (Males mean = 3.38; females mean = 2.82); psychological plateau (Males mean = 2.32; females mean = 2.00) and overall career plateau (Males mean = 3.59; females mean = 3.34). Females scored significantly higher than males on maintenance plateau (Females mean =

4.49; males mean = 4.14) and overall job satisfaction (Females mean = 3.34; males mean = 3.07).

6.8.1.3 Source of Significant Mean Differences: Marital Status

Table 6.24 indicates the source of significant mean differences for marital status.

Table 6.24 *Source of Significant Mean Differences: Marital Status*

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
Job content plateau	Single	156	2.78	2.09	Single-Married	2.64	0.01	0.14
	Married	254	3.39	2.30				
Hierarchical/structural plateau	Single	156	3.93	2.58	Single-Married	3.64	0.00	0.38
	Married	254	4.85	2.31				
Maintenance plateau	Single	156	4.62	1.96	Single-Married	-2.93	0.00	0.30
	Married	254	4.06	1.71				
Psychological plateau	Single	156	1.97	1.51	Single-Married	2.41	0.02	0.23
	Married	254	2.33	1.63				
Overall CPES	Single	156	3.26	1.07	Single-Married	3.31	0.00	0.34
	Married	254	3.64	1.16				
Overall MSQ	Single	156	3.42	1.08	Single-Married	-3.50	0.00	0.37
	Married	254	3.02	1.09				
Overall UWES	Single	156	5.23	1.65	Single-Married	-2.76	0.01	0.24
	Married	254	4.83	1.66				

Note: $p < 0.05$

According to Table 6.24, significant mean differences were observed between:

- single and married groups for job content plateau ($t = 2.64$; $p \leq 0.01$; $d = 0.14$; small practical effect),
- hierarchical/structural plateau ($t = 3.64$; $p \leq 0.00$; $d = 0.38$; small practical effect),
- maintenance plateau ($t = -2.93$; $p \leq 0.00$; $d = 0.30$; small practical effect), psychological plateau ($t = 2.41$; $p \leq 0.02$; $d = 0.23$; small practical effect),
- overall career plateau ($t = 3.31$; $p \leq 0.00$; $d = 0.34$; small practical effect),
- overall job satisfaction ($t = -3.50$; $p \leq 0.00$; $d = 0.37$; small practical effect), and
- overall work engagement ($t = -2.76$; $p \leq 0.01$; $d = 0.24$; small practical effect).

Thus, the source of differences for marital status was attributed to job content plateau, hierarchical/structural plateau, maintenance plateau, psychological plateau, overall career plateau, overall job satisfaction, and overall work engagement.

Overall, married respondents scored significantly higher than their single counterparts on job content plateau (Married mean = 3.39; single mean = 2.78); hierarchical/structural plateau (Married mean = 4.85; single mean = 3.93), psychological plateau (Married mean = 2.33; single mean = 1.97), and overall career plateau (Married mean = 3.64; single mean = 3.26).

Single respondents scored significantly higher than married respondents on maintenance plateau (Single mean = 4.62; married mean = 4.06), overall job satisfaction (Single mean = 3.42; married mean = 3.02), and overall work engagement (Single mean = 5.23; married mean = 4.83).

6.8.2 Age

6.8.2.1 Kruskal-Wallis test for significant mean differences: Age

Table 6.25 depicts the significant mean differences for age.

Table 6.25 *Tests for Significant Mean Differences: Age*

Variables	Socio-biographical subgroup	n	Kruskal-Wallis Test Statistic	Degree of freedom	Asymp.Sig. (2-sided)
Job content plateau	Age: 18-24 – 25-40;18-24 – 41-45; 18-24 – 46 and older; 25-40 – 41-45; 25-40 – 46 and older	410	60.58	3	0.00
Hierarchical/ structural plateau	Age: 18-24 – 25-40;18-24 – 41-45; 18-24 – 46 and older; 25-40 – 41-45; 25-40 – 46 and older; 41-45 – 46 and older	410	129.72	3	0.00
Maintenance plateau	Age: 46 and older – 41-45; 46 and older – 25-40; 46 and older -18-24; 41-45 – 25-40; 41-45 – 18-24; 25-40 – 18-24	410	98.33	3	0.00
Psychological plateau	Age: 18-24 – 25-40;18-24 – 41-45; 18-24 – 46 and older; 25-40 – 41-45; 25-40 – 46 and older	410	59.04	3	0.00
Overall CPES	Age: 18-24 – 25-40;18-24 – 41-45; 18-24 – 46 and older; 25-40 – 41-45; 25-40 – 46 and older; 41-45 – 46 and older	410	103.00	3	0.00

Variables	Socio-biographical subgroup	n	Kruskal-Wallis Test Statistic	Degree of freedom	Asymp.Sig. (2-sided)
Overall MSQ	Age: 46 and older – 41-45; 46 and older – 25-40; 46 and older – 18-24; 41-45 -25-40; 41-45 – 18-24; 25-40 - 18-24	410	79.49	3	0.00
Overall AMQ	Age 46 and older - 25-40; 41-45 – 25-40	410	11.98	3	0.01
Overall UWES	Age 46 and older - 25-40; 46 and older – 18-24; 41-45 – 25-40;41-45 – 18-24; 25-40 – 18-24	410	48.03	3	0.00

Note: $p < 0.05$

Table 6.25 reveals that significant mean differences occurred for age in relation to job content plateau, hierarchical/structural plateau, maintenance plateau, psychological plateau, overall career plateau, overall job satisfaction, overall motivation, and overall work engagement.

6.8.2.2 Source of significant mean differences: Age

Table 6.26 displays the source of significant mean differences for age.

Table 6.26 *Source of Significant Mean Differences: Age*

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
Job content plateau	18-24	45	1.34	0.67	18-24 - 25-40	-4.20	0.00	1.05
	25-40	175	2.78	2.07				
	18-24	45	1.34	0.67	18-24 – 41-45	-5.63	0.00	1.53
	41-45	87	3.65	2.35				
	18-24	45	1.34	0.67	18-24 – 46 and older	-7.31	0.00	1.97
	46 and older	103	4.18	2.22				
	25-40	175	2.78	2.07	25-40 – 41-45	2.52	0.01	0.39
	41-45	87	3.65	2.35				
	25-40	175	2.78	2.07	25-40 – 46 and older	-4.85	0.00	0.65
	46 and older	103	4.18	2.22				
Hierarchical/ structural plateau	18-24	45	1.62	1.41	18-24 - 25-40	-5.21	0.00	1.20
	25-40	175	3.88	2.37				
	18-24	45	1.62	1.41	18-24 – 41-45	-7.87	0.00	1.99
	41-45	87	5.21	2.18				
	18-24	45	1.62	1.41	18-24 – 46 and older	10.29	0.00	3.25
	46 and older	103	6.21	1.41				
	25-40	175	3.88	2.37	25-40 – 41-45	-4.39	0.00	0.58
	41-45	87	5.21	2.18				
	25-40	175	3.88	2.37	25-40 – 46 and older	-7.80	0.00	1.23
	46 and older	103	6.21	1.41				

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
	41-45	87	5.21	2.18	41-45 – 46 and older	2.71	0.01	0.56
	46 and older	103	6.21	1.41				
Maintenance plateau	46 and older	103	3.18	1.65	46 and older – 41-45	2.28	0.02	0.42
	41-45	87	3.82	1.38				
	46 and older	103	3.18	1.65	46 and older – 25-40	6.52	0.00	0.87
	25-40	175	4.66	1.77				
	46 and older	103	3.18	1.65	46 and older - 18-24	9.10	0.00	2.18
	18-24	45	6.14	1.07				
	41-45	87	3.82	1.38	41-45 – 25-40	3.64	0.00	0.53
	25-40	175	4.66	1.77				
	41-45	87	3.82	1.38	41-45 – 18-24	7.05	0.00	1.89
	18-24	45	6.14	1.07				
	25-40	175	4.66	1.77	25-40 – 18-24	4.88	0.00	1.04
	18-24	45	6.14	1.07				
Psychological plateau	18-24	45	1.21	0.52	18-24 – 25-40	-2.65	0.01	0.66
	25-40	175	1.84	1.39				
	18-24	45	1.21	0.52	18-24 – 41-45	-5.01	0.00	1.23
	41-45	87	2.60	1.74				
	18-24	45	1.21	0.52	18-24 – 46 and older	-6.47	0.00	1.48
	46 and older	103	2.87	1.71				
	25-40	175	1.84	1.39	25-40 – 41-45	-3.64	0.00	0.48
	41-45	87	2.60	1.74				
	25-40	175	1.84	1.39	25-40 – 46 and older	-5.75	0.00	0.66
	46 and older	103	2.87	1.71				
Overall CPES	18-24	45	2.39	0.42	18-24 – 25-40	-4.97	0.00	1.14
	25-40	175	3.22	1.03				
	18-24	45	2.39	0.42	18-24 – 41-45	-7.23	0.00	1.77
	41-45	87	3.82	1.19				
	18-24	45	2.39	0.42	18-24 – 46 and older	-9.29	0.00	2.53
	46 and older	103	4.16	0.97				
	25-40	175	3.22	1.03	25-40 – 41-45	-3.78	0.00	0.54
	41-45	87	3.82	1.19				
	25-40	175	3.22	1.03	25-40 – 46 and older	-6.67	0.00	0.94
	46 and older	103	4.16	0.97				
	41-45	87	3.82	1.19	41-45 – 46 and older	-2.29	0.00	0.31
	46 and older	103	4.16	0.97				
Overall MSQ	46 and older	103	2.59	0.89	46 and older – 41-45	2.05	0.04	0.34
	41-45	87	2.92	1.04				
	46 and older	103	2.59	0.89	46 and older – 25-40	5.87	0.00	0.81
	25-40	175	3.39	1.09				
	46 and older	103	2.59	0.89	46 and older – 18-24	8.18	0.00	1.93
	18-24	45	4.17	0.75				
	41-45	87	2.92	1.04	41-45 -25-40	3.28	0.00	0.28
	25-40	175	3.39	1.09				
	41-45	87	2.92	1.04	41-45 – 18-24	6.33	0.00	1.39
	18-24	45	4.17	0.75				
	25-40	175	3.39	1.09	25-40 -18-24	4.38	0.00	9.75
	18-24	45	4.17	.75				
Overall AMQ	46 and older	103	36.48	16.72	46 and older – 25-40	3.29	0.00	0.49
	25-40	175	43.41	11.71				
	41-45	87	39.30	13.99	41-45 -25-40	2.08	0.04	0.32
	25-40	175	43.41	11.71				

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
Overall UWES	46 and older	103	4.24	1.75	46 and older – 25-40	4.81	0.00	0.65
	25-40	175	5.30	1.49				
	46 and older	103	4.24	1.75	46 and older – 18-24	6.17	0.00	1.31
	18-24	45	6.06	1.03				
	41-45	87	4.66	1.71	41-45 -25-40	2.86	0.00	0.40
	25-40	175	5.30	1.49				
	41-45	87	4.66	1.71	41-45 – 18-24	4.80	0.00	1.02
	18-24	45	6.06	1.03				
	25-40	175	5.30	1.49	25-40 -18-24	3.03	0.00	0.60
	18-24	45	6.06	1.03				

Note: $p < 0.05$

a) Job content plateau

According to Table 6.26, significant mean differences were observed between:

- 18-24 and 25-40 age group (t = -4.20; $p \leq 0.00$; d = 1.05; large practical effect),
- 18-24 and 41-45 age group (t = -5.63; $p \leq 0.00$; d = 1.53; large practical effect),
- 18-24 and 46 and older age group (t = -7.31; $p \leq 0.00$; d = 1.97; large practical effect),
- 25-40 and 41-45 age group (t = -2.52; $p \leq 0.01$; d = 0.39; small practical effect) and
- 25-40 and 46 and older age group (t = -4.85; $p \leq 0.00$; d = 0.65; medium practical effect).

Overall, the 46 and older age group (Mean = 4.18), 41-45 age group (Mean = 3.65) and 25-40 age group (Mean = 2.78) scored significantly higher than the 18-24 age group (Mean = 1.34) on job content plateau.

The 46 and older age group (Mean = 4.18) scored significantly higher than the 25-40 age group (Mean = 2.78) whilst the 41-45 age group (Mean = 3.65) scored significantly higher than the 25-40 age group (Mean = 2.78) on job content plateau.

b) Hierarchical/structural plateau

According to Table 6.26, significant mean differences were observed between:

- 18-24 and 25-40 age group (t = -5.21; $p \leq 0.00$; d = 1.20; large practical effect),
- 18-24 and 41-45 age group (t = -7.87; $p \leq 0.00$; d = 1.99; large practical effect),
- 18-24 and 46 and older age group (t = 10.29; $p \leq 0.00$; d = 3.25; large practical effect),
- 25-40 and 41-45 age group (t = -4.39; $p \leq 0.00$; d = 0.58; medium practical effect),
- 25-40 and 46 and older age group (t = -7.80; $p \leq 0.00$; d = 1.23; large practical effect) and

- 41-45 and 46 and older age group (t = 2.71; $p \leq 0.01$; d = 0.56; medium practical effect)

Overall, the 46 and older age group (Mean = 6.21), 41-45 age group (Mean = 5.21) and 25-40 age group (Mean = 3.88) scored significantly higher than the 18-24 age group (Mean = 1.62) on hierarchical/structural plateau.

The 46 and older age group scored significantly higher than the 25-40 age group (Mean = 3.88) and the 41-45 age group (Mean = 5.21) whilst the 41-45 age group (Mean = 5.21) scored significantly higher than the 25-40 age group (Mean = 3.88) on hierarchical/structural plateau.

c) Maintenance plateau

According to Table 6.26, significant mean differences were observed between:

- 46 and older and 41-45 age group (t = 2.28; $p \leq 0.02$; d = 0.42; small practical effect),
- 46 and older and 25-40 age group (t = 6.52; $p \leq 0.00$; d = 0.87; large practical effect),
- 46 and older and 18-24 age group (t = 9.10; $p \leq 0.00$; d = 2.18; large practical effect),
- 41-45 and 25-40 age group (t = 3.64; $p \leq 0.00$; d = 0.53; moderate practical effect),
- 41-45 and 18-24 age group (t = 7.05; $p \leq 0.00$; d = 1.89; large practical effect), and
- 25-40 and 18-24 age group (t = 4.88; $p \leq 0.00$; d = 1.04; large practical effect).

Overall, the 18-24 age group (Mean = 6.14) scored significantly higher than the 46 and older age group (Mean = 3.18), 41-45 age group (Mean = 3.82) and 25-40 age group (Mean = 4.66) on maintenance plateau.

The 25-40 age group (Mean = 4.66) scored significantly higher than the 46 and older age group (Mean = 3.18) and the 41-45 age group (Mean = 3.82) on maintenance plateau. The 41-45 age group (Mean = 3.82) scored significantly higher than the 46 and older age group (Mean = 3.18) on maintenance plateau.

d) Psychological plateau

According to Table 6.26, significant mean differences were observed between:

- 18-24 and 25-40 age group (t = -2.65; $p \leq 0.01$; d = 0.66; moderate practical effect),
- 18-24 and 41-45 age group (t = -5.01; $p \leq 0.00$; d = 1.23; large practical effect),
- 18-24 and 46 and older age group (t = -6.47; $p \leq 0.00$; d = 1.48; large practical effect),
- 25-40 and 41-45 age group (t = -3.64; $p \leq 0.00$; d = 0.48; small practical effect), and

- 25-40 and 46 and older age group (t = -5.75; $p \leq 0.00$; d = 0.66; moderate practical effect).

Overall, the 46 and older age group (Mean = 2.87), 41-45 age group (Mean = 2.60) and 25-40 age group (Mean = 1.84) scored significantly higher than the 18-24 age group (Mean = 1.21) on psychological plateau.

The 46 and older age group (Mean = 2.87) and the 41-45 age group (Mean = 2.60) scored significantly higher than the 25-40 age group (Mean = 1.84) on psychological plateau.

e) Overall career plateau

According to Table 6.26, significant mean differences were observed between:

- 18-24 and 25-40 age group (t = -4.97; $p \leq 0.00$; d = 1.14; large practical effect),
- 18-24 and 41-45 age group (t = -7.23; $p \leq 0.00$; d = 1.77; large practical effect),
- 18-24 and 46 and older age group (t = -9.29; $p \leq 0.00$; d = 2.53; large practical effect),
- 25-40 and 41-45 age group (t = -3.78; $p \leq 0.00$; d = 0.54; moderate practical effect), and
- 25-40 and 46 and older age group (t = -6.67; $p \leq 0.00$; d = 0.94; large practical effect).

The 46 and older age group (Mean = 4.16), 41-45 age group (Mean = 3.82) and 25-40 age group (Mean = 3.22) scored significantly higher than the 18-24 age group (Mean = 2.39) on overall career plateau.

The 46 and older age group (Mean = 4.16) scored significantly higher than the 25-40 age group (Mean = 3.22) and the 41-45 age group (Mean = 3.82) on overall career plateau. The 41-45 age group (Mean = 3.82) scored significantly higher than the 25-40 age group (Mean = 3.22) on overall career plateau.

f) Overall job satisfaction

According to Table 6.26, significant mean differences were observed between:

- 46 and older and 41-45 age group (t = 2.05; $p \leq 0.04$; d = 0.34; small practical effect),
- 46 and older and 25-40 age group (t = 5.87; $p \leq 0.00$; d = 0.81; large practical effect),
- 46 and older and 18-24 age group (t = 8.18; $p \leq 0.00$; d = 1.93; large practical effect),
- 41-45 and 25-40 age group (t = 3.28; $p \leq 0.00$; d = 0.28; small practical effect),
- 41-45 and 18-24 age group (t = 6.33; $p \leq 0.00$; d = 1.39; large practical effect), and

- 25-40 and 18-24 age group (t = 4.38; $p \leq 0.00$; d = 9.75; large practical effect) for overall MSQ.

The 41-45 age group (Mean = 2.92), 25-40 age group (Mean = 3.39) and 18-24 age group (Mean = 4.17) scored significantly higher than the 46 and older age group (Mean = 2.59) on overall job satisfaction.

The 18-24 age group (Mean = 4.17) scored significantly higher than the 41-45 age group (Mean = 2.92) and the 25-40 age group (Mean = 3.39) on overall job satisfaction. The 25-40 age group (Mean = 3.39) scored significantly higher than the 41-45 age group (Mean = 2.92) on overall job satisfaction.

g) Overall motivation

According to Table 6.26, significant mean differences were observed between:

- 46 and older and 25-40 age group (t = 3.29; $p \leq 0.00$; d = 0.49; small practical effect), and
- 41-45 and 25-40 age group (t = 2.08; $p \leq 0.04$; d = 0.32; small practical effect).

The 25-40 age group (Mean = 43.41) scored significantly higher than the 46 and older age group (Mean = 36.48) and the 41-45 age group (Mean = 39.30) on overall motivation.

h) Overall work engagement

According to Table 6.26, significant mean differences were observed between:

- 46 and older and 25-40 age group (t = 4.81; $p \leq 0.00$; d = 0.65; moderate practical effect),
- 46 and older and 18-24 age group (t = 6.17; $p \leq 0.00$; d = 1.31; large practical effect),
- 41-45 and 25-40 age group (t = 2.86; $p \leq 0.00$; d = 0.40; small practical effect),
- 41-45 and 18-24 age group (t = 4.80; $p \leq 0.00$; d = 1.02; large practical effect), and
- 25-40 and 18-24 age group (t = 3.03; $p \leq 0.00$; d = 0.60; moderate practical effect).

The 18-24 age group (Mean = 6.06) scored significantly higher than the 46 and older age group (Mean = 4.24), 41-45 age group (Mean = 4.66) and 25-40 age group (Mean = 5.30) on overall work engagement.

The 25-40 age group (Mean = 5.30) scored significantly higher than the 46 and older age group (Mean = 4.24) and the 41-45 age group (Mean = 4.66) on overall work engagement.

Thus, the source of differences for age was attributed to job content plateau, hierarchical/structural plateau, maintenance plateau, psychological plateau, overall career plateau, overall job satisfaction, overall motivation, and overall work engagement.

6.8.3 Race

6.8.3.1 Kruskal-Wallis test for significant mean differences: Race

Table 6.27 shows the significant mean differences for race.

Table 6.27 *Tests for Significant Mean Differences: Race*

Variables	Socio-biographical subgroup	n	Kruskal-Wallis Test Statistic	Degree of freedom	Asymp.Sig. (2-sided)
Hierarchical/ structural plateau	Race: African-White/Caucasian; African-Indian; Coloured-Indian	409	13.20	3	0.00
Overall CPES	Race: African-Indian; African-White/Caucasian; Coloured-White/Caucasian	409	10.79	3	0.01

Note: $p < 0.05$

Table 6.27 indicates that significant mean differences were observed for race in terms of hierarchical/structural plateau and overall career plateau.

6.8.3.2 Source of significant mean differences: Race

Table 6.28 depicts the source for significant mean differences for race.

Table 6.28 *Source of Significant Mean Differences: Race*

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
Hierarchical/ structural plateau	African	143	3.97	2.40	African-White/Caucasian	-2.58	0.01	0.20
	White/Caucasian	93	4.91	2.38				
	African	143	3.97	2.40	African-Indian	-3.28	0.00	0.46
	Indian	95	5.06	2.35				
	Coloured	78	4.31	2.57	Coloured-Indian	-1.97	0.05	0.30
	Indian	95	5.06	2.35				

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
Overall CPES	African	143	3.26	1.03	African-Indian	-2.58	0.01	0.39
	Indian	95	3.69	1.18				
	African	143	3.26	1.03	African-White/Caucasian	-2.78	0.01	0.40
	White/Caucasian	93	3.71	1.20				

Note: $p < 0.05$

a) Hierarchical/structural plateau

According to Table 6.28, significant mean differences were observed between:

- African and White/Caucasian race groups (t = -2.58; $p \leq 0.01$; d = 0.20; small practical effect),
- African and Indian race groups (t = -3.28; $p \leq 0.00$; d = 0.46; small practical effect), and
- Coloured and Indian race groups (t = -1.97; $p \leq 0.05$; d = 0.30; small practical effect).

Overall, the Indian race group (Mean = 5.06) scored significantly higher than the African race group (Mean = 3.97) and the Coloured race group (Mean = 4.31) on hierarchical/structural plateau.

The White/Caucasian race group (Mean = 4.91) scored significantly higher than the African race group (Mean = 3.97) on hierarchical/structural plateau.

b) Overall career plateau

According to Table 6.28, significant mean differences were observed between:

- African and Indian race groups (t = -2.58; $p \leq 0.01$; d = 0.39; small practical effect) and
- African and White/Caucasian race groups (t = -2.78; $p \leq 0.01$; d = 0.40; small practical effect)

The White/Caucasian race group (Mean = 3.71) and the Indian race group (Mean = 3.69) scored significantly higher than the African race group (Mean = 3.26) on overall career plateau.

6.8.4 Rank

6.8.4.1 Kruskal-Wallis test for significant mean differences: Rank

Table 6.29 displays the significant mean differences for rank.

Table 6.29 *Tests for Significant Mean Differences: Rank*

Variables	Socio-biographical subgroup	n	Kruskal-Wallis Test Statistic	Degree of freedom	Asymp.Sig. (2-sided)
Hierarchical/ structural plateau	Rank: Constable-Warrant Officer; Constable-Lieutenant Colonel; Constable-Captain; Sergeant-Warrant Officer; Sergeant-Lieutenant Colonel; Sergeant-Captain; Sergeant-Colonel; Warrant Officer-Colonel	410	77.26	3	0.00
Maintenance plateau	Rank: Colonel- Sergeant; Colonel-Constable; Captain-Constable; Lieutenant Colonel-Constable; Warrant Officer-Constable	410	19.86	5	0.00
Overall CPES	Rank: Constable-Colonel; Constable-Lieutenant Colonel; Constable-Warrant Officer; Constable-Captain; Sergeant-Colonel; Sergeant-Lieutenant Colonel; Sergeant-Warrant Officer; Sergeant-Captain	410	32.39	5	0.00

Note: $p < 0.05$

Table 6.29 shows that significant mean differences existed for rank in terms of hierarchical/structural plateau, maintenance, and overall career plateau.

6.8.4.2 Source of significant mean differences: Rank

Table 6.30 shows the source for significant mean differences for rank.

Table 6.30 *Source of Significant Mean Differences: Rank*

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
Hierarchical/ structural plateau	Constable	103	2.97	2.30	Constable-Warrant Officer	-4.66	0.00	0.80
	Warrant Officer	66	4.87	2.43				
	Constable	103	2.97	2.30	Constable-Lieutenant Colonel	-5.27	0.00	1.13
	Lieutenant Colonel	53	5.37	1.94				
	Constable	103	2.97	2.30	Constable-Captain	-6.80	0.00	1.17
	Captain	77	5.56	2.11				
	Constable	103	2.97	2.30	Constable-Colonel	-6.41	0.00	1.56
	Colonel	41	5.96	1.54				
	Sergeant	70	3.73	2.41	Sergeant-Warrant Officer	-2.60	0.01	0.47
	Warrant Officer	66	4.87	2.43				
	Sergeant	70	3.73	2.41	Sergeant-Lieutenant Colonel	-3.31	0.00	0.75
	Lieutenant Colonel	53	5.37	1.94				
	Sergeant	70	3.73	2.41	Sergeant-Captain	-4.45	0.00	0.81
	Captain	77	5.56	2.11				
	Sergeant	70	3.73	2.41	Sergeant-Colonel	-4.54	0.00	1.13
	Colonel	41	5.96	1.54				
	Warrant Officer	66	4.87	2.43	Warrant Officer-Colonel	-2.26	0.02	0.55
	Colonel	41	5.96	1.54				
Maintenance plateau	Colonel	41	3.67	1.44	Colonel-Sergeant	2.24	0.03	0.46
	Sergeant	70	4.43	1.84				
	Colonel	41	3.67	1.44	Colonel-Constable	3.65	0.00	0.73
	Constable	103	4.86	1.84				
	Captain	77	3.92	1.89	Captain-Constable	3.33	0.00	0.50
	Constable	103	4.86	1.84				
	Lieutenant Colonel	53	4.08	1.60	Lieutenant Colonel-Constable	2.60	0.01	0.45
	Constable	103	4.86	1.84				
	Warrant Officer	66	4.15	1.90	Warrant Officer-Constable	2.49	0.01	0.38
	Constable	103	4.86	1.84				
Overall CPES	Constable	103	3.09	1.09	Constable-Colonel	-3.12	0.00	0.54
	Colonel	41	3.65	.96				
	Constable	103	3.09	1.09	Constable-Lieutenant Colonel	-3.45	0.00	0.56
	Lieutenant Colonel	53	3.67	0.97				
	Constable	103	3.09	1.09	Constable-Warrant Officer	-3.87	0.00	0.61
	Warrant Officer	66	3.81	1.27				
	Constable	103	3.09	1.09	Constable-Captain	-4.37	0.00	0.66
	Captain	77	3.81	1.09				
	Sergeant	70	3.22	1.15	Sergeant-Colonel	-2.26	0.02	0.53
	Colonel	41	3.65	0.96				
	Sergeant	70	3.22	1.15	Sergeant-Lieutenant Colonel	-2.49	0.01	0.42
	Lieutenant Colonel	53	3.67	0.97				
	Sergeant	70	3.22	1.15	Sergeant-Warrant Officer	-2.79	0.01	0.49
	Warrant Officer	66	3.81	1.27				
	Sergeant	70	3.22	1.15	Sergeant-Captain	-3.19	0.00	0.53
	Captain	77	3.81	1.09				

Note: $p < 0.05$

a) Hierarchical/structural plateau

According to Table 6.30, significant mean differences were observed between:

- Constable and Lieutenant Colonel rank groups (t = -5.27; $p \leq 0.00$; d = 0.80; large practical effect),
- Constable and Captain rank groups (t = -6.80; $p \leq 0.00$; d = 1.13; large practical effect),
- Constable and Colonel rank groups (t = -6.41; $p \leq 0.00$; d = 1.56; large practical effect),
- Sergeant and Warrant Officer rank groups (t = -2.60; $p \leq 0.01$; d = 0.47; small practical effect),
- Sergeant and Lieutenant Colonel (t = -3.31; $p \leq 0.00$; d = 0.75; moderate practical effect),
- Sergeant and Captain rank groups (t = -4.45; $p \leq 0.00$; d = 0.81; large practical effect),
- Sergeant and Colonel rank groups (t = -4.54; $p \leq 0.00$; d = 1.13; large practical effect), and
- Warrant Officer and Colonel rank groups (t = -2.26; $p \leq 0.02$; d = 0.55; moderate practical effect).

Overall, the Colonel rank group (Mean = 5.96), Captain rank group (Mean = 5.56), Lieutenant Colonel rank group (Mean = 5.37), and Warrant Officer rank group (Mean = 4.87) scored significantly higher than the Constable rank group (Mean = 2.97) on hierarchical/structural plateau.

The Colonel rank group (Mean = 5.96), Captain rank group (Mean = 5.56), Lieutenant Colonel rank group (Mean = 5.37) and Warrant Officer rank group (Mean = 4.87) scored significantly higher than the Sergeant rank group (Mean = 3.73) on hierarchical/structural plateau. The Colonel rank group (Mean = 5.96) scored significantly higher than the Warrant Officer rank group (Mean = 4.87) on hierarchical/structural plateau.

b) Maintenance plateau

According to Table 6.30, significant mean differences were observed between:

- Colonel and Sergeant rank groups (t = 2.24; $p \leq 0.03$; d = 0.46; small practical effect),
- Colonel and Constable rank groups (t = 3.65; $p \leq 0.00$; d = 0.73; moderate practical effect),
- Captain and Constable rank groups (t = 3.33; $p \leq 0.00$; d = 0.50; moderate practical effect),
- Lieutenant Colonel and Constable rank groups (t = 2.60; $p \leq 0.01$; d = 0.45; small practical effect), and
- Warrant Officer and Constable rank groups (t = 2.49; $p \leq 0.01$; d = 0.38; small practical effect).

Overall, the Constable rank group (Mean = 4.86) scored significantly higher than the Colonel rank group (Mean = 3.67), Captain rank group (Mean = 3.92), Lieutenant Colonel rank group (Mean = 4.08), and Warrant Officer rank group (Mean = 4.15) on maintenance plateau.

The Sergeant rank group (Mean = 4.43) scored significantly higher than the Colonel rank group (Mean = 3.67) on maintenance plateau.

c) Overall career plateau

According to Table 6.30, significant mean differences were observed between:

- Constable and Colonel rank groups (t = -3.12; $p \leq 0.00$; d = 0.54; moderate practical effect),
- Constable and Lieutenant Colonel rank groups (t = -3.45; $p \leq 0.00$; d = 0.56; moderate practical effect),
- Constable and Warrant Officer rank groups (t = -3.87; $p \leq 0.00$; d = 0.61; moderate practical effect),
- Constable and Captain rank groups (t = -4.37; $p \leq 0.00$; d = 0.66; moderate practical effect),
- Sergeant and Colonel (t = -2.26; $p \leq 0.02$; d = 0.53; moderate practical effect),
- Sergeant and Lieutenant Colonel rank groups (t = -2.49; $p \leq 0.00$; d = 0.42; small practical effect),
- Sergeant and Warrant Officer rank groups (t = -2.79; $p \leq 0.01$; d = 0.49; small practical effect), and
- Sergeant and Captain rank groups (t = -3.19; $p \leq 0.00$; d = 0.53; moderate practical effect).

The Captain rank group (Mean = 3.81), Warrant Officer rank group (Mean = 3.81), Lieutenant Colonel rank group (Mean = 3.67), and Colonel rank group (Mean = 3.65) scored significantly higher than the Constable rank group (Mean = 3.09) as well as the Sergeant rank group (Mean = 3.22) on overall career plateau.

Thus, the source of differences for rank were attributed to hierarchical/structural plateau, maintenance plateau, and overall career plateau.

6.8.5 Tenure

6.8.5.1 Kruskal-Wallis test for significant mean differences: Tenure

Table 6.31 indicates the significant mean differences for tenure.

