DEVELOPING A WORK ENGAGEMENT FRAMEWORK FOR EMPLOYEES IN THE TERTIARY EDUCATION SECTOR IN ZIMBABWE

by

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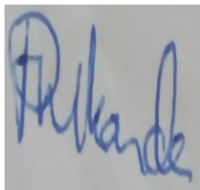**DECLARATION**

Name: P Mkandatsama

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I, Pride Mkandatsama, student number 62102435, hereby declare that this thesis, titled **"Developing a work engagement framework for employees in the tertiary education sector in Zimbabwe"**, is my personal work. I have indicated and acknowledged the sources that I have used and quoted in a list of references. I also declare that the thesis has not been submitted for any other degree or examination at the University of South Africa (Unisa) or any other university.

I further declare that I obtained the ethical clearance to conduct the research from the Department of Human Resource Management, Unisa. I paid particular attention to ensuring adherence to the ethical principles and obligations of research, as required by the Unisa Code of Ethics and Conduct, in all the research processes. The ethical clearance certificate to conduct the research is attached as Appendix A.

_____   _26/02/2024_

Pride Mkandatsama   Date

ACKNOWLEDGEMENTS

ABSTRACT/SUMMARY

DEVELOPING A WORK ENGAGEMENT FRAMEWORK FOR EMPLOYEES IN THE TERTIARY EDUCATION SECTOR IN ZIMBABWE

Pride Mkandatsama

Supervisor	:	Prof. N Ferreira
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The study focused on the construction of a work engagement framework, by investigating the relationship between perceived organisational justice, the psychological contract, work engagement and socio-demographic variables (age, gender, employment status and employment category). This is to inform work engagement strategies for different socio-demographic groups of employees in the context of the tertiary education environment in Zimbabwe.

A quantitative survey was conducted on a sample of academic and non-academic (permanent and contract) staff ($n = 336$) at the selected tertiary institution. The post-positivist philosophy and the census sampling technique were adopted. The bivariate correlations indicated strong relationships between perceived organisational justice, the psychological contract, and work engagement. Stepwise regression analysis revealed perceived organisational justice and the psychological contract to be the strongest predictors of work engagement. Moderated hierarchical regression analysis revealed that the identified socio-demographic variables did not moderate the relationships between perceived organisational justice, the psychological contract, and work engagement. Spearman's bivariate correlation and regression analyses informed structural equation modelling and revealed a good fit between perceived organisational justice, the psychological contract, and work engagement. Statistically significant differences were found in respect of the socio-demographic variables. From a theoretical standpoint, the study enhanced deeper comprehension of the hypothesised work engagement framework; on an empirical standpoint, the study developed an empirically tested work engagement framework; and on a practical level, individual-level and organisation-level interventions pertaining to the work engagement framework are recommended for human resource managers.

Key terms: Perceived organisational justice, psychological contract, tertiary education institutions, work engagement

ISISHWANKATHELO

UPHUHLISO LWESIKHOKELO SOKUZIMISELA EMSEBENZINI KUBASEBENZI KWICANDELO LEZEMFUNDO EZIMBABWE

Pride Mkandatsama

Umlawuli   : Njing. N Ferreira

Umncedisi mlawuli   : Gqirha AJ Deas

ISebe   : Ulawulo Lwemithombo Engabantu (*Human Resource Management*)

Isidanga   : PhD (Izifundo Zolawulo)

Esi sifundo sagxila ekwakheni isikhokelo somsebenzi ngokuphanda ulwalamano phakathi kobulungisa bequmrhu obucingelwayo, isivumelwano sesimo sengqondo nokusebenza nemiba yezobalo loluntu (ubudala, isini, uhlanga, nesimo sengqesho). Oku kwenzelwa ukuyila amacebo okungena emsebenzini kwabantu abaziindidi ezahlukeneyo kwicandelo lezemfundo ephakamileyo eZimbabwe.

Kwaqhutywa uhlolo zimvo oluqwalasela amanani kwisampulu yabasebenzi abafundisayo nabangafundisiyo (abazizigxina nabangezozigxina) (n = 336) kwiziko elithile lemfundo ephakamileyo. Ukufana kwemiba emibini kwabonakalisa ulwalamano olunamandla phakathi kobulungisa bequmrhu obucingelwayo, isivumelwano sesimo sengqondo kunye nokuzimisela emsebenzini. Uhlalutyo lwamanani akhethwe ngokwenkqubo eyaziwa ngokuba yi*stepwise regression* lwadulisa ukuba ubulungisa bequmrhu obucingelwayo kunye nesivumelwano sesimo sengqondo zizo izinto ezikhokelela ekuzinikeleni emsebenzini. Uhlalutyo oluhleliweyo lokulandelelana kwamanani akhethwe ngenkqubo ye*regression* lwavelisa ukuba imiba echingiweyo yezobalo loluntu ayinanxaxheba kulwalamano oluphakathi kobulungisa bequmrhu obucingelwayo, isivumelwano sesimo sengqondo kunye nokuzimisela emsebenzini. Iindidi zohlalutyo lothelekiso lwemiba emibini nolwe*regression* zasekela uhlalutyo lweendidi ngeendidi zokwakheka kwemiba, kwaveza nokuba kukho ulwalamano oluhle phakathi kobulungisa bequmrhu obucingelwayo, isivumelwano sesimo sengqondo kunye nokuzimisela emsebenzini. Kwafumaniseka umahluko othe vetshe phakathi kwemiba yobalo kwezoluntu. Kwizinga leengcingane/iithiyori, esi sifundo saqinisa ukuqonda ngesikhokelo esakhokela iingcinga ezimalunga nokuzimisela emsebenzini.

Kwizinga lezifundo ezinobungqina, isifundo saphuhlisa isikhokelo esivavanywe sanobungqina malunga nokuzimisela emsebenzini kwizinga lokuphathekayo okanye okwenzekayo, kwenziwa iingcebiso kubalawuli becandelo lokulawula abaqeshwa, ngcebiso ezo yayizezokuncedisana nomqeshwa ngamnye kunye nequmrhu malunga nesikhokelo sokuzimisela emsebenzini.

Amagama aphambili: Ubulungisa bequmrhu obucingelwayo, isivumelwano sesimo sengqondo, amaziko emfundo ephakamileyo, ukuzimisela emsebenzini

ISIFINQO

UKWAKHA UHLAKA LOKUSEBENZA KWABASEBENZI EMKHAKHENI WEZEMFUNDO OPHKEME EZIMBABWE

Ngo-Pride Mkandatsama

Umphathi	:	Solwazi N Ferreira
Isekela Mphathi	:	Dkt AJ Deas
Umnyango	:	Ukuphathwa Kwabasebenzi
Iziqu	:	PhD (Izifundo Zokuphatha)

Ucwaningo lugxile ekwakhiweni kohlaka lokuzibandakanya emsebenzini, ngokuphenya ubudlelwano phakathi kobulungiswa benhlangano obucatshangwayo, inkontileka yengqondo nokuzibandakanya komsebenzi kanye nokuhlukahluka kwenhlalo yabantu (iminyaka yobudala, ubulili, uhlanga kanye nesimo sokuqashwa). Lokhu, ukwazisa amasu okuxoxisana nesisebenzi emaqenjini ahlukene enhlalo yabantu ngokwesimo semfundo ephakeme eZimbabwe.

Inhlolovo yenani yenziwe ngesampula labasebenzi bezemfundo nabangezona kwezemfundo (izisebenzi ezihlala unomphela nezesikhashana) (n = 336) esikhungweni semfundo ephakeme esikhethiwe. Ukuhlobana kokuguquguquka kabili kubonise ubudlelwano obuqinile phakathi kobulungiswa benhlangano obubonwayo, inkontileka yengqondo nokuzibandakanya komsebenzi. Ukuhlaziywa kwesinyathelo esihlakaniphile kwembule ubulungisa benhlangano obubonwayo kanye nenkontileka yezengqondo ukuze kube izibikezelo eziqine kakhulu zokuzibandakanya komsebenzi. Ukuhlaziya okulinganiselwe kwesinyathelo esihlakaniphile sokwehla kwamndla emali nomnotho kwembula ukuthi okuguquguqukayo okukhonjiwe kwenhlalo yabantu akuzange kulinganisele ubudlelwano phakathi kokucatshangwayo kobulungiswa benhlangano, inkontileka yengqondo nokuzibandakanya emsebenzini. Ukuhlaziya kokuguquguquka kabili kanye nokwehla kwamndla emali nomnotho yazisa imodeli yezibalo zesakhiwo futhi yembula ukuvumelana okuhle phakathi okucatshangwayo kobulungisa benhlangano, inkontileka yengqondo nokuzibandakanya komsebenzi. Umehluko omkhulu utholakale maqondana nokuguquguquka kwenhlalo yabantu. Ngokwezinga lethiyori, ucwaningo lwathuthukisa ukuqonda kohlaka lokuzibandakanya komsebenzi okucatshangelwayo; ngezinga

lokucwaninga, ucwaningo lwenze uhlaka lokuzibandakanya emsebenzini oluvivinywe ngokwamandla; futhi ngokwezinga elingokoqobo, ukungenelela komuntu ngamunye kanye nenhlangano ngokohlaka lokusebenzelana kwanconywa kubaphathi bezabasebenzi.

Amagama abalulekile: Ubulungiswa benhlangano obubonakalayo, inkontileka yezengqondo, izikhungo zemfundo ephakeme, ukuzibandakanya emsebenzini

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CHAPTER 1: SCIENTIFIC OVERVIEW OF THE PROPOSED RESEARCH

This research aims to develop a work engagement framework for tertiary education institutions in Zimbabwe. The current chapter explains the background to and the motivation for the research. It reviews related literature and formulates the problem statement, the research questions, and the research objectives. A description of the research approach and the research design to be followed is presented. Lastly, the chapter provides an outline of the chapters in the thesis.

1.1 BACKGROUND TO AND MOTIVATION FOR THE RESEARCH

The success of business organisations depends on the engagement of their employees. Tertiary education institutions rely on their employees, who work to produce the activities that help to achieve their objectives and improve organisational performance, as no institution can grow beyond the quality of its employees (Agbionu et al, 2018; David & Ogidi, 2022). The knowledge of academics and support staff (non-academics) is an important resource in which the competitive advantage of tertiary education institutions lies (David & Ogidi, 2022; Ngobeni & Bezuidenhout, 2011). In fact, compared to other institutions, tertiary education institutions depend on the intellectual and creative abilities and willingness of their staff, which makes it crucial to have fully engaged employees (Alzyoud, 2018; David & Ogidi, 2022; Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development [MHTESTD], 2019). Tertiary education is the basic instrument for economic growth and technological advancement (Hiariey & Tutupano, 2020; Mhlanga et al, 2013; Phuthi, 2022; Sheeraz et al, 2021). It contributes to the production of knowledge, which is crucial in improving the quality of a country's labour force, by providing professional, technical, and managerial skills (Abdall, 2016; David & Ogidi, 2022).

In a tertiary education institution, the functions involve teaching, which is done by preparation and delivery of lectures; supervision of students in work-related learning; publications (books and journal articles) and conference and seminar presentations; and rendering services to the community and the institution at large (Agbionu et al, 2018; Phuthi, 2022). The MHTESTD (2019) states that besides teaching, research, and institutional and community services, tertiary education institutions in Zimbabwe are responsible for developing human resources management models to solve problems affecting the country's growth. Zimbabwe is currently experiencing economic challenges that retard economic growth (Garwe & Tirivanhu, 2015; Majoni, 2014), as well as tough times caused by the

Covid-19 pandemic, which affects business (Alam et al, 2022; Sangeeta, 2020). According to Abdall (2016), the challenges faced by developing countries, including Zimbabwe, substantially impact academic and professional staff. Majoni (2014) contends that the economic challenges in Zimbabwe have caused a dramatic decline in tertiary education institutions, because of underfunding, foreign currency shortages, hyperinflation, and large public debt. The shortage of foreign currency has led to a hiring freeze in the tertiary education sector, as the government has failed to sustain this sector's wage bill. This challenge has resulted in high workloads for academics and professionals. Henkel and Haley (2020) and Majoni (2014) state that shortages of foreign currency have also caused a lack of financial support or sponsorship for research for academics. The large public debt, such as that for electricity, has led to power outages, which cause a lack of internet connectivity, thereby affecting research and work output. Research and work output are the main tertiary education outcomes for academics and professionals (MHTESTD, 2019). These general macro-economic challenges reduce employee dedication, absorption and vigour. In the end, employees fail to fulfil their work duties.

The challenges explained above affect the role of Zimbabwe's tertiary education sector, which is mandated to make innovations and initiatives that contribute to the country's economic growth (Shoko, 2014). The MHTESTD (2019) reports that Zimbabwe aimed to become a middle-income economy by 2020. The objective of the Zimbabwean tertiary education sector is to develop the professional and technical skills of the country's workforce in the production of high-quality goods and services (Phuthi, 2022). The quality of the country's human capital will depend on the excellence, relevance, and flexibility of tertiary education staff (MHTESTD, 2019). The excellence, relevance, and flexibility of tertiary education staff that is expected by the MHTESTD can only be achieved if employees have a high level of work engagement.

It is in view of this background that tertiary education institutions are important in the growth of the country. In the process of development of the country, those responsible for producing the outcomes of tertiary education have an important role to play, and they therefore need to be engaged (Coetzee & Rothmann, 2005; Sangeeta, 2018). Zimbabwe's tertiary education sector has undergone noticeable expansion since 1980 (Gurira, 2011). The Zimbabwean tertiary education sector started with one public university and has since grown to 18 public universities (Zimbabwe Council for Higher Education [ZIMCHE], 2018). According to Gurira (2011), the expansion of Zimbabwe's higher (tertiary) education sector has introduced massification, which has caused an increase in tertiary education enrolments, thereby

increasing work roles for tertiary education staff. The increased work overload will in turn lead to depressed levels of vigour, dedication and absorption among employees.

Regardless of the research conducted on work engagement, Hiariey and Tutupano (2020) and Ngobeni and Bezuidenhout (2011) argue that there is limited knowledge on the specific human resource interventions for effective work engagement. In recognition of this, the Zimbabwean tertiary education sector should cultivate work engagement in its employees.

Although there are various conceptualisations of the construct of work engagement, the most prominent conceptualisation is that of Schaufeli et al, (2002). Schaufeli et al, (2002) interpret work engagement as a positive and work-related state of mind, typified by vigour, dedication, and absorption. According to Schaufeli et al, (2002), vigour is depicted by elevated levels of energy and mental resilience when working, devoting effort in one's work, while maintaining resistance to fatigue but persistent when confronted with difficulties. Dedication is portrayed by commitment to work, loyalty and feeling a sense of pride in one`s work (Schaufeli et al, 2002). The characteristics of dedication are finding a sense of value from one's own work and inspired by one's job (Schaufeli et al, 2002). Absorption is manifested by total immersion in one's work, having difficulty separating oneself from one's work, time swiftly passing, and forgetting everything else around one (Schaufeli et al, 2002). Schaufeli et al, (2002) explain that work engagement is a prolonged and universal affective-cognitive state which is not centered on a specific object, event, individual, or behaviour.

This research has adopted Schaufeli et al,'s (2002) conceptualisation of work engagement. Unlike other conceptualisations of work engagement, which describe work engagement in terms of already known psychological constructs, such as commitment, organisational citizenship behaviour, satisfaction, and motivation, Schaufeli et al,'s (2002) definition portrays work engagement as a unique construct that is different from known constructs (Ahuja & Modi, 2015). This study will attempt to determine differences in engagement levels of employees at a tertiary education institution in Zimbabwe, and the focus will be on age, gender, employment status, and employment category, given the diverse socio-demographic characteristics of the workforce employed by the Zimbabwean tertiary education sector.

Much more research has focused on negative feelings and outcomes (distress), such as dissatisfaction, than on positive feelings and outcomes (eustress), such as work engagement, in the work environment (El Alfy & David, 2017; Rothmann & Jordaan, 2006). According to Nelson and Simmons (2003), distress is a negative psychological response to a stressor (such as the work environment), as indicated by negative psychological states,

while eustress is a positive psychological response to a stressor, as indicated by the presence of a positive psychological state. Rothmann and Jordaan (2006) argue that positively stressed employees are engaged, which implies that they are enthusiastically involved and pleasurably occupied by the demands of the work at hand. This idea of Rothmann and Jordaan (2006) converges with Schaufeli et al's (2002) conceptualisation of work engagement, namely that engaged employees are not easily fatigued but persistent in the face of difficulties (stressors). Thus, it is necessary to investigate the level of work engagement among staff of a tertiary education institution in Zimbabwe, given the country's declining economy and the stress this is causing for tertiary education institutions in the country.

Organisations require a core value that upholds standards of fairness to enable positive behaviours such as work engagement (Aslam et al, 2020; Deepak, 2021; Hiariey & Tutupano, 2020; Nethavani & Maluka, 2020; Özer et al, 2017; Rahmah, 2020; Tansky, 1993). Aslam et al, (2020), Deepak (2021), and Rahmah (2020) assert that organisational justice is a principal virtue and a key variable in any organisation, and that it has an influence on various human resource behaviours and outcomes, such as organisational citizenship behaviour, satisfaction, and work engagement.

Perceived organisational justice is a construct that explains individual experiences in an organisational setting in terms of fairness based on situational and personal factors (Colquitt, 2001; Deepak, 2021; Hiariey & Tutupano, 2020). Greenberg (1990) views perceived organisational justice as employees' perception of fairness within an organisation. It is an action or decision that is understood to be morally right on the basis of ethics, religion, fairness, equity, or law (Pekurinen et al, 2017). The concept of perceived organisational justice also pertains to employees' beliefs or views on the extent to which they receive equal treatment in the workplace (Khan & Usman, 2012; Özer et al, 2017). According to Hiariey and Tutupano (2020) and Pan et al, (2018), the concept of perceived organisational justice derives from equity theory, which was propounded by Adams (1965). Pan et al, (2018) explain that equity theory suggests that employees compare the ratio of their perceived work outcomes (rewards, promotions, recognition, and work equipment) to their work inputs (time, performance, and effort). A balance between input and outcomes is regarded as just and fair, while an imbalance denotes unfairness, which will affect employees' level of work engagement. Özer et al, (2017) argue that the concept of perceived organisational justice derives from social exchange theory, which views social life as a series of exchanges, where transactions between two or more parties are reciprocal.

There are various approaches to perceived organisational justice, namely one-factor conceptualisation, which focuses on distributive justice (Moorman, 1991); two-factor conceptualisation, which centres on distributive and procedural justice (Tyler & Bies, 1990); and three-factor conceptualisation (Skarlick & Latham, 1997), which distinguishes distributive, procedural, and interactive justice (Colquitt, 2001; El Alfy & David, 2017; Folge & Cropanzano, 1998; Hiariey & Tutupano, 2020; Pan et al, 2018; Pekurinen et al, 2017; Sahni et al, 2018). Colquitt (2001) explains that three-factor conceptualisation has an interactive dimension, which merges the interpersonal and informational dimensions, which are two of his four dimensions of organisational justice.

This study will adopt Colquitt's (2001) four-dimensional approach to organisational justice. According to Colquitt (2001), merging of the dimensions of organisational justice prevents researchers from uncovering important differences between the constructs. Colquitt's (2001) organisational dimension was chosen for its ability to separate the dimensions. This will assist in determining the effect of each dimension of perceived organisational justice, in order to devise a suitable work engagement framework. Colquitt's (2001) dimensions of perceived organisational justice are distributive, procedural, interpersonal, and informational justice. Distributive justice relates to the distribution of resources among employees, for example, salaries and work resources (Tutar, 2007). Kim et al, (2019) and Pan et al, (2018) state that distributive justice is perceived fairness in the allocation of outcomes, such as pay, promotion, and status, received by an employee. Pan et al, (2018) explain that the distribution of resources influences employees' work engagement, as employees' feelings of fairness depend on perceptions that resources have been shared equally and replenished adequately, which will affect their level of work engagement.

Procedural justice pertains to equity in the procedures used to ascertain the allocation of resources, such as rewards and work resources, and it focuses on consistency, lack of prejudice, and integrity as criteria used by management in availing these resources (Özer et al, 2017). According to Leventhal (1980), fairness in procedural justice is seen by the extent to which procedures suppress bias, create consistent allocations, rely on accurate information, represent the concerns of all recipients, and are based on the prevailing moral or ethical standards. Procedures are important, because they regulate allocation of resources by defining methods, mechanisms, and processes (Swalhi et al, 2017). The importance of procedural justice is confirmed by Kim et al, (2019) and Pan et al, (2018), as they hold that there is a strong relationship between procedural justice and work engagement, as the *process* of allocating resources is more important than the result. Negative perceptions of organisational justice trigger adverse feelings, for instance bad

behaviour and frustration, while positive perceptions of organisational justice give rise to positive attitudes towards the organisation, such as work engagement. According to Özer et al (2017), interpersonal justice refers to the behavioural quality that is attained when procedures are implemented. Informational justice refers to adequacy of the information given on the reasons why procedures have been implemented or resources have been determined in a specific way (Özer et al, 2017).

A study conducted by Saks (2006) shows strong correlations amongst the four dimensions of perceived organisational justice and work engagement, while a study by Özer et al, (2017) indicates that of all the perceived organisational justice dimensions, procedural justice has the strongest relationship to work engagement. By contrast, Ghosh et al, (2014) found that distributive justice had the greatest effect on work engagement. A study by Pekurinen et al, (2017) discovered that negative perceptions of organisational justice affected employee behaviours, which had an impact on work engagement. Therefore, it should be noted that there are contradictory findings reported in the literature on the influence of the four dimensions of perceived organisational justice on work engagement. The contradictory findings on the relationship between perceived organisational justice and work engagement motivated this research, and this is the research gap that the study intends to fill.

Based on the literature cited above, none of these studies focused on the impact of the dimensions of perceived organisational justice in tertiary education institutions and government institutions (Butitova, 2019; Nethavani & Maluka, 2020). Specifically, there are no studies on perceived organisational justice and work engagement in the context of Zimbabwe, particularly in tertiary education institutions. Butitova (2019) recommends that research on perceived organisational justice and organisational behaviours, such as work engagement, be conducted in government institutions (such as tertiary education institutions). This study enriches the discipline of human resource management by providing a framework explaining the effect that perceived organisational justice and the psychological contract have on work engagement in the Zimbabwean tertiary education sector. The tertiary sector is a relevant context to explore these relationships, because it requires innovative, intellectual, and creative employees, so as to contribute to the country's economic growth (Agbionu et al., 2018; Mhlanga et al, 2013).

The psychological contract is another factor influencing work engagement, and an understanding of employees' psychological contract is important in order to establish a more personal relationship with employees (Guest, 2004). Authors in the domain of human

resource management contend that employee contributions or outcomes do not rely only on development of human resource practices, but also on the effective management of employee expectations (Armstrong, 2011). According to Deas (2017), one approach to manage these expectations is through the management of employees` psychological contract.

Naidoo et al, (2019) assert that certain expectations of employees need to be met by the employer, and these expectations form an unwritten contract, known as a psychological contract. However, Naidoo et al., (2019) argue that unlike the formal employment contract, psychological contracts are informal, subjective in nature, not legally binding, and lacking in clarity. The psychological contract denotes employee perceptions of the mutual obligations and expectations implied in the employment relationship (Guest et al, 2010). A psychological contract also refers to an individual's belief in the shared obligations between the individual and another party (Rousseau, 1989). Similarly, Guest and Conway (2002) view the psychological contract as the perceptions held by parties to an employment relationship (employer and employee) of mutual obligations that are implied in the relationship.

Cropanzano et al, (2017) explain that a psychological contract can be subdivided into two types, namely transactional and relational contracts. Relational contracts consist of exchanges that are built on trust and implicit emotional attachments (Chan, 2021). According to Handy et al, (2020), relational contracts are long-term and are associated with stable employment, as well as flexibility. Transactional contracts consist of exchanges that are built on direct and explicit expectations, which are usually economic (Chan, 2021). They are short-term and are more likely to be found in contingent employment contexts (Handy et al, 2020).

The psychological contract involves the nature of the contract (whether relational or transactional, long-term or short-term), the content of the contract, the obligations of each party, and the state of the contract (Guest & Conway, 2002). Naidoo et al, (2019) and Rousseau (1989) assert that the psychological contract derives from social exchange theory, which is influenced by the principle of reciprocity between the employer and the employee, where either party does good in return for a good act. The psychological contract captures the reciprocal promises and obligations implied in the employment relationship, as well as the perceived delivery of the deal (Guest & Conway, 2002). By implication, it is assumed that the psychological contract is a mechanism, besides perceived organisational justice, that explains levels of work engagement.

Complexities such as the speed and change of work technology and the Covid-19 pandemic have ushered in remote working (Alam et al, 2022; Dominiques-Salas et al, 2022; Jovanovic & Lugonjic, 2022). This implies differences in employment contracts. Guest (1998) explains that differences in employment contracts create challenges for employers in terms of managing complexities, due to increasing flexibility and fragmentation of the workforce in organisations, in the form of different working hours and differences in the type of employment contract (short-term or long-term, relational or transactional) and the nature of work.

Tertiary education institutions are not spared from managing complexities with regard to employment contracts, as they also employ different staff with different contracts, different nature of work, and different working hours for different work roles; thus, an understanding of psychological contracts is necessary (Abdall, 2016).

Studies by Naidoo et al, (2019) and Shen (2010) found that the critical aspects that form the psychological contracts in higher (tertiary) education include funding and time off for research, fair promotion, consultation, provision of adequate time for research, and reasonable workloads. According to Guest (2004), the issue of fairness is closely related to the psychological contract and can affect the attitudes and behaviours of involved parties. This suggests a relationship between the psychological contract and work engagement. Morrison and Robinson (1997) state that the concept of the psychological contract has been studied from employees' perspective, such as employees' perceptions of breach or violation of promises by the organisation. Similarly, Freese and Schalk (2008), Guest (2004), Jepsen and Rodwell (2006), and Rao (2021) note that there is scant research on employers' perceptions of breach or violation of the contract by employees.

In a study conducted by Guest and Conway (2002), it was found that the exchange in the employment relationship between management and employees in UK firms was not always fair but tended to favour the employer. Thus, it becomes relevant to understand the impact of the psychological contract on work engagement, and also the moderating effect of socio-demographic variables (age, gender, employment status, and employment category) and their influence on work engagement.

Guest (2004) recommends that studies be conducted that address employee relationships from the perspective of both employer and employees, in order to develop a framework built around contemporary employment relationships. Again, there is limited understanding on the influence of the psychological contract on work engagement in the tertiary education sector

(Bruce et al, 2014; Naidoo et al, 2019). The study therefore seeks to determine the state of psychological contracts and how it influences work engagement in the tertiary education sector in Zimbabwe, given the socio-demographic characteristics (in terms of age, gender, employment status, and employment category) of employees in the tertiary education sector.

Recently, the workplace has changed from an equal setting to an environment filled with different employees in terms of gender and age (socio-demographic variables), among other aspects (Deas, 2017; Deas & Coetzee, 2022; Van der Walt & Du Plessis, 2010). Engaging such a diverse workforce has proved to be difficult for organisations, as these socio-demographic variables affect the level of work engagement (Ngobeni & Bezuidenhout, 2011). Zimbabwe's tertiary education sector is not spared from these challenges, and it becomes necessary to manage these employee differences in socio-demographic makeup, so that employees are engaged and contribute to their organisations (Alzyoud, 2018; Phuthi, 2022). Tertiary education management needs to implement effective work engagement strategies to ensure that employees from the different socio-demographic groups exhibit vigour, dedication, and absorption in their work. Deas and Coetzee (2022) assert that there are different age groups working together, with different attitudes, beliefs, and needs. The differences in the workforce pose a challenge to management in ensuring that all age categories are kept engaged.

Research carried out by Ngobeni and Bezuidenhout (2011) found that there is a relationship between gender, age, and staff appointment type (employment status) and employee engagement. Ngobeni and Bezuidenhout (2011) argue that the younger generational workforce is engaged through fulfilling their personal potential, promotions, and tough assignments, while the older generational workforce is engaged through money. Engagement of the older generational workforce through money implies that they are engaged through good remuneration. Younger generational employees were more enthusiastic about their job and inspired to perform, while the level of engagement diminished with older employees. The findings of Ngobeni and Bezuidenhout's (2011) study diverge from those of Cherniss (1980), who found that engagement levels were higher among older employees compared to their younger counterparts. Roberts' (2020) study on the impact of age on work engagement reveals that older employers (above 50 years) had a higher score on all the components of work engagement (dedication, absorption, and vigour) than employees below 50 years. Roberts (2020) suggests that older employees exhibited higher levels of engagement than younger employees because they had experience. This view by Roberts (2020) is similar to Saks' (2006) view that older employees are more

engaged than younger employees because they are rejuvenated to learn new skills as they prepare for future careers.

A similar study conducted by Korsakienė et al, (2017) yielded different findings from those of Roberts (2020). Korsakienė et al's (2017) study on the influence of age on work engagement indicates that the younger workforce had a higher level of work engagement than older employees. They suggest that the younger workforce could have been more engaged than the older workforce because they were flexible and more accustomed to technology (Korsakienė et al, 2017). Schutte et al, (2000) found that no significant difference in work engagement existed between the different races. A study by Rana and Chopra (2019) indicates that a relationship existed between age and work engagement, but that no relationship existed between gender and work engagement. The findings of Rana and Chopra (2019) are similar to Yadav's (2016) finding that there was no relationship between engagement and gender for academic staff. Coetzee and Rothmann (2005) found that employment status did have an influence on work engagement; support staff (non-academics) showed higher levels of work engagement than academic staff. Research conducted by Coetzee and De Villiers (2010) revealed that gender and work engagement were correlated. The aforementioned study found that the level of engagement of women was higher than that of men (Coetzee & De Villiers, 2010). Schaufeli and Enzmann (1998) found that men were more engaged in their work than women.

Given the fact that there are differences in employees' socio-demographic makeup, it is evident that tertiary education management must appreciate the different employee categories, and their individual needs and goals, and must develop effective work engagement strategies if tertiary education institutions are to contribute to the growth of the economy. Work engagement strategies include employee support, feedback (Abdhy & Kwartini, 2016; Bakker & Demerouti, 2008; Gifford & Young, 2021; Hee et al, 2020; Othman et al, 2019; Schaufeli & Salanova, 2007), rewards (Altehrebah et al, 2019; Bolman & Deal, 2014; Osborne & Hammoud, 2017), meaningful work, leadership, organisational culture, empowerment (Osborne & Hammoud, 2017), and training and development (Chahar & Hatwal, 2018; Hee et al., 2020; Vance, 2006). Based on literature, such a study has not been undertaken in the tertiary education sector in Zimbabwe. Therefore, an investigation of the relationship between perceived organisational justice, the psychological contract, and work engagement may assist to develop a work engagement framework for tertiary education institutions in Zimbabwe.

1.2 PROBLEM STATEMENT

Tertiary education sector management and human resource specialists grapple with the obligation of developing empirically validated and refined approaches in enhancing the work engagement of different socio-demographic groups of employees (Alam et al, 2022; Aslam et al, 2020; Deas, 2017; Nethavani & Maluka, 2020; Ngobeni & Bezuidenhout, 2011). Little is known about the relationships between perceived organisational justice, the psychological contract, and work engagement in the tertiary education sector (Bruce et al, 2014; Naidoo et al, 2019; Nethavani & Maluka, 2020; Snyman et al, 2022). Existing literature on the relationship between perceived organisational justice, the psychological contract, and work engagement has contradictory results (Aslam et al, 2020; Ghosh et al., 2014; Kim et al, 2019; Nethavani & Maluka, 2020; Özer et al, 2017; Pekurinen et al, 2017; Roberts, 2020; Saks & Gruman, 2014; Swalhi et al, 2017). Similarly, the limited studies that exist on the strength and/or direction of socio-demographic variables (age, gender, employment status, and employment category) as moderating variables in the relationship between perceived organisational justice, the psychological contract, and work engagement have mixed results (Aslam et al, 2020; Ghosh et al, 2014; Kim et al, 2019; Nethavani & Maluka, 2020; Özer et al, 2017; Pekurinen et al, 2017; Roberts, 2020; Saks & Gruman, 2014; Swalhi et al, 2017). The mixed results make it difficult to develop a work engagement framework for employees in the tertiary education sector. An examination of current literature on perceived organisational justice, the psychological contract, and work engagement indicates that there is no specific theoretical model that clearly explains the relationships between perceived organisational justice, the psychological contract, and work engagement in a single study. A review of related studies (Alam et al, 2022; Korsakienė et al, 2017; Naidoo et al, 2019; Özer et al, 2017; Pekurinen et al, 2017; Roberts, 2020; Saks, 2006) indicates that the constructs were studied in isolation. Knowledge gained from the current study will therefore provide insights into appropriate work engagement framework with strategies in the tertiary education sector.

Understanding the relationships that exist between perceived organisational justice, the psychological contract, and work engagement is important to understand employees' perceptions and expectations regarding organisational justice and their psychological contracts. An understanding of the relationship between the constructs will assist in the development of a work engagement framework for employees in the tertiary education sector in Zimbabwe. This research provides the basis towards the development of a work engagement framework, as it explores the relationships that exist between perceived

organisational justice, the psychological contract, and work engagement, and how the interplay of socio-demographic variables (age, gender, employment status, and employment category) influences these relationships, specifically in the tertiary education sector in Zimbabwe.

This research provides new insights that can be used to guide work engagement strategies for different socio-demographic groups of employees in the tertiary education environment. The research could also offer valuable input to the human resource management discipline in this complex working environment. The background and motivation for undertaking the research study, along with the research problem statement, informs the construction of the following main research question:

"What are the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement; what are the moderating effects of socio-demographic variables (age, gender, employment status, and employment category) on the relationship between perceived organisational justice, the psychological contract, and work engagement; and what are the elements constituting the overall work engagement framework in the Zimbabwean tertiary education sector?"

The specific research questions for this study are as follows:

1.2.1 Research questions related to the literature review.

Research question 1: How does the literature conceptualise work engagement within the tertiary education context?

Research question 2: How are the variables of perceived organisational justice and the psychological contract conceptualised in the literature, and how do socio-demographic variables (age, gender, employment status, and employment category) relate to these variables?

Research question 3: What is the theoretical relationship between perceived organisational justice, the psychological contract, and work engagement?

Research question 4: Based on the theoretical relationship between perceived organisational justice, the psychological contract, and work engagement-related attributes,

can a theoretical work engagement framework be constructed that may be used to inform work engagement practices in tertiary education institutions in Zimbabwe?

Research question 5: What are the implications of the postulated theoretical work engagement framework for work engagement practices in tertiary education institutions in Zimbabwe?

1.2.2 Research questions related to the empirical study

Research question 1: What is the statistical interrelationship between perceived organisational justice, the psychological contract, and work engagement-related attributes as conceptualised in a sample of participants from a Zimbabwean tertiary education institution? *This research question relates to testing of research hypothesis 1 (H1).*

Research question 2: Do perceived organisational justice and the psychological contract and their attributes significantly predict work engagement? *This research question relates to testing of research hypothesis 2 (H2).*

Research question 3: Based on the overall statistical relationships between perceived organisational justice and the psychological contract (the independent variables) and work engagement (the dependent variable), is there a good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model? *This research question relates to testing of research hypothesis 3 (H3).*

Research question 4: Do individuals' socio-demographic characteristics (age, gender, employment status, and employment category) influence the strength and/or direction of the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement? *This research question relates to testing of research hypothesis 4 (H4).*

Research question 5: Do individuals from different socio-demographic groups in terms of (age, gender, employment status, and employment category) differ significantly in their perceived organisational justice, their psychological contract, and their work engagement? *This research question relates to testing of hypothesis 5 (H5).*

Research question 6: What are the empirical elements of the work engagement framework that manifested from the results, and does the manifested socio-demographic profile have a good fit with the data?

Research question 7: What conclusions can be drawn and what recommendations can be proposed for human resource practitioners with regard to work engagement practices and future research?

1.3 AIMS OF THE RESEARCH

The following aims are informed by the research questions formulated above.

1.3.1 General aim

The general aim of the research is to develop a work engagement framework for tertiary education institutions in Zimbabwe. The basic components of the work engagement framework will derive from the results obtained from the empirical investigation of the relationship between individuals perceived organisational justice and psychological contract and their work engagement. The proposed work engagement framework will also consider the moderating effect of individuals' socio-demographic characteristics, namely their (age, gender, employment status, and employment category), on the relationship between perceived organisational justice, the psychological contract, and work engagement and its antecedents.

1.3.2 Specific aims of the research

The specific aims in terms of the literature review and the empirical study are as follows:

1.3.2.1 Research aims related to the literature review.

Research aim 1: To conceptualise work engagement within the tertiary education context.