Table 6.31 *Tests for Significant Mean Differences: Tenure*

Variables	Socio-biographical subgroup	n	Kruskal-Wallis Test Statistic	Degree of freedom	Asymp.Sig. (2-sided)
Job content plateau	Tenure: 1-5 years – 11-15 years; 1-5 years – 6-10 years; 1-5 years – 16-20 years; 1-5 years – 20 + years; 11-15 years – 16-20 years; 11-15 years – 20 + years; 6-10 years – 16-20 years; 6-10 years – 20 + years	410	83.60	4	0.00
Hierarchical/ structural plateau	Tenure: 1-5 years – 6-10 years;1-5 years – 11-15 years; 1-5 years – 20 + years; 1-5 years – 16-20 years; 6-10 years – 11-15 years; 6-10 years – 20 + years; 6-10 years – 16-20 years; 11-15 years – 20 + years; 11-15 years – 16-20 years	410	181.10	4	0.00
Maintenance plateau	Tenure: 16-20 years – 11-15 years; 16-20 years – 6-10 years; 16-20 years – 1-5 years; 20 + years – 11-15 years; 20 + years – 6-10 years; 20 + years – 1-5 years; 11-15 years – 6-10 years; 11-15 years – 1-5 years; 6-10 years – 1-5 years	410	138.80	4	0.00
Psychological plateau	Tenure: 1-5 years – 6-10 years;1-5 years – 11-15 years; 1-5 years – 16-20 years; 1-5 years – 20 + years; 6-10 years – 16-20 years; 6-10 years – 20 + years; 11-15 years – 16-20 years; 11-15 years – 20 + years	410	95.70	4	0.00
Overall CPES	Tenure: 1-5 years – 6-10 years;1-5 years – 11-15 years; 1-5 years – 16-20 years; 1-5 years – 20 + years; 6-10 years – 16-20 years; 6-10 years – 20 + years; 11-15 years – 16-20 years; 11-15 years – 20 + years	410	141. 83	4	0.00
Overall MSQ	Tenure: 16-20 years – 11-15 years; 16-20 years – 6-10 years; 16-20 years – 1-5 years; 20 + years – 11-15 years; 20 + years – 6-10 years; 20 + years – 1-5 years; 11-15 years – 1-5 years; 6-10 years – 1-5 years	410	118.81	4	0.00
Overall AMQ	Tenure: 16-20 years – 1-5 years; 16-20 years – 11-15 years; 16-20 years – 6-10 years; 20 + years – 1-5 years; 20 + years – 11-15 years; 20 + years – 6-10 years	410	20.11	4	0.00
Overall UWES	Tenure: 16-20 years – 11-15 years; 16-20 years – 6-10 years; 16-20 years – 1-5 years; 20 + years – 11-15 years; 20 + years – 6-10 years; 20 + years – 1-5 years; 11-15 years – 1-5 years; 6-10 years – 1-5 years	410	75.48	4	0.00

Note: $p < 0.05$

Table 6.31 reveals that significant mean differences exist for tenure in relation to job content plateau, hierarchical/structural plateau, maintenance plateau, psychological plateau, overall career plateau, overall job satisfaction, overall motivation, and overall work engagement.

6.8.5.2 Source of significant mean differences: Tenure

Table 6.32 depicts the source of significant mean differences for tenure.

Table 6.32

Source of Significant Mean Differences: Tenure

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
Job content plateau	1-5 years	77	1.62	1.13	1-5 years – 11-15 years	-3.41	0.00	0.76
	11-15 years	100	2.86	2.15				
	1-5 years	77	1.62	1.13	1-5 years – 6-10 years	-3.42	0.00	0.74
	6-10 years	84	2.80	2.15				
	1-5 years	77	1.62	1.13	1-5 years – 16-20 years	-6.36	0.00	1.45
	16-20 years	62	4.02	2.17				
	1-5 years	77	1.62	1.13	1-5 years – 20 + years	-8.31	0.00	1.82
	20 + years	87	4.60	2.14				
	11-15 years	100	2.86	2.15	11-15 years – 16-20 years	-3.51	0.00	0.54
	16-20 years	62	4.02	2.17				
	11-15 years	100	2.86	2.15	11-15 years – 20 + years	-5.35	0.00	0.81
	20 + years	87	4.60	2.14				
	6-10 years	84	2.80	2.15	6-10 years – 16-20 years	-3.26	0.00	0.56
	16-20 years	62	4.02	2.17				
	6-10 years	84	2.80	2.15	6-10 years – 20 + years	-4.98	0.00	0.84
	20 + years	87	4.60	2.14				
Hierarchical/ structural plateau	1-5 years	77	1.69	1.26	1-5 years – 6-10 years	-5.05	0.00	1.13
	6-10 years	84	3.73	2.35				
	1-5 years	77	1.69	1.26	1-5 years – 11-15 years	-7.98	0.00	1.78
	11-15 years	100	4.79	2.21				
	1-5 years	77	1.69	1.26	1-5 years – 20 + years	-11.66	0.00	3.25
	20 + years	87	6.17	1.49				
	1-5 years	77	1.69	1.26	1-5 years – 16-20 years	-10.77	0.00	3.43
	16-20 years	62	6.22	1.38				
	6-10 years	84	3.73	2.35	6-10 years – 11-15 years	-2.78	0.01	0.46
	11-15 years	100	4.79	2.21				
	6-10 years	84	3.73	2.35	6-10 years – 20 + years	-6.71	0.00	1.27
	20 + years	87	6.17	1.49				
	6-10 years	84	3.73	2.35	6-10 years – 16-20 years	-6.21	0.00	1.33
	16-20 years	62	6.22	1.38				
	11-15 years	100	4.79	2.21	11-15 years – 20 + years	-4.19	0.00	0.75
	20 + years	87	6.17	1.49				
	11-15 years	100	4.79	2.21	11-15 years – 16-20 years	-3.89	0.00	0.79
	16-20 years	62	6.22	1.38				
Maintenance plateau	16-20 years	62	3.17	1.17	16-20 years – 11-15 years	3.62	0.00	0.73
	11-15 years	100	4.14	1.49				
	16-20 years	62	3.17	1.17	16-20 years – 6-10 years	5.59	0.00	1.10
	6-10 years	84	4.78	1.76				
	16-20 years	62	3.17	1.17		9.55	0.00	2.41

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
	1-5 years	77	6.06	1.23	16-20 years – 1-5 years			
	20 + years	87	3.16	1.64	20 + years – 11-15 years	3.66	0.00	0.62
	11-15 years	100	4.14	1.49				
	20 + years	87	3.16	1.64	20 + years – 6-10 years	5.80	0.00	0.95
	6-10 years	84	4.78	1.76				
	20 + years	87	3.16	1.64	20 + years – 1-5 years	10.11	0.00	2.01
	1-5 years	77	6.06	1.23				
	11-15 years	100	4.14	1.49	11-15 years – 6-10 years	2.37	0.02	0.39
	6-10 years	84	4.78	1.76				
	11-15 years	100	4.14	1.49	11-15 years – 1-5 years	6.89	0.00	1.41
	1-5 years	77	6.06	1.23				
	6-10 years	84	4.78	1.76	6-10 years – 1-5 years	4.40	0.00	0.85
	1-5 years	77	6.06	1.23				
Psychological plateau	1-5 years	77	1.23	0.55	1-5 years – 6-10 years	-2.35	0.02	0.58
	6-10 years	84	1.79	1.36				
	1-5 years	77	1.23	0.55	1-5 years – 11-15 years	-3.58	0.00	0.75
	11-15 years	100	2.02	1.54				
	1-5 years	77	1.23	0.55	1-5 years – 16-20 years	-6.44	0.00	1.43
	16-20 years	62	2.80	1.64				
	1-5 years	77	1.23	0.55	1-5 years – 20 + years	-8.65	0.00	1.74
	20 + years	87	3.21	1.73				
	6-10 years	84	1.79	1.36	6-10 years – 16-20 years	-4.35	0.00	0.67
	16-20 years	62	2.80	1.64				
	6-10 years	84	1.79	1.36	6-10 years – 20 + years	-6.42	0.00	0.92
	20 + years	87	3.21	1.73				
	11-15 years	100	2.02	1.54	11-15 years – 16-20 years	-3.45	0.00	0.49
	16-20 years	62	2.80	1.64				
	11-15 years	100	2.02	1.54	11-15 years – 20 + years	-5.53	0.00	0.73
	20 + years	87	3.21	1.73				
Overall CPES	1-5 years	77	2.47	.50	1-5 years – 6-10 years	-4.54	0.00	0.96
	6-10 years	84	3.20	1.01				
	1-5 years	77	2.47	.50	1-5 years – 11-15 years	-6.03	0.00	1.23
	11-15 years	100	3.42	1.04				
	1-5 years	77	2.47	.50	1-5 years – 16-20 years	-8.77	0.00	2.12
	16-20 years	62	4.10	1.03				
	1-5 years	77	2.47	.50	1-5 years – 20 + years	-10.87	0.00	2.56
	20 + years	87	4.34	.96				
	6-10 years	84	3.20	1.01	6-10 years – 16-20 years	-4.67	0.00	0.88
	16-20 years	62	4.10	1.03				
	6-10 years	84	3.20	1.01	6-10 years – 20 + years	-6.44	0.00	1.15
	20 + years	87	4.34	.96				
	11-15 years	100	3.42	1.04	11-15 years – 16-20 years	-3.61	0.00	0.65
	16-20 years	62	4.10	1.03				
	11-15 years	100	3.42	1.04	11-15 years – 20 + years	-5.37	0.00	0.92
	20 + years	87	4.34	0.96				
Overall MSQ	16-20 years	62	2.48	0.77	16-20 years – 11-15 years	4.14	0.00	0.83
	11-15 years	100	3.22	1.01				
	16-20 years	62	2.48	0.77		5.48	0.00	1.10

Variables	Socio-biographical subgroup	N	Mean	SD	Source of significant difference between means	Test Statistic	*p*	Cohen's *d*
	6-10 years	84	3.48	1.05	16-20 years – 6-10 years			
	16-20 years	62	2.48	0.77	16-20 years – 1-5 years	8.73	0.00	2.04
	1-5 years	77	4.09	0.80				
	20 + years	87	2.51	0.95	20 + years – 11-15 years	4.30	0.00	0.72
	11-15 years	100	3.22	1.01				
	20 + years	87	2.51	0.95	20 + years – 6-10 years	5.74	0.00	0.97
	6-10 years	84	3.48	1.05				
	20 + years	87	2.51	0.95	20 + years – 1-5 years	9.27	0.00	1.80
	1-5 years	77	4.09	0.80				
	11-15 years	100	3.22	1.01	11-15 years – 1-5 years	5.41	0.00	0.96
	1-5 years	77	4.09	0.80				
	6-10 years	84	3.48	1.05	6-10 years – 1-5 years	3.63	0.00	0.66
	1-5 years	77	4.09	0.80				
Overall AMQ	16-20 years	62	36.27	15.20	16-20 years – 1-5 years	2.41	0.02	0.52
	1-5 years	77	42.97	10.36				
	16-20 years	62	36.27	15.20	16-20 years – 11-15 years	2.89	0.00	0.53
	11-15 years	100	43.31	11.31				
	16-20 years	62	36.27	15.20	16-20 years – 6-10 years	3.26	0.00	6.49
	6-10 years	84	43.99	12.24				
	20 + years	87	35.66	17.06	20 + years – 1-5 years	2.36	0.02	0.53
	1-5 years	77	42.97	10.36				
	20 + years	87	35.66	17.06	20 + years – 11-15 years	2.90	0.00	0.54
	11-15 years	100	43.31	11.31				
	20 + years	87	35.66	17.06	20 + years – 6-10 years	3.29	0.00	0.57
	6-10 years	84	43.99	12.24				
Overall UWES	16-20 years	62	4.11	1.64	16-20 years – 11-15 years	3.73	0.00	0.65
	11-15 years	100	5.14	1.54				
	16-20 years	62	4.11	1.64	16-20 years – 6-10 years	4.54	0.00	0.83
	6-10 years	84	5.39	1.45				
	16-20 years	62	4.11	1.64	16-20 years – 1-5 years	6.86	0.00	1.41
	1-5 years	77	6.01	1.06				
	20 + years	87	4.11	1.75	20 + years – 11-15 years	3.88	0.00	0.62
	11-15 years	100	5.14	1.54				
	20 + years	87	4.11	1.75	20 + years – 6-10 years	4.75	0.00	0.62
	6-10 years	84	5.39	1.45				
	20 + years	87	4.11	1.75	20 + years – 1-5 years	7.27	0.00	1.35
	1-5 years	77	6.01	1.06				
	11-15 years	100	5.14	1.54	11-15 years – 1-5 years	3.75	0.00	0.67
	1-5 years	77	6.01	1.06				
	6-10 years	84	5.39	1.45	6-10 years – 1-5 years	2.61	0.01	0.49
	1-5 years	77	6.01	1.06				

Note: $p < 0.05$

a) Job content plateau

According to Table 6.32, significant mean differences were observed between:

- 1-5 and 11-15 year tenure groups (t = -3.41; $p \leq 0.00$; d = 0.76; moderate practical effect),
- 1-5 and 6-10 year tenure groups (t = -3.42; $p \leq 0.00$; d = 0.74; moderate practical effect),
- 1-5 and 16-20 year tenure groups (t = -6.36; $p \leq 0.00$; d = 1.45; large practical effect),
- 1-5 and 20 + year tenure groups (t = -8.31; $p \leq 0.00$; d = 1.82; large practical effect),
- 11-15 and 16-20 year tenure groups (t = -3.51; $p \leq 0.00$; d = 0.54; moderate practical effect),
- 11-15 and 20 + year tenure groups (t = -5.35; $p \leq 0.00$; d = 0.81; large practical effect),
- 6-10 and 16-20 year tenure groups (t = -3.26; $p \leq 0.00$; d = 0.56; moderate practical effect), and
- 6-10 and 20 + year tenure groups (t = -4.98; $p \leq 0.00$; d = 0.84; large practical effect).

Overall, the 20 + year tenure group (Mean = 4.60), 16-20 year tenure group (Mean = 4.02), 11-15 year tenure group (Mean = 2.86) and 6-10 year tenure group (Mean = 2.80) scored significantly higher than the 1-5 year tenure group (Mean = 1.62) on job content plateau.

The 20 + year tenure group (Mean = 4.60) and the 16-20 year tenure group (Mean = 4.02) scored significantly higher than the 6-10 year tenure group (Mean = 2.80) as well as the 11-15 year tenure group (Mean = 2.86) on job content plateau.

b) Hierarchical/structural plateau

According to Table 6.32, significant mean differences were observed between:

- 1-5 and 6-10 year tenure groups (t = -5.05; $p \leq 0.00$; d = 1.78; large practical effect),
- 1-5 and 11-15 year tenure groups (t = -7.98; $p \leq 0.00$; d = 1.78; large practical effect),
- 1-5 and 20 + year tenure groups (t = -11.66; $p \leq 0.00$; d = 3.25; large practical effect),
- 1-5 and 16-20 year tenure groups (t = -10.77; $p \leq 0.00$; d = 3.43; large practical effect),
- 6-10 and 11-15 year tenure groups (t = -2.78; $p \leq 0.01$; d = 0.46; small practical effect),
- 6-10 and 20 + year tenure groups (t = -6.71; $p \leq 0.00$; d = 1.27; large practical effect),
- 6-10 and 16-20 year tenure groups (t = -6.21; $p \leq 0.00$; d = 1.33; large practical effect),
- 11-15 and 20 + year tenure groups (t = -4.19; $p \leq 0.00$; d = 0.75; moderate practical effect), and
- 11-15 and 16-20 year tenure groups (t = -3.89; $p \leq 0.00$; d = 0.79; moderate practical effect).

Overall, the 16-20 year tenure group (Mean = 6.22), 20 + year tenure group (Mean = 6.17), 11-15 year tenure group (Mean = 4.79) and the 6-10 year tenure group (3.73) scored

significantly higher than the 1-5 year tenure group (Mean = 1.69) on hierarchical/structural plateau.

The 16-20 year tenure group (Mean = 6.22), 20 + year tenure group (Mean = 6.17) and 11-15 year tenure group (Mean = 4.79) scored significantly higher than the 6-10 year tenure group (Mean = 3.73) on hierarchical/structural plateau.

The 16-20 year tenure group (Mean = 6.22) and the 20 + year tenure group (Mean = 6.17) scored significantly higher than the 11-15 year tenure group (Mean = 4.79) on hierarchical/structural plateau.

c) Maintenance plateau

According to Table 6.32, significant mean differences were observed between:

- 16-20 and 11-15 year tenure groups ($t = 3.62$; $p \leq 0.00$; $d = 0.73$; moderate practical effect),
- 16-20 and 6-10 year tenure groups ($t = 5.59$; $p \leq 0.00$; $d = 1.10$; large practical effect),
- 16-20 and 1-5 year tenure groups ($t = 9.55$; $p \leq 0.00$; $d = 2.41$; large practical effect),
- 20 + and 11-15 year tenure groups ($t = 3.66$; $p \leq 0.00$; $d = 0.62$; moderate practical effect),
- 20 + and 6-10 year tenure groups ($t = 5.80$; $p \leq 0.00$; $d = 0.95$; large practical effect),
- 20 + and 1-5 year tenure groups ($t = 10.11$; $p \leq 0.00$; $d = 2.01$; large practical effect),
- 11-15 and 6-10 year tenure groups ($t = 2.37$; $p \leq 0.02$; $d = 0.39$; small practical effect),
- 11-15 and 1-5 year tenure groups ($t = 6.89$; $p \leq 0.00$; $d = 1.41$; large practical effect), and
- 6-10 and 1-5 year tenure groups ($t = 4.40$; $p \leq 0.00$; $d = 0.85$; large practical effect).

Overall, the 1-5-year tenure group (Mean = 6.06), 6-10-year tenure group (Mean = 4.78) and 11-15 year tenure group (Mean = 4.14) scored significantly higher than the 16-20 year tenure group (Mean = 3.17) on maintenance plateau.

The 1-5 year tenure group (Mean = 6.06) and the 6-10 year tenure group (Mean = 4.78) scored significantly higher than the 20 + year tenure group (Mean = 3.16) as well as the 11-15 year tenure group (Mean = 4.14) on maintenance plateau. The 1-5 year tenure group (Mean = 6.06) scored significantly higher than the 6-10 year tenure group (Mean = 4.78) on maintenance plateau.

d) Psychological plateau

According to Table 6.32, significant mean differences were observed between:

- 1-5 and 6-10 year tenure groups (t = -2.35; $p \leq 0.02$; d = 0.58; moderate practical effect),
- 1-5 and 11-15 year tenure groups (t = -3.58; $p \leq 0.00$; d = 0.75; moderate practical effect),
- 1-5 and 20 + year tenure groups (t = -11.66; $p \leq 0.00$; d = 3.25; large practical effect),
- 1-5 and 16-20 year tenure groups (t = -6.44; $p \leq 0.00$; d = 1.43; large practical effect),
- 1-5 and 20 + year tenure groups (t = -2.78; $p \leq 0.01$; d = 0.46; small practical effect),
- 6-10 and 20 + year tenure groups (t = -8.65; $p \leq 0.00$; d = 1.74; large practical effect),
- 6-10 and 16-20 year tenure groups (t = -4.35; $p \leq 0.00$; d = 0.67; moderate practical effect),
- 6-10 and 20 + year tenure groups (t = -6.42; $p \leq 0.00$; d = 0.92; large practical effect),
- 11-15 and 16-20 year tenure groups (t = -3.45; $p \leq 0.00$; d = 0.49; small practical effect), and
- 11-15 and 20 + year tenure groups (t = -5.73; $p \leq 0.00$; d = 0.49; small practical effect).

Overall, the 20 + year tenure group (Mean = 3.21), 16-20 year tenure group (Mean = 2.80), 11-15 year tenure group (Mean = 2.02), and 6-10 year tenure group (Mean = 1.79) scored significantly higher than the1-5 year tenure group (Mean = 1.23) on psychological plateau.

The 20 + year tenure group (Mean = 3.21) and the 16-20 year tenure group (Mean = 2.80) scored significantly higher than the 6-10 year tenure group (Mean = 1.79) as well as the 11-15 year tenure group (Mean = 2.02) on psychological plateau.

e) Overall career plateau

According to Table 6.32, significant mean differences were observed between:

- 1-5 and 6-10 year tenure groups (t = -4.54; $p \leq 0.00$; d = 0.96; large practical effect),
- 1-5 and 11-15 year tenure groups (t = -6.03; $p \leq 0.00$; d = 1.23; large practical effect),
- 1-5 and 16-20 year tenure groups (t = -8.77; $p \leq 0.00$; d = 2.12; large practical effect),
- 1-5 and 20 + year tenure groups (t = -10.87; $p \leq 0.00$; d = 2.56; large practical effect),
- 6-10 and 16-20 year tenure groups (t = -4.67; $p \leq 0.00$; d = 0.88; large practical effect),
- 6-10 and 20 + year tenure groups (t = -6.44; $p \leq 0.00$; d = 1.15; large practical effect),
- 11-15 and 16-20 year tenure groups (t = -3.61; $p \leq 0.00$; d = 0.65; moderate practical effect), and
- 11-15 and 20 + year tenure groups (t = -5.37; $p \leq 0.00$; d = 0.92; large practical effect).

The 20 + year tenure group (Mean = 4.34), 16-20 year tenure group (Mean = 4.10), 11-15 year tenure group (Mean = 3.42), and 6-10 year tenure group (Mean = 3.20) scored significantly higher than the1-5 year tenure group (Mean = 2.47) on overall career plateau.

The 20 + year tenure group (Mean = 4.34) and the 16-20 year tenure group (Mean = 4.10) scored significantly higher than the 6-10 year tenure group (Mean = 3.20) as well as the 11-15 year tenure group (Mean = 3.42) on overall career plateau.

f) Overall job satisfaction

According to Table 6.32, significant mean differences were observed between:

- 16-20 and 11-15 year tenure groups ($t = 4.14$; $p \leq 0.00$; $d = 0.83$; large practical effect),
- 16-20 and 6-10 year tenure groups ($t = 5.48$; $p \leq 0.00$; $d = 1.10$; large practical effect),
- 16-20 and 1-5 year tenure groups ($t = 8.73$; $p \leq 0.00$; $d = 2.04$; large practical effect),
- 20 + and 11-15 year tenure groups ($t = 4.30$; $p \leq 0.00$; $d = 0.72$; moderate practical effect),
- 20 + and 6-10 year tenure groups ($t = 5.74$; $p \leq 0.00$; $d = 0.97$; large practical effect),
- 20 + and 1-5 year tenure groups ($t = 9.27$; $p \leq 0.00$; $d = 1.80$; large practical effect),
- 11-15 and 1-5 year tenure groups ($t = 5.41$; $p \leq 0.00$; $d = 0.96$; large practical effect), and
- 6-10 and 1-5 year tenure groups ($t = 3.63$; $p \leq 0.00$; $d = 0.66$; moderate practical effect).

The 1-5 year tenure group (Mean = 4.09), 6-10 year tenure group (Mean = 3.48), and 11-15 year tenure group (Mean = 3.22) scored significantly higher than the 16-20 year tenure group (Mean = 2.48) as well as the 20 + year tenure group (Mean = 2.51) on overall job satisfaction.

The 1-5 year tenure group (Mean = 4.09) scored significantly higher than the 11-15 year tenure group (Mean = 3.22) and the 6-10 year tenure group (Mean = 3.48) on overall job satisfaction.

g) Overall motivation

According to Table 6.32, significant mean differences were observed between:

- 16-20 and 1-5 year tenure groups ($t = 2.41$; $p \leq 0.02$; $d = 0.52$; moderate practical effect),
- 16-20 and 11-15 year tenure groups ($t = 2.89$; $p \leq 0.00$; $d = 0.53$; moderate practical effect),
- 16-20 and 6-10 year tenure groups ($t = 3.26$; $p \leq 0.00$; $d = 6.49$; large practical effect),
- 20 + and 1-5 year tenure groups ($t = 2.36$; $p \leq 0.02$; $d = 0.53$; moderate practical effect),

- 20 + and 11-15 year tenure groups (t = 2.90; $p \leq 0.00$; d = 0.54; moderate practical effect), and
- 20 + and 6-10 year tenure groups (t = 3.29; $p \leq 0.00$; d = 0.57; moderate practical effect).

The 6-10 year tenure group (Mean = 43.99), 11-15 year tenure group (Mean = 43.31), and 1-5 year tenure group (Mean = 42.97) scored significantly higher than the 20 + year tenure group (35.66) as well as the 16-20 year tenure group (Mean = 36.27) on the overall motivation.

h) Overall work engagement

According to Table 6.32, significant mean differences were observed between:

- 16-20 and 11-15 year tenure groups (t = 3.73; $p \leq 0.00$; d = 0.65; moderate practical effect),
- 16-20 and 6-10 year tenure groups (t = 4.54; $p \leq 0.00$; d = 0.83; large practical effect),
- 16-20 and 1-5 year tenure groups (t = 6.86; $p \leq 0.00$; d = 1.41; large practical effect),
- 20 + and 11-15 year tenure groups (t = 3.88; $p \leq 0.00$; d = 0.62; moderate practical effect),
- 20 + and 6-10 year tenure groups (t = 4.75; $p \leq 0.00$; d = 0.62; moderate practical effect),
- 20 + and 1-5 year tenure groups (t = 7.27; $p \leq 0.00$; d = 1.35; large practical effect),
- 11-15 and 6-10 year tenure groups (t = 2.37; $p \leq 0.02$; d = 0.39; small practical effect),
- 11-15 and 1-5 year tenure groups (t = 3.75; $p \leq 0.00$; d = 0.67; moderate practical effect), and
- 6-10 and 1-5 year tenure groups (t = 2.61; $p \leq 0.01$; d = 0.49; small practical effect).

The 1-5 year tenure group (Mean = 6.01), 6-10 year tenure group (Mean = 5.39), and 11-15 year tenure group (Mean = 5.14) scored significantly higher than the 16-20 year tenure group (Mean = 4.11) as well as the 20 + year tenure group (Mean = 4.11) on overall work engagement. The 1-5 year tenure group (Mean = 6.01) scored significantly higher than the 11-15 year tenure group (Mean = 5.14) and the 6-10 year tenure group (5.39) on overall work engagement.

Thus, the source of differences for tenure was attributed to job content plateau, hierarchical/structural plateau, maintenance plateau, psychological plateau, overall career plateau, overall job satisfaction, overall motivation, and overall work engagement.

6.8.6 Summary of significant mean differences

Table 6.33 summarises the overall significant mean differences for the biographical groups (gender, age, race, marital status, rank, and tenure) in relation to the research variables (job content plateau, hierarchical/structural plateau, maintenance, psychological plateau, overall career plateau, overall job satisfaction, overall motivation, and overall work engagement).

Table 6.33 *Summary of Significant Mean Differences*

Variable	Source of difference	Lowest mean ranking	Highest mean ranking
Job content plateau	Gender	Female	Male
Maintenance plateau	Gender	Male	Female
Psychological plateau	Gender	Female	Male
Overall CPES	Gender	Female	Male
Overall MSQ	Gender	Male	Female
Job content plateau	Age	18-24 years	46 years and older
Hierarchical/structural plateau	Age	18-24 years	46 years and older
Maintenance plateau	Age	46 years and older	18-24 years
Psychological plateau	Age	18-24 years	46 years and older
Overall CPES	Age	18-24 years	46 years and older
Overall MSQ	Age	41-45 years	18-24 years
Overall AMQ	Age	41-45 years	25-40 years
Overall UWES	Age	46 years and older	18-24 years
Hierarchical/structural plateau	Race	African	Indian
Overall CPES	Race	African	White/Caucasian
Job content plateau	Marital Status	Single	Married
Hierarchical/structural plateau	Marital Status	Single	Married
Maintenance plateau	Marital Status	Married	Single
Psychological plateau	Marital Status	Single	Married
Overall CPES	Marital Status	Single	Married
Overall MSQ	Marital Status	Married	Single
Overall UWES	Marital Status	Married	Single
Hierarchical/structural plateau	Rank	Constable	Colonel
Maintenance plateau	Rank	Colonel	Constable
Overall CPES	Rank	Captain	Constable
Job content plateau	Tenure	1-5 years	20 + years
Hierarchical/structural plateau	Tenure	1-5 years	16-20 years
Maintenance plateau	Tenure	20 + years	1-5 years
Psychological plateau	Tenure	1-5 years	20 + years
Overall CPES	Tenure	1-5 years	20 + years
Overall MSQ	Tenure	16-20 years	1-5 years
Overall AMQ	Tenure	20 + years	6-10 years
Overall UWES	Tenure	16-20 years	1-5 years

Table 6.33 provides a summary of the significant mean differences for the research variables (job content plateau, hierarchical/structural plateau, maintenance plateau, psychological plateau, overall career plateau, overall job satisfaction, overall motivation, and overall work engagement) in terms of the biographical groups (gender, age, race, marital status, rank, and tenure).

According to Table 6.33, males had the highest mean scores for job content plateau, psychological plateau, and overall career plateau. Females had the highest mean score for maintenance plateau and the lowest mean score for overall job satisfaction. These findings indicated that, in terms of gender, high job content plateau, psychological plateau, and overall career plateau are related to low job satisfaction. High maintenance plateau is related to high job satisfaction.

The 46 and older age group had the highest mean score for job content plateau, hierarchical/structural plateau, psychological plateau, and overall career plateau. The 18-24 age group had the highest mean score for maintenance plateau. The 41-45 age group had the lowest mean score for overall job satisfaction and overall motivation. The 46 and older age group had the lowest mean score for overall work engagement. These findings showed that, in terms of age, high job content plateau, hierarchical/structural plateau, psychological plateau, and overall career plateau are linked to low work engagement. High maintenance plateau is linked to high work engagement.

In terms of race, the Indian group had the highest mean score for hierarchical/structural plateau whilst the White/Caucasian group had the highest mean score for overall career plateau.

The married group had the highest mean score for job content plateau, hierarchical/structural plateau, psychological plateau, and overall career plateau. The single group had the highest mean score for maintenance plateau. The single group also had the lowest mean score for overall job satisfaction and overall work engagement. These findings revealed that, in terms of marital status, high job content plateau, hierarchical/structural plateau, psychological plateau, and overall career plateau are associated with low job satisfaction and work engagement. High maintenance plateau is associated with high job satisfaction and work engagement.

In terms of rank, Colonels had the highest mean score for hierarchical/structural plateau whilst Constables had the highest mean score for maintenance plateau and overall career plateau.

The 20 + year tenure group had the highest mean score for job content plateau, psychological plateau, and overall career plateau. The 16-20 year tenure group had the highest mean score for hierarchical/structural plateau whilst the 1-5-year tenure group had the highest mean score for maintenance plateau. The 16-20 year tenure group had the lowest mean score for overall job satisfaction and overall work engagement. The 20 + year tenure group had the lowest mean score for overall job satisfaction. These findings indicated that, in terms of tenure, high job content plateau, psychological plateau, and overall career plateau are related to low work motivation. High hierarchical/structural plateau is related to low job satisfaction and work engagement. High maintenance plateau is related to high job satisfaction and work engagement.

The empirical results obtained from the t-test analysis provided supportive evidence for accepting research hypothesis H_6: Individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding the variables manifested in the best fit model.

6.8.7 DECISIONS PERTAINING TO THE RESEARCH HYPOTHESES

Table 6.34 below summarises the key conclusions regarding the research hypotheses.

Table 6.34 *Summary of the Main Findings Relating to the Research Hypotheses*

Research aim	Research hypothesis	Statistical procedure	Supportive evidence provided
Research aim 1: To operationalise the elements of the theoretical framework for career plateauing empirically into a valid and reliable career plateauing experiences scale (CPES). *Sub-aim 1.1*: To assess the psychometric properties (internal consistency reliability and construct validity) of the newly developed career plateauing experiences scale (CPES). *Sub-aim 1.2*: To assess the nature of the interrelationships between the sub-scale dimensions of the career plateauing experiences scale (CPES).	H_{a1}: The elements of the theoretical framework for career plateauing can be operationalised into a valid and reliable career plateauing experiences scale (CPES).	Exploratory Factor Analysis RASCH modelling Scale intercorrelations Confirmatory factor analysis	Yes

Research aim	Research hypothesis	Statistical procedure	Supportive evidence provided
Research aim 2: To assess the direction and magnitude of the statistical inter-relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the South African Police Services context.	H_{a2}: There is a statistically significant interrelationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement.	Correlation analysis	Yes
Research aim 3: To assess whether individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement.	H_{a3}: Individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement.	Multiple Regression analysis	Yes
Research aim 4: To assess if there is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.	$H_{a4:}$ There is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.	Structural Equation Modelling	Yes
The biographical variables of gender, age, race, marital status, rank, and tenure will be treated as control variables. The following research aims are posed:			
Research aim 5: To assess whether gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement.	$H_{a5:}$ Gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement.	Multiple regression analysis	No
Research aim 6: To assess whether individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement.	H_{a6}: Individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding the variables manifested in the best fit model.	Tests for significant mean differences	Yes

6.9 CHAPTER SUMMARY

This chapter reported on and interpreted the statistical procedures that were conducted to explore the factorial validity, uni-dimensionality, and structural validity of the new scale, namely the career plateauing experiences scale (CPES). The findings of the preliminary statistical analysis, descriptive, correlational, and inferential (multivariate) statistical techniques were provided in order to determine the nature of the empirical relationships between career plateauing, job satisfaction, motivation, work engagement, and the socio-demographic variables (gender, age, race, marital status, rank, and tenure). The fundamental results of the literature review and the empirical research were interpreted and provided support for the research hypotheses.

The following research aims were achieved:

- **Research aim 1:** To operationalise the elements of the theoretical framework for career plateauing empirically into a valid and reliable career plateauing experiences scale (CPES) (this research aim relates to research hypothesis H1).
    - ***Sub-aim 1.1*:** To assess the psychometric properties (internal consistency reliability and construct validity) of the newly developed career plateauing experiences scale (CPES).
    - ***Sub-aim 1.2*:** To assess the nature of the interrelationships between the sub-scale dimensions of the career plateauing experiences scale (CPES).

- **Research aim 2:** To assess the direction and magnitude of the statistical inter-relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the South African Police Services context (this research aim relates to research hypothesis H2).

- **Research aim 3:** To assess whether individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H3).

- **Research aim 4:** To assess if there is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model (this research aim relates to research hypothesis H4).

- **Research aim 5:** To assess whether gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H5).

- **Research aim 6:** To assess whether individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H6).

Chapter 7 addresses research aim 7, namely, to formulate recommendations for industrial and organisational psychologists and human resource professionals for career development practices in the South African Police Service and to make suggestions for future research in the field.

Chapter 7 DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

This chapter will focus on a discussion of research aim 7, namely, to formulate recommendations for industrial and organisational psychologists and human resource professionals for career development practices in the South African Police Service (SAPS) and to make suggestions for future research in the field. The chapter commences with a discussion of the results and conclusions pertaining to the general research aim, literature review, the empirical aims, and the research hypotheses relating to the study. Next, the limitations of the literature review and research study are highlighted followed by recommendations for future research and practice. Lastly, the research study is evaluated in terms of its contribution to theory, research, and practice.

7.1 DISCUSSION OF RESULTS

In this section, a description will be provided of the sample profile. The discussion of the results will pertain to the specific sample of participants and their manifested profile. The biographical profile is summarised according to the respondents' person-centred characteristics (gender, age, race, and marital status) and work-related (rank and tenure) characteristics. Thereafter, the sample is described in terms of the mean scores reported for the four measuring instruments. Next, the results of the statistical analyses that were used to address the empirical research aims, by testing the research hypotheses, are integrated and discussed. Finally, a synthesis of the main findings and the decisions regarding the research hypotheses will be discussed.

7.1.1 Biographical profile of the sample

The biographical profile of the sample was reported in section 5.2 in Chapter 5. In terms of the respondents' socio-demographic characteristics, the sample was predominantly male police officers mainly in the 25-40 years age category, African, married, primarily in the rank of Constables, and in the 11-15 years tenure category. Super's (1957) career developmental theory states that individuals who are typically between ages 25 to 44 are in the establishment stage where the focus is on functioning effectively at work and progressing in one's career. However, the limited promotions available in the SAPS may prevent Constables from advancing in their careers. Being married may also add to the frustration of not progressing financially and being better able to support their families. In addition, Constables' 11-15 years tenure suggest that they could experience career stagnation as a result of remaining in one

position for too long. Thus, Constables with 11-15 years tenure are very likely to be both hierarchically/structurally plateaued and job content plateaued which inevitably leads to a psychological plateau characterised by dissatisfaction, disillusion, and disinterest in their jobs.

Males and females were relatively equally represented by the sample. Single individuals as well as those in the 18-24 years age category were underrepresented in the study. This was taken into consideration when interpreting the results as it adversely affected the generalisability of the results to the broader population of the SAPS.

7.1.2 Profile of respondents in terms of mean scores on the measurement scales

This section entails an interpretation and discussion of the mean scores reported for the four measurement scales used to measure the constructs career plateauing, job satisfaction, motivation, and work engagement. The measuring instruments were described in section 5.4 in Chapter 5. A summary of the measuring instruments was provided in Table 6.15 in Chapter 6.

The mean scores for hierarchical/structural plateau and maintenance plateau were relatively moderate implying that although these forms were present in the sample of participants, they were not overly negative about their experiences of career plateauing. Hierarchical/structural plateau had the highest mean score, implying some measure of dissatisfaction with lack of upward promotion opportunities. According to Yang *et al*. (2018), when employees experience a hierarchical plateau, prospects regarding promotions are reduced and there is an unmet expectation of receiving promotions (hierarchical plateaued). This is reflective of the moderate levels of hierarchical/structural plateau experienced by research participants who have been in the rank of Constable, which is an entry level position, for 11-15 years. The reason why these research participants are not too pessimistic can be explained by Super's (1980) Career Development Theory where employees in their early career stage (establishment stage) tend to have the highest promotion aspiration, but as they get older, more emphasis is placed on maintaining the recognition they previously achieved (maintenance stage) (Yang *et al*., 2018). According to Cron (1984), employees have no interest in being promoted, hold onto their position by improving their skills as well as knowledge, and struggle with remaining motivated during the maintenance stage. Morrow and McElroy (1987) found that satisfaction with work and co-workers are the highest whilst satisfaction with promotion and pay are the lowest in the maintenance stage. Thus, this explains the current study’s research results, where relatively moderate hierarchical/structural plateau and low job satisfaction are related to

relatively moderate maintenance but is in contrast to the high levels of motivation experienced by the biographical profile of the study's sample.

The overall career plateau mean score was relatively low, also indicating less strong experiences of career plateauing, and relatively pleasantly plateaued. Relatively high levels of work engagement could potentially explain the less strong experiences of career plateauing. In terms of work engagement, the research results of Basson (2016), Govender (2012), and Jojo (2016) also indicated high work engagement amongst SAPS employees. Even though police officers at the Dog Unit are exposed to conditions that are less favourable for engagement, they are still able to remain engaged (Govender, 2012). The findings of Basson's (2016) study revealed that employees at the SAPS were highly engaged in their work and highlighted the importance of developing and maintaining interventions that foster job and personal resources in order to promote work engagement. Jojo (2016) found that even when police officers at the SAPS are exposed to immense stress, they were still engaged in their work. Furthermore, Jojo's (2016) research results corroborated the results of the current study where high levels of motivation and high levels of engagement were reported.

Baogou and Mian (2019) stated that organisations (such as the SAPS) are moving towards a flatter structure, and subsequently numerous employees have to remain at the same level and in the same job resulting in the plateau occurring earlier in their career. This can lead to frustration and psychological plateau experiences as well as loss of motivation for employees. Table 6.15 revealed that the participants scored relatively low on job content plateau and psychological plateau but high on motivation. This could be attributed to the predominant age group of participants in the establishment stage of their careers where they may still feel satisfied with challenges provided by their jobs. McCleese and Eby (2006) stated that employees who are experiencing a structural plateau may be at higher risk of being negatively affected by a job content plateau. In contrast, in the current study, the results revealed that respondents scored relatively moderate on hierarchical/structural plateau but low on job content plateau. Jiang (2016) stated that career development equips individuals with various psychological resources to effectively cope with career plateaus. Jiang's (2016) research findings show that employees that are highly adaptable are more likely to perceive fit between themselves and their jobs and organisations, which leads to lower levels of job content plateau (Jiang, 2016) and subsequently lower levels of psychological plateau.

The relatively high levels of motivation can be attributed to the relatively low levels of job content plateau and psychological plateau experienced by the research participants. Research conducted by Jugmohan (2013) at the KwaZulu-Natal police forensic science

laboratory revealed that 68.4% of the respondents felt that there are few opportunities for career advancement which has the potential to contribute negatively to motivation levels. In addition, 64.5% of respondents agreed that promotions and career advancement will have an influence on their motivational levels at work. The career advancement of employees can only be effectively carried out if the organisation has a clear and well-defined career path strategy in place. According to 67.1% of respondents, the SAPS Academy in Paarl and Thabong do not have a well-defined career path strategy. This contributes to a work environment that can have a significantly negative influence on employees' motivation levels (Jugmohan, 2013).

In terms of motivation and hierarchical/structural plateauing, the results from the current study contradict the research results of Kotze (2017) and Jugmohan (2013). Kotze (2017) found that the main demotivating factor at the SAPS in Paarl and Thabong is that there is no career management policy, which is linked to promotion and development. Motivation was regarded as one of the most important aspects to focus group discussants because these areas are being neglected by management at the SAPS. The results also revealed that perceptions about the lack of promotional processes has a strong demotivating effect on employees (Kotze, 2017). In contrast to the sample of the current study, the sample in Kotze's (2017) study consisted of only academics at the SAPS Academies in Paarl and Thabong which justifies why they will be demotivated by the lack of career management. The contradicting results of the current study may be due to the moderate levels of maintenance plateau where employees are not concerned with promotions, and the fact that Constables are in the establishment stage where they are still determined to improve their skills, as reflected by their relatively low job content plateau.

The two dimensions of career plateau, namely hierarchical/structural plateau and job content plateau can contribute to a psychological plateau and can decrease employees' job satisfaction (Baogou & Mian, 2019). According to Dachapalli (2019), the SAPS employees seem to encounter many challenges and their work is among the most stressful occupations. Long working hours, dangerous working conditions, the high crime rate, high degrees of physical danger, violence, and trauma are aspects of the stressful conditions which are also linked to job dissatisfaction (Dachapalli, 2016). Mohajane (2017) found that employees at the SAPS are dissatisfied with their job. Similarly, Rothmann and Van Rensburg (2002) found that SAPS employees in the Marico area of the North-West Province experienced significantly lower job satisfaction than employees who were in training. Furthermore, SAPS employees in the Mooi River area of the North-West Province experienced significantly lower job satisfaction than employees that were in training. According to Mohajane (2017), police officers generally work in unsafe and risky environments, and under stressful and pressurised conditions, which

may negatively affect their degree of satisfaction with their jobs. In the current study, even though there were relatively low levels of psychological plateau, the highest mean score obtained by the hierarchical/structural plateau is an indication of dissatisfaction with promotions which explains the relatively low levels of job satisfaction.

It is acknowledged that the above results may have been influenced by the chosen method of data collection, namely self-reporting (Kreitchmann, Ponsoda, Nieto, & Morillo, 2019).

The sections that will be discussed next will include the empirical results that were reported in Chapter 6 as well as the relevant theory from the literature review (Chapters 2 to 4). The discussion is structured in terms of the empirical research aims.

7.1.3 Discussion and interpretation of exploratory and confirmatory factor analysis of the CPES

- ***Empirical research aim 1:*** *To operationalise the elements of the theoretical framework for career plateauing empirically into a valid and reliable career plateauing experiences scale (CPES).*
  - ***Sub-aim 1.1:*** *To assess the psychometric properties (internal consistency reliability and construct validity) of the newly developed career plateauing experiences scale (CPES).*
  - ***Sub-aim 1.2:*** *To assess the nature of the interrelationships between the sub-scale dimensions of the career plateauing experiences scale (CPES).*

The EFA confirmed the four-factor structure as well as the internal consistency reliability of the four-factor structure of the CPES. In addition, the CFA provided further evidence for acceptable internal consistency reliability as well as construct validity of the four CPES scale dimensions. Based on the outcome of the EFA and CFA, career plateauing was conceptualised as further (1) hierarchical career advancement becomes unlikely (hierarchical/structural plateau), (2) the employee has learnt everything pertaining to the job and experiences no further challenges (job content plateau), (3) the employee feels satisfied with the current job (maintenance plateau), and (4) the employee feels dissatisfied, disillusioned, and uninspired by the current job (psychological plateau).

The career plateauing scales that have been developed thus far mainly incorporate two aspects of career plateauing, namely hierarchical/structural plateau and job content plateau (Allen *et al*., 1999; Baogou & Mian, 2019; Bardwick, 1986; Milliman, 1992). In addition to hierarchical/structural plateau and job content plateau, the CPES includes the constructs of maintenance plateau which represents the maintenance career stage of Super (1957), and psychological plateau which is based on the seminal work of Hall (1997) and Levinson *et al*. (1978) on psychological states of dissatisfaction, disillusionment, and lack of passion as triggers of life cycle transitions.

Bardwick's (1986) career plateau scale consisted of 20 items on a four-point Likert scale ranging from 1 (no extent) to 4 (very great extent). The hierarchical/structural plateau comprised of nine items and job content plateau comprised of eleven items (Abd-Elrhaman, Helal, & Ebraheem, 2020). The CPES also consisted of 20 items but it was on a seven-point Likert scale where the four subscales consisted of five items each. The most widely used career plateau scale (Hofstetter & Cohen, 2014; Jiang, 2016; Jiang *et al*., 2018; Wang *et al*., 2014; Xie *et al*., 2015; Yang *et al*., 2018) was developed by Milliman (1992). Hierarchical plateau and job content plateau were measured using six items, on a five-point scale (1 = strongly disagree to 5 = strongly agree) (Milliman, 1992). Su *et al*. (2017) used Allen *et al*.'s (1999) career plateau scale which was an adaptation of Milliman's (1992) scale and comprised of twelve items measuring hierarchical/structural plateau (six items) and job content plateau (6 items) on a five-point Likert scale. Baogou and Mian (2019) developed the career plateau questionnaire based on the Chinese culture. Career plateau was split into hierarchical plateau and job content plateau. The hierarchical plateau subscale consisted of five items and the job content plateau subscale consisted of six items. The career plateau scale was measured on a six-point Likert scale (Baogou & Mian, 2019). In comparison to the CPES, the career plateau scales developed by Milliman (1992), Allen *et al*. (1999), and Baogou and Mian (2019) used five-point and six-point Likert scales and contained less than 20 items.

Furthermore, apart from the CPES, the above scales can only report on the interrelationship between hierarchical/structural and job content plateau. The CPES can provide insight into additional interrelationships which are important to know for the current organisational setup which is characterised by flatter structures. These flatter structures means that a large majority of employees may be both hierarchically/structurally plateaued and job content plateaued so it is vital to not only see how these subconstructs relate to one another but to also establish how employees react to these types of plateaus, in the form of psychological plateau and maintenance plateau. Low levels of maintenance plateau experiences are likely to be associated with higher levels of experiences with job content plateau, hierarchical/structural

plateau, and psychological plateau. High levels of psychological plateau experiences are likely to be associated with higher levels of experiences with job content plateau and hierarchical/structural plateau. Unlike previous career plateau scales, the CPES is able to shed light on these interrelationships which can inform career development practices.

Abd-Elrhaman ***et al.'s*** (2020) use of Bardwick's (1986) career plateau scale yielded an internal consistency of 0.93 for the overall scale, 0.77 for hierarchical/structural plateau, and 0.81 for job content plateau. Milliman (1992) reported an internal consistency reliability of 0.90 for hierarchical/structural plateau and 0.87 for job content plateau. Allen *et al.*'s (1999) study revealed an internal consistency reliability of 0.85 for hierarchical/structural plateauing and 0.83 for job content plateau. The internal consistency reliability for Baogou and Mian's (2019) career plateau scale was 0.84 for hierarchical/structural plateau and 0.87 for job content plateau.

In comparison to the above scales, the internal consistency reliability for hierarchical/structural plateau and job content plateau of the CPES were relatively higher. The overall CPES scale also scored relatively high in terms of internal consistency reliability implying that the scale can be applied with confidence in practice. In terms of construct validity, the CPES had acceptable convergent validity, however, the discriminant validity of the CPES requires further improvement in future research, specifically the psychological plateau subconstruct.

7.1.4 Discussion and interpretation of correlation analysis results

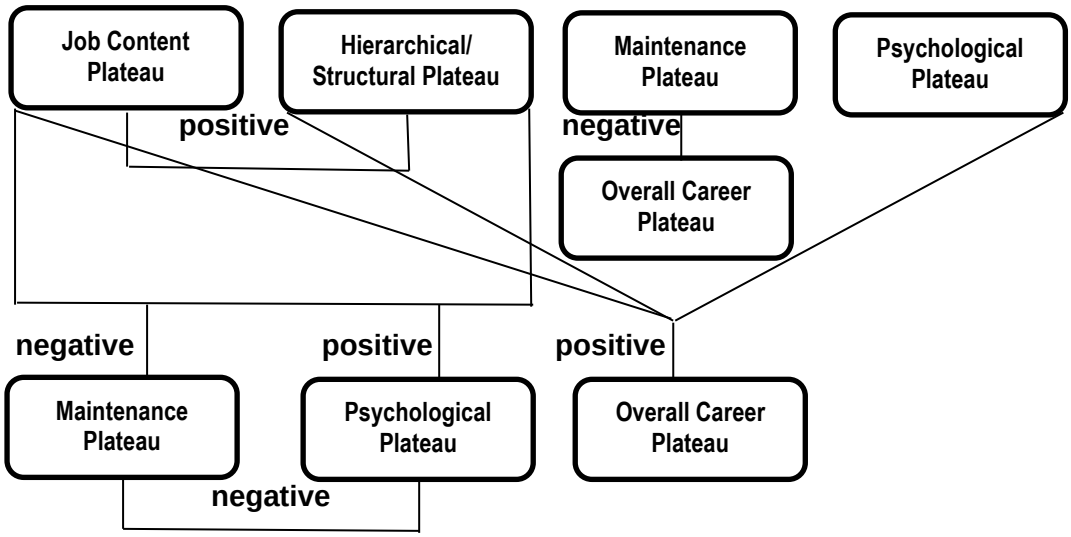
- ***Empirical research aim 2:*** *To assess the direction and magnitude of the empirical statistical inter-relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the South African Police Services context.*

In order to investigate research aim 2, bivariate correlation analyses were applied. Table 6.16 in Chapter 6 revealed the significant bivariate correlations between the independent and dependent variables of this study. The results obtained provided support for research hypothesis 2 and are briefly discussed and interpreted in relation to the relevant literature.

7.1.4.1 Bi-variate correlations among the CPES constructs

Table 6.16 in Chapter 6 showed that increases in job content plateau lead to increases in hierarchical/structural plateau. This can be expected in organisations with flat structures where employees tend to have long years of tenure in one position and the absence of new skills may reduce employees' chances for the limited promotions available. Increases in job content plateau and hierarchical/structural plateau were associated with decreases in maintenance plateau. This means that if employees are faced with a job content plateau and hierarchical/structural plateau, they may not be pleasantly plateaued because of career stagnation. Increases in job content plateau and hierarchical/structural plateau were linked to increases in psychological plateau. This suggests that if employees experience a job content plateau and hierarchical plateau, they may experience psychological feelings of dissatisfaction and disinterest with their careers due to boredom and lack of progress. Increases in maintenance plateau were related to decreases in psychological plateau. This means that if employees are pleasantly plateaued and happy in their position, they may experience psychological feelings of satisfaction and passion for their job. Increases in maintenance plateau were associated with decreases in overall career plateau. This suggests that employees who have made peace with the limited promotions that are available and are content with not being promoted, are less likely to experience an overall career plateau. Increases in job content plateau, hierarchical/structural plateau, and psychological plateau were linked to increases in overall career plateau. This means that employees who remain in one position for too long and do not experience career growth, may experience psychological feelings of frustration and disillusionment and are more likely to experience an overall career plateau. Figure 7.1 illustrates the correlations amongst the career plateauing constructs.

Figure 7.1 *Correlations amongst the career plateauing constructs*



7.1.4.2 Correlations between the demographic variables and career plateau, job satisfaction, motivation, and work engagement

Table 6.16 in Chapter 6 showed that the demographic variables of age, tenure, gender, marital status, and race showed significant and positive associations with job content plateau, hierarchical/structural plateau, maintenance plateau, psychological plateau, overall career plateau, and overall job satisfaction. Age, tenure, gender, and race showed significant and negative associations with job content plateau, maintenance plateau, psychological plateau, overall career plateau, overall job satisfaction, and overall work engagement.

Jojo (2016) found that tenure was positively correlated with engagement. This means that as an employee's number of years in the SAPS increases, the level of engagement also increases. In contrast, the current study found that tenure was negatively correlated with work engagement. In terms of gender, race, and marital status, Jojo's (2016) study revealed that there was no correlation between these demographics in relation to intrinsic motivation and engagement. This is in line with the current study except for gender which was positively correlated with motivation, and marital status which was negatively correlated with work engagement.

Can, Holt, and Hendy (2016) conducted research on patrol officers in the United States of America and Turkey. The multiple regression analyses revealed that there were no significant correlations between department demographics (gender, age, marital status, and tenure) and

job satisfaction (Can *et al*., 2016). This is only true for marital status in this study. Lokesh *et al*. (2016) found that police officers' demographics of age and tenure were positively correlated with their job satisfaction, however gender was not correlated with job satisfaction. In contrast to Lokesh *et al*.'s (2016) findings, the current study showed that age and tenure were negatively correlated with job satisfaction whilst gender was positively correlated with job satisfaction.

7.1.4.3 Correlations between career plateauing and overall job satisfaction

Job content plateau, hierarchical/structural plateau, psychological plateau, and overall career plateau had a significant and negative correlation with overall job satisfaction which indicates that an increase in job content plateau, hierarchical/structural plateau, psychological plateau and overall career plateau may result in a decrease in overall job satisfaction. This suggests that if employees are forced to remain in one position for too long and are not able to achieve upward mobility, they may experience feelings of dissatisfaction and disillusionment which may cause a decrease in overall job satisfaction. Maintenance plateau had a significant and positive correlation with overall job satisfaction which indicates that an increase in maintenance plateau may lead to an increase in overall job satisfaction. This means that employees who are not concerned with promotions and career growth, may experience overall job satisfaction.

Results of Paoline and Gau's (2020) research showed that there exists a positive relationship between advancement opportunities and job satisfaction amongst Oakland police officers. Thus, a decrease in career plateauing leads to an increase in job satisfaction. A study by Appelbaum and Finestone (1994) revealed that plateaued employees usually experience the most dissatisfaction. Lee (2002) conducted a study on 20 Engineering companies in order to examine career plateau. The study concluded that career plateau is often linked to negative work outcomes such as lack of career satisfaction and job satisfaction, as well as an increase in the level of turnover intentions. Hossain (2018) and Jung and Tak (2008) also found that career plateau and job satisfaction was negatively correlated with each other.

According to Mathevani's (2012) research findings, it takes a long time before employees in the SAPS are promoted and the amount of development is insufficient thereby resulting in low job satisfaction.

7.1.4.4 Correlations between career plateauing and overall motivation

Job content plateau, hierarchical/structural plateau, psychological plateau, and overall career plateau had a significant and negative association with overall motivation which suggests that an increase in job content plateau, hierarchical/structural plateau, psychological plateau, and overall career plateau may lead to a decrease in overall motivation. This suggests that if employees are not advancing in their career in terms of learning new skills and receiving promotions, they may experience psychological feelings of frustration and lack of passion which may cause a decrease in overall motivation. Maintenance plateau had a significant and positive correlation with overall motivation which indicates that an increase in maintenance plateau may lead to an increase in overall motivation. This means that employees who are not interested in career growth and are happy in their position, may experience overall motivation.

This finding was in line with Ettington (1992) who found a negative correlation between career plateauing and motivation, and Badiane (2016) who stated that plateaued employees are more likely to experience a lack of motivation. Greenhaus *et al*. (2010) also highlighted that the overall implication of being plateaued is that plateaued employees may become angry, frustrated, bored, stagnant, and less involved and motivated in their work. Career plateauing primarily removes promotional opportunities resulting in a decline in career motivation (Hays, 2012). Njuguna's (2013) study showed that a career plateau leads to low motivation. Near (1980), on the other hand, found that plateaued employees were not less motivated than their non-plateaued peers. Thus, the literature mainly supported the results from this study.

7.1.4.5 Correlations between career plateauing and overall work engagement

Job content plateau, hierarchical/structural plateau, psychological plateau, and overall career plateau had a significant and negative correlation with overall work engagement which indicates that an increase in job content plateau, hierarchical/structural plateau, psychological plateau, and overall career plateau may be linked to a decrease in overall work engagement. This suggests that if employees remain too long in one position and are not improving their skills, they may experience feelings of disappointment and disinterest which may cause a decrease in overall work engagement. Maintenance plateau had a significant and positive correlation with overall work engagement which indicates that an increase in maintenance plateau may lead to an increase in overall work engagement. This means that employees who are content in their job and are not interested in promotions or developing their skills, may experience overall work engagement.

According to Shakiladevi and Basariya (2017), it is assumed that plateaued employees will contribute less of themselves in their job and more in non-work activities. Plateaued employees psychologically tend to detach themselves from work by becoming more involved in nonwork activities in order to perform well in another area of their lives and maintain their morale and dignity (Shakiladevi & Basariya, 2017). The results of Dib's (2018) study confirmed that career plateauing negatively affects the engagement of employees. More specifically, career plateauing affects vigour negatively which means that an employee tends to experience less meaning in her/his work. Career plateauing had a negative effect on absorption where a plateaued employee tends to spend less time focussing and concentrating on his work, since he feels that his efforts at work will not benefit him in the organisation. The strongest negative correlation was between career plateau and dedication to work. Thus, plateaued employees cannot find any meaning in their work and are not enthusiastic about their work (Dib, 2018). Dib's (2018) findings are in support of Lu and Wu (2014) who found that career plateau had a negative effect on engagement. In contrast, a study conducted by Ugwu *et al*. (2015) showed that career plateauing, more specifically hierarchical plateau, was not significantly related to work engagement.

7.1.4.6 Correlations between overall job satisfaction, motivation, and work engagement

Overall job satisfaction had a significant and positive correlation with overall motivation and a significant and positive association with overall work engagement. The results suggest that an increase in job satisfaction may lead to increases in work motivation and work engagement and vice versa. Also, an increase in work motivation may result in an increase in work engagement and vice versa.

Due to the nature of police work, which is usually characterised by incidents of aggressiveness and violence, examining the determinants of work motivation and engagement is thus an important topic for both researchers and practitioners (Gillet, Huart, Colombat, & Fouquereau, 2013). Job satisfaction can positively enhance an employee's work attitude because they may be more motivated and committed to achieving organisational goals (Bhat, 2018). Ismail, Ridwan, and Razak's (2016) study confirmed that job satisfaction correlates positively and significantly with job motivation. Employees who are satisfied with their jobs may talk about their jobs and companies with friends and family, sending a positive message to the community. Thus, the possibilities may be immense by keeping a workforce happy and engaged (Reukauf, 2018). A study conducted by Garg, Dar, and Mishra (2018) found a positive moderate relationship between job satisfaction and work engagement. These findings support the results of the current study.

According to Gillet *et al*. (2013), psychologists frequently investigate police officers' motivation and engagement due to the nature of police work. Gillet *et al*. (2013) conducted research on 170 French policemen, 62 policewomen, and 3 participants who did not specify gender and found that self-determined work motivation was positively related to work engagement. Self-determined motivation refers to engaging in an activity out of pleasure and choice (Gillet *et al*., 2013). Similarly, Jojo (2016) found that where levels of intrinsic motivation were high for the South African police officers, so were the levels of job engagement. Also, Khan and Iqbal's (2013) research results show a strong positive relationship between intrinsic motivation and employee engagement where an increase in intrinsic motivation leads to an increase in engagement levels. Delaney and Royal (2017) found that motivation is a key component of engagement which means that if organisations invest more to extrinsically motivate their employees they will achieve higher levels of overall engagement. The studies of Akhtar, Boustani, Tsivrikos, and Chamorro-Premuzic (2015) and Hsu *et al*. (2010) revealed that individuals with high motivation are highly engaged in their work. These findings corroborate the results of the current study.

An analysis of the bivariate correlations between the variables allowed for an initial evaluation of the degree to which the data supported the core elements of the theorised model proposed in Chapter 3 (see Figure 3.5). Although all of the theorised relationships between the research variables were not empirically established, the conveyed correlations provided evidence of associations, which justified further investigation. The results thus provided supportive evidence for research hypothesis H2 (see Table 6.16).

7.1.5 Discussion and interpretation of the multiple regression analysis results

- ***Empirical research aim 3:*** *To assess whether individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H3).*

- ***Empirical research aim 5:*** *To assess whether gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H5).*

The results obtained provided support for research hypothesis 3.

Figure 6.3 in Chapter 6 illustrates and summarises the best predictors of job satisfaction, motivation, and work engagement as identified by multiple regression analysis. The research literature provided support that career plateauing predicts job satisfaction, motivation, and work engagement. Job content plateau negatively predicted job satisfaction and work engagement. This indicates that since employees are spending many years of tenure in one position as a result of limited opportunity for promotions, they may experience low job satisfaction and work engagement due to the boredom and lack of challenges associated with job content plateau. Similarly, Hurst *et al.* (2017), McCleese and Eby (2006) as well as Salami (2010) discovered that there was a negative association between job content plateau and job satisfaction. Lentz and Allen (2009) also found that as perceptions of job content plateauing increased, employees experienced lower job satisfaction. Even though McCleese and Ebby (2006) found a negative relationship between job content plateau and job satisfaction, they also found that job content plateaued employees experienced higher job satisfaction if they were not also subjected to a hierarchical/structural plateau. Ugwu *et al.*'s (2015) research findings support the results of the current study by showing that hierarchical plateauing was not significantly related to work engagement. This may be as a result of the lack of employment opportunities where, even though employees are plateaued, it may not significantly influence their work engagement behaviour as they are concerned about losing their jobs. In contrast to the current study, Dib (2018) as well as Lu and Wu (2014) found that career plateauing negatively predicted engagement. According to Dib (2018), an employee will feel satisfied and engaged in his job if she/he gets recognition via coaching, feedback, and feeling valued by the organisation.

Hierarchical/structural plateau negatively predicted job satisfaction. This suggests that employees working in organisations with flatter structures are subjected to fewer promotions which may contribute to lower job satisfaction. This is supported by Chao (1990) and Tremblay *et al*. (1995) who found a negative relationship between hierarchical/structural plateau and job satisfaction. Lentz and Allen (2009) also found that as perceptions of hierarchical/structural plateauing increased, employees experienced lower job satisfaction. Godshalk and Fender's (2015) research findings revealed that employees who are structurally plateaued for external reasons experienced low job satisfaction whilst employees structurally plateaued for internal reasons reported high job satisfaction. External reasons refer to being plateaued due to organisational reasons whereas internal reasons refer to one's own personal choice to be plateaued. In terms of the current study, in addition to the maintenance plateau, being structurally plateaued for internal reasons can positively predict job satisfaction.

Maintenance plateau positively predicted job satisfaction and work engagement. This means that employees are pleasantly plateaued because they are not bothered by lack of promotions and are satisfied with training and development opportunities therefore they may experience higher job satisfaction and work engagement. The opposite side of the maintenance plateau is that employees may become too complacent leading to lower job satisfaction and work engagement.

Psychological plateau negatively predicted job satisfaction, motivation, and work engagement. This means that if employees experience psychological feelings of dissatisfaction, disillusionment, and lack of passion related to a hierarchical/structural plateau and job content plateau, they may also experience lower job satisfaction, motivation, and work engagement. The positive side is that the presence of a psychological plateau may trigger a transition into a new life cycle of growth and learning (Levinson, 1996) which may increase job satisfaction, motivation, and work engagement. A transitional period encourages new insight and understanding.

Thus, it appears that the maintenance plateau and the psychological plateau can also be a positive predictor of job satisfaction, motivation, and work engagement. Furthermore, psychological plateau was a strong negative predictor of job satisfaction, motivation, and work engagement. This can be attributed to the greater occurrence of hierarchical/structural plateau and job content plateau, in organisations with flatter structures, which ultimately evokes a psychological plateau characterised by frustration and loss of inspiration for the job.

The results obtained did not provide support for research hypothesis 5.

The majority of literature on career plateauing in the police force focuses on job satisfaction. Borovec and Balgac's (2016) research on police officers in Croatia revealed that none of the socio-demographic variables have a statistically significant effect in predicting job satisfaction. The research results of Kumar's (2017) study on police officers in India showed that demographic factors predict job satisfaction. Gaunya *et al*. (2016) found that organisational variables were better predictors of job satisfaction among police officers in Kenya than demographic variables.

Storm (2002) found that the demographic variable of age significantly predicted all three dimensions of work engagement in the SAPS. Gender and race also significantly predicted work engagement (Storm, 2002). Mostert and Rothmann (2006) found that background variables (e.g. race, age, and gender) are only minor predictors of engagement in the SAPS.

Thus, the research literature provided conflicting results for demographic variables as predictors of job satisfaction and work engagement in the police force.

The multiple regression analysis showed that career plateauing significantly predicted job satisfaction, motivation, and work engagement, and that the biographical variables of gender, age, race, marital status, rank, and tenure did not make significant contributions to predicting career plateauing, job satisfaction, motivation, and work engagement.

7.1.6 Discussion and interpretation of the final structural model

- ***Empirical research aim 4:*** *To assess if there is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model (this research aim relates to research hypothesis H4).*

The results obtained provided support for research hypothesis 4.

Figure 6.4 in Chapter 6 displays the results of the structural equation modelling (SEM) which showed a satisfactory fit between the empirically manifested structural model and the theoretically hypothesised model. Two goodness-of-fit models were assessed, and the best model fit revealed the validity of considering career plateauing and its four subfactors as a significant antecedent of job satisfaction and work engagement. The constructs of career plateauing, job satisfaction, and work engagement were therefore regarded as the core elements of the empirically manifested structural model. The best fit model did not include motivation as part of the endogenous variables.

The results showed that job content plateau and hierarchical/structural plateau was negatively associated with job satisfaction whilst maintenance plateau was positively associated with job satisfaction. This indicates that an increase in job content plateau and hierarchical/structural plateau will cause a decrease in job satisfaction whilst an increase in maintenance plateau will cause an increase in job satisfaction. In a work environment like the SAPS where there is a high possibility of both hierarchical/structural plateau due to restricted upward mobility and long tenure in one position, there will be lower job satisfaction. However, if employees are less focussed on being promoted and more concerned with up-skilling, they will be pleasantly plateaued (maintenance plateau), and this will increase job satisfaction. Herzberg's (1966) two-factor theory highlighted opportunities for advancement as part of the characteristics of the work environment that influences job satisfaction. According to Alshmemri *et al*. (2017),

advancement in terms of job content can affect employees' satisfaction and dissatisfaction depending on whether the job is too easy or too difficult, interesting or boring. Advancement in the form of possibilities for growth refer to opportunities for professional growth and promotions. Professional growth is applicable to maintenance where employees focus on improving their skills and explains the positive association with job satisfaction. These findings are in alignment with the research findings of Chao (1990), Eby (2006), Lentz and Allen (2009), McCleese and Eby (2006), Salami (2010) and Tremblay *et al*. (1995) who discovered that there was a negative association between job content plateau as well as hierarchical/structural plateau and job satisfaction.

This study found that maintenance plateau was positively associated with work engagement and psychological plateau was negatively associated with work engagement. This implies that an increase in maintenance plateau will decrease work engagement and an increase in psychological plateau will cause a decrease in work engagement. When employees are pleasantly plateaued, they are happy with the amount of development they are receiving and staying with their current employer despite not being promoted. Thus, even though the SAPS cannot provide more promotional opportunities, they should offer more training and development for their employees so that they can be pleasantly plateaued and more engaged in their work.