Research aim 2: To conceptualise perceived organisational justice, the psychological contract, and work engagement and their relationship with socio-demographic variables (age, gender, employment status, and employment category).

Research aim 3: To critically evaluate the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement and its antecedents as the elements of the theoretical framework that emerges from the relationship dynamics.

Research aim 4: To conceptualise the strength and/or direction of relationships between socio-demographic variables (age, gender, employment status, and employment category) and (1) perceived organisational justice and (2) the psychological contract and work engagement.

Research aim 5: To conceptualise the implications of the postulated theoretical work engagement framework for work engagement practices in tertiary education institutions in Zimbabwe.

1.3.2.2 Research aims related to the empirical study

Research aim 1: To assess the interrelationship between perceived organisational justice, the psychological contract, and work engagement as conceptualised in a sample of participants from a Zimbabwean tertiary education institution. *This research aim relates to testing of research hypothesis 1 (H1).*

Research aim 2: To empirically investigate whether perceived organisational justice and the psychological contract significantly predict work engagement. *This research aim relates to testing of research hypothesis 2 (H2).*

Research aim 3: To assess whether the empirically derived relationships between perceived organisational justice, the psychological contract, and work engagement determine the elements of the empirically derived work engagement framework. *This research aim relates to testing of research hypothesis 3 (H3).*

Research aim 4: To determine whether there is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement. *This research aim relates to testing of research hypothesis 4 (H4)*

Research aim 5: To determine whether individuals from (age, gender, employment status, and employment category) groups differ significantly in their perceived organisational justice,

their psychological contract, and their work engagement. *This research aim relates to testing of research hypothesis 5 (H5).*

Research aim 6: To examine the empirical elements of the work engagement framework that manifested from the results, and to determine if the manifested socio-demographic profile has a good fit with the data.

Research aim 7: To draw conclusions and propose recommendations for human resource practitioners with regard to work engagement practices.

1.4 STATEMENT OF HYPOTHESES

In light of the literature review, the research hypotheses for the study are formulated as follows:

H1: There is a statistically significant positive interrelationship between perceived organisational justice, the psychological contract, and work engagement.

H2: Perceived organisational justice and the psychological contract (the independent variables) significantly predict work engagement (the dependent variable).

H3: Based on the overall statistical relationships between perceived organisational justice and the psychological contract, and work engagement, there is a good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

H4: The relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement are significantly moderated by individuals' socio-demographic characteristics (age, gender, employment status, and employment category).

H5: The socio-demographic groups (in terms of (age, gender, employment status, and employment category) differ significantly in their perceived organisational justice, their psychological contract, and their work engagement.

1.5 STATEMENT OF SIGNIFICANCE

This research identifies the crucial elements to develop a work engagement framework for Zimbabwean tertiary education institutions. The research can be seen as the foundation for investigations on the relationships between perceived organisational justice, the psychological contract, and work engagement and the moderating effect of socio-demographic variables (age, gender, employment status and employment category) in Zimbabwean organisations, specifically tertiary education institutions. It explores the psychological contract expectations and the perceptions of organisational justice of employees in the tertiary education sector. Understanding employees' psychological contract expectations and their perceptions of organisational justice could assist to address the specific Zimbabwean tertiary education sector challenges of the psychological contract and perceived organisational justice that affect the level of work engagement of the diverse socio-demographic profile of employees in this sector.

1.5.1 Potential contribution on a theoretical level

On a theoretical level, the research might contribute by identifying the relationships that exist between the research constructs. Theoretically, the study determines the relationship between perceived organisational justice, psychological contract, and work engagement. Statistically significant relationships found between perceived organisational justice, the psychological contract, and work engagement will assist in the development of a work engagement framework for employees in Zimbabwean tertiary education institutions. Specifically, the study examines how socio-demographic variables, (age, gender, employment status, and employment category), influence the extent of development and manifestation of the identified constructs, which is important in understanding work engagement in tertiary education institutions in Zimbabwe. This brings new insights into the relationship between perceived organisational justice, the psychological contract, and work engagement, to understand what the strongest predictors of work engagement are. The research also contributes to the body of knowledge on human resource management, by exploring work engagement factors in tertiary education institutions.

1.5.2 Potential contribution on an empirical level

On an empirical level, the research will assist in the development of an empirically tested work engagement framework, which will be used to inform work engagement practices for

employees in Zimbabwean tertiary education institutions. The work engagement framework will be based on the findings with regard to the empirically tested interrelationships found between perceived organisational justice, the psychological contract, and work engagement in a sample of respondents from a Zimbabwean tertiary education institution. In the event that no significant relationships are found between the dependent variable and the independent variables, the importance of the study will be limited to the exclusion of perceived organisational justice and/or the psychological contract as predictors of work engagement. In that case, scholars will have to conduct studies that can generate significant evidence for use in solving the challenge of enhancing work engagement in tertiary education institutions.

The study will also determine whether the relationship between perceived organisational justice, the psychological contract, and work engagement is moderated by socio-demographic variables, namely (age, gender, employment status, and employment category). Given the diversity of the workforce in the Zimbabwean tertiary education sector, the findings will assist to devise a work engagement framework that embraces diversity and that caters for differences between employees, to ensure positive work engagement for all employees.

1.5.3 Potential contribution on a practical level

On a practical level, the research will inform human resource (HR) practitioners of the impact of perceived organisational justice and the psychological contract on the work engagement of employees. The findings of the study will be useful if significant relationships are found between perceived organisational justice, the psychological contract, and work engagement. Specifically, the work engagement framework will inform HR practitioners and tertiary education managers of appropriate work engagement practices that appeal to the diverse socio-demographic profile of employees in Zimbabwean tertiary education institutions.

1.6 THE RESEARCH MODEL

The research was guided by Mouton and Marais's (1996) three-worlds framework, which views the world as interactive and interrelated (Babbie & Mouton, 2008). The model has three world categories, namely the world of everyday life and knowledge (world 1); the world of science, and the search for truth by means of scientific research (world 2); and, lastly, the world of metascience (world 3).

The first world is directed at the world of everyday life, and in this research the focus in the discipline of human resource management is on everyday life. The second world is directed at the search for knowledge through learning, experience, self-reflection, insight, and wisdom (Babbie & Mouton, 2008). In this study, the focus was to solve human resource management problems, particularly with regard to work engagement and its relationships with perceived organisational justice and employees' psychological contract. According to Armstrong (2011), human resource management's contribution to the organisation is to ensure that people (employees) are motivated towards, committed to, and engaged in the organisation, in order to enhance organisational effectiveness in production or service delivery. The third world, namely the world of metascience, has its origins in the prevalence and application of critical interest and reflection by scientists/researchers (Babbie & Mouton, 2008). Thus, to apply metascience, this research might be used by other researchers pursuing a similar or related study.

Another reason for adopting a research model is the idea that studies conducted in the social sciences situate the human being in a social context, such that there is development of the phenomena under study (Creswell, 2014). The social aspect of the study lies in the fact that it relates to individual perceptions, experiences, and attitudes in the workplace. Therefore, the aim is to understand the "human element" better, in order to enhance organisational success (Creswell and Creswell 2017). A social process exists and is represented, which in the case of this study is the work engagement of employees in higher (tertiary) education institutions in Zimbabwe.

From the perspective of a systems approach, there are sub-elements within the research domain of a certain discipline, which are interconnected and/or interrelated (Cooper & Schindler, 2014). In the case of this study the discipline is human resource management (HRM). The sub-elements that were present, for the purposes of this study, were intellectual climate, the market of intellectual resources, and the research process itself (Mouton & Marais, 1996).

1.7 PARADIGMATIC PERSPECTIVE OF THE RESEARCH

A paradigm is a world view or basic set of beliefs that guide research (Creswell, 2014). According to Cooper and Schindler (2014), a paradigm consists of a number of aspects that incorporate accepted theories, models, the body of research, and the different

methodologies, which have a certain view of research. Generally, a paradigm can be regarded as the accepted view that affects or directs the way in which people perceive circumstances around them, view global issues, and even ask provocative questions (Bhattacherjee, 2012). The study will be conducted within the field of human resource management. Literature will be reviewed from a humanistic, developmental, and systems approach. The empirical part of the study will be guided by the post-positivist research paradigm.

1.7.1 The intellectual climate

The concept of an intellectual climate originates from the science of global environmental change, which aims to alert humans to the physical effects of their activities (Castree et al, 2014). Castree et al, (2014) argue that in research, researchers are very vocal when communicating their arguments, and that this is harmful to the physical environment or other human beings. Thus, intellectual climate in research offers a human dimension, to avoid physical harm to the society concerned.

In this research, literature will be reviewed from a humanistic, developmental, and systems approach. The empirical part of the study will be guided by the post-positivist research paradigm.

1.7.1.1 The literature review

The humanistic paradigm, the developmental contextual framework, and the systems approach will be briefly explained below.

(a) The humanistic paradigm
According to Melé (2016), the humanistic paradigm offers seven propositions of genuine humanism, namely

- Human freedom and dignity,
- Comprehensive knowledge,
- Wholeness and responsibility to self and society,
- Human development,
- The common good,
- Transcendence, and

- Stewardship-sustainability.

These propositions assert that human beings are good and that they have different behaviours, and, as such, there is freedom to make individual choices. Thus, there is a need to provide freedom, observe the dignity, and realise the potential of human beings. Sinnott (2008) states that the humanistic paradigm is useful in research, as its goals are to discover the issues that expand human experience on what it means to consciously live a human existence, as well as to solve human problems. In the case of this study, the humanistic paradigm will help to understand the issues of perceived organisational justice and the psychological contract in the workplace, as the society concerned, in order to enhance work engagement. It is crucial to note that the humanistic paradigm is interlinked with the variables in this study, namely perceived organisational justice, the psychological contract, and work engagement. The humanistic paradigm will be relevant to this research, as it will be used to determine the extent to which perceived organisational justice and the psychological contract affect work engagement in the Zimbabwean tertiary education sector.

(b) Developmental contextual framework

The developmental contextual framework suggests that human beings do not exist in a vacuum. It argues that a human being's behaviour is influenced by various factors, namely their social, cultural, and temporal environments (Crawford, 2020). According to Bronfenbrenner (1979), this interplay between a human being and their context is dynamic and developmental. Bronfenbrenner (1979) asserts that families, peers, schools, and communities influence human development and respond to developmental changes of human beings. Thus, families, peers, schools, and communities are the socialising agents that offer developmental influences (Bronfenbrenner, 1979; Crawford, 2020).

Application of the developmental contextual framework in this study is relevant to determine the influence of various cultural and social environments experienced by employees on the relationships between perceived organisational justice, the psychological contract, and work engagement.

(c) The systems approach

Brown and Fowlin (2022) contend that the best paradigm for understanding organisations is the systems approach. This model suggests that an organisation is an open system which engages with the external environment through interactions (Brown & Fowlin, 2022; Katz & Kahn, 1978; Martz, 2013). An open system has inputs, throughputs, complex cycles of events, outcomes, and self-regulating mechanisms to achieve equilibrium (Brown & Fowlin,

2022). It easily adapts to the changes that happen in the external environment, and it depends on subsystems to make a whole. The success of an open system depends on the system's ability to balance resources, such as inputs and outputs, as well as mechanisms, to get feedback to ensure its sustainability (Brown & Fowlin, 2022).

The systems approach pertains to the constructs of this research, namely perceived organisational justice, the psychological contract, and work engagement, which views an individual as an element of the organisation that relates with the external environment. It is relevant for the study, as it shows how the constructs of perceived organisational justice, the psychological contract, and work engagement are related, and how these constructs function within the context of the Zimbabwean tertiary education sector. The inputs are the perceived organisational justice, psychological contract and socio-demographic variables (age, gender, employment status and category). The process mechanisms are the strategies that influence work engagement (communication, fair workloads, internet facilities, office space). The output is work engagement.

1.7.1.2 The empirical research

In this study, empirical research will be guided by the post-positivist research paradigm. Post-positivism argues that one can make reasonable inferences about a phenomenon by combining empirical observations with logical reasoning (Pham, 2018). Post-positivists view science as not certain but probabilistic, that is, based on many contingencies, and they seek to explore these contingencies to understand social reality better. Thus, the problems studied by post-positivists reflect the need to identify and assess the causes that determine outcomes such as those found in experiments. The knowledge that develops through a post-positivist lens is based on careful observation and measurement of the objective reality that exists out there in the world (Neuman, 2016; Schwandt, 2007).

In this study, empirical research will relate to the post-positivist research paradigm, as the relationship between the variables of perceived organisational justice, the psychological contract, and work engagement will be examined. Empirically, the study will also look at how the socio-demographic profile of the respondents in terms of their age, gender, employment status, and employment category affect the relationship between perceived organisational justice, the psychological contract, and work engagement.

1.7.2 The market of intellectual resources

The market of intellectual resources pertains to the perceptions and values held by those practising within a discipline that affect the epistemic status of scientific statements (Lor, 2014; Mouton & Marais, 1998). The researcher will present theoretical models, metatheoretical statements, conceptual descriptions, a central hypothesis, and theoretical and methodological assumptions related to the variables investigated in the research, namely perceived organisational justice, the psychological contract, and work engagement, and the socio-demographic variables (age, gender, employment status, and employment category).

1.7.2.1 Metatheoretical statements

Every study is based on a number of theories, paradigms, and models which define the context in which the study is situated. Metatheoretical statements represent the assumptions underlying the theories, models, and paradigms of research in a given discipline (Lor, 2014; Magno, 2010; Mouton & Marais, 1998). They are drawn from metatheories, which describe, investigate, analyse, and criticise the theories of the particular study domain (Lor, 2014; Magno, 2010; Mouton & Marais, 1998). Hjørland (1998) and Lor (2014) state that metatheoretical statements are linked to philosophical views and are part of interdisciplinary trends involving psychology, sociology, and management. These statements provide a set of ideas that are necessary to investigate a given phenomenon.

As stated earlier, the study is situated in the field of human resource management (HRM). Human resource management is a strategic and integrated approach to the employment, development, and well-being of employees (Armstrong, 2016; Gutterman, 2020). It is a process through which management builds the workforce and tries to create the human performance that organisations require (Armstrong, 2011, 2016; Boxall & Purcell, 2016; Gutterman, 2020). The practice of human resource management (HRM) is responsible for initiating and formulating human resource policies and practices that activate positive behaviour, a positive attitude, and commitment of employees towards their work (Armstrong, 2016; Boxall & Purcell, 2016; Gutterman, 2020). Human resource practitioners facilitate communication between management and employees and advise management on appropriate human resource practices to improve work engagement (Gutterman, 2020).

1.7.2.2 Theoretical models

A theoretical model simply refers to aspects such as explaining and making predictions about phenomena; it holds a set of interrelated propositions, concepts, and descriptions on the relationships between variables, with a view to explain the phenomena (Imenda, 2014). In this research, the theoretical models will be established on perceived organisational justice (Colquitt, 2001), the psychological contract (Guest et al, 2010), and work engagement (Schaufeli et al., 2002.)

1.7.2.3 Conceptual descriptions

Perceived organisational justice

Perceived organisational justice explains individual experiences in an organisational setting in terms of fairness based on situational and personal factors (Colquitt, 2001).

Psychological contract

The psychological contract refers to the perceptions of the mutual expectations and obligations implied in the employment relationship (Guest et al, 2010).

Work engagement

Schaufeli et al, (2002) define work engagement as an encouraging, satisfying work-related state of mind, which is depicted by vigour, dedication, and absorption. They explain vigour as an increased level of energy, mental strength, and endurance in one's work (Schaufeli et al, 2002). Dedication is the involvement in one's work and having a sense of importance, pride, and interest in one's work. Absorption is characterized by full concentration and happy engrossment in one's work.

Table 1.1 shows the constructs that will be used for the purposes of discussion in this study.

Table 1. 1
Overview of Core Constructs

Construct	Sub-constructs	Definition	Theoretical model	Measuring instrument
Perceived organisational justice	• Distributive justice • Procedural justice • Interpersonal justice • Informational justice	Individual experiences in an organisational setting in terms of fairness based on situational and personal factors	Colquitt (2001)	Perceived Organisational Justice Measure (Colquitt, 2001)
Psychological contract	• Employer obligations • Employee obligations • Satisfaction with the psychological contract • State of the psychological contract	Employee perceptions of the reciprocal expectations and obligations implied in the employment relationship	Rousseau (1989) Rousseau (1990) Guest (2004) Guest et al., (2010)	PSYCONES Questionnaire (Isakkson, 2006)
Work engagement	• Vigour • Dedication • Absorption	A positive focus reflecting a positive way related to commitment, involvement, enthusiasm, and energy towards the organisation	Schaufeli et al., (2002)	Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002)

Source: Author's own work

1.7.2.4 Central hypothesis

The research`s central hypothesis is that a relationship exists between perceived organisational justice, psychological contract, and work engagement. In addition, employees' socio-demographic characteristics (age, gender, employment status, and employment category) influence the strength and/or direction of the relationships between perceived

organisational justice, the psychological contract, and work engagement. The relationships that exist between perceived organisational justice, the psychological contract, and work engagement will be used to develop a work engagement framework for employees in Zimbabwean tertiary education institutions.

1.7.2.5 Theoretical assumptions

- There is a great need for basic research to determine the relationship between perceived organisational justice, the psychological contract, and work engagement.
- Perceived organisational justice, individuals' psychological contract, and their socio-demographic factors (age, gender, employment status, and employment category) will influence work engagement.
- The relationships between the constructs of perceived organisational justice, the psychological contract, and work engagement can be moderated by socio-demographic variables (age, gender, employment status, and employment category). The moderating variables affect the strength and/or direction of the relationship between the construct variables. Understanding individuals perceived organisational justice, psychological contract, and work engagement will increase understanding of the factors that may potentially inform work engagement practices for employees in tertiary education institutions in Zimbabwe.
- The relationship dynamics between the variables investigated in the research constitute a framework that can be empirically tested, which will guide work engagement practices in Zimbabwean tertiary education institutions.

1.7.2.6 Methodological assumptions

Methodological assumptions refer to a system of beliefs and philosophy about the development of knowledge, which underpins the choice of research methods (Saunders et al, 2016). They are also known as philosophical beliefs and values about research, what constitutes valid research, and the appropriate research methods for the development of knowledge in a given study (Burrell & Morgans, 2017; Gelo, 2012; Mouton & Marais, 1998). The research will consider the ontological, epistemological, axiological, and methodological dimensions of methodological assumptions:

- Ontological dimension

Saunders et al. (2016) state that ontology relates to the realities encountered in research. The ontological dimension is concerned with the way the researcher defines truth and reality about objects. Ontological assumptions shape the way the researcher sees and studies the research objects (Saunders et al, 2016). The research objects may be organisations, individuals' working lives, management, or organisational artefacts (Gelo, 2012). This study is ontological in the sense that it will understand the reality of the relationship between perceived organisational justice and the psychological contract and their attributes, and how they affect work engagement and its antecedents. Thus, the study will also understand what is known about work engagement in tertiary education institutions in Zimbabwe.

- Epistemological dimension

Saunders et al, (2016) assert that epistemology refers to assumptions about human knowledge, and how the researcher communicates knowledge to others. The epistemological dimension focuses on the process through which the researcher comes to know truth and reality. It is concerned with what constitutes acceptable, valid, and legitimate knowledge (Gelo, 2012). The study will attempt to achieve reliable and valid findings by using an appropriate research design and publishing the research, as a way of sharing knowledge with others.

- Axiological dimension

Axiology refers to the role of values and ethics in the research process (Saunders et al, 2016). The axiological dimension focuses on the values and ethics to be considered in the research process. It is concerned with how researchers deal with both their own values and those of the participants (Gelo, 2012). The researcher's values in every stage of the research are important to ensure credibility of the research. In this study the principles of research ethics (confidentiality, anonymity, and no harm) were observed, to protect the values of participants and the researcher.

- Methodological dimension

The methodological dimension translates ontological and epistemological principles into guidelines that show how the research will be conducted (Tuli, 2010). This dimension focuses on the methods used to conduct research, or study (Gelo, 2012). In this study, appropriate research methods will be used. Correlational and descriptive research approaches were used in the literature review, and quantitative research methods will be used in the empirical study.

1.8 DELIMITATION OF THE STUDY

This study followed a survey-based approach, as research was conducted at a single selected tertiary education institution in Zimbabwe.

The study is confined to the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement, and the strength and/or direction of the effect of socio-demographic variables (age, gender, employment status, and employment category) on the relationship between perceived organisational justice, the psychological contract, and work engagement. It does not determine the cause or the effect of the impact of the socio-demographic variables (age, gender, employment status, and employment category) on the relationship between the variables investigated in the research.

The research is also limited to the relationships between these variables, and the moderating effect of the socio-demographic variables, in the context of tertiary education institutions in Zimbabwe.

1.9 RESEARCH DESIGN

A research design outlines the plan and procedures used to carry out a research study (Creswell, 2014). It closes the gap between the research questions and the actual research (Creswell & Creswell, 2017). It can also be described as the blueprint on which the research will be based (Johnson & Christensen, 2014). This research applied three types of research design, namely exploratory, descriptive, and explanatory research. Their application was based on the different research questions formulated for the study.

1.9.1 Exploratory research

Exploratory research is often used in a new area of inquiry, to find out the magnitude of a particular phenomenon or problem, to create new thoughts and intuitions for the problem, and to test the viability of conducting a more extensive study of the phenomenon (Creswell, 2014). It serves as a useful precursor to more in-depth research, because of its ability to gather information from an unknown field or context (Bhattacherjee, 2012; Nardi, 2018). Exploratory research is mainly done to quench the researcher's desire to understand, to test

the viability of undertaking an extensive study as well as developing the methods to be used in subsequent study. The exploratory part of the research included the initial stages, aimed at acquainting the researcher with the context of the study; recognising the relevant constructs in the proposed research; formulating the research problem, questions and aims; and defining the viability of the research.

1.9.2 Descriptive research

Descriptive research is directed at making careful observations and detailed documentation of a research phenomenon, as well as describing the characteristics of a studied phenomenon or population (Kothari & Garg, 2014; Salkind, 2018). Descriptive research is used in literature review and empirical research (Bhattacherjee, 2012). In literature review, descriptive research was used to conceptualise the variables investigated in the research, namely perceived organisational justice, the psychological contract, and work engagement. Specifically, descriptive research was used to discuss the relevant theories that underlie these constructs. It was also used in the empirical study to describe the socio-demographic characteristics of the research participants. The descriptive component of the research also includes means, standard deviations, internal consistency reliability values (Cronbach's alpha coefficients), and composite reliability values of the measures.

1.9.3 Explanatory research

Explanatory research seeks explanations of observed phenomena or behaviours; it goes beyond the "why" and the "how" of research, by identifying the causal factors, the outcomes of the phenomena, and how they are interrelated (Bhattacherjee, 2012; Creswell & Creswell, 2017). According to Neuman (2016), explanatory research aims to provide details where limited information exists. Explanatory research was used in this study to explain the relationships between the variables of perceived organisational justice, the psychological contract, and work engagement, so as to draw conclusions on the relationships, as well as to develop a work engagement framework for higher (tertiary) education institutions in Zimbabwe. Therefore, this research has met the required criteria of this research as highlighted above.

1.9.4 Validity

A research design lays out the research work plan, or blueprint, that produces a valid literature review and empirical study for the variables investigated (Chetwynd, 2022;

Creswell & Creswell, 2017; Duchett, 2021). Salkind (2018) asserts that the characteristics of valid research include truthfulness, accuracy, authenticity, genuineness, and soundness, and that they relate to the quality of the accuracy of the findings, as well as their generalisability across contexts. Validity explains the effectiveness of the collected data in covering the actual area of investigation; it refers to the appropriateness of the instrument to measure what it is intended to measure (Duchett, 2021; Taherdoost, 2016). There exist two types of validity, which are internal and external. Internal validity refers to how well a study has been conducted (Chetwynd, 2022; Jackson, 2009), and the extent to which it represents the truth in the population one is studying (Duchett, 2021; Taherdoost, 2016). External validity refers to how applicable the findings of the study are to the real world (Chetwynd, 2022; Jackson, 2009), specifically the extent to which the findings can be generalised to the entire population that the sample represents (Duchett, 2021; Taherdoost, 2016). It is imperative to ensure internal and external validity for any research design. There are several components of the research process that need to be adhered to in order to attain validity, and these relate to the purpose of the study, the theoretical paradigm, the research context, the data collection methods employed, and the data analysis methods involved (Chetwynd, 2022; Creswell et al, 2010). Content validity was achieved by consulting experts in the field of HRM who include supervisors and industry professionals. The experts provided guidance on the content generated about psychological contract, perceived organisational justice and work engagement. Additionally, construct validity was achieved by estimating several statistical measures such as the Cronbach's alpha, AVE and C.R.

1.9.4.1 Validity of the literature review

For the purposes of this study, the literature review`s validity was ensured through the use of relevant and recent literature that addresses the aims and problems of the study. The researcher made sure that recent literature was used in the study, and that reference was made to core research in the field under investigation. She also ensured that the literature used in the study reflects and matches the research constructs and research instruments that were used.

1.9.4.2 Validity of the empirical research

Internal validity was assured by utilising appropriate and standardised measuring instruments (Creswell & Creswell, 2017; Duchett, 2021; Taherdoost, 2016). The researcher determined the face validity, criterion-related validity, construct validity, and content validity

of the instruments used in the study. Face validity refers to whether an instrument is assessed by the scientific community as measuring the stated concept (Duchett, 2021).

The researcher ensured that there was internal validity by reducing bias when selecting respondents working at tertiary education institutions in Zimbabwe. The sampling procedure relates to the internal validity of the study. Internal validity was achieved by making sure that a sample was chosen and that the standardised questionnaires had clear instructions for the respondents. The statistical procedures moderated for biographical variables.

External validity shows the degree to which the study results can be generalised to the entire population that the sample represents (Chetwynd, 2022; Duchett, 2021; Taherdoost, 2016). It encompasses aspects such as the sampling procedure, the spatial and temporal context of the research, and the circumstances upon which the research will be conducted (Duchett, 2021). The researcher targeted the whole population of employees in a tertiary education institution in Zimbabwe, in order to expand the generalisability of the results.

The researcher also guaranteed external validity by using questionnaires that are scientifically proven and accepted for measuring the research constructs of perceived organisational justice, the psychological contract, and work engagement. Data was accurately collected, coded, and analysed, and statistical analysis with appropriate computer software was done, to assure external validity. Data was reported and interpreted according to the accepted statistical procedures, the conclusions and recommendations that were offered were based on the research findings.

1.9.5 Reliability

Reliability is the magnitude of the measurement of a phenomenon to produce stable and replicable results (Creswell & Creswell, 2017; Nardi, 2018; Taylor, 2021). It is concerned with repeatability and reproducibility of study results when a similar measurement instrument is applied in different situations (Chetwynd, 2022). Reliability also refers to how much the data collection methods can ensure that the findings are consistent and that similar observations and conclusions can be drawn to those made by other scholars (Duchett, 2021; Taylor, 2021). It provides quantification of the accuracy of measuring instruments on similar replications (Chetwynd, 2022; Goodwin, 2010). The researcher made use of appropriate theories, models, and literature sources to ensure reliability of the literature review (Chetwynd, 2022; Duchett, 2021; Taherdoost, 2016; Taylor, 2021).

The reliability of the empirical study was assured by using a representative sample. Disturbance variables were reduced with the aid of the sampling procedure and the measuring instruments. Past research studies have proven the reliability of the reliability of the measuring instruments. Cronbach's alpha, AVE, and C.R which measure reliability of the instruments are discussed in Chapter 4 (the research methodology chapter). All the subscales` internal consistency reliabilities were tested prior to continuing with the statistical analysis (see Chapter 5).

1.9.6 The unit of analysis

The focus of studies in the social sciences is the individual human being (Mouton & Marais, 1996). All the individual employees working at a tertiary education institution in Zimbabwe form the study`s unit of analysis. Specifically, the unit of analysis is all full-time and part-time employees (academic and non-academic) at the targeted institution. Therefore, the unit of observation in this study is the individual (i.e., individual employees in the tertiary education sector in Zimbabwe).

The reliability of the empirical study was assured through the utilisation of a representative sample. Disturbance variables were reduced with the sampling procedure and the measuring instruments that were utilized. The reliability has been proven in past research studies. This is discussed in Chapter 4 (the research methodology chapter). Moreover, the internal consistency reliability for each utilized scale was also tested preliminary to advancing to statistical analysis (see Chapter 5).

1.9.7 The variables

The variables investigated in this research are perceived organisational justice and the psychological contract (the independent variables) and work engagement (the dependent variable). Socio-demographic characteristics (age, gender, employment status, and employment category) are also investigated as moderating variables on the influence of perceived organisational justice and the psychological contract (the independent variables) on work engagement (the dependent variable).

The terms "independent variable" and "dependent variable" denote a causal relationship. The independent variable influences the dependent variable towards a certain outcome. The study is going to be explanatory in nature; it will not focus on causes and effects. Instead, the study focuses on the nature, direction, and the extent of the relationship between the

variables, so as to develop an overall work engagement framework for higher (tertiary) education institutions in Zimbabwe.

Figure 1.1 outlines the variables investigated in the research, as well as the proposed relationship between the variables. In summary, the research investigated the relationship between perceived organisational justice, the psychological contract, and work engagement. It also investigated the strength and/or direction of the influence of socio-demographic variables (age, gender, employment status, and employment category) on the relationships between perceived organisational justice, the psychological contract, and work engagement. The results were used to develop a work engagement framework for tertiary education institutions in Zimbabwe. While the unit of analysis is both individuals and the institution, the results are not reported at an individual level (i.e., reporting results for individual employees). Instead, the results reflect collated scores for each construct.

Figure 1.1
Conceptual Model of the Study
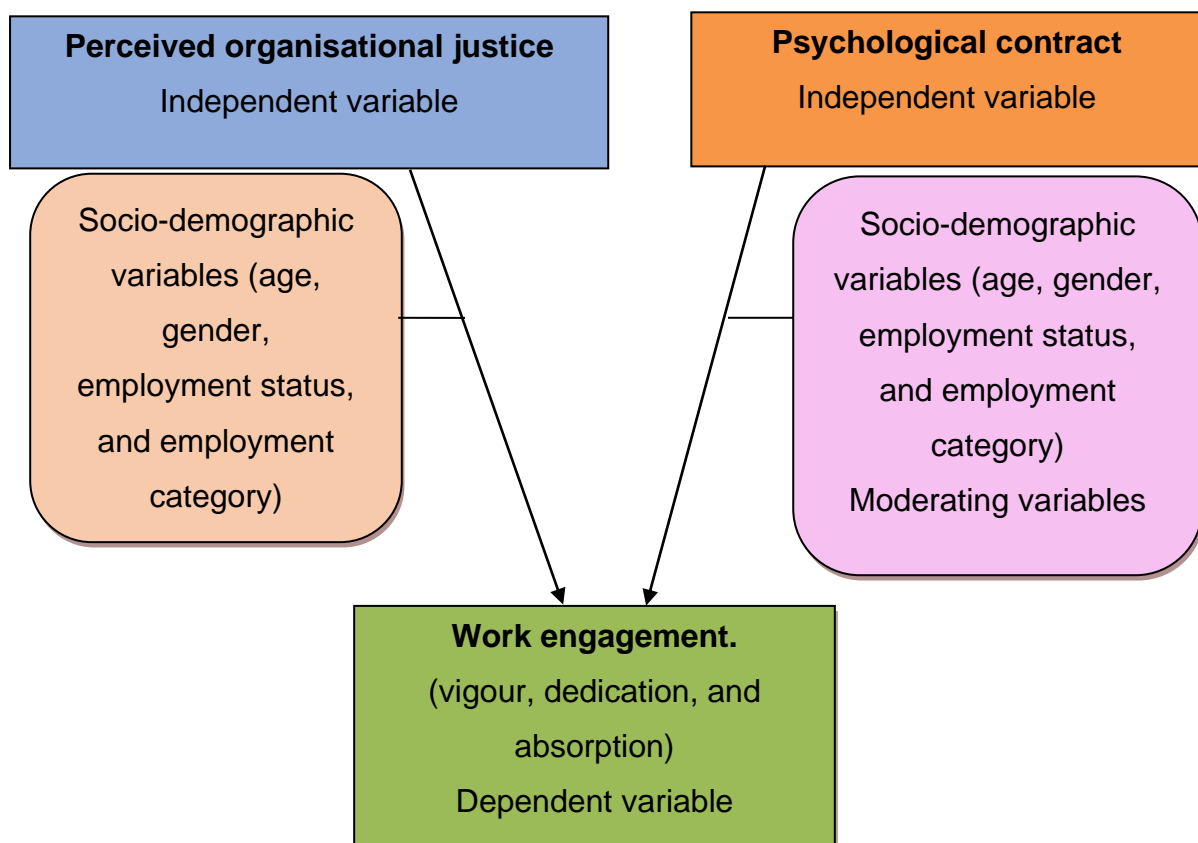
Source: *Author's own work*

1.9.8 Ethical considerations

The researcher sought approval for ethical clearance from Unisa's Ethics Review Committee and observed the research ethics as outlined in Unisa's (2016) policy on research ethics. According to Unisa's (2016) policy on research ethics, the basic moral principles, or ethics for research, are autonomy, beneficence, non-maleficence, and justice.

The researcher observed the principle of autonomy by respecting the autonomy, rights, and dignity of research participants in this study. The principle of beneficence was observed by ensuring that the research contributes to the improvement of the welfare of employees in tertiary education institutions. The researcher also ensured non-maleficence, by avoiding harm to participants. This was done by respecting their privacy and confidentiality. Their participation was based on consent. Written consent was obtained from the participants, and the researcher observed their anonymity and confidentiality. The principle of justice was observed by ensuring that the benefits and the risks of participation in the research were communicated to participants.

Authorisation to conduct the study was sought from a selected tertiary education institution in Zimbabwe. After obtaining permission, the researcher developed an online questionnaire. A link to the questionnaire was created and sent to participants through gatekeepers of the selected institution.

1.10 RESEARCH METHODOLOGY

Research methodology details the specific procedures, methods and techniques employed in a study to ensure reliable and valid results that address research aims and objectives (Kumar, 2019) . The research employed a quantitative survey approach. The quantitative survey was online-based, and the researcher created a link to the questionnaire, which was given to the participants with the assistance of the institution's gatekeepers. The researcher used standardised, valid, and reliable measuring instruments. The target population of the research was both academic and non-academic staff at a tertiary education institution in Zimbabwe. The researcher used descriptive statistics, correlation analysis, and inferential and multivariate statistics to validate the research hypotheses. These facets are examined in detail in Chapters 3 and 4.

The research was conducted in two phases, with the different stages discussed below.

1.10.1 Phase 1: The literature review

This stage reviewed literature on perceived organisational justice, the psychological contract, and work engagement.

Step 1 addressed research aim 1, namely, to conceptualise work engagement within the tertiary education context.

Step 2 addressed research aims 2 and 4 of the literature review, which are to conceptualise perceived organisational justice, the psychological contract, and work engagement, as well as to determine the strength and/or direction of socio-demographic variables (age, gender, employment status and employment category) on the relationship between perceived organisational justice, the psychological contract, and work engagement.

Step 3 dealt with research aim 3, which is to evaluate the relationship interactions between perceived organisational justice, the psychological contract, and work engagement as the elements of the theoretical framework that emerges from the relationship dynamics.

Step 4 dealt with research aim 5 of the literature review, which is to conceptualise the implications of the postulated theoretical work engagement framework for work engagement practices in tertiary education institutions in Zimbabwe.

1.10.2 Phase 2: The empirical study

The empirical study was conducted at a tertiary education institution in Zimbabwe.

Step 1: Measuring instruments
The instruments that were utilised to measure the constructs of perceived organisational justice, the psychological contract, and work engagement will be explored in Chapter 4. The instruments are the Perceived Organisational Justice Measure (Colquitt, 2001), the PSYCONES Questionnaire (Isakkson, 2006), and the Utrecht Work Engagement Scale (Schaufeli & Bakker, 2006). A biographical information questionnaire was employed to

collect information on the research participants' age, gender, employment status, and employment category.

Step 2: Description of the population and sample

The criteria used to determine the population and the sample and a description of each are provided in Chapter 5.

Step 3: Ethical considerations in administering the measuring instruments

The steps involved in the data collection procedure from the sample are examined in detail in Chapter 4.

Step 4: Data capturing

Responses of the participants to the questionnaires were captured in an electronic database, which was then transformed into an IBM SPSS version 28 data file.

Step 5: Formulation of the research hypotheses

The research hypotheses aimed at achieving the objectives of the research were formulated in this step (see Chapter 5).

Step 6: Statistical processing of the data

The statistical procedures employed in the research study in this step are clarified in Chapter 5.