The psychological plateau encompasses feelings of dissatisfaction and disinterest, emanating from the hierarchical/structural plateau and job content plateau, which will result in less work engagement. According to Bakker *et al*. (2014), the job demands-resources (JD-R) theory suggests that employees excel in work environments where there is high job demands (challenges) merged with high job or personal resources. When employees have enough resources at work, they are more able to deal with challenges and this promotes work engagement (Bakker *et al*., 2014). Job resources are useful in fostering personal growth, learning, and development (Bakker & Demerouti, 2008; Schaufeli, 2013). According to the JD-R model, resources promote engagement in terms of energising employees (vigour), encouraging their persistence (dedication), and making them concentrate on their efforts (absorption) leading to positive outcomes such as job performance (Schaufeli, 2013). Thus, the JD-R theory explains the associations of maintenance plateau and psychological plateau with work engagement in the current study. Research by Bai and Liu (2018) showed that the career growth of employees has a significant positive influence on their work engagement. Harju *et al*.'s (2016) research findings indicated that searching for challenges may be a way to prevent employees from experiencing boredom at work and enhance their work engagement.

Overall, the findings propose that if the respondents experienced job content plateau and hierarchical/structural plateau, they will experience less job satisfaction. If maintenance plateau increases, job satisfaction and work engagement will also increase. Furthermore, an increase in psychological plateau will lead to a reduction in work engagement.

The SEM results confirmed the predictive influence of career plateauing. While the model showed an adequate fit to the data, some of the proposed paths were nonsignificant. The results of the SEM analysis therefore provided partial support for research hypothesis H5.

7.1.7 Discussion and interpretation of the results of the tests for significant mean differences

- **Research aim 6:** To assess whether individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H6).

The results obtained provided support for research hypothesis 6.

Tables 6.22 to 6.33 in Chapter 6 are relevant to this section.

The young age group (18-24 years) with 1-5 years tenure had significantly higher levels of maintenance plateau (pleasantly plateaued) and work engagement than the older research participants (46 years and older) with 16 and more years of tenure. Employees in the 18-24 years age group are in Super's (1957) exploration career stage where they are still discovering their interests and abilities. Since these employees also have low tenure, they are more likely to remain dedicated to their job. Thus, younger employees are able to be pleasantly plateaued and to be engaged in their work. In comparison, employees in the 46 years and older age group are in Super's (1957) maintenance career stage where they are focussed on holding onto their current position. These employees also have high tenure and may therefore struggle to remain interested in their job. Thus, they are less likely to be pleasantly plateaued and are less engaged in their work. Both Bartlett (2015) and Sharma *et al*. (2017) emphasised that older respondents possess higher levels of work engagement. Boikanyo and Heyns (2019) found that employees in the 41–59 age category were slightly more engaged than the other age groups. Schaufeli and Bakker (2003) also found marginal differences between age and work engagement.

The long tenure group (16 years and longer) who were older in age (46 years and older) had significantly higher levels of job content plateau, hierarchical/structural plateau, and psychological plateau than the short tenure group (1-5 years) who were younger in age (18-24 years). Employees in Super's (1957) maintenance career stage with long years of tenure have reached the pinnacle of career success (George & Jones, 2012) and there is limited room for growth especially in a pyramid shaped organisation like the SAPS. These employees therefore experience higher levels of job content plateau and hierarchical/structural plateau and subsequently psychological plateau. Employees in Super's (1957) exploration career stage with short years of tenure tend to have more opportunities for promotion and career growth, and therefore experience lower levels of job content plateau and hierarchical/structural plateau and subsequently psychological plateau. This is in accordance with Allen *et al*. (1999) who stated that organisational tenure is positively related to hierarchical plateauing. This finding is the opposite of Jiang, Hu, and Wang (2018) who found that high tenure results in a low level of the job content plateau and Allen *et al*. (1999) who indicated that organisational tenure was not related to job content plateau. The findings of Armstrong-Stassen's (2008) study indicated that not all older employees will experience job content plateauing, making age by itself an insufficient predictor of job content plateauing. Yang *et al*. (2018) found that employees of all ages are equally influenced by career plateau. They discovered that the negative consequences of both hierarchical and job content plateau occur regardless of employees' age (Yang *et al*., 2018).

White/Caucasian employees in the lower rank (Constable) and from the older age group (46 years and older) with long tenure (16 years and longer) obtained significantly higher levels of overall career plateau than African employees in the higher rank (Captain) and from the younger age group (18-24 years) with short tenure (1-5 years). Post-apartheid brought about the implementation of affirmative action and employment equity policies in order to rectify past inequalities for previously disadvantaged groups in the SAPS. This explains why White/Caucasians may remain in lower ranks for a long period of time contributing to an overall career plateau as opposed to African employees whose promotions are fast tracked and therefore would display lower levels of overall career plateau. Burke (1989) identified employees with more than sixteen years of service remaining at the Constable rank as being plateaued. Brown-Wilson (2008) stated that race has an impact on career plateauing. Powell and Butterfield (1997) found that race indirectly affected promotion decisions through key job-relevant variables, to the disadvantage of applicants of colour. Rothmann and Strijdom (2002) indicated that White police personnel were relatively dissatisfied with supervision, rewards, company policy, working conditions, recognition, and promotion. This can be explained in terms of the changes in the country since independence (Dachapalli, 2016). Chao (1990)

stated that individuals who perceive a career plateau early in their job tenure may engage a lot in career planning in order to reverse the plateau, whereas individuals who perceive a career plateau and have a long job tenure may think that any further career planning is pointless.

Indian employees in the higher rank (Colonel) and from the older age group (46 years and older) with long tenure (16 years and longer) obtained significantly higher levels of hierarchical/structural plateau than African employees in the lower rank (Constable) and from the younger age group (18-24 years) with short tenure (1-5 years). As employees move higher up in rank, fewer positions are available therefore Indian employees in the Colonel rank would experience higher levels of hierarchical/structural plateau than African employees in the Constable rank who are younger and have more chances for promotions. Near (1985) and Savery (1990) established that employees on a plateau tend to be older and this is consistent with Evans and Gilbert (1984) who defined a plateaued employee as one whose age was over 45. In contrast, the research findings of Lee (2003), Peterson and Jun (2007), and Yang (2016) have shown that plateauing is not correlated with age.

Single female employees in the younger age group (18-24 years) with short tenure (1-5 years) obtained higher levels of maintenance plateau (pleasantly plateaued) and job satisfaction than married male employees in the older age group (41 years and older) with long tenure (16 years and longer). Young, single employees may not have as many responsibilities as older, married employees and therefore may not be as concerned with promotions and advancing financially which allows them to be pleasantly plateaued and satisfied with their job. Herzberg *et al*. (1957) stipulated that employees display high levels of job satisfaction at the beginning of their careers. Damazo (2017) also found that there was a significant difference between police officer's job satisfaction and age. Gaunya *et al*. (2016), on the other hand, found that age was not a significant predictor of job satisfaction amongst police officers. In contrast to the current study, Kemunto *et al*. (2018) found that married employees experienced higher job satisfaction. Msuya (2016) and Sharma *et al*. (2017) found no significant difference between marital status and job satisfaction. Damazo's (2017) research findings also revealed that there was an insignificant difference between police officer's job satisfaction and marital status. Lee's (2014) research revealed that gender played a significant role in terms of police officers' job satisfaction. Msuya (2016) also found that there were significant differences between male and female respondents with regard to job satisfaction. In contrast, the research findings of Bhat (2018), Culibrk *et al*. (2018), Omole *et al*. (2019), Ramadhani (2014) and Van der Schyff *et al*. (2018) showed no significant difference between gender and job satisfaction. Damazo's

(2017) as well as Gaunya *et al*.'s (2016) research also showed that there was an insignificant difference between police officer's job satisfaction and gender.

Married male employees in the older age group (46 years and older) with long tenure (20 years and longer) obtained higher levels of job content plateau, psychological plateau, and overall career plateau than single females in the younger age group (18-24 years) with short tenure (1-5 years). George and Jones (2012) stated that employees who are in the mid-career stage generally have more than 20 years of tenure and find it difficult to stay productive. These employees may experience career plateaus and obsolescence (George & Jones, 2012). This reveals why married male employees who are older and have longer tenure will experience greater job content plateau, psychological plateau, and overall career plateau than younger, single females in Super's (1957) exploration career stage, with shorter tenure. These findings are similar to that of Near (1985) and Morrison (1996) who found that plateaued employees were more likely to be married rather than single. According to Cheng and Su (2013), promotion is a goal that an individual strives to achieve at every stage in their career development. Taiwanese career officers tend to experience career plateaus when they are repeatedly unable to advance to a better position or higher rank (Cheng & Su, 2013). In contrast to the current study, Drucker-Godard *et al*. (2015) found that women feel slightly more plateaued than men whilst Allen *et al*. (1998) found that women were much more highly plateaued than men. Women were more likely to experience either a hierarchical or job content plateau than were men, however, they were more likely than women to be classified as either double plateaued (both hierarchical and job content plateaued) or non-plateaued. Similarly, women reported higher levels of job content plateaus than men (McCleese & Eby, 2006; Shecket, 1995a).

Employees in the 25-40 years age group with 6-10 years tenure group obtained significantly higher levels of motivation than employees in the 41-45 years age group with 20 years and longer tenure. The 25-40 and 41-45 years age group represents Super's (1957) establishment career stage which is characterised by stability and working effectively as well as advancing in one's career. The motivation levels for these age groups may differ due to the fact that employees in the 41-45 years age group are toward the latter part of the establishment phase where the focus is more on assessing the past and the future of their career. The vast difference in motivation levels can also be attributed to tenure. This is in line with Sommerfeldt's (2010) research which showed that tenure had a massive influence on police motivation. The flatter structure of the SAPS may make it difficult for employees with longer tenure to maintain motivation levels because of fewer promotions and staying in the same position for too long. In contrast, Delgado *et al*. (2018) found that employees with longer tenure

experienced a higher level of work motivation. However, Chai *et al*. (2017) and George *et al*. (2017) found no significant difference between work motivation and tenure. Sommerfeldt (2010) found that police officers become less motivated as they advance in age.

Overall, the results of the tests for significant mean differences between groups revealed that employees' demographic (gender, age, race, marital status, rank, and tenure) characteristics should be considered when attempting to investigate career plateauing in relation to job satisfaction, motivation, and work engagement in the SAPS.

7.2 CONCLUSIONS

This section discusses the conclusions of the literature review (Chapter 3 and 4) and empirical research (Chapter 5) in accordance with the research aims outlined in Chapter 1.

7.2.1 Conclusions relating to the literature review

The general aim of the research was to develop a valid and reliable measure of career plateauing and to determine whether individuals' experiences of career plateauing (as antecedent) positively or negatively predict their job satisfaction, motivation, and work engagement (as consequences). This research further aimed to investigate whether individuals' gender, age, race, marital status, rank, and tenure significantly influence their subjective work experiences (career plateauing, job satisfaction, motivation, and work engagement).

The conclusions pertaining to the validity and reliability of the career plateauing experiences scale (CPES), and the relationship dynamics between the research variables will be discussed by referring to each of the specific literature research aims for this study.

7.2.1.1 Literature research aim 1

- To establish the nature and theoretical elements of career plateauing and critically evaluate the implications for staff members' career development in the South African Police Service.

The first aim, namely, to establish the nature and theoretical elements of career plateauing and to critically evaluate the implications for staff members' career development in the SAPS, was attained in Chapter 3 (Career plateauing).

(a) Theoretical elements of career plateauing

- Limited vertical and horizontal movement in one's job (career plateau).
- Vertical movement within an organisation declines (hierarchical/structural plateau).
- Everything has been learnt about the job and subsequently there are no further challenges (job content plateau).
- Satisfaction with the current job despite no promotions (maintenance plateau).
- Psychological feelings of dissatisfaction and disillusionment stemming from lack of promotions and challenges (psychological plateau).

(b) Career development in the South African Police Service

- Career management tends to be a highly neglected area in the SAPS as there are no formal career management policies or career paths for its employees. The absence of career management affects the career development of staff negatively and results in a job content plateau. If employees are not developed, it impacts on their future marketability and opportunities for promotion and this may also result in a hierarchical/structural plateau and ultimately a psychological plateau. This may decrease employees' job satisfaction, motivation, and work engagement.

7.2.1.2 Literature research aim 2

- To conceptualise job satisfaction, motivation, and work engagement from a theoretical perspective.

The second aim, namely, to conceptualise job satisfaction, motivation, and work engagement from a theoretical perspective, was attained in Chapter 4 (Job satisfaction, motivation, and work engagement).

The conceptualisation of these three constructs are imperative because they are related to career plateauing in the SAPS. More specifically, the addition of the maintenance plateau and psychological plateau, or the feelings associated with hierarchical/structural plateau and job content plateau, are related to job satisfaction, motivation, and work engagement. Due to the limited prospect for promotions that may lead to high incidences of hierarchical/structural plateau and job content plateau, it is therefore important to understand the concept of job satisfaction, motivation, and work engagement.

7.2.1.3 Literature research aim 3

- To conceptualise the theoretical relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement and to explain this relationship in terms of an integrated theoretical model.

The third aim was to conceptualise the theoretical relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement and to explain this relationship in terms of an integrated theoretical model as illustrated in Figure 4.7.

- Based on the literature review, the integrated theoretical model as indicated in Figure 4.7 revealed that an increase in career plateauing decreases job satisfaction, motivation, and work engagement. Thus, the constructs of hierarchical/structural plateau, job content plateau, maintenance plateau, and psychological plateau were included in the design of the CPES as these subconstructs are related to job satisfaction, motivation, and work engagement.

7.2.1.4 Literature research aim 4

- To conceptualise the influence of individuals' biographical characteristics (gender, age, race, marital status, rank, and tenure) on their career plateauing, job satisfaction, motivation, and work engagement.

The fourth aim was to conceptualise the influence of individuals' biographical characteristics (gender, age, race, marital status, rank, and tenure) on their career plateauing, job satisfaction, motivation, and work engagement

The literature review revealed that individuals' biographical characteristics (gender, age, race, marital status, rank, and tenure) influences their career plateauing, job satisfaction, motivation, and work engagement in the workplace. Thus, the impact of employees' biographical characteristics (gender, age, race, marital status, rank, and tenure) must be taken into consideration when investigating the influence of career plateauing, job satisfaction, motivation, and work engagement in the SAPS.

7.2.1.5 Literature research aim 5

- To conceptualise the implications of the theoretical relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement for career development in the South African Police Service.

The fifth aim was to conceptualise the implications of the theoretical relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement for career development in the SAPS.

The literature review revealed that a lack of training and development of staff contributes to the stagnation of their career and increased feelings of career plateauing. The lack of career development also makes employees feel less satisfied, motivated, and engaged. Thus, the implementation of career development practices in the SAPS will reduce career plateauing and increase job satisfaction, motivation, and work engagement.

7.2.2 Conclusions relating to the empirical study

The empirical aim of this research was to address the following seven specific aims:

- **Research aim 1:** To operationalise the elements of the theoretical framework for career plateauing empirically into a valid and reliable career plateauing experiences scale (CPES) (this research aim relates to research hypothesis H1).
    - ***Sub-aim 1.1*:** To assess the psychometric properties (internal consistency reliability and construct validity) of the newly developed career plateauing experiences scale (CPES).
    - ***Sub-aim 1.2*:** To assess the nature of the interrelationships between the sub-scale dimensions of the career plateauing experiences scale (CPES).

- **Research aim 2:** To assess the direction and magnitude of the empirical statistical inter-relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the South African Police Services context (this research aim relates to research hypothesis H2).

- **Research aim 3:** To assess whether individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H3).
- **Research aim 4:** To assess if there is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model (this research aim relates to research hypothesis H4).

- **Research aim 5:** To assess whether gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H5).

- **Research aim 6:** To assess whether individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement (this research aim relates to research hypothesis H6).

- **Research aim 7:** To formulate recommendations for industrial and organisational psychologists and human resource professionals for career development practices in the South African Police Service and to make suggestions for future research in the field.

7.2.2.1 Empirical research aim 1

- To operationalise the elements of the theoretical framework for career plateauing empirically into a valid and reliable career plateauing experiences scale (CPES).

Conclusion: The CPES is a valid and reliable scale to measure the construct of career plateauing in the South African context.

Career plateauing was conceptualised as further (1) hierarchical career advancement becomes unlikely (hierarchical/structural plateau), (2) the employee has learnt everything pertaining to the job and experiences no further challenges (job content plateau), (3) the employee feels satisfied with the current job (maintenance plateau), and (4) the employee feels dissatisfied, disillusioned, and uninspired by the current job (psychological plateau).

The associations between the CPES constructs is important for the SAPS where there may be a high incidence of hierarchical/structural plateau and job content plateau due to the pyramid-shaped organisational structure and the affirmative action policy which results in limited promotions. The high occurrence of job content plateau may also occur because there is no formal career development policy in the SAPS and the nature of police work does not always allow for lateral movement in the form of rotation leading to very little upskilling of skills. Thus, hierarchical/structural plateau, job content plateau, and subsequently psychological plateau are inevitable for many employees. The associations between the CPES constructs revealed that high levels of maintenance plateau was linked to lower levels of job content plateau, hierarchical/structural plateau, and psychological plateau. If employees are

pleasantly plateaued (maintenance plateau), they are less focussed on promotions and are more satisfied with the amount of training and development available to them. This may decrease the impact of the hierarchical/structural plateau, job content plateau, and psychological plateau.

Table 7.1 summarises the structure of the CPES.

Table 7.1 *Structure of the CPES*

CPES label	Original definition	Revised definition	Number of Items
Job content plateau	A job content plateau occurs when the job no longer provides any opportunities or challenges.	Job content plateauing occurs when an employee has learnt everything pertaining to the job and subsequently experiences no further challenges, opportunities to try out new ideas, and no further learning and growth. The job subsequently becomes routine and repetitive.	5
Hierarchical/ structural plateau	Hierarchical/structural plateau refers to a low likelihood of future promotions.	Career stagnation due to the absence of vertical movement in the organisation in the form of promotions.	5
Maintenance plateau	Feeling pleasantly plateaued and satisfied with current job level.	Feeling satisfied with current job and training and development opportunities; enjoy work activities; do not desire promotion.	4
Psychological plateau	Feeling dissatisfied, disillusioned, and a lack of passion for the job.	A lack of interest, passion and confidence in one's work leads to a deterioration in work performance. This may be an outcome of job content plateau and hierarchical/structural plateau which may trigger a life cycle transition pertaining to personal growth and development.	5

The CPES and its subscales had acceptable internal consistency reliability but there were problems with the construct validity of the scale. The convergent validity of the CPES was satisfactory, however, the discriminant validity of the CPES requires more attention. More specifically, the items of the psychological plateau construct needs to be reconsidered in order to improve discriminant validity of the CPES. Therefore, there needs to be additional studies to further refine the CPES. However, in general, the CPES seems to be a valid and reliable scale to use in further research and in practice.

7.2.2.2 Empirical research aim 2

- To assess the direction and magnitude of the empirical statistical inter-relationship between the constructs of career plateauing, job satisfaction, motivation, and work engagement as manifested in a sample of respondents employed in the South African Police Services context.

Conclusion: The demographic variables of gender, age race, marital status, rank, and tenure are likely to impact on career plateauing, job satisfaction, motivation, and work engagement in the SAPS. Therefore, the influence of these demographic variables must be considered when studying the inter-relationship between career plateauing, job satisfaction, motivation, and work engagement.

7.2.2.3 Empirical research aim 3

- To assess whether individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement.

Conclusion: Individuals' experiences of career plateauing significantly predict their job satisfaction, motivation, and work engagement. Employees' experience of hierarchical/structural plateau, job content plateau, maintenance plateau, and psychological plateau will determine their job satisfaction, motivation, and work engagement. Aspects of psychological plateau must be addressed in order to enhance employees' job satisfaction, motivation, and work engagement. Issues related to job content plateau needs attention to improve job satisfaction and work engagement whilst hierarchical/structural plateau must be addressed in order to increase job satisfaction.

7.2.2.4 Empirical research aim 4

- To assess if there is a statistically good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

Conclusion: Job content plateau and hierarchical/structural plateau decreases job satisfaction. Psychological plateau decreases work engagement. In contrast, maintenance plateau increases job satisfaction and work engagement. This is in accordance with the theoretically hypothesised model where the lack of promotions and challenges related to job content plateau and hierarchical/structural plateau lowers job satisfaction. The feelings of dissatisfaction and disinterest associated with psychological plateau lowers job satisfaction

and work engagement. Being pleasantly plateaued (maintenance plateau) increases job satisfaction and work engagement as employees are content with their position.

7.2.2.5 Empirical research aim 5

- To assess whether gender, age, race, marital status, rank, and tenure significantly predict career plateauing, job satisfaction, motivation, and work engagement.

Conclusion: The gender, age, race, marital status, rank, and tenure of employees do not forecast their career plateauing, job satisfaction, motivation, and work engagement. Thus, these individual differences will not influence how employees will experience career plateauing, job satisfaction, motivation, and work engagement.

7.2.2.6 Empirical research aim 6

- To assess whether individuals from various biographical groups (gender, age, race, marital status, rank, and tenure) differ significantly regarding their career plateauing, job satisfaction, motivation, and work engagement.

Conclusion: Job content plateau was more likely to be experienced by married male employees who had long tenure (20 years and longer) and who were older in age (46 years and older). Hierarchical/structural plateau was more likely to be experienced by Indian employees in the higher rank (Colonel) with long tenure (16 years and longer) and who were older in age (46 years and older). Maintenance plateau (pleasantly plateaued) was more likely to be experienced by single female employees in the young age group (18-24 years) with 1-5 years tenure. Psychological plateau was more likely to be experienced by married male employees with long tenure (20 years and longer) who were older in age (46 years and older).

Overall career plateau was more likely to be experienced by White/Caucasian married male employees in the lower rank (Constable) and from the older age group (46 years and older) with long tenure (20 years and longer). Job satisfaction was more likely to be experienced by single female employees in the younger age group (18-24 years) with short tenure (1-5 years).

Motivation was more likely to be experienced by employees in the 25-40 years age group with 6-10 years tenure. Work engagement was more likely to be experienced by the young age group (18-24 years) with 1-5 years tenure.

7.2.2.7 Empirical research aim 7

- To formulate recommendations for industrial and organisational psychologists and human resource professionals for career development practices in the South African Police Service and to make suggestions for future research in the field.

Based on the empirical results, the following general conclusions and recommendations are proposed for career development practices and for future research.

(a) Conclusions

- The validity and reliability of the CPES supports the use of the scale in organisations to assist industrial and organisational psychologists and human resource professionals in designing career development programmes.
- Measuring career plateau will assist industrial and organisational psychologists and human resource professionals in identifying the type of career plateau experienced by employees so that the relevant interventions can be developed to reduce career plateauing and to enhance job satisfaction, motivation, and work engagement.
- Comprehending the impact of career plateauing on employees' careers is a starting point in compiling effective programmes to alleviate the negative effect in the work environment.
- The CPES can be used to measure career plateauing for diverse groups of individuals (gender, age, race, marital status, rank, and tenure).
- Career development interventions should consider individual differences in terms of gender, age, race, marital status, rank, and tenure with regard to career plateauing.
- Understanding career plateauing may assist in the development of organisational policies, procedures, and practices.

7.2.3 Conclusions relating to the central hypothesis

The central hypothesis of this study, as indicated in Chapter 1, stated that the theoretical elements of career plateauing can be operationalised into a reliable and valid scale that can be used to assess whether a relationship exists between career plateauing, job satisfaction, motivation, and work engagement. Furthermore, individuals with different biographical characteristics (gender, age, race, marital status, rank, and tenure) differ significantly regarding career plateauing, job satisfaction, motivation, and work engagement. The literature review and empirical study provided supportive evidence for the central hypothesis.

7.2.4 Conclusions relating to the field of industrial and organisational psychology

The inferences made from the literature review, together with the results of the empirical study, should make a significant contribution to the field of industrial and organisational psychology and career development practices. The study should thus contribute to a better understanding of the relationship between career plateauing, job satisfaction, motivation, and work engagement. The study also highlighted the importance of understanding and accommodating individual differences in terms of gender, age, race, marital status, rank, and tenure in the SAPS environment.

The literature review provided new insights into the various concepts and theoretical models relating to employees' career plateauing, job satisfaction, motivation, and work engagement. In line with the conclusions drawn from the literature review, it is evident that organisations, industrial and organisational psychologists, and human resource professionals should focus on the concepts and theoretical models that influence the variables of career plateauing, job satisfaction, motivation, and work engagement as these constructs inform career development practices. The field of industrial and organisational psychology should take into account the interrelationships between overall career plateau, job content plateau, hierarchical/structural plateau, maintenance plateau, and psychological plateau, as well as the interrelationship between career plateauing and its subconstructs with job satisfaction, motivation, and work engagement, when applying the CPES in organisations.

The results of the empirical study revealed that it is imperative that industrial and organisational psychologists and human resource professionals consider the psychometric properties of the measuring instruments (CPES, MSQ, AMQ, and UWES) used to measure career plateauing, job satisfaction, motivation, and work engagement. Trained and qualified practitioners, preferably qualified psychometrists or psychologists, should be consulted during the administration and interpretation of the results from the research instruments in order to promote fairness and equality. Furthermore, the research findings indicate that individuals' sociodemographic characteristics such as gender, age, race, marital status, rank, and tenure as well as the flatter structure of the SAPS must be taken into consideration when compiling career development strategies.

7.3 LIMITATIONS

The limitations of the literature review and the empirical study are discussed below.

7.3.1 Limitations of the literature review

The exploratory research on the development and validation of the CPES in relation to job satisfaction, motivation, and work engagement in the South African Police Service was limited for the following reasons:

- A gap in literature on career plateauing is that a complete questionnaire containing the constructs of hierarchical/structural, job content plateau, maintenance plateau, and psychological plateau does not exist anywhere. The constructs of maintenance plateau and psychological plateau have not been included in any of the career plateau scales developed thus far. The significance of developing a questionnaire that assesses career plateauing is that it serves to guide career development practices in the SAPS.
- There are various work-related variables, however, only three variables (job satisfaction, motivation, and work engagement) were explored in this study. Therefore, the current study was unable to provide a holistic view of the work-related variables that may be influenced by career plateauing in the SAPS.
- Several research studies have been conducted on career plateauing in relation to job, satisfaction, motivation, and work engagement, however, the current study is the first study to explore the relationship between all these constructs in the same study.
- Even though various research studies have been conducted on career plateauing, little research has been conducted in the South African context and more specifically in the SAPS.
- The research and interpretation of findings were limited to the disciplinary boundary of industrial and organisational psychology. Future research should consider identifying constructs from other disciplinary standpoints and observing the patterns that may arise.

7.3.2 Limitations of the empirical study

The findings of the empirical study could be limited due to the generalisability in terms of the size and characteristics of the research sample, and the psychometric properties of the measuring instruments used. The following restrictions should be taken into consideration:

- The research data were drawn exclusively from within South Africa and in the public sector (SAPS), which will limit the generisability of the findings to other organisations and the private sector. The demographic profile of the sample (lack of heterogeneity) also

impedes the generalisability of the results to the broader population and other occupational contexts.

- The biographical variables are limited to gender, age, race, marital status, rank, and tenure. It is possible that other biographical variables might have exerted a different effect on the research outcomes. Although the sample size (N= 410) was adequate to examine the equivalence of the CPES for the gender, age, race, marital status, rank, and tenure groups, a larger and more representative sample of the different groups could have contributed to more meaningful cross-cultural comparisons. Future research should explore the psychometric properties of the CPES in larger and more diverse samples in various occupational contexts.
- The CPES needs to be improved through cross-validation studies with special focus on construct and discriminant validity and equivalence for race, age, and gender groups. Structural equivalence and group confirmatory analysis are recommended for future studies.
- The Cronbach's alpha coefficients for job content plateau and hierarchical/structural plateau were above 0.9, which is an indication of redundancy (or too high a degree of similarity between items). Since only 5 items were included for each construct in the final questionnaire, items could not be deleted in order to improve the reliability of the scales. This could have been avoided if a proper pilot study was initially conducted.
- Future research should reassess the link between job satisfaction and maintenance plateau to further refine the CPES and ensure lack of possible multicollinearity and discriminant validity between the constructs.
- The scoring of the AMQ was problematic and may have had a different influence on the research outcomes. Future research studies should incorporate alternative measures of motivation relating to studies of the CPES.
- Although the sample consisted of 410 participants, a larger sample would be required to establish the existence of a definite relationship between career plateauing, job satisfaction, motivation, and work engagement and the sociodemographic variables in the study.
- The sample represented predominantly married African male police officers who were mainly in the 25-40 years age group and in the 11-15 years tenure group, which limited the generalisability of the results to the broader SAPS population.
- The measuring instruments (CPES, MSQ, AMQ, and UWES) are self-report questionnaires which were reliant on the participants' personal opinions, views, insights, and experiences which may have comprised the validity of the research findings.

- The main limitation of the current study was the exploratory, cross-sectional nature of the research design. No causal effects could be assessed but merely the nature, direction and magnitude of the prediction direction. Controlling the research variables was challenging and determining causality in the significant relationships could not be assessed. Thus, there may be concerns about common method variance. Future research should use a longitudinal design which would cater for a more comprehensive measurement of the research results as they would be investigated over time, and the direction of relationships could thus be inferred.
- The CFA established that the theoretical model underpinning the CPES is consistent with the observed data. However, cross-validation studies should further investigate the factorial and structural validity of the CPES in relation to other tests that measure similar constructs. Since the study was only exploratory in nature, future validation studies should concentrate on enhancing the model fit of the theoretical model underpinning the CPES.

Despite the above-mentioned limitations, it can be concluded that the study provided valuable information on the relationships between career plateauing, job satisfaction, motivation, and work engagement. The results of the study could be regarded as an initial step in advancing and stimulating further research into career plateauing, job satisfaction, motivation, and work engagement in the South African employment context from a positivist perspective.

7.4 RECOMMENDATIONS

Based on the research findings, conclusions and limitations, the following recommendations for the field of industrial and organisational psychology and further research in this field are discussed below.

7.4.1 Recommendations for the field of industrial and organisational psychology

The research results and significant relationship dynamics that emerged from the research study may contribute to the development of the following individual and organisational interventions regarding career development practices for employees from the SAPS.

Individual-level Interventions

- Poor communication exists in the SAPS (Kotze, 2017). Thus, it is imperative that there is proper communication and consultation with employees where they can talk about the

limitations, strengths, and challenges surrounding their careers. In this way employees can enhance career adaptability resources by taking charge of their careers and planning out their future career paths which will inform their training and development needs. This may assist in identifying experiences of psychological plateau which negatively impacts engagement. Job crafting in the form of metacognition reduces psychological withdrawal so that employees remain engaged in their work.

- Identifying career impediments through the assessment of career plateauing using the CPES so that the necessary interventions can be implemented to cope with the career plateau.
- Since job crafting introduces new elements into the job, it is positively related to job satisfaction, and can be used to address the negative impact of job content plateau on job satisfaction by increasing challenges and decreasing boredom in the job.
- Adopting career adaptability resources will prevent employees, who are experiencing a maintenance plateau, from stagnating in their careers as they can explore new opportunities as well as experiences through training and development to sustain employability.
- White/Caucasian married male employees in the lower rank (Constable) and from the older age group (46 years and older) with long tenure (20 years and longer) were more likely to experience an overall career plateau. Married male employees who had long tenure (20 years and longer) and who were older in age (46 years and older) were more likely to experience a job content plateau. Indian employees in the higher rank (Colonel) with long tenure (16 years and longer) and who were older in age (46 years and older) were more likely to experience a hierarchical/structural plateau. Thus, career development programmes should focus on these individuals for training and development, mentoring, and lateral transfers.
- Married male employees with long tenure (20 years and longer) who were older in age (46 years and older) should engage in continuous learning so that they improve their skills and expertise, in preparation for vertical or horizontal career movement, as they were more likely to experience a psychological plateau.

Organisational-level Interventions

- The SAPS does not have a career management policy (Kotze, 2017) which is linked to promotion and development. A formal career management system must be developed where employees receive information on succession paths and consistently receive feedback on their progress.

- Career development policies, procedures, and practices must be clear and concise to effectively guide employees' career path. This plays a critical role in averting the negative consequences of the career plateau (Hossain, 2018).
- Career development policies, procedures, and practices must be sensitive not only to the differences amongst employees in terms of their demographical characteristics (gender, age, race, marital status, rank, and tenure) but also towards their cultural diversity.
- Implementation of career development programmes should be proactive rather than reactive so that employees are better equipped to deal with career stagnation and boredom.
- Career development practices and job crafting must be supported and promoted by senior management to ensure the success of such initiatives.
- The aim of career development programmes should be to reduce and remove negative perceptions of career plateauing and to subsequently enhance job satisfaction, motivation, and work engagement. Married male employees with long tenure (20 years and longer) who were older in age (46 years and older) were more likely to experience a job content plateau and psychological plateau whilst Indian employees in the higher rank (Colonel) with long tenure (16 years and longer) and who were older in age (46 years and older) were more likely to experience a hierarchical/structural plateau. Therefore, career development programmes should concentrate on these groups of individuals.
- Even though the SAPS does have a performance enhancement process (PEP) in place which is useful to identify employees' training needs and to develop training plans accordingly, often such information is not implemented effectively (Mohajane, 2017). Thus, more attention should be focussed on the applying the PEP so that employees can receive the training that they need to perform better in their jobs.
- Establish the adoption of support structures such as employee assistance programmes and mentoring programmes that would assist in reducing the negative aspects of a career plateau and assist employees to manage their careers through the use of career adaptability resources and job crafting initiatives.
- Job crafting involving work role expansion can broaden employees' skills and allow them to become multi-skilled. This may occur through rotation as well as secondments of the stagnating and bored employees to other positions on the same level that requires similar skills.
- Employees need to develop career adaptability, through career discussions and career management, which is effective in reducing career plateaus, especially job content plateaus.

7.4.2 Recommendations for future research

The study can be described as innovative because it shows that career plateauing is multidimensional in nature and can be measured in a reliable and valid manner in the multicultural and diverse work context of the SAPS. Industrial and organisational psychologists and human resource professionals can use the CPES as a measure in career development programmes to create awareness and to assist employees to determine whether or not they are experiencing a career plateau. Since research as well as the current research has shown that gender, age, race, marital status, rank, and tenure groups differ in terms of career plateauing, career development strategies should consider these differences. The research findings are encouraging for the future validation and standardisation of the CPES. The development of the CPES represents a possible significant advancement in positivist research which may inspire empirical research and theory development of career plateauing in the contemporary protean and boundaryless career context. Future cross-validation studies will most likely lead to a better insight of the construct of career plateauing and its sub-scales. Though the scale is mainly applicable to the SAPS environment, it is a broad scale that can still be used in other sectors that also have limited career progression structures similar to that of the SAPS.

The sample in this study comprised of mainly married African male police officers who were mainly in the 25-40 years age group and in the 11-15 years tenure group. To increase the generalisability of the findings, future research studies should make use of larger heterogeneous samples that are more representative of the different sociodemographic and occupational groups within the South African context. The sample in this study consisted of employees in the SAPS. Similar research needs to be conducted in other public sector organisations as well as in the private sector in order to test the findings in a broader South African employment context.

Future research should also focus on a more in-depth investigation of the relationship dynamics between career plateauing, job satisfaction, motivation, and work engagement and the biographical variables (gender, age, race, marital status, rank, and tenure). The research results of this study provided a limited understanding of the research variables and the biographical variables. Future studies would be important for industrial psychologists and human resource practitioners in terms of improving career development strategies at both an organisational and an individual level.

Longitudinal research designs may contribute to the current research by evaluating the suggested recommendations. The measurement of the research variables before, during, and after recommended organisational interventions might establish whether the relationships between the variables remain consistent over time. A longitudinal study of the interactions between the elements of the proposed integrated model would also allow researchers to test the assumptions regarding the directions of causality in the model, promoting more significant causal inferences that might stimulate a greater understanding of career plateauing, job satisfaction, motivation, and work engagement in the workplace. The assessment of causality between variables would support industrial psychologists and human resource practitioners to use the findings from the studies to compile career development programmes, policies, and procedures in the workplace.

7.5 EVALUATION OF THE STUDY

The primary aim of this research was to construct a valid and reliable measure of career plateauing, that can be applied in the SAPS context, and to determine whether individuals' experiences of career plateauing positively or negatively predict their job satisfaction, motivation, and work engagement. The following dimensions of career plateauing were explored: job content plateau, hierarchical/structural plateau, maintenance plateau, and psychological plateau. The results revealed that career plateauing could be assessed in a reliable manner, however, the validity of the scale requires further investigation. The findings indicated that individuals' experiences of career plateauing significantly predicted their job satisfaction, motivation, and work engagement.

7.5.1 Value added at a theoretical level

The literature review showed that the contemporary work environment is affected by globalisation, technological advancements, political developments, and changes in workforce demographics and employee skills. Organisational structures are becoming flatter, increasing the chances of plateauing. The literature review further revealed that political transformation has resulted in changes in the structure and workforce composition of the SAPS and this has impacted on the careers of police officers. Thus, it can be established that the socio-demographic variables of gender, age, race, marital status, rank, and tenure should be taken into consideration when individuals' career plateauing, job satisfaction, motivation, and work engagement are investigated. In terms of the constructs of the current study, the literature review contributed by clearly conceptualising these constructs. Furthermore, relevant

theoretical models were used to understand the relationship between the constructs and assisted in constructing an integrated theoretical model.

On a theoretical level, the literature review assisted the researcher in identifying the elements of career plateauing that are relevant for constructing the CPES. Unlike previous career plateauing scales that mainly incorporate the aspects of hierarchical/structural plateau and job content plateau, the CPES includes the constructs of maintenance plateau and psychological plateau. The notion of the psychological career plateau is a novel contribution by the research and the construct has been operationalised into an empirical measure. The construct broadens understanding of the dynamics amongst hierarchical/structural plateau, job content plateau, and maintenance plateau. In this regard, the research extended theory on career plateauing which may be relevant to the trend of flatter organisational structures.

The literature review made an important contribution by identifying the relationship that exists between career plateauing (job content plateau, hierarchical/structural plateau, maintenance plateau, and psychological plateau), job satisfaction, motivation, and work engagement and the socio-demographic variables (gender, age, race, marital status, rank, and tenure) included in this study. In addition, the literature review revealed that the socio-demographic variables, relevant to this study, could act as predictors of individuals' career plateauing, job satisfaction, motivation, and work engagement. The research results can be used to formulate recommendations for employees' career development and contributes to career theory by providing more insight into how job satisfaction, motivation, and work engagement affects career plateauing and individuals' careers.

7.5.2 Value added at an empirical level

On an empirical level, this study contributed by empirically testing and operationalising the theoretical elements of career plateauing into a reliable and valid measurement scale that can be applied especially in organisations with flat structures. Advanced statistical techniques were applied to assess the psychometric properties of the newly developed CPES. The current study could possibly be breaking new ground by including the maintenance plateau and psychological plateau subscales as part of the career plateauing construct. Further refinement of the CPES is recommended in future research because the subscale psychological plateau requires improvement in terms of discriminant validity. This was considered during interpretation of the findings.

The empirically manifested model added to the theoretical framework of the CPES. Given the cultural and generational diversity of the SAPS, the empirical results made valuable contributions by identifying differences in employees regarding their biographical variables. The findings indicate that significant differences exist between the biographical variables (gender, age, race, marital status, rank, and tenure) and career plateauing, job satisfaction, motivation, and work engagement. Thus, taking into account the diversity of the workforce, enhances the significance of the recommendations that are provided.

7.5.3 Value added at a practical level

On a practical level, this research study contributes to a better understanding of the concepts of career plateauing, job satisfaction, motivation, and work engagement amongst industrial and organisational psychologists and human resource professionals. The results contributed to career development practices by establishing the occurrence of significant relationships between career plateauing, job satisfaction, motivation, and work engagement and the socio-demographic variables (gender, age, race, marital status, rank, and tenure) in the SAPS. In addition, the relationship between the constructs also emphasises the uniqueness of individual employees which assists in the career development of diverse employees. In terms of this knowledge, individual and organisational recommendations were proposed.

This research study revealed that job crafting and career adaptability resources can be used to address the psychological plateau which improves the work engagement of employees. Job crafting can also be applied to enhance the job satisfaction of employees (Bakker & Albrecht, 2018; Porfelli & Savickas, 2012). The continuous training and development of employees reduces the occurrence of the shadow side of the maintenance plateau so that younger employees are constantly growing in their careers so that they can avoid experiencing a psychological plateau and job content plateau. Career development practices in the SAPS can benefit immensely from these new and unique insights emanating from this study in addressing issues relating to career plateauing thereby increasing job satisfaction and work engagement.

Taking into account the diversity of the SAPS workforce will enable industrial and organisational psychologists and human resource professionals to enhance career development practices by focussing on the differences of employees' personal and work-related characteristics. This will align individual needs with organisational goals thereby

achieving organisational success. Thus, the research findings have resulted in providing direction for future studies regarding the career development of diverse employees.

7.5.4 Contribution to my doctorateness and graduateness

The doctorate process required the researcher to apply critical and innovative thinking. The researcher was not only exposed to the concepts in the research study but also gained an in-depth understanding of career plateauing, job satisfaction, motivation, and work engagement. This study gave the researcher the platform, using relevant literature, to conceptualise the career plateauing, job satisfaction, motivation, and work engagement constructs as well as the variables that are associated with these constructs. Since this study is the first to investigate the maintenance plateau and psychological plateau as sub-constructs of career plateauing, it can be regarded as unique and adding new knowledge to the career plateauing literature. The inclusion of the maintenance plateau and psychological plateau as part of the CPES will make the scale more attractive as it enables organisations to investigate aspects of career plateauing that are pertinent to organisations, like the SAPS, with flatter structures. The scale development process used in the development of the CPES was both challenging and rewarding. The researcher gained tremendous knowledge and insight regarding the data analysis, statistical analysis, and reporting pertaining to this study.

The study contributed to the doctorateness and graduateness of the researcher as an industrial psychologist and human resource practitioner. The practical recommendations and interventions suggested by the researcher can assist her in her role as an employee health and wellness practitioner to help organisations as well as clients to deal with factors affecting career plateauing so that job satisfaction, motivation, and work engagement are enhanced in the workplace. This may impact positively on the clients' and organisations' career development by maximising their career wellbeing.

The study contributed to the national transformational goals by identifying the obstacles relating to career plateauing that may hamper job satisfaction, motivation, and work engagement of employees in the SAPS and suggesting career development practices to overcome obstacles brought about by career plateauing issues. This justifies employing industrial psychologists as professionals in the SAPS in order to strengthen the human capacity development of the organisation.

7.6 CHAPTER SUMMARY

This chapter discussed the conclusions, limitations, and recommendations of the research study with regard to the theoretical and empirical aims. The possible limitations of the study were discussed in relation to the theoretical and empirical study. Recommendations for future research were highlighted. An integration of the research findings was also provided which highlighted the degree to which the research results supported the development and validation of the career plateauing experiences scale (CPES) in relation to job satisfaction, motivation, and work engagement in the South African Police Service (SAPS).

This chapter achieved the following research aim:

Research aim 7: To formulate recommendations for industrial and organisational psychologists and human resource professionals for career development practices in the South African Police Service and to make suggestions for future research in the field.

REFERENCES

Aamodt, M.G. (2010). *Industrial/organizational psychology: An applied approach* (6th ed.). Cengage Learning.

Abd-Elrhaman, E.S.A., Helal, W.E.H., & Ebraheem, S.M.A. (2020). Career plateau, self-efficacy and job embeddedness as perceived by staff nurses. *American Journal of Nursing Research*, *8*(2), 170-181. https://doi.org/10.12691/ajnr-8-2-6

Abdolhosseini, H., Abedi, M.R., Baghban, I., & Nilforoshan, P. (2013). Career development in classical, modern, and postmodern theories. *Interdisciplinary Journal of Contemporary Research in Business, 5*(5), 512-517.

Abdolshah, M., Khatibi, S.A.M., & Moghimi, M. (2018). Factors influencing job satisfaction of banking sector employees (The case study: Asgariyeh and Mehrlran banks in Qazvin and Alborz, Iran). *Journal of Central Banking Theory and Practice, 1*, 207-222. https://doi.org/10.2478/jcbtp-2018-0009

Abdulkadir, D.S., Isiaka, S.B., & Adedoyin, S.I. (2012). Effects of strategic performance appraisal, career planning and employee participation on organizational commitment: An empirical study. *International Business Research, 5*(4), 124-133. https://doi.org/10.5539/ibr.v5n4p124

Abraham, S. (2012). Job Satisfaction as an antecedent to employee engagement. *Journal of Management, 8*(2), 27-36.

Acquah, A. (2017). Implications of the Achievement Motivation Theory for school management in Ghana: Literature Review. *Research on Humanities and Social Sciences, 7*(5), 2224-5766.

Adkins, C.J. (2015). *Examining the X and Y generations' motivation for choosing law enforcement: My how things have changed?* (Unpublished master's thesis). Youngstown State University, Ohio, United States.

Agbor, N.S., Ebeh, R.E., Nwankwo, B.E., & Agu, S.A. (2014). Influence of emotional intelligence and gender on job satisfaction among local government employees. *Research in Psychology and Behavioral Sciences, 2*(4), 86-89. https://doi.org/10.12691/rpbs-2-4-2

Akaike, H. (1987). Factor analysis and AIC. *Psychometrika*, *52*(3), 317–332. https://doi.org/10.1007/978-1-4612-1694-0_29

Akhtar, R., Boustani, L., Tsivrikos, D., & Chamorro-Premuzic, T. (2015). The engageable personality: Personality and trait EI as predictors of work engagement. *Personality and Individual Differences, 73,* 44-49. https://doi.org/10.1016/j.paid.2014.08.040

Akinyi, R. (2014). *Career progression of women in the banking sector: The case of the Standard Chartered Bank Kenya Limited, Nairobi City County* (Unpublished master's thesis). University of Nairobi, Kenya, Nairobi.

Alarcón, D., & Sánchez, J.A. (2015). *Assessing convergent and discriminant validity in the ADHD-R IV rating scale*. Spanish STATA meeting October 22, 2015, University of Pablo de Olavide, Seville, Spain.

Alavi, S.M., & Bordbar, S. (2017). Differential item functioning analysis of high-stakes test in terms of gender: A Rasch model approach. *Malaysian Online Journal of Educational Sciences, 5*(1), 10-24.

Alderfer, C.P. (1969). An empirical test of a new theory of human needs. *Organizational Behavior & Human Performance, 4*(2), 142–175. https://doi.org/10.1016/0030-5073(69)90004-X

Alduaij, H.S. (2013). A study of work motivation among Kuwaiti employees. *International Journal of Business and Social Science, 4*(10), 184-188.

Alexander, D.A., Walker, L.G., Innes, G., & Irving, B.L. (1993). *Police stress at work.* The Police Foundation.

Ali, W. (2016). Understanding the concept of job satisfaction, measurements, theories, and its significance in the recent organizational environment: A theoretical framework. *Archives of Business Research, 4*(1), 100-111. https://doi.org/10.14738/abr.41.1735

Allen, T.D., Poteet, M.L., & Russell, J.E.A. (1998). Attitudes of managers who are more or less career plateaued. *The Career Development Quarterly, 47*(2), 159-172. https://doi.org/10.1002/j.2161-0045.1998.tb00549.x

Allen, T.D., Russell, J.E.A., Poteet, M.L., & Dobbins, G.H. (1999). Learning and development factors related to perceptions of job content and hierarchical plateauing. *Journal of Organizational Behavior*, *20*(7), 1113-1137. https://doi.org/10.1002/(SICI)1099-1379(199912)20:7<1113::AID-JOB944>3.0.CO;2-7

Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's two-factor theory. *Life Science Journal, 14*(5), 12-16. https://doi.org/10.7537/marslsj140517.03

Altunel, M.C., Kocak, O.E., & Cankir, B. (2015). The effect of job resources on work engagement: A study on academicans in Turkey. *Educational Sciences: Theory & Practice, 15*(2), 409-417. https://doi.org/10.12738/estp.2015.2.2349

Andersen, J.A. (2018). Managers' motivation profiles: Measurement and application. *SAGE,* 1-9. https://doi.org/10.1177/2158244018771732

Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin 103*(3), 411–423. https://doi.org/10.1037/0033-2909.103.3.411

Anderson, S. (2017). Assessing job satisfaction using Hertzberg's two-factor theory: A qualitative study between US and Japanese insurance employees. *IAFOR Journal of Business & Management, 2*(1), 22-35. https://doi.org/10.22492/ijbm.2.1.02

Appelbaum, S.H., & Finestone, D. (1994). Revisiting career plateauing: Same old problems-avant-garde solutions. *Journal of Managerial Psychology*, *9*(5)*,* 12-21.

Armstrong, C. (2015). *Workplace motivation and its impact on job satisfaction & self-esteem* (Unpublished bachelor's thesis). Dublin Business School, Dublin, Ireland.

Armstrong-Stassen, M. (2008). Factors associated with job content plateauing among older workers. *Career Development International, 13*(7), 594-613. https://doi.org/10.1108/13620430810911074

Arosi, Z. (2013). *A psychobiographical study of Ellen Kuzwayo* (Unpublished master's thesis). Nelson Mandela Metropolitan University, Port Elizabeth, South Africa.

Arthur, M.B., & Rousseau D.M. (Eds.). (1996). *The boundaryless career as a new employment principle for a new organizational era.* Oxford University Press.

Ashwathapa, K. (2005). *Human Resource Management* (4th ed.). McGraw Hills.

Ates, H.K., & Yilmaz, P. (2018). Investigation of the work motivation levels of primary school teachers. *Journal of Education and Training Studies, 6*(3), 184-196. https://doi.org/10.11114/jets.v6i3.2948

Baakeel, O.A.O. (2018). Using expectancy theory to explain performance appraisal elements and employee's motivation. *Journal of Fundamental and Applied Sciences, 10*(4S), 365-370.

Babbie, E. (2010). *The practice of social research* (12th ed.). Wadsworth Publishing Company.

Badiane, K. (2016). A study on career plateauing, organizational commitment, and organizational citizenship behaviour of Taiwan-based expatriates: A holistic approach to international mobility. *International Journal of Human Resource Studies, 6*(2), 134-167. https://doi.org/10.5296/ijhrs.v6i2.9254

Badubi, R.M. (2017). Theories of motivation and their application in organizations: A risk analysis. *International Journal of Innovation and Economic Development, 3*(3), 44-51. https://doi.org/10.18775/ijied.1849-7551-7020.2015.33.2004

Bai, J., & Liu, J.P. (2018). A Study on the Influence of Career Growth on Work Engagement among New Generation Employees. *Open Journal of Business and Management, 6*(2), 300-317. https://doi.org/10.4236/ojbm.2018.62022

Bajis, D., Chaar, B., Penm, J., & Moles, R. (2016). Competency-based pharmacy education in the Eastern Mediterranean Region - A scoping review. *Currents in Pharmacy Teaching and Learning, 8*(3), 401-428. https://doi.org/10.1016/j.cptl.2016.02.003

Bakker, A.B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309-328. https://doi.org/10.1108/02683940710733115

Bakker, A.B., Demerouti, E., & Sanz-Vergel, A.I. (2014). Burnout and work engagement: The JD-R approach. *Annual Review of Organizational Psychology and Organizational Behavior, 1*, 389-411. https://doi.org/10.1146/annurev-orgpsych-031413-091235

Bakker, A., Cai, J., English, L., Kaiser, G., Mesa, V., & Dooren, W.V. (2019). Beyond small, medium, or large: points of consideration when interpreting effect sizes. *Educational Studies in Mathematics, 102*, 1-8. https://doi.org/10.1007/s10649-019-09908-4

Bakker, A.B., & Albrecht, S. (2018). "Work engagement: current trends". *Career Development International, 23*(1), 4-11. https://doi.org/10.1108/CDI-11-2017-0207

Bakker, A.B., & Oerlemans, W.G.M. (2019). Daily job crafting and momentary work engagement: A self-determination and self-regulation perspective. *Journal of Vocational Behavior, 112*, 417-430. https://doi.org/10.1016/j.jvb.2018.12.005

Baoguo, X., & Mian, X. (2005). An empirical research on causes and effects of career Plateau. *Proceedings of the 7th International Conference on Innovation and Management*, 1729-1732.

Bardwick, J. (1980). The seasons of a woman's life. In D. McGuigan (Ed.), *Women's lives: New theory, research, and policy.* 35-57. University of Michigan Press.

Bardwick, J.M. (1986). *The plateauing trap*. Amazon.

Bardwick, J.M. (1983). SMR forum: Plateauing and productivity. *Sloan Management Review, 24*(3), 67-73.

Barnes, M.C., Fogg, A.H., Stephens, C.N., & Titman, L. G. (2013). *Company organization: Theory and practice.* Routledge.

Bartlett, M.S. (1954). A note on the multiplying factors for various χ2 approximations. *Journal of the Royal Statistical Society, Series B (Methodological)*, *16*(2), 296–298. http://www.jstor.org/stable/2984057

Bartlett, S. (2015). *The relationship between emotional intelligence, work engagement, creativity and demographic variables* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Basson, L. (2016). *Job calling: Testing the effects on engagement and health in the South African Police Service* (Unpublished master's thesis). Stellenbosch University, Cape Town, South Africa.

Batts, A.W., Smoot, S.M., & Scrivner, E. (2012, July 1). Police leadership challenges in a changing world. *New Perspectives in Policing,* 1-24. https://www.ncjrs.gov/pdffiles1/nij/238338.pdf

Beekhan, A. (2012). *The relationship between achievement motivation and job satisfaction* (Unpublished master's thesis). University of KwaZulu-Natal, Durban, South Africa.

Beheshtifar, M., & Modaber, H. (2013). The investigation of relation between occupational stress and career plateau. *Interdisciplinary Journal of Contemporary Research in Business, 4*(1), 650-660.

Bellingan, T.R. (2004). Job satisfaction: An analysis of middle managers in the South African Police Service. *Acta Commercii, 4*(1), 29-36. https://doi.org/10.4102/ac.v4i1.49

Bendix, S. (2010). *Industrial relations in the new South Africa* (5th ed.). Juta.

Bentler, P.M., & Bonett, D.G. (1980). Significance tests and goodness-of-fit in the analysis of covariance structures. *Psychological Bulletin, 88*(3), 588–606. https://doi.org/10.1037/0033-2909.88.3.588

Bernardo, A.B.I, & Salanga, M.G.C. (2019). Validating the protean and boundaryless career attitudes scales with Filipino young adults *Cogent Psychology, 6*(1), 1-15. https://doi.org/10.1080/23311908.2019.1671133

Bezuidenhout, A., & Cilliers, F.V.N. (2011). Burnout, work engagement and sense of coherence in female academics in higher-education institutions in South Africa. *South African Journal of Industrial Psychology, 36*(1), 872−882. https://doi.org/10.4102/sajip.v36i1.872.

Bezuidenhout, M. (2011). *The development and evaluation of a measure of graduate employability in the context of the new world of work* (Unpublished master's thesis). University of Pretoria, Pretoria, South Africa.

Bhat, A.A. (2018). Job satisfaction among high school teachers. *The International Journal of Indian Psychology, 6*(1), 2349-3429. https://doi.org/10.25215/0601.027

Bhavani, M., & Prasad, V.M. (2013). An empirical study of organizational climate and career plateau causes and effects of enterprises in India. *IOSR Journal of Business and Management, 9*(6), 69-73. https://doi.org/10.9790/487X-0966973

Bienkowska, J. (2012). Organizational and professional commitment: The comparative study. *Problems of Management in the 21st Century, 4*, 21-29.

Billinger, S., & Workiewicz, M. (2019). Fading hierarchies and the emergence of new forms of organization. *Journal of Organization Design*, *8*(17), 1-6. https://doi.org/10.1186/s41469-019-0057-6

Boikanyo, D.H., & Heyns, M.M. (2019). The effect of work engagement on total quality management practices in a petrochemical organisation. *South African Journal of Economic and Management Sciences*, *22*(1), a2334. https://doi.org/10.4102/sajems.v22i1.2334

Boke, K., & Nalla, M.K. (2009). Police organization culture and job satisfaction: A comparison of law enforcement officers' perceptions in two Midwestern states in the U.S. *Journal of Criminal Justice and Security*, *11*(1), 55-73.

Bond, T.G., & Fox, C.M. (2015). *Applying the Rasch model: Fundamental measurement in the human sciences* (3rd ed.). Routledge.

Boone, W.J., & Noltemeyer, A. (2017). Rasch analysis: A primer for school psychology researchers and practitioners. *Cogent Education, 4*(1), 1-13. https://doi.org/10.1080/2331186X.2017.1416898

Boresli, N. (2015). Impact of career plateau and supervisory support on career satisfaction: A study of banking industry in Kuwait. *Proceeding of the 3rd Conference on Marketing, 3*, 30-40. https://doi.org/10.17501/icom2015-1104

Borovec, K., & Balgac, I. (2016). Contribution of internal communication in predicting job satisfaction among police officers. *Criminology & Social Integration Journal, 25*(1), 17-33.

Bosch, A., de Bruin, G.P., Kgaladi, B., & de Bruin, K. (2012). Life role salience among black African dual-career couples in the South African context. *The International Journal of Human Resource Management, 23*(14), 2835-2853. https://doi.org/10.1080/09585192.2012.671506

Bothma, A.C., & Schepers, J.M. (1997). The role of locus of control and achievement motivation in the work performance of black managers. *Journal of Industrial Psychology, 23*(3), 44-52. https//doi.org/10.4102/sajip.v23i3.638

Bowen, P., Cattell, K., & Distiller, G.E. (2008). Job satisfaction of South African quantity surveyors: An empirical study. *Journal of Construction Management & Economics, 26*(7), 765-780. Retrieved from: https://dx.doi.org/10.1080/01446190801998724

Breaugh, J.A. (2011). Modeling the managerial promotion process. *Journal of Managerial Psychology*, *26*(4), 264-277. https://doi.org/10.1108/02683941111124818

Brewer, E. W., & Shapard, L. (2004). Employee Burnout: A meta-analysis of the relationship between age or years of experience. *Human Resource Development Review, 3*(2), 102–123.

Briscoe, J.P., Henagan, S.C., Burton, J.P., & Murphy, W.M. (2012). Coping with an insecure employment environment: The differing roles of protean and boundaryless career orientations. *Journal of Vocational Behavior, 80*(2), 308-316. https://doi.org/10.1016/j.jvb.2011.12.008

Brogden, M. (1996). The indigenisation of policing in South Africa. In *Policing change, changing police: International perspectives,* O. Marenin (Ed.). Garland Publishing.

Brouse, C.H., Basch, C.E., LeBlanc, M., McKnight, K.R., & Lei, T. (2010). College students' academic motivation: Differences by gender, class, and source of payment. *College Quarterly*, *13*(1), 1-10.

Brown, A., Bimrose, J., Barnes, S., & Hughes, D. (2012). The role of career adaptabilities for mid-career changers. *Journal of Vocational Behavior, 80*(3), 754-761. https://doi.org/10.1016/j.jvb.2012.01.003

Brown-Wilson, D. (2008). *Career plateauing in older managers: A systematic literature review* (Unpublished master's thesis). Cranfield University, Cranfield, London.

Brown-Wilson, D., & Parry, E. (2013). Career progression in older managers. *Employee Relations Journal, 35*(3), 309-321. https://doi.org/10.1108/01425451311320495

Bruce, D. (2013, March). New Blood: Implications of en masse recruitment for the South African Police Service. *SA Crime Quarterly, 43*, 17-28. https://doi.org/10.17159/2413-3108/2013/v0i43a823

Bruning, P.F., & Campion, M.A. (2018). A role-resource approach-avoidance model of job crafting: A multimethod integration and extension of job crafting theory. *Academy of Management Journal, 61*(2), 499-522. https://doi.org/10.5465/amj.2015.0604

Bryman, A. (2012). *Social research methods* (4th ed.). Oxford University Press.

Buitendach, J.H., & Rothmann, S. (2009). The validation of the Minnesota Job Satisfaction Questionnaire in selected organisations in South Africa. *South African Journal of Human Resource Management*, *7*(1), 1-8. https://doi.org/10.4102/sajhrm.v7i1.183

Burke, R.J. (1989). Examining the career plateau: Some preliminary findings. *Psychological Reports, 65*(1)*,* 295–306. https://doi.org/10.2466/pr0.1989.65.1.295

Burke, R.J., & El-Kot, G. (2010). Work engagement among managers and professionals in Egypt: Potential antecedents and consequences. *African Journal of Economics and Management Studies, 1*(1), 42−60. https://doi.org/10.1108/20400701011028158

Burke, R.J., & Mikkelsen, A. (2006). Examining the career plateau among police officers. *International Journal of Police Strategies and Management*, *29*(4), 691-703. https://doi.org/10.1108/13639510610711600

Burton, L.J., & Mazerolle, S.M. (2011). Survey instrument validity Part1: Principles of survey instrument development and validation in athletic training education research. *Athletic Training Education Research*, *6*(1), 27-35.

Buys, S. (2014). *The factors that relate to the career maturity of school-going girls in Gauteng: A case study* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Cain, M.K., Zhang, Z., & Yuan, K. (2017). Univariate and multivariate skewness and kurtosis for measuring nonnormality: Prevalence, influence, and estimation. *Behavioural Research, 49*, 1716-1735. https://doi.org/10.3758/s13428-016-0814-1

Campbell, D. (2011). Diversity and job satisfaction: Reconciling conflicting theories and findings. *International Journal of Applied Management and Technology, 10*(1), 1-15. https://doi.org/10.5590/IJAMT.2011.10.1.01

Can, S.H., Holt, W., & Hendy, H.M. (2016). Patrol officer job satisfaction scale (POJSS): Psychometrics and associations with individual and police department demographics. *Policing: An International Journal, 39*(4), 710-722. https://doi.org/10.1108/PIJPSM-11-2015-0129

Chai, S.C., Teoh, R.F., Razaob, N.A., & Kadar, M. (2017). Work motivation among occupational therapy graduates in Malaysia. *Hong Kong Journal of Occupational Therapy, 30*(1)*,* 42-48. https://doi.org/10.1016/j.hkjot.2017.05.002

Chan, K.Y., Uy, M.A., Ho, M.R., Sam, Y.L., Chernyshenko, O.S., & Yu, K.T. (2015). Comparing two career adaptability measures for career construction theory: Relations with boundaryless mindset and protean career attitudes. *Journal of Vocational Behavior, 87,* 22-31. https://doi.org/10.1016/j.jvb.2014.11.006

Chang, S.J., Van Witteloostuijn, A., & Eden, L. (2010). From the editors: Common method variance in international business research. *Journal of International Business Studies*, *41*(2), 178-184. https://doi.org/10.1057/jibs.2009.88

Chao, G.T. (1990). Exploration of the conceptualization and measurement of career plateau: A comparative analysis. *Journal of Management, 16*(1), 181-193. https://doi.org/10.1177/014920639001600113

Chauvet, I. (2016). *Emotional intelligence, job satisfaction, work engagement and turnover intentions of employees in selected South African organisations* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Chen, J., Hou, Z., Li, X., Lovelace, K., Liu, Y., & Wang, Z. (2016). The role of career growth in Chinese new employees' turnover process. *Journal of Career Development, 43*(1), 11–25. https://doi.org/10.1177/0894845315571412

Chen, Y., & Zhao, Q. (2013). Gender differences in business faculty's research motivation. *Journal of Education for Business*, *88*(6), 314-324. https://doi.org/10.1080/08832323.2012.717121

Cheng, J., & Su, T. (2013). Career plateauing and institutional/occupational intention for Taiwanese career officers. *Military Psychology, 25*(2), 156-165. https://doi.org/10.1037/h0094957

Chiaburu, D.S., Diaz, I., & De Vos, A. (2013). Employee alienation: Relationships with careerism and career satisfaction. *Journal of Managerial Psychology, 28*(1), 4-20. https://doi.org/10.1108/02683941311298832

Choudhary, S.A., Ramzan, M., & Riaz, A. (2013). Strategies for career plateau: Empirical investigation of organizations in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business, 4*(9), 712-726.

Chreptaviciene, V., & Starkute, J. (2010). The model of cohesions between career and competence. *Engineering Economics, 21*(5), 537-549.

Civelek, M.E. (2018). *Essentials of structural equation modelling*. https://digitalcommons.unl.edu/zeabook/64

Clark, G.L. (2010). *Differences in the domains of achievement motivation based on gender and developmental group* (Unpublished specialist thesis). Western Carolina University, Western Carolina, United States of America.

Clarke, J.W. (2004). Marketing management implications of career plateauing. *Problems and Perspectives in Management, 2*(4)*,* 201-205.

Clarke, J.W. (2005). *Career plateaus in retail management.* Paper presented at the annual meeting of the Association of Collegiate Market Educators. http://sbaer.uca.edu/research/acme/2005/09.pdf

Coetzee, M., Bester, M.S., Ferreira, N., & Potgieter, H. (2020). Facets of career agility as explanatory mechanisms of employees' career adaptability. *African Journal of Career Development, 2*(1), a11.https://doi.org/10.4102/ajcd. v2i1.11

Coetzee, M., & de Villiers, M. (2010). Sources of job stress, work engagement and career orientations of employees in a South African financial institution. *Southern African Business Review*, *14*(1), 27-58.

Coetzee, M., & Potgieter, I.L. (2014). Mediating effect of self-esteem on the career self-management and career resilience of early-career staff in the business management field. *Southern African Business Review, 18*(2), 65-82. https://doi.org/10.25159/1998-8125/5678

Coetzee, M., & Roythorne-Jacobs, H. (2012). *Career counselling and guidance in the workplace: A manual for career practitioners* (2nd ed.). Juta.

Coetzee, M., & Schreuder, A.M.G. (2011). *Careers: An organisational perspective* (4th ed.). Juta.

Coetzee, M., & Schreuder, D. (2011). The relation between career anchors, emotional intelligence, and employability satisfaction among workers in the service industry. *Southern African Business Review, 15*(3), 76–97.

Coetzee, M., Bergh, Z.C., & Schreuder, A.M.G. (2010). The influence of career orientations on subjective work experiences. *South African Journal of Human Resource Management, 8*(1). https://doi.org/10.4102/sajhrm.v8i1.279

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Lawrence Erlbaum Associates.

Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7th ed.). Routledge.