Step 7: Reporting of the results

Results of this study are depicted in tables, figures, diagrams, and/or graphs. Discussion of the research findings is laid out in a systematic and logical framework to ensure that findings of the study are presented in an appropriate and exceptional manner. Chapter 6 reports on the results.

Step 8: Integration of the research

The results are interpreted and discussed in Chapter 6.

Step 9: Conclusions, limitations, and recommendations

In the last step, the conclusions, limitations, and recommendations related to the research findings, and their integration with the relevant theory, are discussed in Chapter 7.

1.11 CHAPTER LAYOUT

The chapter layout is as follows:

Chapter 1: Scientific overview of the research
Chapter 2: Metatheoretical context: Work engagement in the tertiary education sector in Zimbabwe
Chapter 3: Perceived organisational justice, the psychological contract, and work engagement
Chapter 4: Framework for work engagement: A theoretical perspective
Chapter 5: Research methodology
Chapter 6: Research results
Chapter 7: Conclusions, limitations, and recommendations

1.12 CHAPTER SUMMARY

This chapter explained the background to and motivation for the research, the aim of the study, the research problem, and the significance of the study. It also clarified the research model, the paradigmatic perspective, the theoretical models, the research design, and the methodology. The research was motivated by the absence of known research on the relationship between perceived organisational justice, the psychological contract, and work engagement. It intends to analyse and critique literature, guided by a well-grounded research methodology, which will examine the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement, for the purposes of devising a work engagement framework, which will be the basis for informing work engagement practices for employees in the Zimbabwean context of tertiary education institutions. In addition, the research intends to examine the extent to which socio-demographic characteristics (moderating variables), namely age, gender, employment status, and employment category, affect the relationship between perceived organisational justice, the psychological contract, and work engagement.

Chapter 2 discusses the first research aim of the literature review which seeks to conceptualise work engagement within the tertiary education context. The chapter includes a critical evaluation of work engagement in tertiary institutions, and the discussion of variables affecting work engagement in tertiary education.

CHAPTER 2: THE METATHEORETICAL CONTEXT: WORK ENGAGEMENT IN THE TERTIARY EDUCATION ENVIRONMENT IN ZIMBABWE

Tertiary education in Zimbabwe started with the establishment of the University of Rhodesia, which was renamed the University of Zimbabwe (Garwe & Tondhlana, 2018; Phuthi, 2022). Garwe and Tondhlana (2018) explain that when the country gained independence in 1980, the new government devised policy reforms to address colonial inequalities and to satisfy the populace's need for higher qualifications. This caused the growth in the number of private and public universities, and there are currently 24 registered universities (14 public and 10 private) (Phuthi, 2022; Uzhenyu, 2019). To ensure quality assurance and monitoring of the institutions' performance, a regulatory body, the Zimbabwe Council for Higher Education (ZIMCHE), was formed (Garwe & Tirivanhu, 2015; Garwe & Tondhlana, 2018; Phuthi, 2022; ZIMCHE, 2018).

Tertiary institutions are responsible for training human minds and facilitating knowledge development (Agbionu et al, 2018; Garwe & Tondhlana, 2018). According to Mhlanga et al, (2013) and Phuthi (2022), tertiary education drives economic growth and technological advancement. Thus, tertiary education institutions require scholars and researchers who are committed to creating and improving knowledge. This implies that tertiary institutions rely on their employees being engaged, in order to meet organisational goals (Aybas & Acar, 2017).

This chapter focuses on the first research aim, which is to conceptualise work engagement within the tertiary education context. Therefore, the research will develop a thorough understanding of work engagement in the context of developing countries, such as Zimbabwe.

2.1 CONCEPTUALISATION OF THE CONCEPT OF WORK ENGAGEMENT

The concept of work engagement faces challenges in its description, as scholars fail to agree on a universal meaning of the construct (Alam et al., 2022; Gifford & Young, 2021; Sangeeta, 2020; Wushe & Shenje, 2019). The literature has various conceptualisations of the construct of work engagement, as researchers propose a broad range of characteristics of engaged employees. The original meaning of the concept of work engagement was explained by Kahn (1990) as the psychological experiences of employees in their work. Kahn (1990) conceived of categories of psychological conditions, namely psychological meaningfulness, for example, joviality (Meiyani & Putra, 2019); psychological safety, for

example, willingness to do work (Bakker, 2011); and psychological availability, for example, exertion of performance or energy (Bakker, 2011), as employees' experiences that influence their work engagement. The work contexts referred to by Kahn (1990) determine employees' absence or presence of their selves "psychologically" during task performance (Cheng, 2021; Saks, 2019; Wuttafon, 2016).

The most recent definition of work engagement, provided by Gifford and Young (2021), views "work engagement" as an umbrella term for organisational commitment, organisational identification, and motivation of employees. Another contextualisation of work engagement, by Rana and Chopra (2019), views work engagement as the positive outcomes that engaged employees bring to the organisation, including higher productivity, lower absenteeism, reduced employee turnover, customer satisfaction, and innovation. Meiyani and Putra (2019) argue that work engagement is an individual predisposition to participate in a work activity, by applying knowledge, interest, and performance. According to Özer et al., (2017), engaged employees are those who think in a positive way which relates to their motivation, satisfaction, organisational citizenship behaviour, commitment, involvement, enthusiasm, and energy towards the organisation.

Schaufeli et al., (2002) assert that work engagement is a positive, satisfying, work-related state of mind, which is typified by vigour, dedication, and absorption. Budriene and Diskiene (2020) provide a similar definition to Schaufeli et al.'s (2002) definition of work engagement. They state that work engagement is a stable attitude characteristic of an employee, which involves prolonged concentration of the employee in solving work challenges (Budriene & Diskiene, 2020). The employee's concentration is reflected in emotional connection with the values and goals of the organisation, for example, putting extra effort in their work and supporting work goals (Budriene & Diskiene, 2020). Work engagement would mean that employees have commitment, job satisfaction, and job involvement in the tertiary education context (Awang & Ahmad, 2010; Wang & Heng, 2009; Wuttafon, 2016; Yahaya et al, 2014). Saks and Gruman (2014) highlight that although the constructs of employee commitment, job satisfaction, and job involvement are regarded as indicators of work engagement in tertiary institutions, the constructs of commitment and job involvement have a different meaning, and the definition by Schaufeli et al, (2002) is therefore a more accepted definition.

Kim et al, (2019) define work engagement as individual participation, pleasure, and passion for their work. Abdhy and Kwartini (2016) view work engagement as a new approach to employee motivation.

It is important to mention that the terms "work engagement" and "employee engagement" are used interchangeably, despite having different meanings (Uzhenyu, 2019). Uzhenyu (2019) explains the difference between these two concepts, where work engagement pertains to an employee`s relationship with their work only, while employee engagement comprises relationship of the employee with the organisation. The current research adopts Schaufeli et al.'s (2002) conceptualisation of work engagement. Unlike the other conceptualisations mentioned above, which define work engagement in terms of already known psychological constructs, such as commitment, organisational citizenship behaviour, satisfaction, and motivation, among others, Schaufeli et al.'s (2002) definition depicts work engagement as a unique construct that is different from known constructs (Ahuja & Gupta, 2018; Ahuja & Modi, 2015; Christian et al, 2011; Wuttafon, 2016).

2.2 WORK ENGAGEMENT CHALLENGES IN HIGHER EDUCATION

Employee engagement has emerged as one of the greatest challenges in the workplace, because of complexities and stringent regulations that affect work engagement (Gifford & Young, 2021; Jovanovic & Lugonjic, 2022; Negash et al., 2019; Osborne & Hammoud, 2017; Rao, 2021). The current world is dynamic and disruptive (Jovanovic & Lugonjic, 2022). The challenges of the Covid-19 pandemic, the digitalisation of work, and economic uncertainty have presented a new normal, which has implications for employee engagement (Jovanovic & Lugonjic, 2022). According to Jovanovic and Lugonjic (2022), the Covid-19 pandemic and the digitalisation of technology have introduced remote working. Many employees are working from home, while at the same time homeschooling and taking care of their children. Employees end up having work pressure, due to competing roles at work and at home. According to Jovanovic and Lugonjic (2022), employees have suffered pay cuts, unpaid leave, and even job insecurity, which impact their work engagement.

Alam et al., (2022), Paul (2016), and Rao (2021) assert that the contemporary employment environment is characterised by workplace dynamics such as the speed and complexity with which business moves, as well as the need to do work tasks in less time to meet business targets. Paul (2016) explains that due to time constraints, employees in modern organisations consider working on their first priorities, which could result in workload problems, as they may fail to reconcile competing work priorities. Employees' workloads normally lead to frustration, which presents challenges in engaging employees for organisational performance.

Gallup (2023) and the MHTESTD (2019) report a crisis in the context of innovation, productivity, and performance in the employment environment. The crisis can be attributed to the low level of work engagement worldwide (Gallup, 2023). Globally, only 23% of workers can be described as fully engaged in their work, while 77% are either not engaged or actively disengaged (Gallup, 2023.Worldwide in 2023, disengagement led to $8.8 trillion in lost productivity (Gallup, 2023). Agbionu et al., (2018) explain that tertiary education institutions are grappling with challenges of engaging their workforce, due to frustrating working conditions arising from inadequate teaching and research facilities, poor remuneration, and unfavourable policies. Saks (2006) confirms that when organisations fail to avail the vital resources (namely remuneration, and teaching and research facilities), employees are more inclined to disengage themselves from their work roles.

In the 21st century, universities and colleges are witnessing the academic challenge of dwindling financial support (Henkel & Haley, 2020). Dwindling financial support has a bearing on support of activities in tertiary education institutions (Henkel & Haley, 2020; Uzhenyu, 2019). The ZIMCHE (2018) outlines the major activities in a tertiary education institution as teaching, research and development, community service, and innovation and industrialisation. According to Agbionu et al, (2018), teaching entails lecture preparation and delivery, and supervision of students in work-related learning. The research and development activity requires academics to do research publications and conference and seminar presentations (Marufu & Uzhenyu, 2017). Community service renders service to the community and the institution at large, and innovation and industrialisation ensures development of models that solve problems affecting the growth of the country and implementing initiatives that contribute to economic growth (MHTESTD, 2019; Shoko, 2014).

Zimbabwe is facing economic challenges, caused by the Covid-19 pandemic, rising inflation, foreign currency shortages, and large public debt (Chinyoka & Mutambara, 2020; Chirisa et al., 2021; Garwe & Tirivanhu, 2015; Jovanovic & Lugonjic, 2022). The challenges mentioned above have led to reduced government support for tertiary education activities, such as recruitment and rewards, as the government has failed to sustain the tertiary sector wage bill (Chirisa et al., 2021; Garwe & Tirivanhu, 2015; Majoni, 2014; MHTESTD, 2019; Uzhenyu, 2019). The decline in government support has also led to a hiring freeze in the tertiary education sector, causing high workloads for academics and professionals (Chirisa et al., 2021; Garwe & Tirivanhu, 2015; Marufu & Uzhenyu, 2017; Uzhenyu, 2019). Coupled with the expansion of the Zimbabwean tertiary education system and the massification of education, which has seen an increase in student enrolments, there has been an increase in work roles for tertiary education staff (Gurira, 2011; Uzhenyu, 2019). Paul (2016) and

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Sangeetha et al., (2018) explain that high workloads normally lead to frustration, which could result in disengagement of employees from their work.

According to Wushe and Shenje (2019), foreign currency shortages have caused a reduction in financial support to government institutions (including tertiary education institutions). Majoni (2014) and Uzhenyu (2019) highlight that foreign currency shortages have reduced government support and sponsorship of research for academics in Zimbabwean tertiary institutions. Majoni (2014) states that the large public debt, such as that for electricity, has led to power outages, which cause a lack of internet connectivity, thereby affecting research and work output. Research and work output are the main tertiary education outcomes for academics and professionals (MHTESTD, 2019). This shows the effect of these challenges on the activities of tertiary institutions.

Despite the efforts of the ZIMCHE (2018), the Zimbabwean tertiary education sector has witnessed a brain drain of highly qualified academics to neighbouring countries, such as Botswana and South Africa, in search of better wages and job security (Uzhenyu, 2019). It is important to note that the brain drain in Zimbabwe's tertiary education sector could have been influenced by employees' decreased levels of work engagement, due to the challenges mentioned above.

Ahuja and Gupta (2018) and Phuthi (2022) concur that there is a low quality of teaching and learning in tertiary education institutions, as many of these institutions suffer from a shortage of staff and outdated curricula, a rigid pedagogy, and poor quality of teaching and research. These challenges have been attributed to low engagement of staff in higher education, as well as a weak environment for innovation (Ahuja & Gupta, 2018), which diverges from the characteristics of engaged employees, namely pride, enthusiasm, and exertion of energy in one's work (Schaufeli et al., 2002). The challenges that affect tertiary institutions are summarised in Table 2.1.

Table 0.1
Challenges Affecting Tertiary Institutions

Factor	Challenges
Digitalisation of technology (Jovanovic & Lugonjic, 2022)	Remote working, work pressure due to competing roles at work and at home, job insecurity, and pay cuts, which affect work engagement
Complexities and stringent regulations in business (Alam et al, 2022; Osborne & Hammoud, 2017)	Workload problems for employees, failure to complete work tasks
Workplace dynamics such as the speed and complexity with which business moves (Jovanovic & Lugonjic, 2022; Paul, 2016)	Failure to reconcile competing tasks, frustration, and a decrease in the level of work engagement
A crisis in the context of innovation (Gallup, 2023; MHTESTD, 2019)	Low productivity, reduced performance, and disengagement
Economic challenges, such as rising inflation and foreign currency shortages (Chinyoka & Mutambara, 2020; Jovanovic & Lugonjic, 2022; Majoni, 2014; Uzhenyu, 2019)	Poor remuneration of employees, a hiring freeze and high workloads for existing employees, frustration, and disengagement
Poor working conditions (Agbionu et al, 2018)	Disengagement
Lack of research and teaching facilities (Agbionu et al, 2018; Saks, 2006)	Disengagement
Reduced financial support by the state (Chinyoka & Mutambara, 2020; Chirisa et al, 2021; Garwe & Tirivanhu, 2015; Henkel & Haley, 2020)	Low support for tertiary education activities; high workloads for employees; poor remuneration, leading to disengagement; frustration; and low-quality teaching

Source: Author's own work

2.3 WORK ENGAGEMENT STRATEGIES FOR HIGHER EDUCATION

The subject of work engagement continues to gain momentum, as organisations need to create appropriate strategies that enhance employees' level of engagement (Alam et al, 2022; Motyka, 2018; Sangeeta, 2020). Altehrebah et al., (2019) and Gifford and Young (2021) explain that organisations need to invest in the area of human resource practices to engage, as well as to enjoy, the positive impacts and benefits of work engagement. Thus, it

is important for the management of tertiary institutions to know appropriate human resource practices that work as strategies for enhancing the work engagement of their staff. The idea of appropriate strategies that enhance work engagement is confirmed by Alam et al., (2022). Budriene and Diskiene (2020) assert that changes and complexities in the global arena, such as the Covid-19 pandemic, require management to understand situations that foster engagement. Thus, organisational managers are encouraged to find new forms and methods of employee engagement in such an inconsistent business environment (Alam et al., 2022; Budriene & Diskiene, 2020; Sangeeta, 2020).

Work engagement has gained a lot of attention from organisations, due to its influence on employees' effort, attitude, and performance (Alam et al, 2022; Uzhenyu, 2019). Despite all the attention, the Strategic Human Resource Management Report (2016) and Wushe and Shenje (2019) state that there are reports from business leaders that indicate that they seem not to realise the benefits of employee engagement. This is regardless of the point that many studies have proved that numerous factors can positively impact work engagement levels of employees (Alam et al., 2022; Altehrebah et al, 2019; Aybas & Acar, 2017; Azmy, 2019; Chahar & Hatwal, 2018; Cheng, 2021; Jondar & Sudarsono, 2015; Kreimer & Kinicki, 2010; Mansoor & Hassan, 2016; Osborne & Hammoud, 2017; Othman et al, 2019; Vance, 2006).

Cheng (2021), Meiyani and Putra (2019), and Rana and Chopra (2019) assert that employee engagement thrives in an environment where positive emotions, such as involvement and pride, are encouraged. West (2012) and Saks (2019) confirm that when employees feel positive emotions, they can think in a more flexible and open-minded way, thereby enhancing work engagement.

The drivers of work engagement include leadership, rewards, and compensation (Osborne & Hammoud, 2017; Othman et al., 2019, Wushe & Shenje, 2019); employee support and feedback; organisational culture; meaningful work; empowerment, and training and development (Aybas & Acar, 2017; Gifford & Young, 2021; Osborne & Hammoud, 2017; Vance, 2006); communication; teamwork; work relationships; recognition; and career growth (Altehrebah et al, 2019; Cheng, 2021; Mansoor & Hassan, 2016). Chahar and Hatwal (2018) confirm that such human resource practices are effective strategies for enhancing work engagement.

Chahar and Hatwal (2018), Cheng (2021), and Vance (2006) suggest that management needs to design and implement effective engagement activities, such as job and task design, performance management, and workforce surveys, which provide powerful levers for

enhancing employees' level of engagement. Gifford and Young (2021) define job and task design as the process of ensuring that employee job characteristics are clearly defined and make full use of employees' skills. A good job and task design is rich, challenging, and meaningful to the employee (Gifford & Young, 2021; Vance, 2006). Vance (2006) and Chahar and Hatwal's (2018) view of enhancing job and task designs for increasing work engagement in organisations is supported by Aybas and Acar (2017), who argue that work engagement practices enable employees to be positively engaged in work activities, due to personal enjoyment of these factors.

Communication increases employees' level of work engagement, by keeping them informed about what is happening in the organisation, so that they control and exercise their own discretion to reduce uncertainty, minimise stress, and give a sense of belonging (Mansoor & Hassan, 2016). A study conducted by Altehrebah et al, (2019) at the University of Sana'a found that employees' level of work engagement decreased due to poor communication. According to Chahar and Hatwal (2018), employees are engaged when they receive regular constructive responses and feedback.

Gifford and Young (2021), Jovanovic and Lugonjic (2022), and Mansoor and Hassan (2016) argue that teamwork and collaboration, as well as social support, are necessary for the success of organisational initiatives such as work engagement. Mansoor and Hassan (2016) argue that teamwork assists in developing strong relationships with employees. They assert that strong relationships with employees foster strong team interaction, which creates an engaging environment in which employees can perform at the highest possible level (Mansoor & Hassan, 2016). Social support is the extent to which an employee receives assistance or advice from supervisors or co-workers (Gifford & Young, 2021). Employees require increased support in time of need, honest feedback, and praise and recognition to increase their levels of work engagement (Mansoor & Hassan, 2016).

Effective leadership is a good strategy for enhancing work engagement (Azmy, 2019; Hee et al, 2020). Leadership is a management function that is exercised by top management, or a group of individuals at the top level that manages the organisation (Hee et al, 2020). Leadership is a social communicating process between a leader and their followers; therefore, leaders are capable of promoting achievement of an organisation's goals through the engagement of employees (Altehrebah et al, 2019; Heng et al, 2020). Ariani (2014) and Azmy (2019) concur that good leadership has a positive effect on work engagement. According to Kreimer and Kinicki (2010), the role of leaders is to influence others to achieve a common goal. Barkhuizen (2014) and Tshilongamulenzhe and Takawira (2015) argue that

leaders have the role of ensuring that the work environment assists the engaged, woos the not engaged, and makes the disengaged become engaged. Good leaders also empower their employees (Gifford & Young, 2021). Empowerment is the practice of giving employees more authority, autonomy, and responsibility in deciding how they do their work (Gifford & Young, 2021). Successful application of leadership styles influences the level of work engagement of employees (Azmy, 2019).

Offering lucrative rewards is another strategy for enhancing work engagement. Altehrebah et al, (2019) and Gifford and Young (2021) mention that organisations that offer high rewards have high levels of engagement of employees compared to companies that offer low rewards. Altehrebah et al, (2019) state that organisations must design good reward and payment systems and provide benefits, while maintaining internal equity and developing salary structures that are consistent with qualifications and experience. Agbionu et al., (2018) argue that employees are more engaged when they feel that their organisation is taking care of their well-being by offering valuable rewards. Agbionu et al, (2018) recommend that tertiary sector management be conscious of reward types that are suitable for their employees.

Organisational culture is yet another strategy for enhancing work engagement (Alam et al., 2022). According to Azmy (2019), organisational culture determines the working climate for employees. An organisation needs a culture with three attributes, namely strong, dynamic, and adaptive (Jondar & Sudarsono, 2015). A strong culture influences employees' behaviour and encourages them to have good perceptions and feelings (Jondar & Sudarsono, 2015). A dynamic and adaptive culture promotes flexibility and responsiveness to the environment, thereby engaging employees.

Learning and development also enhances work engagement (Alam et al, 2022). It is a human resource practice in which organisations develop employees' skills through staff development programmes such as training on or off the job, mentoring, and coaching (Alam et al., 2022; Altehrebah et al, 2019; Sangeeta, 2020). Mansoor and Hassan (2016) state that organisations need to develop a culture that supports learning and development. Learning and development is a practice that develops employees' skills, through self-development programmes such as training and formal education (Altehrebah et al, 2019). The practice of learning and development extends workforce capabilities, skills, and competencies, which boosts employee confidence, morale, and efficiency, resulting in improved work engagement. Companies that send staff members for training programmes communicate to

their employees that the company is interested in knowledge acquired. This will remind employees of their purpose, thereby enhancing the level of work engagement.

Work engagement can also be increased by using training and development as a strategy (Chahar & Hatwal, 2018; Gifford & Young, 2021; Jovanovic & Lugonjic, 2022; Vance, 2006). According to Chahar and Hatwal (2018), employers should provide a platform for professional development, as well as celebrate employee creativity, to enhance employees' work engagement. Chahar and Hatwal (2018) assert that engaged employees are twice as likely to be better performers, which shows the importance of implementing engagement strategies. The work engagement strategies for higher education that were discussed above are summarised in Table 2.2.

Table 0.2
Work Engagement Strategies for Higher Education

Strategy	Example(s)
Job and task design (Chahar & Hatwal, 2018; Cheng, 2021; Gifford & Young, 2021)	Job redesign and clear and fair work loads
Performance management (Chahar & Hatwal, 2018)	Performance management appraisals
Communication (Altehrebah et al, 2019; Chahar & Hatwal, 2018; Mansoor & Hassan, 2016)	Regular responses and feedback by management
Teamwork and collaboration (Ariani, 2014; Chahar & Hatwal, 2018; Jovanovic & Lugonjic, 2022; Mansoor & Hassan, 2016)	Teamwork activities, social support, assistance from co-employees, support in time of need, honest feedback, and praise and recognition
Good leadership style (Ariani, 2014; Azmy, 2019; Kreimer & Kinicki, 2010)	Creating an environment that facilitates work engagement; giving employees empowerment, authority, autonomy, and responsibility
Learning, and training and development (Altehrebah et al, 2019; Ariani, 2014; Chahar & Hatwal, 2018; Gifford & Young, 2021; Jovanovic & Lugonjic, 2022; Mansoor & Hassan, 2016)	Training and development programmes, and formal education
Reward management (Altehrebah et al, 2019; Gifford & Young, 2021)	Benchmarked and market-related salary structures that are consistent with qualifications

	and experience
	Fair distribution of rewards
	Clear policies on rewards allocation
Organisational culture (Alam et al, 2022; Azmy, 2019; Jondar & Sudarsono, 2015)	Flexible strategies and responsiveness to the environment

Source: Author's own work

2.4 VARIABLES INFLUENCING WORK ENGAGEMENT IN TERTIARY EDUCATION

Tertiary education is an important sector, which plays a major role in improving national productivity, through development of the country's human resources (Naidoo et al, 2019; Phuthi, 2022). Thus, engaging tertiary education staff is necessary to enhance national effectiveness (Agbionu et al, 2018). Therefore, it is crucial to understand the factors influencing work engagement in the context of tertiary education.

Researchers have come up with various categories for the variables influencing work engagement in tertiary institutions. Existing studies categorise the factors influencing work engagement of tertiary education staff into personal/individual and institutional/environmental factors (Bland et al, 2005; Kwick, 2016; Shin & Cumming, 2010; Teodorescu, 2000). A study carried out by Heng et al, (2020) identified the three categories of factors that influence work engagement as individual, institutional, and national factors. Heng et al, (2020) assert that the person–environment (individual–institutional) dichotomy does not incorporate all the factors that may influence work engagement, hence the need for another category, namely national factors. They probably expanded the environmental factors identified by existing studies into the categories of institutional and national factors (Heng et al, 2020). Heng et al, (2020) adopted Altbach's (2003) idea that macro-level factors, such as government, industries, and donor agencies, support national factors that influence the work engagement of tertiary education staff.

According to Heng et al, (2020), personal factors include age, gender, academic rank, research knowledge, and skills. Institutional factors are the institutional mission, the size of the institution, its orientation, its leadership, availability of resources, rewards, mentorship programmes, and the institutional culture.

2.4.1 Individual/personal factors

Individual factors are the conditions, strategies, and constructs influencing an individual's level of work engagement (Heng et al, 2020). These conditions, strategies, and constructs are assumed to be fundamental for enhancing employee engagement (Hee et al, 2020). Kwick (2016) contends that individual characteristics have a considerable effect on tertiary employees' work engagement. The factors include demographic characteristics that include age, gender, employment status, and employment category, as well as psychological, professional, and attitudinal characteristics.

2.4.1.1 Age

Of the various demographic variables, age has received attention as a factor influencing work engagement. Studies conducted by Alam et al, (2022), Haley et al, (2013), and Simpson (2009) found that employees of different age groups displayed different levels of work engagement. Haley et al.'s (2013) South African study found that older employees scored higher on the dedication variable of work engagement. Studies conducted by Alam et al, (2022) and Zeng et al., (2019) found similar results to Haley et al.'s (2013) study. The assumption by Geldenhuys and Henn (2017) is that older employees were more engaged at work because they were more likely to have full-grown adult children, which allowed them to direct all their attention to their jobs.

2.4.1.2 Gender

Employee gender also influences work engagement. However, related studies on gender and work engagement have yielded contradictory results. Banihani et al., (2013) and Tshilongamulenzhe and Takawira (2015) found that men and women showed equal levels of work engagement. A study by Crompton et al., (2007) found gender differences in work engagement. According to Crompton et al, (2007), women are more likely than men to take care of families, which would limit their availability for work. The unavailability of women for work is normally construed as lack of work engagement (Crompton et al, 2007). The findings by Crompton et al, (2007) are similar to Schaufeli et al.'s (2006) finding that South African and Canadian women's work engagement levels differ. A study by Gulzar and Teli (2018) at a tertiary institution in South Africa found contradictory results, namely that female employees were more engaged than their male counterparts.

2.4.1.3 Marital status

Another demographic variable that influences work engagement is marital status. Research findings by Othman et al, (2019) reveal that married employees were more engaged than their single counterparts. In a similar study, Mokhine (2020) found that employees with partners were more engaged than single employees. Studies carried out by Burke et al, (2013) and Kim et al, (2009) found no significant correlation between marital status and engagement.

2.4.2 Institutional factors

Heng et al., (2020) define institutional factors as the work environment constructs, strategies, and conditions at an organisation's structural, or systematic, level. Work environment describes the setting, situation, and environment in which employees work (Hee et al, 2020). The institutional constructs, strategies, and conditions that enable work engagement include availability of resources and funds, institutional orientation, institutional regulations and policies, institutional culture, reward and incentive systems, leadership styles, and teaching loads (Tien, 2016). Agbionu et al, (2018) and Hee et al, (2020) state that tertiary education staff require a conducive environment for teaching and research, such as an e-library and access to restricted published research content, to enhance teaching and learning. Such an environment increases their level of work engagement, because academic staff feel proud (a characteristic of work engagement) of their personal and organisational research visibility and ranking (Agbionu et al, 2018). A study conducted by Shin and Cumming (2010) in Saudi Arabia discovered a positive correlation between work engagement and institutional factors, such as leadership support, rewards, and incentives. Negash et al, (2019) found that institutional factors, such as provision of infrastructural facilities, reasonable workloads, and availability of seminars and workshops, were strong predictors of work engagement.

2.4.3 National factors

National factors that influence work engagement in tertiary institutions include collaborative national policies, conducive national politics, government investment, industry support, and development partners and donor agencies (Quimbo & Sulabo, 2014; Sam & Dahles, 2017). According to Heng et al, (2020), donors, such as the World Bank and UNESCO, offer support for individual and institutional research through provision of infrastructure and technical support. It is important to note that research is a main activity in tertiary institutions,

and employees may become engaged when they are provided with enabling factors to increase their research output. A study conducted by Tien (2016) in Vietnam concluded that national factors do influence the work engagement of tertiary staff. Specifically, Tien (2016) found that socio-economic growth and sociocultural factors, such as a culture of respect and recognition of academic freedom, influence work engagement in Vietnam. Similarly, Sam and Dahles (2017) found that national factors such as donor support can predict work engagement. Support from donor agencies such as the World Bank plays a significant role in tertiary education (Sam & Dahles, 2017; Tien, 2016). Sam and Dahles (2017) explain that provision of financial and technical assistance, especially in developing countries, creates a favourable environment and helps to solve major challenges, such as infrastructural issues, thereby facilitating work completion and enhancing work engagement. Table 2.3 summarises the factors influencing work engagement, as discussed above.

Table 0.3
Factors Influencing Work Engagement

Factor	Examples
Individual/personal factors (Bland et al, 2005; Heng et al, 2020; Kwick, 2016; Shin & Cumming, 2010; Teodorescu, 2000)	**Age** Older employees exhibit higher levels of work engagement than younger employees (Alam et al., 2022; Geldenhuys & Henn, 2017; Haley et al, 2013; Zeng et al, 2019). Younger employees are more engaged than older employees (Simpson, 2009). **Gender** There is equal engagement between men and women (Banihani et al, 2013; Tshilongamulenzhe & Takawira, 2015). Men are more engaged than women (Crompton et al., 2007; Schaufeli et al, 2006). Females are more engaged than males (Gulzar & Teli, 2018). **Marital status** Married employees exhibit higher levels of work engagement compared to single employees (Mokhine, 2020; Othman et al, 2019). There is no significant relationship between marital status and work engagement (Burke et al, 2013; Simpson,

	2009).
Institutional/organisational factors (Bland et al., 2005; Heng et al., 2020; Kwick, 2016; Shin & Cumming, 2010; Teodorescu, 2000)	There is a positive relationship between organisational policies (such as those pertaining to fair rewards and incentives), reasonable workloads, and leadership support and work engagement (Alam et al, 2022; Heng et al, 2020). E-library and access to restricted published content (Agbionu et al, 2018; Hee et al., 2020). Provision of infrastructural facilities (Heng et al., 2020; Negash et al., 2019). Availability of seminars (Negash et al, 2019).
National/macro-level factors (Altbach, 2003; Heng et al., 2020)	National politics, e.g., recognition of academic freedom (Quimbo & Sulabo, 2014; Sam & Dahles, 2017). The culture, e.g., a culture of respect and recognition of academic freedom (Quimbo & Sulabo, 2014; Sam & Dahles, 2017; Tien, 2016). Donor support, e.g., from the World Bank and UNESCO (Heng et al, 2020). Government support, e.g., government investment and funding for tertiary activities (Quimbo & Sulabo, 2014; Sam & Dahles, 2017; Tien, 2016). Industry support, e.g., funding (Quimbo & Sulabo, 2014; Sam & Dahles, 2017; Tien, 2016). Development partners, e.g., finance and technical assistance in infrastructural development and research funding (Heng et al, 2020; Quimbo & Sulabo, 2014; Sam & Dahles, 2017; Tien, 2016).

Source: Author's own work

Table 2.3 indicates the factors that influence work engagement in tertiary institutions. On an *individual level*, work engagement is influenced by personal factors, such as age, gender, and marital status. On an *organisational level*, availability of work resources, such as the internet and an e-library, and good policies, such as those pertaining to rewards and promotion, can predict positive work engagement. *National factors*, such as donor support, government investment, and industry support, also influence work engagement. Gifford and Young (2021) assert that a limited understanding of work engagement can disempower

employers or management from taking appropriate and corrective action to enhance employees' work engagement. Thus, the managers of tertiary institutions need to consider the factors discussed above to influence the work engagement of their employees.

2.5 EVALUATION AND SYNTHESIS

Organisations need to be conscious of the challenges bedevilling the work engagement of their staff. It is imperative for the management of tertiary institutions to understand the facilitating conditions for work engagement. This will assist educational managers in designing and implementing a range of strategies that are appropriate for a diverse workforce, so as to increase their engagement levels. Rana and Chopra (2019) argue that employers and organisations need to carefully consider the workforce profile (in terms of age, gender, employment status, and employment category), in order to devise appropriate work engagement initiatives and interventions. There is also a need for organisations to reconcile their work processes, such as job tasks and responsibilities, techniques for doing work tasks, and human resource policies, to enhance employees' level of work engagement.

Organisations require a work engagement model to enhance employees' work engagement levels. The management of tertiary institutions needs to consider work engagement in this sector in order to fully understand employees' patterns of work engagement. This will inform appropriate programmes for developing, nurturing, and maintaining the work engagement of their staff. Considering the demographically diverse workforce found in organisations, a work engagement model that considers differences in workforce demographics may appeal to different groups in terms of age, gender, employment status, and employment category.

2.6 CHAPTER SUMMARY

Chapter 2 addressed the first research aim, which is to conceptualise work engagement within the tertiary education context.

Chapter 3 will address research aim 2, which is to conceptualise perceived organisational justice, the psychological contract, and work engagement and their relationship with socio-demographic variables (age, gender, employment status and employment category). The chapter will discuss the current body of theory and research pertaining to the constructs of organisational justice, the psychological contract, and work engagement comprehensively. It

will fully conceptualise the theoretical correlation among organisational justice, the psychological contract, and work engagement.

CHAPTER 3: PERCEIVED ORGANISATIONAL JUSTICE, THE PSYCHOLOGICAL CONTRACT, AND WORK ENGAGEMENT

This chapter focuses on the second research aim, which is to conceptualise perceived organisational justice, the psychological contract, and work engagement, as well as their relationship with socio-demographic variables (age, gender, employment status and employment category). The research will focus on the theoretical relationships in two phases. It will first look at the relationship between perceived organisational justice and work engagement, as well as the influence of socio-demographic variables (age, gender, employment status and employment category) on the relationship between perceived organisational justice and work engagement of employees. It will then look at the relationship between the psychological contract and work engagement, as well as the influence of socio-demographic variables (age, gender, employment status and employment category) on the correlation between the psychological contract and work engagement of employees.

3.1 CONCEPTUALISATION OF PERCEIVED ORGANISATIONAL JUSTICE

The concept of organisational justice was coined by Greenberg (1987) as a term for describing employees' perceptions of what is fair and what is not fair in the workplace (Deepak, 2021; Nethavani & Maluka, 2020; Omar et al, 2018; Sheeraz et al, 2021). There are different conceptualisations, measures, outcomes, and dimensions of organisational justice (Colquitt, 2001; Cropanzano et al, 2017; Ohiorenoya & Eguavoen, 2019; Omar et al, 2018; Özer et al., 2017; Pan et al, 2018; Pekurinen et al, 2017). The terms "justice" and "fairness" are used interchangeably (Nethavani & Maluka, 2020).

Sheeraz et al, (2021) view organisational justice as a perception that an organisation makes fair decisions, uses fair procedures in making decisions, and interacts fairly with employees. Organisational justice is a personal evaluation of the ethical and moral status of managerial conduct (Ajala, 2015; Cropanzano et al, 2017; Kim et al, 2019). Perceived organisational justice is a situational, individual, or personal perception of fairness in an organisational setting (Colquitt, 2001; Pattnaik & Tripathy, 2019).

The concept of organisational justice is also defined as the perception of workers regarding just and fair behaviour they receive at work (Hiariey & Tutupano, 2020). Organisational justice is an individual perception of the treatment received in an organisation (Ohiorenoya & Eguavoen, 2019; Pan et al, 2018).

The concept of organisational justice is subjective and socially constructed (Folge & Cropanzano, 1998; Ohiorenoya & Eguavoen, 2019; Sahni et al, 2018). Folge and Cropanzano (1998), Ohiorenoya and Eguavoen (2019), and Sahni et al, (2018) explain that this is because people (employees) have different views on what is just and what is unjust. Employees are an integral part of the organisational system (Sahni et al, 2018). Thus, they constantly review organisational processes, procedures, policies, interactions, or outcomes (Cropanzano et al, 2017; Folge & Cropanzano, 1998). It is clear that review of these policies, procedures, processes, interactions, or outcomes creates a perception of those processes or outcomes as fair or unfair, just or unjust, hence the term "perceived organisational justice" (Ohiorenoya & Eguavoen, 2019; Sahni et al, 2018).