Colakoglu, S.N. (2011). The impact of career boundarylessness on subjective career success: The role of career competencies, career autonomy, and career insecurity. *Journal of Vocational Behavior, 79*(1)*,* 47-59. https://doi.org/10.1016/j.jvb.2010.09.011

Conner, D. (2014). The effects of career plateaued workers on in-group members' perceptions of P-O fit. *Employee Relations, 36*(2), 198-212. https://doi.org/10.1108/ER-01-2013-0001

Converse, P.D., Pathak, J., DePaul-Haddock, A.M., Gotlib, T., & Merbedone, M. (2012). Controlling your environment and yourself: Implications for career success. *Journal of Vocational Behavior, 80*(1)*,* 148–159. https://doi.org/10.1016/j.jvb.2011.07.003

Cook, J.D., Hepworth, S.J., Wall, T.D., & Warr, P.B. (1981). *The experience of work: A compendium and review of 249 measures and their use.* Academic Press.

Cook, S.L. (2011). *Redirection: Using career developmental theory to interpret the volunteer activities of retirees* (Unpublished doctoral thesis). University of Toronto, Toronto, Canada.

Costello, A.B., & Osborne, J.W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation, 10*, 1-9. https://doi.org/10.7275/jyj1-4868

Crockford, E.C. (2001). *A profile of mid-life men experiencing career plateau: Demographics, work traits and self-esteem* (Unpublished doctoral thesis). Capella University, Minnesota, United States of America.

Cron, W.L. (1984). Industrial salesperson development: A career stages perspective. *Journal of Marketing, 48*(4), 41–52. https://doi.org/10.2307/1251509

Culibrk, J., Delic, M., Mitrovic, S., & Culibrk, D. (2018). Job satisfaction, organizational commitment and job involvement: The mediating role of job involvement. *Frontiers in Psychology, 9*(132), 1-12. https://doi.org/10.3389/fpsyg.2018.00132

Dachapalli, L.P. (2016). An investigation into the levels of job satisfaction and organizational commitment amongst South African Police Service employees. *Problems and Perspectives in Management, 14*(3), 58-66. https://doi.org/10.21511/ppm.14(3).2016.07

Damazo, A. (2017). *Demographic factors and police officer's job satisfaction at Tanzania Police School – Moshi* (Unpublished master's thesis). Open University of Tanzania, Dar es Salaam, Tanzania.

Dawson, M.E. (2014). *Job satisfaction, career plateau, and the perception of promotability of full-time firefighters and officers within the Minnesota Fire Service* (Unpublished doctoral thesis). Capella University, Minneapolis, Minnesota.

De Haro, J., Castejon, J., & Gilar, R. (2013). General mental ability as moderator of personality traits as predictors of early success. *Journal of Vocational Behavior, 83*(2), 171-180. https://doi.org/10.1016/j.jvb.2013.04.001

De Lange, A.H., Bal, P.M., Van der Heiden, B.I.J.M., De Jong, N., & Schaufeli, W.B. (2011). When I'm 64: Psychological contract breach, work motivation and the moderating roles of future time perspective and regulatory focus. *Work & Stress, 25*(4), 338–354. https://doi.org/10.1080/02678373.2011.632610

De Mars, C.E. (2017). Infit and Outfit: Interpreting statistical significance and magnitude of misfit in conjunction. *Journal of Applied Measurement*, *18*(2), 163 – 177. https://www.ncbi.nlm.nih.gov/pubmed/28961152

De Vaus, D. (2006). *Research design*. Sage Publications.

De Vos, A.S., Delport, C.S.L., Fouche, C.B., & Strydom H. (2011). *Research at grass roots: A primer for the social science and human professions.* Van Schaik.

DeFillippi, R.J., & Arthur, M.B. (1996). Boundaryless contexts and careers: A competency-based perspective. In M. B. Arthur, & D. M. Rousseau (Eds.), *The boundaryless career.* Oxford University Press.

Delaney, M.L., & Royal, M.A. (2017). Breaking engagement apart: The role of intrinsic and extrinsic motivation in engagement strategies. *Industrial and Organizational Psychology, 10*(1), 127-140. https://doi.org/10.1017/iop.2017.2

Delgado, F.S., Yap, F.M.G., & Luces, R.L. (2018). Level of work motivation: Its relationship to job performance of non-academic staff at CapSU System. *International Journal of Scientific and Research Publications, 8*(9), 238-246. https://doi.org/10.29322/IJSRP.8.9.2018.p8133

Demerouti, E., Nachreiner, F., Bakker, A.B., & Schaufeli, W.B. (2001). The job demands Resources model of burnout. In *Journal of Applied Psychology*, *86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Dempsey, J.S., & Forst, L.S. (2010). *An introduction to policing* (5th ed.). Delmar.

DeVellis, R.F. (2016). *Scale development: Theory and Application* (4th ed.). Sage Publications.

DeVellis, R.F. (2012). *Scale development: Theory and applications* (3rd ed.). Sage Publications.

DeVellis, R.F. (2003). *Scale development: Theory and applications* (2nd ed.). Sage Publications.

Di Fabio, A., & Maree, J.D. (2013). Career construction and life design: Heralding a new beginning to career counselling in the 21st century. In A. Di Fabio, & J.G. Maree (Eds.),

Psychology of career counselling: New challenges for a new era, 1-15. Nova Science Publishers, Inc.

Dib, M.S. (2018). *Career plateauing effect on employee engagement* (Unpublished master's thesis). American University of Beirut, Beirut, Lebanon.

Diefendorff, J.M., & Chandler, M.M. (2011). Motivating employees. In S. Zedeck (Ed.), *APA Handbook of Industrial and Organisational Psychology: Maintaining, expanding, and contracting the organization* (3), 65-135). American Psychological Association.

Dimitrov, D.M. (2012). *Statistical methods for validation of assessment scale data in counseling and related fields.* American Counseling Association.

Dlanga, K. (2014, January). Affirmative action is here, deal with it. *Mail & Guardian.* http://mg.co.za/article/2014-01-31-affirmative-action-is-here-deal-with-it

Doan, M.P. (2011). *The roles of systematic skewness and systematic kurtosis in asset pricing* (Unpublished doctoral thesis). University of RMIT, Melbourne, Australia.

Drucker-Godard, C., Fouque, T., Gollety, M., & Le Flanchec, A. (2015). Career plateauing, job satisfaction and commitment of scholars in French Universities. *Public Organization Review, 15*, 335-351. https://doi.org/10.1007/s11115-014-0280-0

Du Toit, D.M., & Coetzee, M. (2012). Exploring the perceived career success of staff in a South African science and engineering company. *Journal of Psychology in Africa, 27*(2), 96-105. https://doi.org/10.1080/14330237.2012.10874526

Ebenehi, A.S., Rashid, A.M., & Bakar, A.R. (2016). Predictors of career adaptability skill among higher education students in Nigeria. *International Journal for Research in Vocational Education and Training (IJRVET), 3*(3), 212-229. https://doi.org/10.13152/IJRVET.3.3.3

El Badawy, T.A., & Magdy, M.M. (2015). Assessing the impact of emotional intelligence on job satisfaction: An empirical study on faculty members with respect to gender and age. *International Business Research, 8*(3), 67-78. https://doi.org/10.5539/ibr.v8n3p67

Elsass, P.M., & Ralston, D.A. (1989). Individual responses to the stress of career plateauing. *Journal of Management, 15*(1), 35-47. https://doi.org/10.1177/014920638901500104

Enache, M., Sallan, J.M., Simo, P., & Fernandez, V. (2011). Career attitudes and subjective career success: Tackling gender differences. *Gender in Management: An International Journal, 26*(3), 234-250. https://doi.org/10.1108/17542411111130990

Engelhard, G. (2013). *Invariant measurement: Using Rasch models in the social, behavioral, and health sciences.* Routledge.

Erasmus, B. (1998). Workplace issues affecting women in HR. *Management Today, 14*(7), 26-34.

Ercikti, S., Vito, G.F., Walsh, W.F., & Higgins, G.F. (2011): Major determinants of job satisfaction among police managers. *Southwest Journal of Criminal Justice. 8*(1). 97-111.

Erwee, R. (1986). Achievement motivation and locus of control of black university students. *SA Journal of Industrial Psychology, 12*(2), 1-9. https://doi.org/10.4102/sajip.v12i2.447

Ettington, D.R. (1998). Successful career plateauing. Journal of Vocational Behavior, 52, 72–88.

Evans, M., & Gilbert, E. (1984). Plateaued managers: Their need gratifications and their effort-performance expectations. *Journal of Management Studies, 21*(1), 99-108. https://doi.org/10.1111/j.1467-6486.1984.tb00226.x

Farrell, T.S.C. (2014). I feel like I've plateaued professionally…gone a little stale: Mid-career reflections in a teacher discussion group. *Reflective Practice, 15*(4), 504-517. https://doi.org/10.1080/14623943.2014.900029

Faull, A. (2011, November). *Corruption in the South African Police Service: Civil perceptions and experiences.* ISS Paper 226. https://www.issafrica.org/uploads/Paper226.pdf

Feldman, D.C., & Weitz, B.A. (1988). Career plateaus reconsidered. *Journal of Management, 14*(1), 69-80. https://doi.org/10.1177/014920638801400107

Ference, T.P., Stoner, J.A., & Warren, E.K.G. (1977). Managing the career plateau. *Academy of Management Review*, *2*(4), 602-612.

Fernandez, D.R. (1995). *Career plateau response as a function of personal coping strategies* (Unpublished doctoral thesis). Florida State University, Florida, United States of America.

Ferreira, N. (2012). *Constructing a psychological career profile for staff retention* (Unpublished doctoral thesis). University of South Africa, Pretoria, South Africa.

Ferreira, T.S. (2017). Motivational factors in sales team management and their influence on individual performance. *Tourism and Management Studies, 13*(1), 60-65. https://doi.org/10.18089/tms.2017.13108

Field, A. (2013). *Discovering statistics using SPSS (and sex, drugs, and rock-and-roll)* (4th ed.). Sage Publications.

Finnigan, M. (2016, Jan 5). *Focus 100-Team motivation using Maslow's*. [Video]. YouTube. https://www.youtube.com/watch?v=kNkw5Cpbmpkandfeature=youtube

Flick, U. (2015). *Introducing research methodology* (2nd ed.). Sage Publications.

Forgionne, G.A., & Peeters, V.E. (1982). Differences in job motivation and satisfaction among female and male managers. *Human Relations, 35*(2), 101-118. Retrieved from: https://doi.org/10.1177/001872678203500202

Fornell, C.G. & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50. https://doi.org/10.1177/002224378101800104

Foster, B.P., Lonial, S., & Shastri, T. (2011). Mentoring, career plateau tendencies, turnover intentions and implications for narrowing pay and position gaps due to gender-structural equations modelling. *The Journal of Applied Business Research, 27*(6), 71-84. https://doi.org/10.19030/jabr.v27i6.6467

Foster, J.J., & Parker, I. (1995). *Carrying out investigations in psychology: Methods and statistics*. British Psychological Society (BPS) Books.

Fox, C., & Jones, J. (1998). Use of the Rasch modeling in counseling psychology research. *Journal of Counseling Psychology, 45*(1), 30-45. https://doi.org/10.1037/0022-0167.45.1.30

Franks, D.A. (2002). *An investigation into the factors motivating information technology specialists in the local government sector* (Unpublished master's thesis). University of the Western Cape, Cape Town, South Africa.

Freeman, S. (1993). Donald Super: A perspective on career development. *Journal of Career Development, 19*, 255-264. https://doi.org/10.1177/089484539301900403

Freeney, Y., & Fellenz, M.R. (2013). Work engagement, job design and the role of the social context at work: Exploring antecedents from a relational perspective. *Human Relations*, *66*(11), 1427–1445. https://doi.org/10.1177/0018726713478245

Gabriel, J. (2015). *Young people's experiences of moving out of being 'Not in Education, Employment or Training' (NEET)': An exploration of significant factors* (Unpublished doctoral thesis). University of Birmingham, Edgbaston, United Kingdom.

Gallie, F. (2016). *The relationship between sense of coherence, work engagement and burnout in a public-sector organisation* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Garg, K., Dar, I.A., & Mishre, M. (2018). Job satisfaction and work engagement: A study using private sector bank managers. *Advances in Developing Human Resources, 20*(1), 58-71. https://doi.org/10.1177/1523422317742987

Gaunya, C.R., Oruta, E.M., & Lidava, M.K. (2016). An evaluation of factors influencing perception of job satisfaction among police officers in Kenya. *Public Policy and Administration Research, 6*(10), 23-29.

Gawke, J.C., Gorgievski, M.J., & Bakker, A.B. (2017). Employee intrapreneurship and work engagement: A latent change score approach. *Journal of Vocational Behavior, 100,* 88-100. https://doi.org/10.1016/j.jvb.2017.03.002

George, J.M., & Jones, G.R. (2012). *Understanding and managing organizational behaviour* (2nd ed.). Pearson Education.

George, L., Sabapathy, T., & Varghese, A. (2017). Work motivation of teachers: Role of biographical variables. *IOSR Journal of Research & Method in Education, 7*(3), 38-43. https://doi.org/10.9790/7388-0703033843

Gidarska, S. (2017). *Achievement motivation in Hispanic University students: Associations with reasons for attending college* (Unpublished master's thesis). Appalachian State University, Boone, North Carolina.

Gillet, H., Huart, I., Colombat, P., & Fouquereau, E. (2013). Perceived organizational support, motivation, and engagement among police officers. *Professional Psychology: Research and Practice, 44*(1), 46-55.

Godshalk, V.M., & Fender, C.M. (2015). External and internal reasons for career plateauing: Relationships with work outcomes. *Group & Organization Management, 40*(4), 529-559. https://doi.org/10.1177/1059601114558062

Goliath-Yarde, L., & Roodt, G. (2011). Differential item functioning of the UWES-17 in South Africa. *SA Journal of Psychology*, *37*(1), 1-11. https://doi.org/10.4102.sajip.v37i1.897

Gomez-Benito, J., Sireci, S., Padilla, J., Hidalgo, M.D., & Benitez, I. (2018). Differential item functioning: Beyond validity evidence based on internal structure. *Psicothema, 30*(1), 104-109. https://doi.org/10.7334/psicothema2017.183

Gottschalk, P. (2010). *Policing organized crime: Intelligence strategy implementation*. CRS Press.

Gould, S., & Penley, L. (1985). A study of the correlates of the willingness to relocate. *The Academy of Management Journal*, *28*(2), 472-478. https://doi.org/10.2307/256212

Govender, P. (2012). *Occupational stress and work engagement of Dog Unit members in the South African Police Service* (Unpublished master's thesis). University of Kwazulu-Natal, Durban, South Africa.

Graham, M. W., & Messner, P. E. (1998). Principals and job satisfaction. *International Journal of Educational Management, 12*(5), 196 – 202.

Grant, A. M., & Shin, J. (2012). Work motivation: Directing, energizing, and maintaining effort (and research). In R. M. Ryan (Ed.), *The Oxford handbook of human motivation* (pp. 1-29). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780195399820.013.0028

Green Jr., P.I., Finkel, E.J., Fitzsimons, G.M., & Gino, F. (2017). The energizing nature of work engagement: Toward a new need-based theory of work motivation. *Research in Organizational Behavior, 37*, 1-18. https://doi.org/10.1016/j.riob.2017.10.007

Green, K.E., & Frantom, C.G. (2002, November). Survey development and validation with the Rasch model. *A paper presented at the International Conference on Questionnaire Development, Evaluation and Testing,* 1-42.

Greenhaus, J.F., Callanan, G.A., & Godshalk, V.M. (2010). *Career Management* (4th ed.). Sage Publications.

Greenhaus, J.H., & Callanan, G.A. (1994). *Career Management*. (2nd ed.). The Dryden Press.

Greenhaus, J.H., Parasuraman, S., & Wormley, W.M. (1990). Experiences, job performance evaluations, and career outcomes. *Academy of Management Journal, 33*(1), 64-86. https://doi.org/10.2307/256352

Greus, M., & Sleath, P. (2018). *Manager's influence on work wellbeing and motivation through good relations* (Unpublished bachelors' thesis). Oulu University of Applied Sciences, Oulu, Finland.

Grimard, C.M. (2018). Chicken dance anyone? A quick experiential exercise for teaching expectancy theory. *Developments in Business Simulation and Experiential Learning, 45*, 191-196.

Guan, Y., Arthur, M.B., Khapova, S.N., Hall, R.J., & Lord, R.G. (2018). *Journal of Vocational Behavior*. https://doi.org/10.1016/j.jvb.2018.05.013

Guan, Y., Wang, F., Liu, H., Ji, Y., Jia, X., Fang, Z., Li, Y., Hua, H., & Li, C. (2015). Career-specific parental behaviours, career exploration and career adaptability: A three-wave investigation among Chinese undergraduates. *Journal of Vocational Behavior, 86,* 95-103. https://doi.org/10.1016/j.jvb.2014.10.007

Gudeta, N., & Getachew, K. (2017). Job satisfaction across some selected demographic variables among hospital health workers in South-West Shoa Zone, Oromia Regional State, Ethiopia. *Journal of Health, Medicine and Nursing, 35*, 36-43. https://doi.org/10.11648/j.ijcocr.20170201.15

Guglielmi, D., Avanzi, L., Chiesa, R., Mariani, M.G., Bruni, I., & Depolo, M. (2016). Positive aging in demanding workplaces: The Gain Cycle between job satisfaction and work engagement. *Frontiers in Psychology, 7,* 1-10. https://doi.org/10.3389/fpsyg.2016.01224

Gupta, S., & Pannu, H. (2013, January). A comparative study of job satisfaction in public and private sector. *Indian Journal of Arts*, *1*(1), 3-6. https://www.discovery.org.in/ija.htm

Guss, C.D., Burger, M.L., & Dorner, D. (2017). The role of motivation in complex problem solving. *Frontiers in Psychology, 8*, 1-5. https://doi.org/10.3389/fpsyg.2017.00851

Haenggli, M., & Hirschi, A. (2020). Career adaptability and career success in the context of a broader career resources framework. *Journal of Vocational Behavior, 119,* 1-14. https://doi.org/10.1016/j.jvb.2020.103414

Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2014). *Multivariate data analysis* (7th ed.). Pearson Education.

Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis* (7th ed.). Pearson Prentice Hall.

Hair, J.F., Sarstedt, M., Hopkins, L. & Kuppelwieser, V.G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review, 26*(2), 106-121. https://doi.org/10.1108/EBR-10-2013-0128

Haley, L., Mostert, K., & Els, C. (2013). Burnout and work engagement for different age groups: Examining group-level differences and predictors. *Journal of Psychology in Africa, 23(2*), 283-295*.* https://doi.org/10.1080/14330237.2013.10820625

Hall, D.T. (1997). Special challenges of careers in the 21st century. *The Academy of Management Executive, 11*(1), 60-61. https://doi.org/10.5465/AME.1997.19161947

Hanaysha, J.R., & Hussain, S. (2018). An examination of the factors affecting employee motivation in the higher education sector. *Asia-Pacific Journal of Management Research and Innovation, 14*(1-2), 22-31. https://doi.org/10.1177/2319510X18810626

Harju, L.K., Hakanen, J.J, & Schaufeli, W.B. (2016). Can job crafting reduce job boredom and increase work engagement? A three-year cross-lagged panel study. *Journal of Vocational Behavior*, *95-96,* 11-10. https://doi.org/10.1016/j.jvb.2016.07.001

Harrigan, W.J., & Commons, M.L. (2015). Replacing Maslow's needs hierarchy with an account based on stage and value. *Behavioral Development Bulletin*, *20*(1), 24-31. https://doi.org/10.1037/H0101036

Harter, J.K., Schmidt, F.L., Asplund, J.W., Killham, E.A., & Agrawal, S. (2010). Causal impact of employee work perceptions on the bottom line of organizations. *Perspectives on Psychological Science, 5*, 378-389.

Hassan, M.T., Ismail, M., & Uli, J. (2010). Moderating role of job performance on the relationship between career plateauing and work outcomes among administrative and diplomatic officers in Malaysia. https://www.jgbm.org/page/3%20Mat%20Sani&20hassan.pdf

Hays, R.V. (2012). Inspiring the experienced, unmotivated employee: A challenge for today's leaders. *Contract Management, 52*(5), 62-71.

Hee, O.C., Kamaludin N.H., & Ping, L.L. (2016). Motivation and job performance among nurses in the Health Tourism Hospital in Malaysia. *International Review of Management and Marketing 6*(4), 668-672.

Heilmann, S.G., Holt, D.T., & Rilovick, C.Y. (2008). Effects of career plateauing on turnover: A test of a model. *Journal of Leadership & Organization Studies, 15*(1), 59-68. https://doi.org/10.1177/1548051808317999

Herbst-Bergin, N. (2014). *Is career plateau a relevant concept in the Irish Financial Sector post Celtic Tiger years?* (Unpublished master's thesis). National College of Ireland, Dublin, Ireland.

Herman, C., & Lewis S. (2012). Entitled to a sustainable career? Motherhood in science, engineering, and technology. *Journal of Social Issues 68*(4), 767-789. https://doi.org/10.1111/j.1540-4560.2012.01775.x

Herzberg, F. (1966). *Work and the nature of man*. World Publishing.

Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work.* Wiley Publishing.

Heyns, M.M., & Kerr, M.D. (2018). Generational differences in workplace motivation. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, *16*(0), a967. https://doi. org/10.4102/sajhrm. v16i0.967

Hinkin, T.R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods, 2*(1), 104-121. https://doi.org/10.1177/109442819800100106

Hinton, C.P. (2012). *The relationship between employability and hope* (Unpublished doctoral thesis). DePaul University, Chicago, Illinois.

Hirschi, A. (2012). The career resources model: An integrative framework for career counsellors. *British Journal of Guidance & Counselling, 40*(4), 369-383. https://doi.org/10.1080/03069885.2012.700506

Hirschi, A. (2010). The role of chance events in the school-to-work transition: The influence of demographic, personality, and career development variables. *Journal of Vocational Behavior, 77,* 39–49. https://doi.org/10.1016/j.jvb.2010.02.002

Hitka, M., & Balazova, Z. (2015). The impact of age, education, and seniority on motivation of employees. *Theory and Practice, 16*(1), 113-120. https://doi.org/10.3846/btp.2015.433

Hlengane, N.A., & Bayat, M.S. (2013a). Poor employee work performance: A case study – Cambridge Police Station. *Kuwait Chapter of Arabian Journal of Business and Management Review, 12*(12), 80-92. https://doi.org/10.12816/0003848

Hlengane, N.A., & Bayat, M.S. (2013b). Evaluation of employee poor work performance with specific focus on operational functions at Cambridge police station in the Eastern Cape Province. *Singaporean Journal of Business Economics, and Management Studies, 1*(12), 9-32. https://doi.org/10.12816/0003826

Hlongwane, P. (2013). *The implementation of affirmative action policy within the Pretoria district of the South African Police Service* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Hobfoll, S.E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 3,* 513-524. https://doi.org/10.1037/0003-066X.44.3.513

Hobfoll, S.E., Johnson, R.J., Ennis, N., & Jackson, A.P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology, 84*(3), 632-643. https://doi.org/10.1037//0022-3514.84.3.632

Hoekstra, R., Vugteveen, J., Warrens, M.J., & Kruyen, P.M. (2019). An empirical analysis of alleged misunderstandings of coefficient alpha. *International Journal of Social Research Methodology, 22*(4), 351-364. https://doi.org/10.1080/13645579.2018.1547523

Hofstetter, H., & Cohen, A. (2014). The mediating role of job content plateau on the relationship between work experience characteristics and early retirement and turnover intentions. *Personnel Review, 43*(3), 350-376. https://doi.org/10.1108/PR-03-2012-0054

Hogan, R., Chamorro-Premuzic, T., & Kaiser, R.B. (2013). Employability and career success: Bridging the gap between theory and reality. *Industrial and Organizational Psychology, 6,* 3-16. https://doi.org/10.1111/iops.12001

Holston-Okae, B.L., & Mushi, R.J. (2018). Employee turnover in the hospitality industry using Hertzberg's two-factor motivation-hygiene theory. *International Journal of Academic Research in Business and Social Sciences, 8*(1), 218-248. https://doi.org/10.6007/IJARBSS/v8-i1/3778

Hontake, T., & Ariyoshi, H. (2016). A study on work engagement among nurses in Japan: The relationship to job-demands, job-resources, and nursing competence. *Journal of Nursing Education and Practice, 6*(5), 111-117. https://doi.org/10.5430/jnep.v6n5p111

Hoole, C., & Hotz, G. (2016). The impact of a total reward system of work engagement. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 42*(1), a1317. https://doi.org/10.4102/sajip.v42i1.1317

Hossain, T. (2018). Effects of perceived career plateau on work related attitudes: A study on employees of Bangladeshi private organizations. *IOSR Journal of Applied Chemistry (IOSR-JAC), 11*(10); 44-54. https://doi.org/10.9790/5736-1110014454

Howes, L.M., & Goodman-Delahunty, J. (2015). Predicting career stability and mobility: Embeddedness and boundarylessness. *Journal of Career Development, 42*(3), 244-259. https://doi.org/10.1177/0894845314548722

Howitt, D., & Cramer, D. (2017). *Research methods in psychology* (5th ed.). Pearson Education.

Hoyle, R.H. (1995). *Structural Equation Modelling.* Sage Publications.

Hsu, H., Chen, S., Yu, H., & Lou, J. (2010). Job stress, achievement motivation and occupational burnout among male nurses. *Journal of Advanced Nursing, 6*(7), 1592-1601. https://doi.org/10.1111/j.1365-2648.2010.05323.x

Huang, Y. (2014). *How intrinsic motivation and extrinsic motivation affect organizational commitment and job satisfaction: A cross-cultural study in the United States and China* (Unpublished doctoral thesis). Texas A&M International University, Laredo, Texas.

Huberman, M. (1995). Professional careers and professional development: Some intersections. In *Professional development in education: New paradigms & practices,* T.R. Guskey, & M. Huberman (Eds.), 193-224. Teachers College Press.

Huberman, M. (1989). The professional life cycle of teachers. *Teachers College Record, 91*(1), 31–57.

Hurst, C.S., Baranik, L.E., & Clark, S. (2017). Job content plateaus: Justice, job satisfaction, and citizenship behavior. *Journal of Career Development, 44*(4), 283-296. https://doi.org/10.1177/0894845316652250

Hurst, C.S., Baranik, L.E., & Clark, S. (2013, November). Job content plateaus and citizenship behaviour in Kenya: The role of justice and job satisfaction. Paper presented at the annual conference of the Southern Management Association, New Orleans, Los Angeles.

Hurst, C.S., Kungu, K., & Flott, P. (2012). Stress, organizational citizenship behaviours, and coping: Comparisons among plateaued and non-plateaued employees. *Business and Management Research*, *1*(3), 17-27. https://doi.org/10.5430/bmr.v1n3p17

Hwang, E. (2008). Determinants of job satisfaction among South Korean police officers: The effect of urbanization in a rapidly developing nation. *Policing: An International Journal of Police Strategies & Management*, *31*(4), 694-714.

Ilgunov, A., & Khutter, M. (2016). *Motivation of personnel in a healthcare company* (Unpublished bachelor's thesis). JAMK University of Applied Sciences, Central Finland, Finland.

Inkson, K., Dries, N., & Arnold, J. (2015). *Understanding careers.* Sage Publications.

Innanen, H., Tolvanen, A., & Salmela-Aro, K. (2014). Burnout, work engagement and workaholism among highly educated employees: Profiles, antecedents, and outcomes. *Burnout Research, 1*(1), 38-49. https://doi.org/10.1016/j.burn.2014.04.001

Iroegbu, M.N. (2015). Do age and gender have anything to do with job satisfaction: A practical outlook on the Nigerian public sector. *American Journal of Applied Psychology, 4*(4), 111-114. https://doi.org/10.11648/j.ajap.20150404.15

Ismail, A., Ridwan, M., & Razak, A. (2016). A study on job satisfaction as a determinant of job motivation. *Acta Universitatis Danubis Economica, 12*(3), 30-44.

Ivancevich, J.M., & Matteson, M.T. (2002). *Organisational behavior and management* (6th ed.). McGraw-Hill.

Jackson, L.T.B., van de Vijver, F.J.R., & Molokoane, D.H. (2013). A dual-process model of diversity outcomes: The case of the South African Police Service in the Pretoria area. *SA Journal of Human Resource Management, 11*(1), 1-13. https://doi.org/10.4102/sajhrm.v11i1.504

Jaiswal, S., & Joge, P. (2018). A study on impact of psychological empowerment on employee retention in technical institutes of Durg and Bhilai. *International Journal of Research-Granthaalayah, 6*(1). 470-479. https://doi.org/10.5281/zenodo.1172278

Jakobsen, M., & Jensen, R. (2015). Common method bias in public management studies. *International Public Management Journal*, *18*(1), 3–30. https://doi.org/10.1080/10967494.2014.997906

Jalagat Jr., R. (2016, December). Job performance, job satisfaction, and motivation: A critical review of their relationship. *International Journal of Advances in Management and Economics, 5*(6), 36-42.

James, S., & Hendry, B. (1991). The money or the job: The decision to leave policing. *Australian and New Zealand Journal of Criminology, 24,* 169-189.

Jawahar, I.M., & Liu, Y. (2017). Why are proactive people more satisfied with their job, career, and life? An examination of the role of work engagement. *Journal of Career Development, 44*(4), 344-358. https://doi.org/10.1177/0894845316656070

Jaworek, M. (2017). The role of occupational and demographic factors in relation to work engagement in Polish sample of employees-initial study. *Journal of Positive Management, 8*(4), 44-57. https://doi.org/10.12775/JPM.2017.130

Jiang, Z. (2016). The relationship between career adaptability and job content plateau: The mediating roles of fit perceptions. *Journal of Vocational Behavior, 95-96*, 1-10. https://doi.org/10.1016/j.jvb.2016.06.001

Jiang, Z., Hu. X., & Wang, Z. (2018). Career adaptability and plateaus: The moderating effects of tenure and job self-efficacy. *Journal of Vocational Behavior, 104*, 59-71. https://doi.org/10.1016/j.jvb.2017.10.006

Jimenez, J., Gomez, A., Buhrmester, M. D., Vázquez, A., Whitehouse, H., & Swann, W. B.

(2016). The dynamic identity fusion index: A new continuous measure of identity fusion for web-based questionnaires. *Social Science Computer Review, 34*(2), 215-228.

Johnson, J., Irizarry, M., Nguyen, N., & Maloney, P. (2018). *Part 1: Motivation 101: A Guide for Public Servants*. https://stars.library.ucf.edu/motivationforpublicservants

Jojo, A. (2016). *Occupational stress and intrinsic motivation as determinants of job engagement in the South African Police Service* (Unpublished master's thesis). University of Fort Hare, Eastern Cape, South Africa.

Joo, B., & Ready, K.J. (2012). Career satisfaction: The influences of proactive personality, performance goal orientation, organizational learning culture, and leader-member exchange quality. *Career Development International, 17*(3), 276-295. https://doi.org/10.1108/13620431211241090

Joseph, D. (2017). *Perceived contributing factors impeding job satisfaction of social workers in non-government organisations* (Unpublished master's thesis). University of Stellenbosch, Cape Town, South Africa.

Joseph. J. (1996). An exploratory look at the plateauism construct. *Journal of Psychology Interdisciplinary and Applied, 130*(3), 237-244. https://doi.org/10.1080/00223980.1996.9915005

Jost, P.J. (2014). *The economics of motivation and organisation: An introduction*. Edward Elgar.

Jugmohan, N. (2013). *Employee motivation in the KwaZulu-Natal police forensic science laboratory* (Unpublished master's thesis). University of KwaZulu Natal, Durban, South Africa.

Jung, J., & Tak, J. (2008). The effects of perceived career plateau on employees' attitudes: Moderating effects of career motivation and perceived supervisor support with Korean

employees. *Journal of Career Development, 35*(2), 187-201. https://doi.org/10.1177/0894845308325648

Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement work. *Academy of Management Journal, 33*(4), 692-724. https://doi.org/10.2307/256287

Kaiser, H.F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, *XX*(1), 141–151.

Kaiser, H.F. (1974). An index of factorial simplicity. *Psychometrika*, *39*(1), 31–36. https://doi.org/10.1007/BF02291575

Karatepe, O.M., & Olugbade, O.A. (2017). The effects of work social support and career adaptability on career satisfaction and turnover intentions. *Journal of Management & Organization, 23*(3), 337-355. https://doi.org/10.1017/jmo.2016.12

Karimi, L., & Meyer, D. (2019). An evaluation of common method variance-bias in psychology. *International Journal of Psychological Studies, 11*(3), 83-94. https://doi.org/10.5539/ijps.v11n3p83

Kelly, H. (2014). A Path Analysis of educator perceptions of open educational resources using the Technology Acceptance Model. *The International Review of Open and Distributed Learning, 15*(2), 26 – 42. https://doi.org/10.19173/irrodl.v15i2.1715.

Kemunto, M.E., Adhiambo, R.P., & Joseph, B. (2018). Is marital status a predictor of job satisfaction of public secondary school teachers? *International Journal of Psychology and Behavioral Sciences, 8*(3), 51-58. https://doi.org/10.5923/j.ijpbs.20180803.03

Khalid, S., Irshad, M.Z., & Mahmood, B. (2012). Job satisfaction among academic staff: A comparative analysis between public and private sector universities of Punjab,

Pakistan. *International Journal of Business and Management*, *7*(1), 126-136. https://doi.org/10.5539/ijbm.v7n1p126

Khan, W., & Iqbal, Y. (2013). *An investigation of the relationship between work motivation (intrinsic and extrinsic) and employee engagement: A study on Allied Bank of Pakistan* (Unpublished master's thesis). Umea School of Business, Umea, Sweden.