Perceived organisational justice is a neglected concept in tertiary education, despite its importance in influencing various behavioural outcomes (such as work engagement) in the workplace (Colquitt, 2001; Deconinck, 2010; El Alfy & David, 2017; Hiariey & Tutupano, 2020; Pan et al, 2018; Pekurinen et al, 2017). Nethavani and Maluka (2020) confirm that tertiary institutions in South Africa have not mastered the concept of organisational justice, as they continue to give employees the same treatment, which they perceive to be fair.

3.1.1 Components of organisational justice

The literature has diverging views on the components of organisational justice (Ajala, 2015; Colquitt, 2001; Cropanzano et al, 2017; Folge & Cropanzano, 1998; Pan et al, 2018; Pekurinen et al, 2017). According to Moorman (1991), organisational justice is a single-factor concept consisting of distributive justice. Thibaut and Walker (1975) devised a two-factor model of organisational justice by introducing procedural justice. The two-factor model is supported by Tyler and Bies (1990), who, likewise, view organisational justice as a concept comprising distributive and procedural justice (Pan et al, 2018). Bies and Moag (1986) extended the model to three factors, by including an internal/relational dimension (Pan et al., 2018). Skarlick and Latham (1997), likewise, view organisational justice as a three-factor concept, consisting of distributive, procedural, and interactive justice (Colquitt, 2001). Colquitt (2001) and Cropanzano et al, (2017) explain that the interactive dimension found in the three-factor conceptualisation merges the interpersonal and informational dimensions, which are found in Colquitt's (2001) four dimensions of organisational justice. El Alfy and David (2017) and Hiariey and Tutupano (2020) note that contemporary organisational justice has developed from the historical dimensions of organisational justice, by diverging from a unidimensional construct to a four-dimensional construct, as explained above. However,

Zayer and Benabdelhadi (2020) propose an overall justice conceptualisation, which is a global view of justice based on the overall experience of treatment received by employees in the workplace. Zayer and Benabdelhadi (2020) justify the overall justice perspective by saying that in real organisational life, employees are not concerned with a particular type of justice (i.e., distributive, procedural, interpersonal, or informational justice), but with how the authorities treat them overall. Table 3.1 summarises the approaches to organisational justice.

Table 3.1
Approaches to Organisational Justice

Dimensions	Constructs	Source
Single dimension	Distributive justice	Greenberg (1990)
Two dimensions	Distributive and procedural justice	Thibaut and Walker (1975)
Three dimensions	Distributive, procedural, and interactional justice	Bies and Moag (1986)
Four dimensions	Distributive, procedural, interpersonal, and informational justice	Colquitt (2001)
Overall dimension	Overall justice	Zayer and Benabdelhadi (2020)

Source: Author's own work

This study has adopted Colquitt's (2001) four-dimensional approach to organisational justice, because of its ability to distinguish and uncover the differences between the dimensions of organisational justice (Colquitt, 2001; Pan et al, 2018; Pattnaik & Tripathy, 2019). Colquitt's (2001) approach has four different dimensions, which are linked to different outcomes. His four dimensions of organisational justice are distributive, procedural, interpersonal, and informational justice (Colquitt, 2001).

3.2 THEORETICAL FRAMEWORK FOR PERCEIVED ORGANISATIONAL JUSTICE

Researchers unanimously agree that social exchange theory (Blau, 1964) and equity theory (Adams, 1965) are the main theoretical foundations appropriate for explaining perceptions of organisational justice or injustice (Aslam et al, 2020; Colquitt, 2001; Deepak, 2021; Nethavani & Maluka, 2020; Pattnaik & Tripathy, 2019; Rahmah, 2020; Zayer &

Benabdelhadi, 2020). Social exchange theory is important for understanding behaviour of employees in relation to reciprocal justice or fairness (Colquitt, 2001; Nethavani & Maluka, 2020; Zayer & Benabdelhadi, 2020). Equity theory (Adams, 1965) provides useful insights into the importance of fairness perceptions in an organisation (Nethavani & Maluka, 2020; Ryan, 2016).

3.2.1 Social exchange theory (Blau, 1964)

Social exchange theory assumes that there are exchange interactions between an organisation and employees (Nethavani & Maluka, 2020). The exchange interactions result in economic (financial rewards) or social (non-financial rewards) outcomes (Nethavani & Maluka, 2020; Ryan, 2016). According to Blau (1964), employees compare their contribution and work outcomes with other employees' contribution and outcomes, to determine if there is a balance (justice) or an imbalance (injustice). It is from this perspective that the distributive justice dimension was introduced as a single-factor approach to organisational justice, from which other forms of organisational justice were derived (El Alfy & David, 2017; Moorman, 1991; Pattnaik & Tripathy, 2019).

Kim et al., (2019), Nethavani and Maluka (2020), Pan et al, (2018), and Zayer and Benabdelhadi (2020) explain that employees act in accordance with what they perceive and receive. Zayer and Benabdelhadi (2020) assert that when employees are surrounded by fair organisational systems, such as fairness in the allocation of workloads, remuneration, and promotion, they believe that they are obliged to make a quid pro quo with positive behaviours, such as work engagement. Social exchange theory holds that employees perceive organisational justice when they receive fair treatment from the authorities of the organisation, and they perceive injustice when treated unfairly (Cropanzano et al, 2017; Nethavani & Maluka, 2020; Shkoler & Tziner, 2017).

3.2.2 Equity theory (Adams, 1965)

Adams' (1965) equity theory suggests that employees expect to receive rewards that are proportionate to their contribution, in a social exchange process (Colquitt, 2001; El Alfy & David, 2017; Hiariey & Tutupano, 2020; Nethavani & Maluka, 2020; Zayer & Benabdelhadi, 2020). In relation to the work environment, Adams' (1965) equity theory focuses on the social comparisons that employees make between the inputs they contribute (effort, performance, loyalty, responsibilities, and skills) and the outputs they receive (rewards, benefits, and promotion opportunities) (Adams, 1965; Pan et al, 2018; Zayer &

Benabdelhadi, 2020). Equity theory also states that employees have "referent others", or "comparison others", that they refer to when comparing their input and output ratio (Adams, 1965; Kim et al, 2019; Nethavani & Maluka, 2020; Pan et al, 2018; Swalhi et al, 2017). Colquitt (2001), Nethavani and Maluka (2020), Pattnaik and Tripathy (2019), and Zayer and Benabdelhadi (2020) explain that the comparisons between referent others' input and output ratio and an employee's input and output ratio form the basis of the employee's perception of whether there is equity or inequity.

According to Adams (1965), Colquitt (2001), Greenberg (1990), Nethavani and Maluka (2020), and Zayer and Benabdelhadi (2020), if the input and output ratios are equal, employees develop equitable feelings and thereby perceive organisational justice to be present. Thus, employees will develop or maintain positive behaviours, such as work engagement (Cropanzano et al, 2017; Schaufeli & Salanova, 2007). Equity theory states that when employees perceive a dissimilarity between their input and output ratio and that of others, they will experience feelings of inequity and will perceive justice as absent, thereby developing negative behaviours, such as disengagement (Gifford & Young, 2021).

The theoretical model on which the adopted definition of organisational justice is based is discussed in the following section.

3.2.3 Colquitt's (2001) four dimensions of organisational justice

This section discusses Colquitt's (2001) organisational justice dimensions, which are distributive, procedural, interpersonal, and informational justice.

3.2.3.1 Distributive justice

Colquitt and Rodell (2015) claim that distributive justice is the original conceptualisation of organisational justice. Distributive justice is perceptions of fairness in relation to distribution of outcomes, such as salary, promotions, and rewards (Omar et al, 2018; Sheeraz et al, 2021). The dimension of distributive justice specifically focuses on the degree to which outcomes are equitable, as well as individual satisfaction with the results, or outcomes (Colquitt & Rodell, 2015; Greenberg, 1990; Pan et al, 2018). Omar et al, (2018) explain that in the distributive justice dimension, involved parties in an exchange expect profits that are proportionate to the investment they perceive to have made, and distributive justice is perceived when profits meet expectations. Raja et al, (2018) and Sheeraz et al, (2021) found

that of the four dimensions of organisational justice, distributive justice is more significant in developing countries (such as Zimbabwe).

3.2.3.2 Procedural justice

Procedural justice refers to an employee's perceptions of fairness in relation to the means, mechanisms, and processes used in the distribution of benefits and rewards (Leventhal, 1980; Omar et al, 2018; Pattnaik & Tripathy, 2019). According to Swalhi et al, (2017), procedures are vital in the regulation of resource allocation, by stating the methods, mechanisms, and processes to be used. Colquitt and Rodell (2015), Colquitt (2001), and Omar et al, (2018) assert that authorities are expected to follow a certain code of conduct and to stick to the expected standards in the allocation of outcomes. Leventhal (1980) and Thibaut and Walker (1975) state that the conditions for procedural justice to take place are consistency, unbiasedness, accurate information, ability to correct flawed information, use of ethical procedures, and representation of the voices of all groups. Leventhal (1980) asserts that procedural justice has minimal influence on outcomes (such as work engagement), as it matters most to individuals receiving unfavourable outcomes. However, Sheeraz et al, (2021) argue that procedural justice is very important, as fair procedures satisfy employees, even when the distribution does not.

3.2.3.3 Interpersonal justice

Greenberg (1990), Omar et al, (2018), and Pattnaik and Tripathy (2019) view the dimension of interpersonal justice as the social aspect of the distributive justice component. The interpersonal justice dimension show the extent to which authority exercise dignity, respect, and politeness when implementing procedures and deciding outcomes (Omar et al, 2018; Özer et al, 2017; Pattnaik & Tripathy, 2019; Swalhi et al, 2017).

3.2.3.4 Informational justice

Greenberg (1990), Omar et al, (2018), and Pattnaik and Tripathy (2019) view the informational justice dimension as the social side of procedural justice. Informational justice focuses on truthfulness and information adequacy, as well as explanations provided to employees on the distribution of outcomes (Colquitt & Rodell, 2015; Greenberg, 1990; Özer et al, 2017; Pattnaik & Tripathy, 2019). It also reflects the timeliness of information provided by supervisors to employees on the implementation of procedures that result in the

distributive outcome. The aim of informational justice is to communicate the reasons why procedures are implemented or why resources are determined in a particular way (Özer et al., 2017). Table 3.2 summarises Colquitt's (2001) four dimensions of organisational justice.

Table 3.2
Colquitt's Four Dimensions of Organisational Justice

Dimension	Content
Distributive justice	Fairness, equity in distribution of salaries, promotions, and workloads.
Procedural justice	Ethical standards in resource allocation, employee representation, use of appropriate methods and processes for determining reward outcomes, promotions, and workloads.
Interpersonal justice	Dignity, respect, and politeness.
Informational justice	Truth, information adequacy, and timeliness of communication.

Source: Author's own work

It has been noted that organisational justice is an individual perception. Perceived organisational justice has its foundations in social exchange theory (Aslam et al, 2020; Colquitt, 2001; Deepak, 2021) and equity theory (Colquitt, 2001; Zayer & Benabdelhadi, 2020). The concept has many dimensions, and fairness should therefore be considered in all the facets. This includes distributive, procedural, interpersonal, and informational justice.

3.3 RELATIONSHIP BETWEEN PERCEIVED ORGANISATIONAL JUSTICE AND WORK ENGAGEMENT

Many studies conducted on perceived organisational justice and work engagement indicate that organisational justice influences work engagement (Ghosh et al, 2014; Inoue et al., 2010; Law, 2014; Ledimo & Hlongwane, 2013; Nethavani & Maluka, 2020; Özer et al, 2017; Pakpahan et al., 2020; Panatik et al, 2017; Peters, 2018; Rodriguez et al, 2014; Saks, 2006; Strom et al, 2013; Tessema, 2014). The view that perceived organisational justice and work engagement are strongly related is supported by Moorman (1991), Omar et al, (2018), and Pattnaik and Tripathy (2019), who assert that employees' perceptions of justice can influence their level of work engagement, while perceptions of injustice can result in lower levels of work engagement. This is confirmed by Argawal (2014) and Rodriguez et al, (2014). According to Argawal (2014), employees` perceptions of justice have affect their

level of work engagement. Rodriguez et al, (2014) assert that work engagement increases when there is fair treatment of employees. Peters (2018) asserts that employees are more likely to feel obligated to be fair when doing their work if they perceive fairness thereby increasing their work engagement levels.

Pakpahan et al.`s (2020) findings on the correlation between organisational justice and work engagement reveal that all the perceived organisational justice dimensions (distributive, procedural, interpersonal, and informational justice) were strongly related to work engagement. The findings of Pakpahan et al, (2020) are similar to those of Özer et al, (2017) and Tessema (2014) in similar studies. Research conducted by Koodamara and Sashidhir (2019), likewise, found that there was a direct relationship among the organisational justice dimensions (distributive, procedural, interpersonal, and informational justice) and work engagement in an Indian organisation.

The findings of research conducted by Ohiorenoya and Eguavoen (2019) in tertiary institutions in Edo State, Nigeria indicate that each of the dimensions of organisational justice influenced the work engagement of employees. Ohiorenoya and Eguavoen (2019) found that the work engagement of employees in Edo State tertiary institutions was very low. The findings by Ohiorenoya and Eguavoen (2019) confirm the findings of similar research conducted by Aslam et al, (2020) and Nethavani and Maluka (2020) in tertiary institutions. Ohiorenoya and Eguavoen (2019) found that tertiary institutions in Edo State did not observe fairness, that there was gross laxity, and that organisational justice was still far from a reality. Employees in Edo State tertiary institutions perceived all the dimensions of organisational justice to be very low and negative (Ohiorenoya & Eguavoen, 2019). Ohiorenoya and Eguavoen (2019) report that distribution of rewards by management in Edo State tertiary institutions was not in relation to employees' workloads and qualifications.

Nethavani and Maluka (2020) found that a relationship exists between organisational justice and work engagement of academic employees at a selected tertiary institution. Employees` work engagement levels were very low (Nethavani & Maluka, 2020). It is suggested that the reasons for such low levels of work engagement were inconsistencies in the application of human resource policies and procedures for employees, overdue promotions, failure by management to master the concept of organisational justice, and continually giving employees similar treatment that management perceived as fair (Aslam et al, 2020; Nethavani & Maluka, 2020; Ohiorenoya & Eguavoen, 2019). The findings by Aslam et al., (2020), Nethavani and Maluka (2020), and Ohiorenoya and Eguavoen (2019) are similar to those of Ghosh et al, (2017). Ghosh et al 's (2017) study on organisational justice and work

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engagement of employees employed at Indian banks found that all the dimensions of organisational justice had an influence on work engagement.

The literature has mixed findings on the relationship between organisational justice and work engagement (Ghosh et al, 2014; Law, 2014; Özer et al, 2017; Panatik et al, 2017). Research findings by Law (2014) on the relationship between organisational justice and work engagement show that the distributive justice dimension was more strongly related to work engagement than the other organisational justice dimensions. This finding is consistent with that of Ghosh et al, (2014), namely that distributive justice played a major role in determining work engagement levels, followed by the procedural and interactional justice dimensions, respectively. The findings by Ghosh et al, (2014) and Law (2014) diverge from those of Panatik et al, (2017), namely that the distributive justice dimension was not related to any dimensions of work engagement.

A study conducted by Özer et al, (2017) on the relationship between perceived organisational justice and work engagement of healthcare employees in Turkey found that procedural justice had the most significant effect, followed by distributive and interactional justice (the informational and interpersonal dimensions), respectively. However, a similar study conducted by Sze and Angeline (2011) revealed that distributive justice had a stronger relationship with work engagement than did other dimensions of organisational justice.

Another study, by Saks (2006), on the relationship between organisational justice and work-related learning, indicates that the procedural justice and distributive justice dimensions were more related to work engagement than the interpersonal justice and informational justice dimensions were. The findings by Saks (2006) confirm those of Strom et al, (2013) in a similar study.

The research findings by Saks (2006) and Strom et al, (2013) contradict those of Inoue et al. (2010), namely that the interactive justice dimension (informational and interpersonal justice) had a stronger relationship with work engagement than the distributive and procedural justice dimensions did. Koodamara and Sashidhir (2019), likewise, found that the interactional justice (interpersonal and informational justice) dimension was more strongly related to work engagement than were the procedural and distributive justice dimensions.

Research conducted by Panatik et al, (2017) on the effect of organisational justice on work engagement levels of female engineers in Malaysia found that procedural justice had a more significant relationship with work engagement than did other dimensions of organisational

justice. In the same study, Panatik et al, (2017) found that the interactional justice dimension was only related to the vigour and dedication dimensions of work engagement. Ohiorenoya and Eguavoen (2019) found that procedural justice had a strong relationship with work engagement among the employees of Edo State tertiary institutions. These findings are similar to those of Özer et al, (2017), namely that procedural justice had a stronger relationship with work engagement of bank employees in India than did other dimensions of organisational justice.

3.4 THE INFLUENCE OF SOCIO-DEMOGRAPHIC VARIABLES (AGE, GENDER, EMPLOYMENT STATUS AND EMPLOYMENT CATEGORY) ON PERCEIVED ORGANISATIONAL JUSTICE

This section discusses the impact of socio-demographic variables (age, gender, employment status and employment category) on the perceived organisational justice of a diverse employee profile.

3.4.1 Age

A study conducted by Butitova (2019) on the perceptions of organisational justice among government employees in the Midwest found that age did not have a statistically significant effect on perceived organisational justice. The findings by Butitova (2019) imply that age did not influence employees' perceptions of organisational justice. Butitova's (2019) findings diverge from Brienza and Bobocel's (2017) findings in a similar study on the impact of age on organisational justice. Brienza and Bobocel (2017) found that there was a strong relationship between age and perceived organisational justice. Older employees were more sensitive to the informational and interpersonal justice dimensions, while younger employees were more sensitive to the distributive and procedural justice dimensions (Brienza & Bobocel, 2017). The findings from the related studies mentioned suggest that age is related to organisational justice. Although employees may have different perceptions of the different dimensions of organisational justice, fairness is fundamental for all age groups.