Kifle, T., & Desta, I.H. (2012). Gender differences in domains of job satisfaction: Evidence from doctoral graduates from Australian Universities. *Economic Analysis & Policy*, *42*(3), 319-338. https://doi.org/10.1016/S0313-5926(12)50032-9

Kim, J.H. Multicollinearity and misleading statistical results. *Korean Journal of Anestesiology, 72*(6), 558-569. https://doi.org/10.4097/kja.19087

Kim, W., Han, S.J., & Park, J. (2019, February). Is the role of work engagement essential to employee performance or 'nice to have'? *Sustainability, 11*(4), 1-16. https://doi.org/10.3390/su11041050

Klassen, R.M., Yerdelen, S., & Durksen, T.L. (2013). Measuring teacher engagement: Development of the Engaged Teachers Scale (ETS). *Frontline Learning Research, 1*(2), 33–52. https://doi.org/10.14786/flr.v1i2.44

Kline, R.B. (2011). *Principles and practice of structural equation modeling* (2nd ed.). Guilford Press.

Kline, R.B. (2005). *Principles and practice of structural equation modelling*. Guilford Press.

Klupakova, H. (2013). Overview of the characteristics of career concepts. *EMI, 5*(1), 16-23.

Knight, C., Patterson, M., Dawson, J., & Brown, J. (2017). Building and sustaining work engagement – a participatory action intervention to increase work engagement in

nursing staff. *European Journal of Work and Organizational Psychology,* 1-16. https://doi.org/10.1080/1359432X.2017.1336999

Kooij, D.T.A.M., De Lange, A.H., Jansen, P.G.W., Kanfer, R., & Dikkers, J.S.E. (2011). Age and work-related motives: Results of a meat-analysis. *Journal of Organizational Behavior, 32*(2), 197–225. https://doi.org/10.1002/job.665

Korsakiene, R., & Smaliukiene, R. (2014). The implications of contemporary approaches toward career development. *Procedia-Social and Behavioral Sciences, 109*, 422-426. https://doi.org/10.1016/j.sbspro.2013.12.484

Koslowsky, M. (1991). A longitudinal analysis of job satisfaction, commitment, and intention to leave. *Applied Psychology: An International Review, 40*(4)*,* 405-415. https://doi.org/10.1111/j.1464-0597.1991.tb01000.x

Kotze, C.M. (2017). *Talent management for training staff in the South African Police Service: The case of the SAPS academy, Paarl* (Unpublished master's thesis). North-West University, Potchefstroom, South Africa.

Kotze, M. (2018). How job resources and personal resources influence work engagement and burnout. *African Journal of Economic and Management Studies, 9*(2), 148-164. https://doi.org/10.1108/AJEMS-05-2017-0096

Kreitchmann, R.S., Abad, F.J., Ponsoda, V., Nieto, M.D., & Morillo, D. (2019). Controlling for response biases in self-report scales: Forced-choice vs. psychometric modelling of Likert items. *Frontiers in Psychology, 10*(2309), 1-12. https://doi.org/10.3389/fpsyg.2019.02309

Kumar, T.K.V. (2017). Factors impacting job satisfaction among police personnel in India: A multidimensional analysis. *International Criminal Justice Review*, *27*(2), 126-148. https://doi.org/10.1177/1057567716683776

Kuok, A.C.H, & Taormina, R.J. (2017). Work engagement: Evolution of the concept and a new inventory. *Psychological Thought, 10*(2), 262-287. https://doi.org/10.5964/psyct.v10i2.236

Kuranchie-Mensah, E.B., & Amponsah-Tawiah, K. (2016). Employee motivation and work performance: A comparative study of mining companies in Ghana. *Journal of Industrial Engineering and Management, 9*(2), 255-309. https://doi.org/10.3926/jiem.1530

Kyriazos, T.A. (2018). Applied psychometrics: Sample size and sample power considerations in factor analysis (EFA, CFA) and SEM in General. Psychology, 9, 2207-2230. https://doi.org/10.4236/psych.2018.98126

Kyriazos, T.A., & Stalikas, A. (2018). Applied psychometrics: The steps of Scale development and standardization process. *Psychology, 9*, 2531-2560. https://doi.org/10.4236/psych.2018.911145

Lapalme, M., Tremblay, M., & Simard, G. (2009). The relationship between career plateauing, employee commitment and psychological distress: The role of organisational and supervisor support. *The International Journal of Human Resource Management, 20*(5), 1132-1145. https://doi.org/10.1080/09585190902850323

Latack, J.C. (1984). Career transitions within organizations: An exploratory study of work, nonwork, and coping strategies. *Organizational Behaviour and Human Performance, 34*, 296-322. https://doi.org/10.1016/0030-5073(84)90041-2

Latham, G.P., & Pinder, C.C. (2005). Work motivation theory and research at the dawn of the twenty-first century. *Annual Review of Psychology, 56*(1), 485-516. https://doi.org/10.1146/annurev.psych.55.090902.142105

Lawson, R.B., Anderson, E.D., & Rudiger, L.P. (2013). *Psychology and systems at work.* Pearson Education.

Leary, M.R. (2004). *Introduction to behavioural research methods.* Pearson Education.

Ledwaba, N.J., & Mofokeng, J. (2014). Job satisfaction and morale within the South African Police Service public order policing in the Tshwane Metropolitan Area. *Acta Criminologica: Southern African Journal of Criminology, 1,* 84-100.

Lee, H.W. (2010). The relationship between achievement, motivation, and psychological constructs. *Journal of Global Business Issues, 4*(1), 9-15.

Lee, M.W., Song, G.R., & Kim, K.S. (2016). Different OCB reactions against the structural career plateau according to employees' personality profiles. *The International Journal of Humanities & Social Studies, 4*(12), 274-286.

Lee, P.C.B. (2003). Going beyond career plateau: Using professional plateau to account for work outcomes. *Journal of Management Development, 22*(6), 538-551. https://doi.org/10.1108/02621710310478503

Lee, S.U. (2014). *Police officer job satisfaction and Officer-Sergeant education levels: A relational demography perspective* (Unpublished master's thesis). Illinois State University, Normal, Illinois.

Leedy, P.D., & Ormrod, J.E. (2012). *Practical research: Planning and design* (10th ed.). Pearson.

Leggett, T. (2005). Just another miracle: A decade of crime and justice in democratic South Africa. *Social Research 72*(3), 581-604.

Leibowitz, Z.B., Kaye, B.L., & Farren, C. (1990). What to do about career gridlock. *Training and Development Journal*, *44*(4), 28-35.

Lemire, L., Saba, T., & Gagnon, Y. (1999). Managing career plateauing in the Quebec Public Sector. *Public Personnel Management, 28*(3), 375-391. https://doi.org/10.1177/009102609902800305

Lentz, E., & Allen, T.D. (2009). The role of mentoring others in the career plateauing phenomenon. *Group & Organization Management, 34*(3), 358-384. https://doi.org/10.1177/1059601109334027

Levinson, D.J., Darrow, C.N., Klein, E.B., Levinson, M.H., & McKee, B. (1978). *The Seasons of a Man's Life.* Alfred A, Knopf.

Levinson, D.J. (with Levinson, J.D.). (1996). *The seasons of a woman's life.* Ballantine Books.

Levy, P.E. (2010). *Industrial organizational psychology: Understanding the workplace* (3rd ed.). Worth Publishers.

Lewis, C.C., Weiner, B.J., Stanick, C., & Fischer, S.M. (2015). Advancing implementation science through measure development and evaluation: A study protocol. *Implementation Science, 10*(102), 1-10. https://doi.org/10.1186/s13012-015-0287-0

Linacre, J.M. (2009). *A user's guide to WINSTEPS*. Winsteps.

Linacre, J.M. (2010). *A user's guide to FACETS Rasch-Model computer programs program manual 3.70.0*. The College of Information Sciences and Technology. The Pennsylvania State University. Pennsylvania.

Linacre, J.M. (2016). *Rasch measurement computer program User's Guide.* http://www.winsteps.com

Listau, K.T. (2016).*Work engagement: A double-edged sword* (Unpublished master's thesis). Norwegian University of Science and Technology, Trondheim, Norway.

Locke, E.A. (1976). The nature and causes of job satisfaction. In M.C. Dunette (Ed.), *Handbook of Industrial and Organizational Psychology.* 1297-1349. Rand-McNally.

Lokesh, L., Patra, S., & Venkatesan, S. (2016). Job satisfaction among police personnel: A socio-demographic study. *Global Journal of Interdisciplinary Social Sciences, 5*(4), 56-62.

Lu, N., & Wu, T. (2014). Significant multiple regression algorithm of construction occupation based on micro-optical characteristics and matrix correlation degree. *Computer Modelling and New Technologies, 18*(12), 171-178.

Lukosi, E.D. (2015). *Employees' job satisfaction and organizational performance in Tanzania police force: The case study of Tanzania police force headquarters* (Unpublished master's thesis). Open University of Tanzania, Dar es Salaam, Tanzania.

Lumley, E.J., Coetzee, M., Tladinyane, R., & Ferreira, N. (2011). Exploring the job satisfaction and organisational commitment of employees in the information technology environment. *Southern African Business Review, 15*(1), 100-118.

Lunenburg, F.C. (2011). Expectancy theory of motivation: Motivating by altering expectations. *International Journal of Management, Business, and Administration, 15*(1), 1-5.

Lyons, S.T., Schweitzer, L., Ng, E.S.W., & Kuron, L.K.J. (2012). Comparing apples to apples: A qualitative investigation of career mobility patterns across four generations. *Career Development International, 17*(4), 333-357. https://doi.org/10.1108/13620431211255824

Lytle, S.K. (2014). *Job satisfaction: Officers policing aboriginal communities in Canada* (Unpublished master's thesis). University of Regina, Regina, Canada.

Mafini, C., & Dlodlo, N. (2014). The relationship between extrinsic motivation and life satisfaction amongst employees in a public organisation. *SA Journal of Industrial Psychology, 40*(1), 1166-1178. https://doi.org/10.4102/sajip.v40i1.1166

Maidani, E.A. (1991). Comparative study of Herzberg's two-factor theory of job satisfaction among public and private sectors. *Public Personnel Management, 20*(4), 441-48. https://doi.org/10.1777/009102609102000405

Makki, A., & Abid, M. (2017). Influence of intrinsic and extrinsic motivation on employees' task performance. *Studies in Asian Social Science, 4*(1), 38-43. https://doi.org/10.5430/sass.v4n1p38

Malik, M.I., Zaheer, A., Khan, M.A., & Ahmad, M. (2010). Developing and testing a model of burnout at work and turnover intentions among doctors in Pakistan. *International Journal of Business and Management, 5*(10), 234-244. https://doi.org/10.5539/ijbm.v5n10p234

Mallik, S. (2017). Motivation as a promoting determinant in second and foreign language classroom: A review. *European Journal of Foreign Language Teaching, 2*(1), 90-102. https://doi.org/10.5281/zenodo.293024

Mani, V. (2011). Analysis of employee engagement and its predictors. *International Journal of Human Resource Studies*, *1*(2), 15–27. https://doi.org/10.5296/ijhrs.v1i2.955

Mansah-Owusu, G. (2013). *Is the boundaryless career applicable to all? An investigation of black knowledge intensive workers in the UK* (Unpublished doctoral thesis). Brunel University London, Uxbridge, United Kingdom.

Marasinghe, M.P.L.R., & Wijayaratne, A. (2018). The impact of gender differences on job satisfaction of university library professionals. *Journal of the University Librarians Association of Sri Lanka*, *21*(2), 1–20. https://doi.org/10.4038/jula.v21i2.7905

Marks, M. (1995, June). *Stresses in the South African Police Service.* Paper presented to Stress Management Self-help Group in Soweto, Protea Police Station. http://www.csvr.org.za/index.php/publications/1774

Masiapata, N.M. (2007). *Ethics and ethos in the South African Police Service: An overview of the Johannesburg Central Police Station* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Maslach, C., & Leiter, M.P. (1997). *The truth about burnout*. Jossey-Bass.

Maslach, C., Schaufeli, W.B., & Leiter, M.P. (2001). Job burnout. *Annual Review of Psychology, 52*(1), 397-422. https://doi.org/10.1146/annurev.psych.52.1.397

Maslow, A. (1943). A Theory of human motivation. *Psychological Review*, 50, 370-396. https://doi.org/10.1037/h0054346

Maslow, A.H. (1954). *Motivation and Personality*. Harper and Row.

Masvaure, P., Ruggunan, S., & Maharaj, A. (2014). Work engagement, intrinsic motivation and job satisfaction among employees of a Diamond Mining Company in Zimbabwe. *Journal of Economic and Behavioral Studies, 6*(6) 488-499. https://doi.org/10.22610/jebs.v6i6.510

Mathevani, M.A. (2012). *An investigation of employee satisfaction in the workplace of the South African Police Service* (Unpublished master's thesis). University of Johannesburg, Johannesburg, South Africa.

Matlala, M.M. (2012). *The use of the Automated Fingerprint Identification System to improve the quality of service rendered by the South African Police Service on the East Rand* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Matthysen, M., & Harris, C. (2018). The relationship between readiness to change and work engagement: A case study in an accounting firm undergoing change. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur, 16*(0), a855. https://doi.org/10.4102/sajhrm.v16i0.855

Maturure, T. (2016). *Burnout, work engagement and sense of coherence in nurses working at a central hospital in KwaZulu-Natal* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Maurer, T.J., & Chapman, E.F. (2013). Ten years of career success in relation to individual and situational variables from the employee development literature. *Journal of Vocational Behavior, 83*(3) 450-465. https://doi.org/10.1016/j.jvb.2013.07.002

Mawere, M., Mubaya, T.R., van Reisen, M., & van Stam, G. (2016). Maslow's theory of human motivation and its deep roots in individualism: Interrogating Maslow's applicability in Africa. In M. Mawere, & A. Nhemachena (Eds.), *Theory, knowledge, development and politics: What role for the academy in the sustainability of Africa?* Langaa RPCIG.

May, D.R., Gilson, R.L., & Harter, L.M. (2004). The psychological conditions of meaningfulness, safety, and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology, 77*(1) 11-37. https://doi.org/10.1348/096317904322915892

Mayasari, I. (2010). Managing career plateau professionally in organization setting. http://iinmayasari.files.wordpress.com/2010/01/managing-career-plateau-in-organization-setting.pdf

McCleese, C.S., & Eby, L.T. (2010). Plateaus and appraisal: Characteristics and experiences of plateaued employees. *Journal of Knowledge & Human Resource Management, 2*(2), 10-19.

McCleese, C.S., & Eby, L.T. (2006). Reactions to job content plateaus: Examining role ambiguity and hierarchical plateaus as moderators. *The Career Development Quarterly, 55*(1), 64-76. https://doi.org/10.1002/j.2161-0045.2006.tb00005.x

McCleese, C.S., Eby, L.T., Scharlau, E.A., & Hoffman, B.H. (2007). Hierarchical, job content, and double plateaus: A mixed-method study of stress, depression, and coping responses. *Journal of Vocational Behavior, 71*(2), 282-299. https://doi.org/10.1016/j.jvb.2007.05.001

McClelland, D.C. (1976). *The achieving society: With a new introduction*. Irvington Publishers.

McClelland, D.C. (1967). *The achieving society*. Free Press.

Mehta, M., & Kumar, P. (2016). Motivation theories and its implications. *International Journal of Commerce and Management Research, 2*(2), 86-88.

Meister, D.G., & Ahrens, P. (2011). Resisting plateauing: Four veteran teachers' stories. *Teaching and Teacher Education: An International Journal of Research and Studies, 27*(4), 770–778. https://doi.org/10.1016/j.tate.2011.01.002

Meyer, J.C., & Braxton, W.T.F. (2002). 'n Vergelyking tussen die prestasiemotiveringsvlakke van verskillenderasse en geslagsgroepe. *SA Journal of Industrial Psychology, 28*(3), 62-68.

Meyer, W.F., Moore, C., & Viljoen, H.G. (2008). *Personology: From individual to ecosystem*. Heinemann.

Miles, S. (2010). *Job satisfaction, perceived career plateau, and the perception of promotability: A correlational study in television media* (Unpublished doctoral thesis). Walden University, Minnesota, United States of America.

Miles, S., Gordon, J., & Storlie, C. (2013). Job satisfaction, perceived career plateau, and the perception of promotability: A correlational study. *The Journal of International Management Studies, 8*(1), 1-9.

Miller, H.A., Mire, S., & Kim, B. (2009). Predictors of job satisfaction among police officers: Does personality matter? *Journal of Criminal Justice*, *37*(5), 419-426. https://doi.org/10.1016/j.jcrimjus.2009.07.001

Milliman, J.F. (1992). *Causes, consequences, and moderating factors of career plateauing* (Unpublished doctoral thesis). University of Southern California, Los Angeles, United States of America.

Milstein, M. (1990). Plateauing as an occupational phenomenon among teachers and administrators. *Journal of Personnel Evaluation in Education, 3,* 325–336. https://doi.org/10.1007/BF00126780

Mofomme, T.J. (2001). Culture in the South African Police Services*. Crime Research in South Africa, 3*(3). http://www.crisa.org.za

Mohajane, M.J. (2017). *Job satisfaction and employee retention in the South African Police Service* (Unpublished doctoral thesis). University of South Africa, Pretoria, South Africa.

Mokalake, K.S. (2015). *The relationships between intrinsic motivation, social support, and work engagement of shift workers in a South African chemical company* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Montgomery, D.L. (2002, Spring). Happily ever after: Plateauing as a means for long-term career satisfaction. *Library Trends, 50*(4), 702-716.

Moon, J.S., & Choi, S.B. (2016). The impact of career management on organizational commitment and the mediating role of subjective career success: The case of Korean

R&D employees. *Journal of Career Development,* 1-18. https://doi.org/10.1177/0894845316643829

Morgado, F.F.R., Meireles, J.F.F., Neves, C.M., Amaral, A.C.S., & Ferreira, M.E.C. (2017). Scale development: Ten main limitations and recommendations to improve future research practices. *Psicologia: Reflexao e Crtica, 30*(3), 1-20. https://doi.org/10.1186/s41155-016-0057-1

Morgan, G. (1980). Paradigms, metaphors, and puzzle solving in organization theory. *Administrative Science Quarterly*, *25*(4), 605-622. https://doi.org/10.2307/2392283

Morrison, J.L. (1996). *Individual determinants of a career plateau in a sales organization* (Unpublished master's thesis). Pittsburg State University, Pittsburg, United States of America.

Morrow, P.C., & McElroy, J.C. (1987). Work commitment and job satisfaction over three career stages. *Journal of Vocational Behavior, 30*(3), 330-346. https://doi.org/10.1016/0001-8791(87)90009-1

Mostert, K., & Rothmann, S. (2006). Work-related well-being in the South African Police Service. *Journal of Criminal Justice, 34*(5), 479 – 491. https://doi.org/10.1016/j.jcrimjus.2006.09.003

Mouton, J. (2001). *How to succeed in your master's and doctoral studies.* Van Schaik.

Mouton, J., & Marais, H. (1996). *Basic concepts: In the methodology of the social sciences* (4th ed.). HSRC Publishers.

Msuya, O.M. (2016). Exploring levels of job satisfaction among teachers in public secondary schools in Tanzania. *International Journal of Educational Administration and Policy Studies, 8*(2), 9-16. https://doi.org/5897/IJEAPS2015.0435

Mubiana, P.B. (2010). *Career maturity, career knowledge, and self-knowledge among Psychology Honours students: An exploratory study* (Unpublished master's thesis). University of Pretoria, Pretoria, South Africa.

Mullins, L.J. (2002). *Management and Organisational Behaviour* (6th ed.). Prentice Hall.

Mullins, L.J. (1996). *Management and organisational behaviour* (4th ed.). Pitman Publishing.

Naidoo, P. (2014). *The relationship between organisational culture and work engagement* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Namweda, I.N. (2017). *Retention of employees in the Department of Transport in the Ministry of Works and Transport in Namibia* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Nazir, S., Qun, W., Yulin, D., Afzal, D., & Hui, L. (2014). Linking rewards to employee motivation at work: A Chinese study. *European Journal of Business and Management, 6*(38), 207-217. http://www.iiste.org/Journals/index.php/EJBM/article/view/18791

Near, J.P. (1985). A discriminant analysis of plateaued versus non-plateaued managers. *Journal of Vocational Behavior*, *26*(2), 177-188. https://doi.org/10.1016/0001-8791(85)90017-X

Near, J.P. (1980). The career plateau: Causes and effects. *Business Horizons*, *23,* 53-57. https://doi.org/10.1016/0007-6813(80)90072-5

Nel, P.S., Gerber, P.D., Van Dyk, P.S., Haasbroek, G.D., Schultz, H.B., & Werner, A. (2001). *Human Resources Management.* Oxford.

Netemeyer, R.G., Bearden, W.O., & Sharma, S. (2003). *Scaling procedures: issues and applications*. Sage Publications.

Neville, T.M. & Henry, D.B. (2017). Career plateauing among senior librarians. *Journal of Library Administration, 57*(6), 1-36. https://doi.org/10.1080/01930826.2017.1337971

Newham, G., Masuku, T., & Dlamini, J. (2006, March). Diversity and transformation in the South African Police Service: A study of police perspectives on race, gender, and the community in Johannesburg policing area. *Criminal Justice Programme,* 1-51*.* http://www.csvr.org.za

Newman, K.L. (2011). Sustainable careers: Lifecycle engagement in work. *Organizational Dynamics, 40*(2), 136-143. https://doi.org/10.1016/j.orgdyn.2011.01.008

Ng, T.W.H., & Feldman, D.C. (2012). Evaluating six common stereotypes about older workers with meta-analytical data. *Personnel Psychology*, *65*(4), 821–858. https://doi.org/10.1111/peps.12003

Ng, T.W.H., Eby, L.T., Sorensen, K.L., & Feldman, D.C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology, 58*(2), 367-408. https://doi.org/10.1111/j.1744-6570.2005.00515.x

Njambi, C. (2014). *Factors influencing employee motivation and its impact on employee performance: A case of AMREF Health Africa in Kenya* (Unpublished master's research project report). United States International University, Africa, Nairobi, Kenya.

Njuguna, B.K. (2013*). Effects of career plateauing on attitudes and commitment of secondary school teachers towards their work in Ruiru and Thika West districts* (Unpublished master's thesis). Kenyatta University, Nairaobi, Kenya.

Noesgaard, M.S. (2018). How home health caregivers' perceive the influence of professionalism on their experienced work engagement. *Journal of Career Development, 45*(4), 378-392. https://doi.org/10.1177/0894845317699516

Nordin, J., Yusuf, N.A., Sadikin, S., & Desa, Z.M. (2017). Job satisfaction among educators, staff in public universities: Case study of UiTM Samarahan Sarawak. *International Journal of Advanced and Applied Sciences, 4*(3), 73-78. https://doi.org/10.21833/ijaas.2017.03.012

Noudoostbeni, A., Kaur, K., & Jenatabadi, H.S. (2018). A comparison of structural equation modelling approaches with Delone & McLean's model: A case study of radio-frequency identification user satisfaction in Malaysian university libraries. *Sustainability, 10*, 1-16. https://doi.org/10.3390/su10072532

Nunally, J.C., & Bernstein, I.H. (1994). *Psychometric Theory*. McGraw-Hill.

Nwannebuife, A.S. (2017). *Effect of employee motivation on organizational productivity* (Unpublished master's thesis). Covenant University, Ogun State, Nigeria.

O'Donnell, A.M., Reeve, J., & Smith, J.K. (2007). *Educational psychology: Reflection for action.* John Wiley & Sons Inc.

Oanh, H.T.K. (2016). *Employee's motivation: How to improve employees' motivation in order to increase work performance* (Unpublished bachelor's thesis). Helsinki Metropolia University of Applied Sciences, Helsinki, North Finland.

Obiebi, I.P., & Irikefe, G.O. (2018). Motivational factors: Implications for job performance among workers of a public tertiary institution in Nigeria. *Global Journal of Research and Review, 5*(2:6), 1-6. https://doi.org/10.21767/2393-8854.100035

Odhong, E.A., Were, S., & Jonyo, F. (2018). Influence of employee engagement on employee performance in the private security industry in Kenya with a focus on private security guards in Nairobi County. *International Journal of Current Research, 10*(3), 66346-66354.

Odukah, M.E. (2016). Factors influencing staff motivation among employees: A case study of Equator Bottlers (Coca Cola) Kenya. *Journal of Human Resource and Sustainability Studies, 4*, 68-79. https://doi.org/10.4236/jhrss.2016.42008

Oh, J.R. (2013). *The impact of organizational justice on career satisfaction of employees in the public sector of South Korea* (Unpublished doctoral thesis). University of Minnesota, Minnesota, United States of America.

Olson, A., & Wasilewski, M. (2014, January). Resolve to rise past the plateau in 2014. *PoliceOne.com.* https://www.policeone.com/health.fitness/articles/6758299

Olusadum, N.J., & Anulika, N.J. (2018). Impact of motivation on employee performance: A study of Alvan Ikoku Federal College of Education. *Journal of Management and Strategy, 9*(1), 53-65. https://doi.org/10.5430/jms.v9n1p53

Omar, K., Anuar, M.M., Salleh, A.M.M., & Yaakop, A.Y. (2014). Career plateauing: Is it still a matter of concern? *Mediterranean Journal of Social Sciences, 5*(7), 224-230. https://doi.org/10.5901/mjss.2014.v5n7p224

Omole, O.E., Ajani, O.G., Odunjo, K.S., & Olaide, R.Y. (2019). Jog satisfaction: Salary and work motivation as predictors. *The International Journal of Business & Management, 7*(6), 29-33. https://doi.org/10.24940/theijbm/2019/v7/i6/BM1906-009

Ongori, H., & Agolla, J.E. (2009). Paradigm shift in managing career plateau in organisations: The best strategy to minimise employee intention to quit. *Africa Journal Business Management*, *3*(6), 268-271.

Oppong, F.B., & Yao, S. (2016). Assessing univariate and multivariate normality: A guide for non-statisticians. *Mathematical Theory and Modeling, 6*(2), 26-33.

Osborne, J.W. (2015). What is rotating in exploratory factor analysis? *Practical Assessment, Research and Evaluation, 20*(2), 1-8. https://doi.org/10.7275/hb2g-m060

Osemeke, M., & Adegboyega, S. (2017). Critical review and comparism between Maslow, Herzberg, and McClelland's theory of needs. *FUNAI Journal of Accounting, Business and Finance (FUJABF), 1*(1), 161-173.

Otto, K., Roe, R., Sobiraj, S., Baluku, M.M., & Vasquez, M.E.G. (2017). The impact of career ambition on psychologists' extrinsic and intrinsic career success: The less they want, the more they get. *Career Development International, 22*(1), 23-36. https://doi.org/10.1108/CDI-06-2016-0093

Owoyele, S. (2017). *Factors influencing employee motivation and its impact on employee performance* (Unpublished master's thesis). Centria University of Applied Sciences, Kokkola, Finland.

Palmero, S., Roger, A., & Tremblay, M. (2001). *Work satisfaction and career plateau of part-time workers*. Paper presented at the *EGOS 17th Colloquium Lyon, 2001, Sub Theme 14 (Career as Professional Odyssey)*. http://centremagellan.univ-lyon3.fr/fr/articles/88_567.pdf

Paoline, E.A., & Gau, J.M. (2020). An empirical assessment of the sources of police satisfaction. *Police Quarterly, 23*(1), 55-81. https://doi.org/10.1177%2F1098611119875117

Patten, M.L., & Newhart, M. (2018). *Understanding research methods: An overview of the essentials* (10th ed.). Routledge.

Pei, X. (2017). Empirical study of career management and engagement. *Canadian Social Science, 13*(1), 43-48. https://doi.org/10.3968/9239

Peng, M.Y., Chen, C., & Yen, H. (2019). A comparative study of the relationship among antecedents and job satisfaction in Taiwan and mainland China: Employability as

mediator. *International Journal of Environmental Research and Public Health, 16*(14), 2-17. https://doi.org/10.3390/ijerph16142613

Perera, H.N., Vosicka, L., Granziera, H., & McIlveen, P. (2018). Towards an integrative perspective on the structure of teacher work engagement. *Journal of Vocational Behavior, 108,* 28-41. https://doi.org/10.1016/j.jvb.2018.05.006

Peterson, R.T., & Jun, M. (2007). The plateau syndrome: The problem and alternative solutions. *Journal of Selling & Major Account Management, 7*(3), 18-36.

Petrus, T. (2014). Enemies of the people: Reflections on the South African Police Service (SAPS) as a symbol of repression and oppression post-1994. *International Journal of Humanities, 4*(2), 69-79.

Pieters, W.R. (2018). Assessing organisational justice as a predictor of job satisfaction and employee engagement in Windhoek. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, *16*(0), a928. https://doi. org/10.4102/sajhrm. v16i0.928

Pillay, A.L. (2020). Prioritising career guidance and development services in post-apartheid South Africa. *African Journal of Career Development 2*(1), a9. https://doi.org/10.4102/ajcd. v2i1.9

Pinder, C. (1998). *Motivation in work organizations.* Psychology Press.

Pisapia, T.C., Wood, T., & Bendassolli, P.F. (2016). Boundaryless careers in a large Brazilian financial institution. *Temas Psicol., 24*(1), 277-293. https://doi.org/10.9788/TP2016.1-19

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended

remedies. *Journal of Applied Psychology, 88*(5), 879-903. https://doi.org/10.1037/0021-9010.88.5.879

Potgieter, I.L. (2012). *The development of a career meta-competency model for sustained employability* (Unpublished doctoral thesis). University of South Africa, Pretoria, South Africa.

Potgieter, I.L., Coetzee, M., & Ximba, T. (2017). Exploring career advancement challenges people with disabilities are facing in the South African work context. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, *15*(0), a815. https://doi.org/10.4102/sajhrm.v15i0.815

Potgieter, P.J. (2013). Exploring the public image of the police in a post-apartheid South Africa. *Acta Criminologica: Southern African Journal of Criminology, 26*(2), 147-169.

Pottas, C.D. (1981). Entrepreneurspotensiaal onder swart studente. *Development Studies in Southern Africa, 3*(e), 243-261.

Pottas, C.D., Erwee, R., Boshoff, A.B., & Lessing, B.C. (1988). *Manual for the achievement motivation questionnaire.* University of Pretoria.

Powell, G.N., & Butterfield, D.A. (1997). Effect of race on promotions to top management in a federal department. *Academy of Management Journal, 40*(1), 112-128. https://doi.org/10.2307/257022

Pringle, J.K., & Dixon, K.M. (2003). Re-incarnating life in the careers of women. *Career Development International, 8*(6), 291-300. https://doi.org/10.1108/13620430310496107

Pruitt, W.R. (2010). The progress of democratic policing in post-apartheid South Africa. *African Journal of Criminology and Justice Studies, 4*(1), 116-140.

Quarterly Employment Statistics. (2019, December). *South African Police Service Employment Statistics.* Statistics South Africa.

Raganella, A.J., & White, M.D. (2004). Race, gender, and motivation for becoming a police officer: Implications for building a representative police department. *Journal of Criminal Justice*, *32*(6), 501-513. https://doi.org/10.1016/j.jcrimjus.2004.08.009

Rahman, H., & Nurullah, S.M. (2014). Motivational need hierarchy of employees in public and private commercial banks. *Central European Business Review, 3*(2), 44-53. https://doi.org/10.18267/j.cebr.84

Ramadhani, S. (2014). *Factors influencing job satisfaction and turnover intentions in commercial banks* (Unpublished master's thesis). Open University of Tanzania, Dar es Salaam, Tanzania.

Ramasodi, S.E. (2016). *Work-related sense of coherence: Demographical differences and its relationship with work engagement in a motor retail organisation in Gauteng* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Ramlal, P., & Siva sree, G. (2017). A study on career plateauing in India in Petroleum Sector. *International Journal of Engineering Technology Science and Research, 4*(10), 655-663.

Ramos, R., Jenny, G., & Bauer, G. (2016). Age-related effects of job characteristics on burnout and work engagement. *Occupational Medicine, 66*, 230-237. https://doi.org/10.1093/occmed/kqv172

Rast, S., & Tourani, A. (2012). Evaluation of employees' job satisfaction and role of gender difference: An empirical study at airline industry in Iran. *International Journal of Business and Social Science*, *3*(7), 91-100.

Raykov, T. (1997). Estimation of composite reliability for congeneric measures. *Applied Psychological Measurement*, *21*(2), 173–184. https://doi.org/10.1177/01466216970212006

Re'em, Y. (2011). *Motivating public employees*. Hertie School of Governance Working Paper No. 60. http://www.hertieschool.org/fileadmin/images/Downloads/working_papers/60.pdf

Redmond, B.F. (2010). Need theories: What do I want when I work? *Work attitudes and motivation*. Pennsylvania State University World Campus.

Rehman, M.S., & Waheed, A. (2011). An empirical study of the impact of job satisfaction on job performance in the public sector organizations. *Interdisciplinary Journal of Contemporary Research in Business, 2*(9), 167-181.

Reukauf, J.A. (2018). *The correlation between job satisfaction and turnover intention in small business* (Unpublished doctoral thesis). Walden University, Minneapolis, Minnesota.

Reynolds, H.W., & Guest, G. (2015). Designing research. In G. Guest & E.E. Namey (Eds.), *Public Health Research Methods* (pp. 33-68). Thousand Oaks. https://dx.doi.org/10.4135/9781483398839

Riza, S.D., Ganzach, Y., & Liu, Y. (2016). Time and job satisfaction: A longitudinal study of the differential roles of age and tenure. *Journal of Management, 20*(10), 1-22. https://doi.org/10.1177/0149206315624962

Robbins, S.P. (2005). *Organizational behavior*. Pearson Prentice Hall.

Roberts, R.L. (2005). *The relationship between rewards, recognition, and motivation at an insurance company in the Western Cape* (Unpublished master's thesis). University of the Western Cape, Cape Town, South Africa.

Robinson, M.A. (2018). Using multi-item psychometric scales for research and practice in human resource management. *Human Resource Management, 57*(3), 739-750. https://doi.org/10.1002/hrm.21852

Robyn, A., & du Preez, R. (2013). Intention to quit amongst generation Y academics in higher education. *SA Journal of Industrial Psychology, 39*(1), 1-14. https://doi.org/10.4102/sajip.v39i1.1106

Roth, J.D. (2008). *The difference between a career and a job*. Retrieved from https:// www.getrichslowly.org/the-difference-between-a-career-and-a-job/

Rothmann, S., & Rothmann, S. (2010). Factors associated with employee engagement in South Africa. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 36*(2), 925-937. https://doi.org/10.4102/sajip.v36i2.925

Rothmann, S. & Strijdom, G. (2002). Suicide ideation in the South African Police Services in the North-West Province. *Journal of Industrial Psychology*, *28*(1), 44-48. https://doi.org/10.4102/sajip.v28i1.40

Rothmann, S. & Van Rensburg, P. (2002). Psychological strengths, coping and suicide ideation in the South African Police Services in the North West Province. *Journal of Industrial Psychology*, *28*(3), 39-49. https://doi.org/10.4102/sajip.v28i3.64

Roulin, N., Mayor, E., & Bangerter, A. (2014). How to satisfy and retain personnel despite job-market shortage. *Swiss Journal of Psychology, 73*(1), 13-24. https://doi.org/10.1024/1421-0185/a000123

Ruddy, N. (2018). *The impact of work engagement and work addiction on digital burnout among highly educated employees within the research industry* (Unpublished master's thesis). University of Pretoria, Pretoria, South Africa.

Rudolph, C.W., Katz, I.M., Lavigne, K.N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior, 102*, 112-138. https://doi.org/10.1016/j.jvb.2017.05.008

Runyon, R.P., Coleman, K.A., & Pittenger, D.J. (2002). *Fundamentals of behavioural statistics* (9th ed.). McGraw-Hill.

Rybnicek, R., Bergner, S., & Gutschelhofer, A. (2019). How individual needs influence motivation effects: A neuroscientific study on McClelland's need theory. *Review of Managerial Science, 13*, 443-482. https://doi.org/10.1007/s11846-017-0252-1

Sabbagha, M.F.D. (2016). *A model of employee motivation and job satisfaction for staff retention practices within a South African foreign exchange banking organisation* (Unpublished doctoral thesis). University of South Africa, Pretoria, South Africa.

Sahito, Z., & Vaisanen, P. (2017). The diagonal model of job satisfaction and motivation: Extracted from the logical comparison of content and process theories. *International Journal of Higher Education, 6*(3), 209-230. https://doi.org/10.5430/ijhe.v6n3p209

Saks, A.M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology, 21*(7), 600-619. https://doi.org/10.1108/02683940610690169

Salami, S.O. (2010). Career plateauing and work attitudes: Moderating effects of mentoring with Nigerian employees. *Journal of International Social Research, 3*(11), 499-508. https://doi.org/10.5964/ejop.v6i4.224

Salkind, N. J. (2016). *Exploring research* (9th ed.). Pearson Education.

Samiei, G., & Salavati, A. (2015). Career plateauing: A survey on effects of career plateauing on knowledge management (Case study: Insurance companies in Sanandaj city). *Indian Journal of Fundamental and Applied Life Sciences, 5*(S3), 991-1000.

Sammarra, A., Profili, S., & Innocenti, L. (2013). Do external careers pay-off for both managers and professionals? The effect of inter-organizational mobility on objective career success. *International Journal of Human Resource Management*, *24*(13), 2490–2511. https://doi.org/10.1080/09585192.2012.725076

Saner, T., & Eyupoglu, S.Z. (2012). Have gender differences in job satisfaction disappeared? A study of Turkish universities in North Cyprus. *African Journal of Business Management*, *6*(1), 250-257. https://doi.org/10.5897/AJBM11.1935

Sarwar, M.A. (2014). *Gendered differences in job satisfaction: How men and women cope with work and family* (Unpublished master's thesis). Kent State University, Kent, Ohio.

SAS. (2013). *Statistical Analysis System*, *Version 9.4.* SAS Institute Inc.

Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research Methods for Business Students*. *Business.* (7th ed.). Pearson Education Limited.

Savery, L.K. (1990). Managing plateaued employees.*Management Decision, 28*(3), 46-50. https://doi.org/10.1108/00251749010140051

Savickas, M.L. (2011). New questions for vocational psychology: Premises, paradigms, and practices. *Journal of Career Assessment, 19*(3), 251–258. https://doi.org/10.1177/1069072710395532

Savickas, M.L., & Porfeli, E.J. (2012). Career Adapt-Abilities Scale – USA Form: Psychometric properties and relation to vocational identity. *Journal of Vocational Behavior, 80*(3), 748–753. https://doi.org/10.1016/j.jvb.2012.01.009

Savickas, M.L. (2012). Life design: A paradigm for career intervention in the 21st century. *Journal of Counseling and Development, 90*(1), 13-19. https://doi.org/10.1111/j.1556-6676.2012.00002.x

Savickas, M.L. (2008). Helping people choose jobs: A history of the guidance profession. In J. A. Athanasou, & R. van Esbroeck (Eds.), *International handbook of career guidance,* 97-113. Springer.

Savickas, M.L. (2005). The theory and practice of career construction. In S. D. Brown, & R.W. Lent (Eds.), *Career development and counseling: Putting theory and research to work,* 42-70. John Wiley & Sons.

Schafer, T., & Schwarz, M.A. (2019). The meaningfulness of effect sizes in psychological research: Differences between sub-disciplines and the impact of potential biases. *Frontier in Psychology, 10*, 1-13. https://doi.org/10.3389/fpsyg.2019.00813

Schaufeli, W., & Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25,* 293-315. https://doi.org/10.1002/job.248

Schaufeli, W., & Bakker, A.B. (2003). *Utrecht work engagement scale: Preliminary Manual.* Utrecht University.

Schaufeli, W.B. (2013). What is engagement? In C. Truss, K. Alfes, R. Delbridge, A. Shantz, & E. Soane (Eds.), *Employee engagement in theory and practice,* 15-35. Routledge.

Schaufeli, W.B. (2012). Work engagement: What do we know and where do we go? Work engagement in everyday life, business, and academia. *Romanian Journal of Applied Psychology, 14*(1), 3-10.

Schaufeli, W.B., Salanova, M., González-Romá, V., & Bakker, A.B. (2002). The measurement of engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-being, 3*(1), 71-92. https://doi.org/10.1023/A:1015630930326

Schein, E. (1978). *Career dynamics: Matching individual and organisational needs.* Addison Wesley.

Schneider, B., Yost, A.B., Kropp, A., Kind, C., & Lam, H. (2018). Workforce engagement: What it is, what drives it, and why it matters for organizational performance. *Journal of Organizational Behavior, 39*(4) 462-480. https://doi.org/10.1002/job.2244

Schreuder, A.M.G., & Coetzee, M. (2013). *Careers: An organisational perspective* (4th ed.). Juta.

Schreuder, A.M.G., & Theron, A. L. (2001). *Careers: An organisational perspective.* Juta.

Schultz, H., Bagraim, J., Potgieter, T., Viedge, C., & Werner, A. (2003). *Organisational behaviour: A contemporary South African perspective.* Van Schaik Publishers.

Schumacker, R.E. & Lomax, R.G. (2016). *A beginner's guide to structural equation modelling* (4th ed.). Routledge.

Sekaran, U., & Bougie, R. (2013). *Research Methods for Business: A skill-building approach* (6th ed.). Wiley.

Seligman, M.E.P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5-14. https://doi.org/10.1037/0003-066X.55.1.5

Shakiladevi, A.R., & Basariya, R.S. (2017). Career plateau of employees and its causes. *International Journal of Advanced Research in Science, Engineering and Technology, 4*(3), 3589-3592.

Sharma, A., Goel, A., & Sengupta, S. (2017). How does work engagement vary with employee demography? *Procedia Computer Science, 122*, 146-153. https://doi.org/10.1016/j.procs.2017.11.353

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research, 3*(7), 749-752.

Shecket, W.C. (1995a). Career plateauing: A survey of technical college employees. *Journal of Vocational and Technical Education, 11*(2), 22-27. https://doi.org/10.21061/jcte.v11i2.584

Shecket, W.C. (1995b). *Navigating the career plateau: A qualitative investigation of veteran community college educators* (Unpublished doctoral thesis). Gonzaga University, Washington, United States of America.

Shindhe, S.V. (2018). *Functions of management*. Laxmi Book Publication.

Singh, R. (2016). The impact of intrinsic and extrinsic motivators on employee engagement in Information organizations. *Journal of Education for Library and Information Science, 57*(2), 197-206. https://doi.org/10.12783/issn.2328-2967/57/2/11

Singh, S.P., & Sharma, H.K. (2016). Impact of work motivation on job satisfaction of teachers in professional education. *Research Journal of Social Science & Management, 6*(5), 90-96.

Sirin, E.F. (2009). Analysis of Relationship between job satisfaction and attitude among research assistants in school of physical education and sports. *Journal of Theory and Practice in Education, 5*(1), 85-104.

Slavec, A., & Drnovsek, M. (2012). A perspective on scale development in entrepreneurship research. *Economic and Business Review, 14*(1), 39-62.

Smit, P.J., Cronje, G.J., Brevis, T. & Vrba, M.J. (2011). *Management principles: A contemporary edition for Africa* (5th ed.). Juta.

Smith-Ruig, T. (2009). Exploring career plateau as a multi-faceted phenomenon: Understanding the types of career plateau experienced by accounting professionals.

British Journal of Management, 20(4), 610-622. https://doi.org/10.1111/j.1467-8551.2008.00608.x

Snelgar, R., Shelton, S.A., & Giesser, A. (2017). A comparison of South African and German extrinsic and intrinsic motivation. *South African Journal of Economic and Management Sciences, 20*(1), 1-12. https://doi. org/10.4102/sajems. v20i1.1552

Sommerfeldt, V. (2010). *An identification of factors influencing police workplace motivation* (Unpublished doctoral thesis). Queensland University of Technology, Brisbane, Australia.

Sonn, C. (2015). *The relationship between burnout and work engagement amongst employees within a pharmaceutical distribution industry* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Sonnentag, S. (2017). A task-level perspective on work engagement: A new approach that helps to differentiate the concepts of engagement and burnout. *Burnout Research, 5*, 12-20. https://doi.org/10.1016/j.burn.2017.04.001

Spagnoli, P. (2017). Organizational socialization learning, organizational career growth, and work outcomes: A moderated mediation model. *Journal of Career Development,* 1-17. https://doi.org/10.1177/0894845317700728

Spangenberg, J.T. (1990). *Achievement and achievement motives: Psychological and sociological approaches.* Freeman & Company.

Spector, P.E. (1997). *Job satisfaction: Application, assessment, causes and consequences.* Thousand Oaks.

Sreejesh, S., Mohapatra, S., & Anusree, M.R. (2014). *Business research methods: An applied orientation*. https://doi.org/10.1007/978-3-319-00539-3

Stead, G.B., & Watson, M.B. (1998). The appropriateness of Super's career theory among Black South Africans. *South African Journal of Psychology, 28*, 40-43. https://doi.org/10.1177/008124639802800107

Stefanovska-Petkovska, M., Bojazdiev, M., Handjiski, V.K., & Trajkovska, V. (2017). The "Blue-collar" motivation: Personal and work environment predictors of job satisfaction among construction workers. *Universal Journal of Management 5*(3), 149-159. https://doi.org/10.13189/ujm.2017.050306

Steyn, M. (2010). *Being different together*. iNCUDISA.

Stockemer, D. (2019). *Quantitative methods for the social sciences: A practical introduction with examples in SPSS and Stata.* Springer International Publishing.

Stojanović, M., Andjelković-Apostolović, M., Milošević Z., & Ignjatović, A. (2018). Parametric versus nonparametric tests in biomedical research. *Acta Medica Medianae, 57*(2), 75-80. https://doi.org/10.5633/amm.2018.0212

Stone, R.J. (2014). *Human Resource Management* (8th ed.). John Wiley & Sons.

Stoner, J.A.F., Ference T.P., Warren, E.K., & Christensen, H.K. (1980). *Managerial career plateaus: An exploratory study*. Center for Research in Career Development.

Storm, K. (2002). *Burnout and work engagement in the South African Police Service* (Unpublished doctoral thesis). North-West University, Potchefstroom, South Africa.

Storm, K., & Rothmann, S. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African Police Service. *SA Journal of Industrial Psychology*, *29*(4), 62–70. https://doi.org/10.4102/sajip.v29i4.129

Strumpfer, D.J.W., & Mlonz, E. N. (2001). Antonovsky's sense of coherence scale and job attitudes: Three studies. *SA Journal of Psychology 31*(2), 30-37. https://doi.org/10.1177/008124630103100204

Su, T., Kuo, J., Cheung, Y., Hung, C., Lu, S., & Cheng, J. (2017). Effect of structural/content career plateaus on job involvement: Do institutional/occupational intentions matter? *Universal Journal of Management, 5*(4), 190-198. https://doi.org/10.13189/ujm.2017.050404

Sultana, R, & Malik, O.F. (2019). Is Protean Career Attitude Beneficial for Both Employees and Organizations? Investigating the Mediating Effects of Knowing Career Competencies. *Frontiers in Psychology*, 10:1284, 1-13. https://doi.org/ 10.3389/fpsyg.2019.01284

Super, D.E. (1990). A life span, life-space approach to career development. In D. Brown, & L. Brooks (Eds.), *Career choice and development*: *Applying contemporary theories to practice,* 197-261. Jossey-Bass.

Super, D.E. (1980). A life span, life space approach to career development. *Journal of Vocational Behavior, 16*(3), 282-298. https://doi.org/10.1016/0001-8791(80)90056-1

Super, D.E. (1957). *The psychology of careers.* Harper.

Tabachnick, B.G., & Fidell, L.S. (2019). *Using multivariate statistics* (7th ed.). Pearson Education.

Tabarsa, G., & Nazari, A.J. (2016). Examining the moderating role of mentoring relationship in between content plateauing with job satisfaction and willingness to leave the organization (Case study: Iran ministry of industry, mines, and trade). *Indian Journal of Science and Technology, 9*(7), https://doi.org/10.17485/ijst/2016/v9i7/87858

Takawira, N. (2012). *Job embeddedness, work engagement and turnover intention of staff in a higher education institution* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Tehseen, S., Ramayah, T., & Sajilan, S. (2017). Testing and Controlling for Common Method Variance: A Review of Available Methods. *Journal of Management Sciences*, *4*(2), 142-168. https://doi.org/10.20547/jms.2014.1704202

Terre Blanche, M., & Durrheim, K. (2002). *Research in practice: Applied methods for the social sciences.* University of Cape Town Press.

Tharkude, D., & Gankar, S. (2018). An empirical research on causes and effects of career plateau on individual performance in Pune City, *4*(2), 4096- 4105.

Thiagaraj, D., & Thangaswamy, A. (2017). Theoretical concept of job satisfaction – A study. *International Journal of Research – Granthaalayah, 5*(6), 464-470. https://doi.org/10.5281/zenodo.822315

Thomas, B.J. (2009). *Career plateau and African American women middle managers in professional organizations* (Unpublished doctoral thesis). Capella University, Minnesota, United States of America.

Thomas, E.C. (2018). *An evaluation of job crafting as an intervention aimed at improving work engagement* (Unpublished master's mini thesis). University of Western Cape, Cape Town, South Africa.

Thompson, E.R., & Phua, F.T.T. (2012). A brief index of affective job satisfaction. *Group & Organization Management, 37*(3), 275–307. https://doi.org/10.1177/1059601111434201

Thurstone, L.L. (1947). *Multiple factor analysis*. University of Chicago Press

Tilekar, P., & Pachpande, A. (2014). A study of employee motivation of manufacturing, banking & IT sector w.r.t. Herzberg's two factor theory. *International Journal of Organizational Behaviour & Management Perspectives, 3*(2), 897-903.

Timms, C., & Brough, P. (2013). I like being a teacher: Career satisfaction, the work environment and work engagement. *Journal of Educational Administration, 51*(6), 768-789. https://doi.org/10.1108/JEA-06-2012-0072

Tims, M., Bakker, A.B., & Derks, D. (2013). The impact of job crafting on job demands, job resources, and well-being. *Journal of Occupational Health Psychology, 18*(2), 230–240. https://doi.org/10.1037/a0032141

Tims, M., Bakker, A.B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior, 80*(1), 173–186. https://doi.org/10.1016/j.jvb.2011.05.009

Tladinyane, R., Coetzee, M., & Masenge, A. (2013). Psychological career meta-capacities in relation to employees' retention-related dispositions. *Southern African Business Review, 17*(2), 140-163.

Tladinyane, R., & Van der Merwe, M. (2016). Career adaptability and employee engagement of adults employed in an insurance company: An exploratory study. *SA Journal of Human Resource Management*, *14*(1), a752. https://doi.org/10.4102/sajhrm.v14i1.752

Tolentino, L.R., Garcia, P.R.J.M., Lu, V.N., Restubog, S.L.D., Bordia, P., & Plewa, C. (2014). Career adaptation: The relation of adaptability to goal orientation, proactive personality, and career optimism. *Journal of Vocational Behavior, 84*(1), 39-48. https://doi.org/10.1016/j.jvb.2013.11.004

Tremblay, M., & Roger, A. (1993). Individual, familial, and organizational determinants of career plateau: An empirical study of the determinants of objective and subjective career plateau in a population of Canadian managers. *Group & Organization Management, 18*(4), 411-435. https://doi.org/10.1177/1059601193184003

Tremblay, M., Roger, A., & Toulouse, J.M. (1995). Career plateau and work attitudes: An empirical study of managers. *Human Relations, 48*(3), 221-237. https://doi.org/10.1177/001872679504800301

Tshilongamulenzhe, M.C, & Takawira, N. (2015). Examining the gender influence on employees' work engagement within a South African University. *Risk governance & control: Financial markets & institutions, 5*(2), 110-119. https://doi.org/10.22495/rgcv5i2c1art5

Tuan, L.T. (2012). Development strategy for a textile firm. *Journal of Management and Sustainability, 2*(2), 136-157. https://doi.org/10.5539/jms.v2n2p136

Ufuophu-Biri, E., & Iwu, C.G. (2014). Job motivation, job performance and gender relations in the broadcast sector in Nigeria. *Mediterranean Journal of Social Sciences, 5*(16), 191-198. https://doi.org/10.5901/mjss.2014.v5n16p191

Ugwu, F.O. (2013). Work engagement in Nigeria: Adaptation of the Utrecht Work Engagement Scale for Nigerian sample. *International Journal of Multidisciplinary Academic Research, 1*(3), 16-26.

Ugwu, F.O., Ezeh, M.A., & Ogbu, J.U. (2015). Investigating the relationships between perceived hierarchical plateauing, job crafting, work centrality and work engagement: An empirical study in emerging economy. *International Journal of Management Sciences, 5*(9), 604-614.

Uttley, J. (2019). Power analysis, sample size, and assessment of statistical assumptions: Improving the evidential value of lighting research. *LEUKOS, 15*(2-3), 143-162. https://doi.org/10.1080/15502724.2018.1533851

Uy, M.A., Chan, K., Sam, Y.L., Ho, M.R., & Chernyshenko, O.S. (2015). Proactivity, adaptability and boundaryless career attitudes: The mediating role of entrepreneurial alertness. *Journal of Vocational Behavior, 86,* 115-123. https://doi.org/10.1016/j.jvb.2014.11.005

Van der Schyff, R., Botha, D., & Ellis, S. (2018). Undergraduate students' perceptions of factors affecting job satisfaction. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, *16*(0), a949. https://doi. org/10.4102/sajhrm. v16i0.949

Van der Smissen, S., Schalk, R., & Freese, C. (2013). Contemporary psychological contracts: How both employer and employee are changing the employment relationship. *Management Revue, 24*(4), 309-327. https://doi.org/10.1688/1861-9908_mrev_2013_04_Smissen

Van Eeden, P.D. (2015). *An evaluation of learning programmes in the South African Police Service* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Vandrew, A.T. (2012). *Chief School Business Officials: A qualitative investigation of employment longevity and the career plateau* (Unpublished doctoral thesis). Indiana University of Pennsylvania, Philadelphia, United States of America.

Veiga, J.F. (1981). Plateaued versus non-plateaued managers career patterns, attitudes, and paths. *Academy of Management Journal*, *24*(3), 566-578. https://psycnet.apa.org/doi/10.2307/255575

Venter, W.J. (2006). *Staff development at division of training in the South African Police Service* (Unpublished master's thesis). Tshwane University of Technology, Tshwane, South Africa.

Venz, L., Pundt, A., & Sonnentag, S. (2018). What matters for work engagement? A diary study on resources and the benefits of selective optimization with compensation for state work engagement. *Journal of Organizational Behavior, 39*(1), 26-38. https://doi.org/10.1002/job.2207

Videnska, L. (2013). *Work engagement antecedents* (Unpublished master's thesis). University of Nairobi, Nairobi, Kenya.

Vilakazi, M.C. (2015). *The impact of police corruption on service delivery in Pretoria Central* (Unpublished master's thesis). University of South Africa, Pretoria, South Africa.

Viljoen, R. (2008). *Inclusive organizational transformation through inclusivity* (Unpublished doctoral thesis). University of South Africa, Pretoria, South Africa.

Visi, O. (2016). Theoretical aspects of career patterns under the organization and individual career management perspectives. *European Scientific Journal, 12*(1), 501-513. https://doi.org/10.19044/esj.2016.v12n1p501

Volmer, J., & Spurk, D. (2011). *Protean and boundaryless career attitudes: Relationships with subjective and objective career success. Journal for Labour Market Research, 43*(3), 207-218. https://doi.org/10.1007/s12651-010-0037-3

Vroom, V.H. (1964). *Work and motivation*. Wiley.

Wadhwa, D.S., & Verghese, M. (2015). The impact of employee empowerment on job satisfaction and organizational commitment: An empirical investigation with special reference to selected cement industry in Chhattisgarh. *International Journal in Management and Social Science, 3*(3), 280-286.

Wang, Q., Weng, Q., McElroy, J.C., Ashkanasy, N.M., & Lievens, F. (2014). Organizational career growth and subsequent voice behaviour: The role of affective commitment and gender. *Journal of Vocational Behavior, 84*(3), 431-441. https://psycnet.apa.org/doi/10.1016/j.jvb.2014.03.004

Wang, X., Liu, L., Zou, F., Hao, J., & Wu, H. (2017). Associations of occupational stressors, perceived organizational support, and psychological capital with work engagement among Chinese female nurses. *Biomed Research International,* 1-8. https://doi.org/10.1155/2017/5284628

Wang, Y., Hu, C., Hurst, C.S., & Yang, C. (2014). Antecedents and outcomes of career plateaus: The roles of mentoring others and proactive personality. *Journal of Vocational Behavior, 85*(3), 319-328. https://doi.org/10.1016/j.jvb.2014.08.003

Warren, E.K., Ference, T.P., & Stoner, J.A.F. (1975). Case of the plateaued performer. *Harvard Business Review, 53*, 146-148.

Watanabe, M. (2010). *Gender and race differences in job satisfaction and commitment among stem faculty: The influence of network integration and work-family balance* (Unpublished master's thesis). University of Nebraska, Lincoln, United States of America.

Webb, J. (2016). The mid-career information professional: Managing your own career. *Business Information Review, 33*(3), 163-168. https://doi.org/10.1177/0266382116666965

Wefald, A.J., & Downey, R.G. (2009). Construct dimensionality of engagement and its relation with satisfaction. *The Journal of Psychology*, *143*(1), 91–111. https://doi.org/10.3200/JRLP.143.1.91-112

Wegner, T. (2014). *Applied business statistics: Methods and excel-based applications* (3rd ed.). Juta & Company Ltd.

Weiss, D.J., Dawis, R.V., England, G.W., & Lofquist, L.H. (1967). *Manual for the Minnesota Satisfaction Questionnaire.* University of Minnesota.

Weston, J.W. (2016). *Employee engagement: Understanding the construct's stability* (Unpublished master's thesis). Colorado State University, Fort Collins, Colorado.

White, L.M. (2014). *Lesbian and gay career development and Super's life-span, life-space theory* (Unpublished doctoral thesis). University of Toronto, Toronto, Canada.

Whiteley, B.E. (2002). *Principles of research in behavioural science* (2nd ed.). McGraw Hill.

Wickramasinghe, V., & Jayaweera, M. (2010). Impact of career plateau and supervisory support on career satisfaction. *Career Development Journal*, *15*(6), 544-561. https://doi.org/10.1108/13620431011084402

Wiley, C. (1997). What motivates employees according to over 40 years of motivation surveys. *International Journal of Manpower, 18*(3), 263-280. https://doi.org/10.1108/01437729710169373

Wilson, J.M., & Heinonen, J.A. (2012). Police workforce structures: Cohorts, the economy, and organizational performance. *Police Quarterly, 15*(3), 283-307. https://doi.org/10.1177/1098611112456691

Winsteps (2013). Rasch Analysis. Software Version 1.0.0. Winsteps Inc. Retrieved from: www.winsteps.com/index.htm

Woo, V. (2012). *Significant life transitions and changing lives: An investigation into the internationally mobile professional* (Unpublished doctoral thesis). Case Western Reserve University, Ohio, United States of America.

Wright, B.D., & Stone, M. H. (1979). *Best Test Design*. MESA Press.

Wrzesniewski, A., & Dutton, J.E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review, 26*(2), 179–201. https://doi.org/10.5465/amr.2001.4378011

Wymer, W., & Alves, H.M.B. (2012). A review of scale development practices in non-profit management and marketing. *Interdisciplinary approach to Economics and Sociology, 15*(2), 143-152. https://doi.org/ 10.14254/2071-789X.2012/5-2/11

Xanthopoulou, D., Bakker, B.A., & Fischbach, A. (2013). Work engagement among employees facing emotional demands: The role of personal resources. *Journal of Personnel Psychology, 12*(2), 74-84. https://doi.org/10.1027/1866-5888/a000085

Xie, B., Lu, X., Zhou, W., & Xin, X. (2014). The effect of career plateau on Chinese employees' affective commitment: An indigenous career plateau scale and two-mediator model. *Front Business Research, 8*(3), 346-366. https://doi.org/10.3868/s070-003-014-0016-6

Yang, W. (2016). *'That's not what I signed up for!' A longitudinal investigation of the impact of unmet expectation in the relation between career plateau and job outcomes* (Unpublished doctoral thesis). University of Manchester, England, United Kingdom.

Yang, W., Johnson, S., & Niven, K. (2018). "That's not what I signed up for!" A longitudinal investigation of the impact of unmet expectation and age in the relation between career plateau and job attitudes. *Journal of Vocational Behavior, 107*, 71-85. https://doi.org/10.1016/j.jvb.2018.03.006

Yang, W., Niven, K., & Johnson, S. (2019). Career plateau: A review of 40 years of research. *Journal of Vocational Behavior, 110,* 286-302. https://doi.org/10.1016/j.jvb.2018.11.005

Yapa, P.M.S.P., Rathnayake, R.M., Senanayake, G., & Premakumara, P. (2014, February). *Effect of demographic factors on job satisfaction of non-academic staff in universities.* Proceedings of the 3rd International Conference on Management and Economics, University of Rahuna, Sri Lanka. http://www.mgt.ruh.ac.lk/pubs/pdf/ICME2014_OP_p303.pdf

Yau, H.K., Kan, M.S., & Cheng, A.L.F. (2011). Gender differences on intrinsic motivation in Hong Kong Higher Education. *E-Journal of Organizational Learning and Leadership*, *9*(2), 63-80.

Young, H.R., Glerum, D.R., Wang, W., & Joseph, D.L. (2018). Who are the most engaged at work? A meta-analysis of personality and employee engagement. *Journal of Organizational Behavior, 39*(10), 1330-1346. https://psycnet.apa.org/doi/10.1002/job.2303

Young, M. (2004). *Exploring the meaning of trauma in the South African Police Service* (Unpublished doctoral thesis). University of South Africa, Pretoria, South Africa.

Young, M., Koortzen, P., & Oosthuizen, R.M. (2012). Exploring the meaning of trauma in the South African Police Service: A systems psychodynamic perspective. *SA Journal of Industrial Psychology, 38*(2). https://doi.org/10.4102/sajip.v38i2.1004

Young, R.A., Valach, L., & Domene, J.F. (2005). The action-project method in counselling psychology. *Journal of Counseling Psychology, 52*(2), 215-223. https://doi.org/10.1037/0022-0167.52.2.215

Ziegler, M., Schmukle, S., Egloff, B., & Buhner, M. (2010). Investigating measures of Achievement Motivation(s). *Journal of Individual Differences, 31*(1), 15-21. https://doi.org/10.1027/1614-0001/a000002

APPENDIX A

THE CAREER PLATEAUING EXPERIENCES SCALE (CPES)

INSTRUCTIONS

The CPES consists of 20 questions which must be answered on a seven-point Likert scale and takes approximately five minutes to complete. The statements relate to career plateauing which refers to a situation where further (1) hierarchical career advancement becomes unlikely (hierarchical/structural plateau), (2) the employee has learnt everything pertaining to the job and experiences no further challenges (job content plateau), (3) the employee feels satisfied with the current job (maintenance plateau), and (4) the employee feels dissatisfied, disillusioned, and uninspired by the current job (psychological plateau). Select either 1-Not Agree at All; 2-Very Slightly Agree; 3-Slightly Agree; 4-Moderately Agree; 5-Mostly Agree; 6-Strongly Agree; 7-Very Strongly Agree.

	STATEMENT	Not Agree At All 1	Very Slightly Agree 2	Slightly Agree 3	Moderately Agree 4	Mostly Agree 5	Strongly Agree 6	Very Strongly Agree 7
1	In general, I am satisfied with my job.							
2	I enjoy performing my daily work activities.							
3	I am not currently looking for alternative employment.							
4	I am not concerned about being promoted.							
5	I am satisfied with the training and development opportunities provided to me.							
6	I feel incapable of performing my tasks/job adequately.							
7	Recently I have noticed a deterioration in my work performance.							
8	My interest in work has decreased.							
9	I generally have a lack of passion for my work.							
10	I often feel anxious about my work performance.							
11	I am worried that I will no longer be promoted.							
12	I do not expect to progress higher than my current job level.							
13	My opportunities for future promotion is limited.							
14	I am unlikely to achieve a higher job title.							
15	I am not advancing any further in my organisation.							
16	I am no longer challenged by my job.							
17	I do not receive challenging work assignments.							
18	I am no longer able to learn and grow in my current job.							
19	I am not given the opportunity to try out new ideas.							
20	My job is routine and repetitive.							

THANK YOU FOR YOUR TIME!

APPENDIX B

Ethics Final Approval

UNISA university of south africa

Ref #: 2013/CEMS/IOP/00141

ETHICS REVIEW COMMITTEE: DEPARTMENT OF INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

STUDENT: MS S RAMGOOLAM
STUDENT NR: 30449219
SUPERVISOR: Prof A M G Schreuder
Joint supervisor: Prof M Coetzee

This is to certify that the application for ethics clearance submitted by

Ms Shailkumari Ramgoolam
(Student nr: 30449219)
For the study

Development and validation of the Career Plateauing Experiences Scale in relation to job satisfaction, motivation and work engagement in the South African Police Service

Decision:
Application approved

The application for ethics clearance for the above mentioned research was reviewed by IOP *unit committee* on 20/11/2013 in compliance with the Unisa Policy on Research Ethics.

Ethical clearance has been granted.

Please be advised that the research ethics review committee needs to be informed should any part of the research methodology as outlined in the Ethics Application (Ref. Nr.: 2013/CEMS/IOP/00141), change in any way.

The Research Ethics Review Committee wishes you all the best with this research undertaking.

Kind regards,

Dr O M Ledimo
(On behalf of the IOP Department Ethics Committee)

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Editorial Declaration

I, Marcel M du Plessis, editor and proof-reader, hereby declare that I edited the pre-examination version of the thesis, entitled *DEVELOPMENT AND VALIDATION OF THE CAREER PLATEAUING EXPERIENCES SCALE IN RELATION TO JOB SATISFACTION, MOTIVATION, AND WORK ENGAGEMENT IN THE SOUTH AFRICAN POLICE SERVICE*, by Shailyn Ramgoolam during the month of June 2020.

I corrected the tense, grammar, formatting, and other language errors using the Track Changes feature in Microsoft Word. I also highlighted potential problems, logical leaps, and missing information to aid the student in correcting and finalising the document.

Signed,

Marcel M du Plessis

Editor

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8 July 2020