3.4.2 Gender

Gender has an influence on the relationship between perceived organisational justice and work engagement. Butitova (2019) reports that male employees perceived their workplace as unfair compared to female employees. Gifford and Young (2021) suggest that employees

who experience feelings of injustice develop negative behaviour, such as disengagement. This implies that male employees perceived organisational injustice and had decreased work engagement levels compared to female employees, as they perceived organisational injustice. A study conducted by El Alfy and David (2017) on the perceptions of organisational justice in UAE higher education institutions reveals that male employees perceived organisational justice positively and displayed positive organisational behaviours (such as work engagement) compared to female employees. The findings of El Alfy and David (2017) differ from those of Deepak (2021) on the perceptions of organisational justice of Bangalorean women. Deepak's (2021) study reveals that women perceived organisational justice as fair compared to men. Women perceived organisational justice as fair in the distributive, interpersonal, and informational dimensions of organisational justice (Deepak, 2021). It is suggested that women perceived unfair organisational justice in the procedural justice dimension due to discrimination based on gender characteristics rather than job characteristics, which resulted in gender discrimination against women (Deepak, 2021).

3.4.3 Employment status

Butitova (2019) found that employees who occupied higher-level posts with higher salaries perceived organisational justice positively and reported higher levels of work engagement than employees in lower job grades. Furthermore, Butitova (2019) states that long-term experience and service (such as permanent employment status) negatively affects employees' perceptions of organisational justice, which may result in a decreased level of work engagement. Butitova (2019) mentions that such employees tend to accept the status quo if they believe that it cannot be changed, but that they decrease their level of work engagement. This indicates that the variable of employment status does have an influence on the relationship between organisational justice and work engagement. The research findings of Butitova (2019) diverge from those of El Alfy and David (2017) on perceptions of organisational justice of employees in UAE higher education institutions.

3.4.4 Employment category

El Alfy and David (2017) found that employees who occupied higher academic ranks (such as academic employees) had a lower perception of organisational justice and reported negative organisational behaviours (such as work engagement) compared to other employees (such as non-academic employees), who reported positive organisational behaviours (such as work engagement). El Alfy and David's (2017) findings are similar to

those of Nethavani and Maluka (2020). Nethavani and Maluka (2020) confirm that employment category does have an influence on organisational justice. Employees in tertiary institutions with a higher rank category, particularly academic employees, perceived organisational justice as unfair, while lower-rank employees (such as non-academics) perceived organisational justice as fair.

The contradictory findings on the influence of socio-demographic variables (age, gender, employment status and employment category) on perceived organisational justice, mentioned above, indicate that employees (regardless of their age, gender, race, or employment status) differ in the organisational justice dimensions to which they are sensitive. This implies that management in organisations needs to understand the different organisational justice perceptions of the different socio-demographic groups among its employees, in order to manage organisational justice.

3.5 CONCEPTUALISATION OF THE PSYCHOLOGICAL CONTRACT

The principle of the psychological contract was coined and developed by Argyris (1960) and Schein (1965). It was later reconceptualised by Rousseau (1989) and continues to have a considerable influence on contemporary writing on the psychological contract (Alcover et al., 2017; Freese & Schalk, 1996; Gresse & Linde, 2020; Linde & Gresse, 2014; Ling & Zhongwu, 2021).

The first definition of the psychological contract, by Argyris (1960), conceptualises a psychological contract simply as an implicit understanding between an employee and an employer. Another conceptualisation, offered by Schein (1965), defines a psychological contract as a variety of expectations between the organisation and employees. Such expectations are not written into a formal agreement, yet they operate powerfully as determinants of behaviour.

A reconceptualisation, by Rousseau (1995), views the psychological contract as a set of individual beliefs of a person in relation to the reciprocal obligations and benefits established in a relationship of exchanges between the employee and the employer. Jepsen and Rodwell (2006) view Rousseau's (1995) definition as a two-dimensional construct that defines the psychological contract in terms of perceptions and obligations that are transactional or relational. Rousseau et al., (2013) contextualise the psychological contract as individual-level cognitive structures that reflect people's view about their exchange

relations. Another contextualisation, by Thompson and Bunderson (2003) and O'Donohue and Grimmer (2007), views the psychological contract as a three-dimensional construct. Thompson and Bunderson (2003) and O'Donohue and Grimmer (2007) extend Rousseau's (1995) definition by suggesting shared ideologies as another important aspect of the psychological contract that shapes employment relationships in the 21st century. O'Donohue and Grimmer (2007) assert that besides transactional and relational aspects, employees want organisations that share their ideologies. According to Beyer (1981), an ideology is a set of beliefs that bind people together and explain their worlds in terms of cause-and-effect relationships. This implies that employees want to understand meaning and to see how they fit in the organisation. Guest (1998), Guest and Conway (2002), Guest (2004), and Guest et al, (2010) define the psychological contract as the perception of both parties on the exchange of implicit promises and obligations in an employment relationship.

Rousseau's (1995, 1998) definitions have limitations in their description of the psychological contract, as they restrict it to promises and obligations (Freese & Schalk, 2008; Guest, 2004; Jepsen & Rodwell, 2006). Freese and Schalk (2008), Guest (2004), and Jepsen and Rodwell (2006) propose an extension of Rousseau's (1995) definition to accommodate evaluation of the state of the psychological contract in the conceptualisation. Although the psychological contract refers to a set of reciprocal promises and obligations, as elucidated by Rousseau (1995), evaluating the state of the psychological contract (to check on the fulfillment of obligations and promises, their fairness and trust implications) renders the concept of the psychological contract more explanatory, thereby enabling the prediction of diverse variables related to employee behaviours or attitudes that include work engagement (Freese & Schalk, 2008; Guest & Conway, 2002; Guest et al, 2010).

Ling and Zhongwu (2021) assert that a psychological contract is additional to the provisions of the written employment contract, which has various implicit, informal, and unstated mutual understandings and expectations between an employee and an employer. Psychological contracts are dynamic; when formed, they tend to become stable (Rousseau, 2012). However, Gresse and Linde (2020) and Rousseau et al, (2013) note that psychological contracts can be altered based on the circumstances (such as unexpected promotions or demotions), which lead to new beliefs.

The researcher adopted Guest (1998, 2004), Guest and Conway (2002), Guest et al, (2010), and Rousseau's (1990, 1995) definitions of the psychological contract. Considering the limitations of Rousseau's (1995) definition, Guest (1998, 2004), Guest and Conway (2002), and Guest et al's (2010) definitions compensate for the limitations by giving an impression

that the psychological contract encompasses reciprocal promises and obligations and the overall state of the psychological contract in an exchange relationship.

The psychological contract influences how individuals feel, think, and behave in organisations, which implies that it provides a basis for coordination and cooperation between employees and the organisation (Gresse & Linde, 2020; Rousseau, 1989, 2000; Rousseau et al, 2013). The obligations held by either party in the psychological contract influence employees' judgements and behaviour, through anticipation of the future of the exchange (Gresse & Linde, 2020). The motivation for a psychological contract is to satisfy the psychological needs of employees, so that they increase performance through the enhancement of positive work behaviour (such as work engagement) (Ling & Zhongwu, 2021).

3.5.1 Formation of the psychological contract

The consensus is that individual beliefs regarding the psychological contract are formed in the recruitment and socialisation process, when an employee enters the organisation (Gresse & Linde, 2020; Rousseau, 1998). Although organisational entry is the critical stage, it is important to know that formation of the psychological contract starts with anticipatory and rudimentary psychological contracts (Gresse & Linde, 2020).

3.5.1.1 Anticipatory psychological contract

Bruins (2019), Linde and Gresse (2014), and Ruchika and Prasad (2020) view the anticipatory psychological contract as the provisional beliefs, expectations, and perceptions held by individuals on future employment. The anticipatory psychological contract is developed during adolescence through socialisation agents, such as family, friends, media, peers, school, and work contacts (Gresse & Linde, 2020). It plays a great role in developing the exchange relationship between the employer and the employee in an organisation.

3.5.1.2 Rudimentary psychological contract

A rudimentary psychological contract is an established set of implicit expectations and obligations held upon organisational entry by a newcomer (Gresse & Linde, 2020). It is based on expectations of unspecified rights and obligations that are formed throughout one's professional career (De Vos et al, 2005; Gresse & Linde, 2020).

An understanding of anticipatory and rudimentary psychological contracts is important, as the combination of social aspects, individual perceptions, and employment beliefs forms a loose foundation for the future psychological contract formation process in an employment relationship (Gresse & Linde, 2020; Rousseau, 2000). This view by Gresse and Linde (2020) is supported by De Vos et al, (2005), who suggest that beliefs and expectations by employees when they join an organisation are not based on the actual contract but rather on social, normative, and implicit contract sources.

3.6 THEORETICAL FRAMEWORK FOR THE PSYCHOLOGICAL CONTRACT

There are various theories that offers foundation for the concept of psychological contract. Gresse and Linde (2020) suggest schema theory and psychological contract theory as the major theoretical basis for the psychological contract. Yuexin and Hui (2020) and Zhunang and Hui (2019) argue that equity theory and social exchange theory in related studies are the theoretical basis for the psychological contract. The researcher acknowledges various views but chooses schema theory and social exchange theory, as supported in the discussions that follow in this section.

3.6.1 Schema theory (Rumelhart, 1980)

Schema theory is implied in Rousseau's (1990) reconceptualisation of the psychological contract (Gresse & Linde, 2020).

According to Rousseau (2000), psychological contracts result from cognitive schemas. A cognitive schema helps an individual with coping in order to understand their experiences (Rumelhart, 1980). Schema theory is appropriate because it offers a theoretical lens which assists in the evaluation of how the psychological contract works and how information forms obligations and expectations among the parties to an employment relationship (Alcover et al., 2017).

Alcover et al, (2017) and Gresse and Linde (2020) explain that schemas develop at an early stage of an individual's life, when they learn the general values of mutuality, quid pro quo rules, and appropriate rewards for exerted effort. Mental schemas are further influenced, changed, or revised during the socialisation stage by family, school, and peers before organisational entry (Gresse & Linde, 2020). De Vos et al, (2005) argue that an individual's

mental schemas influence the nature of their psychological contract and also determine the degree that their expectations match the actual exchange relationship in their employment. Gresse and Linde (2020) assume that individuals can develop mental schemas even if they do not have any employment history. The challenge that can arise from established schemas is that individuals may construct a naïve and imperfect schema when they enter an organisation.

3.6.2 Social exchange theory (Blau, 1964)

Social exchange theory is based on the principle of reciprocity (Gardner et al, 2020; Gouldner, 1960). It has been dominant in underpinning research on the psychological contract, due to its intuitive appeal to reciprocation and mutual obligations (Folge & Cropanzano, 1998; Gardner et al., 2020; Handy et al, 2020). The main critical aspects in a psychological contract are mutual obligations, which depend on another person`s actions (Cropanzano et al, 2017; Cropanzano & Mitchell, 2005; Gardner et al., 2020; Handy et al, 2020). Social exchange theory encompass a range of reciprocal exchanges that create obligations between parties in an exchange (Cropanzano & Mitchell, 2005; Gardner et al., 2020). Thus, social exchange theory is appropriate for this study, as it provides a framework through which psychological contracts can be explained (Handy et al, 2020). The choice of social exchange theory is also based on the fact that it is the most influential theory for understanding work behaviours, such as work engagement (Cropanzano & Mitchell, 2005).

This theory assumes that there are two parties in an exchange relationship (Blau, 1964; Cropanzano & Mitchell, 2005; Gardner et al, 2020; Storm & Rothmann, 2003). The two parties in an exchange relationship have obligations towards each other and are obliged to reciprocate the actions of the other party (Blau, 1964; Deas, 2017; Gardner et al, 2020; Rayton & Yalabik, 2014). In an employment relationship, employees are expected to fulfil certain obligations, such as loyalty and performance, in exchange for inducements provided by the employer, such as financial rewards, training, and benefits (Garcia et al, 2021; Gardner et al., 2020; Rayton & Yalabik, 2014). Social exchange theory states that employees exhibit positive attitudes and behaviours, such as work engagement, if they perceive the organisation`s fulfilment of its obligations to them (Cropanzano & Mitchell, 2005; Handy et al, 2020; Rousseau, 2000). Conversely, employees will develop or exhibit negative attitudes or behaviours, such as disengagement, if they perceive that the organisation has not fulfilled its obligations to them (Cropanzano et al, 2017; Cropanzano & Mitchell, 2005; Garcia et al, 2021; Gresse & Linde, 2020; Handy et al, 2020).

3.6.3 Psychological contract theory (Rousseau, 1989)

Psychological contract theory is rooted in psychological principles and is influenced by the reciprocity principle of social exchange (Garcia et al, 2021; Hansen et al, 2013; Rousseau, 1995). According to Hansen et al, (2013), individuals hold an individual-level cognitive structure that reflects their thoughts about the obligations that exist between themselves and another party in an exchange relationship. In an organisational setup, parties in an employment relationship (the employer and the employee) hold perceived reciprocal obligations (Cooke et al, 2020; Garcia et al, 2021; Hansen et al, 2013; Kutaula et al, 2020; Rousseau, 1995). The perceived obligations existing between the employment relationship parties affect their feelings, attitudes, judgements, and behaviours towards each other (Hansen et al., 2013).

This theory emphasises the importance of an individual's beliefs regarding mutual obligations to the organisation (Gresse & Linde, 2020; Rousseau, 1990, 1995). According to Gresse and Linde (2020) and Hicks and Monroy-Paz (2015), employee perceptions that psychological contract obligations have been met result in favourable work outcomes that include trust, loyalty, and work engagement. Employees may develop negative work behaviours when they perceive a breach or a violation of the psychological contract (Garcia et al, 2021; Rousseau, 2000).

The theoretical model on which the definitions of the psychological contract are based is discussed in the following section, as summarised in Table 3.3.

Table 3.3
Psychological Contract Components

Characteristic	Components	Source(s)
Types of psychological contracts	• Transactional contracts • Relational contracts • Transitional contracts • Balanced contracts	(Ling & Zhongwu, 2021; Rousseau, 1989, 2012)
Content of the psychological contract	• Employer obligations • Employee obligations	(Rousseau, 1989, 1990)
State of the psychological contract	• Breach • Violation • Fulfilment (satisfaction with the psychological contract)	(Guest, 2004; Guest & Conway, 2002; Opolot & Maket, 2020)

 Source: Author's own work

3.7 TYPES OF PSYCHOLOGICAL CONTRACTS

There are four types of psychological contracts, namely transactional, relational, transitional, and balanced contracts (Rousseau, 1989, 2012; Savarimuth & Jerena, 2017), which are discussed below.

3.7.1 Transactional psychological contracts

Transactional contracts are short-term exchanges of employment agreements that exist for a short period of time (Blau, 1964; Ling & Zhongwu, 2021; Rousseau, 1989). Blau (1964), Ling and Zhongwu (2021), Rousseau (1989), and Savarimuth and Jerena (2017) explain that employees who hold transactional contracts focus on economic and monetary aspects, such as pay and benefits. Employees who hold a transactional psychological contract view their workplace just as a place to do their work, such that they invest little emotional attachment and commitment to the organisation (Savarimuth & Jerena, 2017).

3.7.2 Relational psychological contracts

The relational psychological contract refers to employee perceptions of a long-term stable relationship with the organisation (Ling & Zhongwu, 2021; Rousseau, 2000). Relational

contracts focus on both social and economic exchanges (Rousseau, 2012; Savarimuth & Jerena, 2017). They are built on trust, and they embrace long-term employment, which means that they exist for a long period of time (Ling & Zhongwu, 2021; Yuexin & Hui, 2020; Zhunang & Hui, 2019).

3.7.3 Transitional psychological contracts

Transitional psychological contracts are mutual cognitive perceptions of the relationship between employer and employee that develop as a result of the consequences of organisational changes, or transitions (Ma & Cheng, 2021). The organisational changes, or transitions, are normally at odds with previously established employment arrangements (Ma & Cheng, 2021). According to Rousseau (2000), transitional contracts are characterised by mistrust and uncertainty between employer and employee, as well as an erosion of or decline in employee returns from the contribution made. Blau (1964) and Savarimuth and Jerena (2017) assert that transitional contracts present no commitment from either party. This means that a transitional contract does not constitute a true psychological contract.

3.7.4 Balanced psychological contracts

Balanced psychological contracts confirm the agreements between an employee and the organisation on long-term and specific performance agreements (Rousseau, 1998; Savarimuth & Jerena, 2017). Blau (1964), Hui et al, (2004), Rousseau (1989), and Savarimuth and Jerena (2017) state that balanced psychological contracts focus on both socio-emotional and economic exchange. A balanced psychological contract creates a continuous and harmonious work relationship (Savarimuth & Jerena, 2017; Zhunang & Hui, 2019).

3.8 CONTENT OF THE PSYCHOLOGICAL CONTRACT

Guest and Conway (2002) and Naidoo et al, (2019) explain that the psychological contract consists of trust, fairness, and delivery of the deal (fulfilment of obligations). The elements of trust, fairness, and delivery of the deal influence employee perceptions of the overall state of the psychological contract (Guest & Conway, 2002; Opolot & Maket, 2020). Fair treatment results in positive outcomes, such as work engagement, while unfair treatment results in negative outcomes, such as disengagement (Argawal, 2014; Naidoo et al., 2019).

According to Guest and Conway (2002) and Naidoo et al, (2019), trust is readiness to be susceptible to another party`s actions. Trust is intertwined with mutual obligations, and it is built over a period of time, thereby creating an exchange relationship (Guest, 2004; Guest & Conway, 2002; Opolot & Maket, 2020). Naidoo et al, (2019) emphasise the role that perceptions about fairness play in shaping employee attitudes such as work engagement. This implies that fairness is a perception held by either party on whether they are treated fairly or not. The deal refers to the obligations included in the psychological contract (Guest & Conway, 2002; Naidoo et al, 2019). According to Naidoo et al, (2019), an obligation is an allegiance to anticipated action that another party has accepted. Employer and employee obligations can be formulated or developed as the expectations between the employee and the employer modifies (Rousseau, 2012). Table 3.4 provides a list of employer and employee obligations.

Table 3.4
List of Employer and Employee Obligations

Party in the employment relationship	List of obligations	Sources
Employer	• To offer stable and long-term employment • To support the well-being and interests of employees and their families • To enhance employees' employability within and outside the organisation • To promote continuous learning, and to help employees successfully execute escalating performance requirements. • To offer job security, training and development, rewards, benefits, fair pay, good working conditions, and career prospects	(Rousseau, 2000) (Naidoo et al, 2019; Opolot & Maket, 2020)

Employee	• To maintain good relations with the employer	(Rousseau, 2000)
	• To remain with the organisation	(Opolot & Maket, 2020)
	• To do what is required to keep the job	
	• To support the organisation	
	• To demonstrate loyalty and commitment to the organisation	
	• To display good organisational citizenship behaviour	
	• To develop skills valued by the employer, as well as skills for external employability	
	• To perform the job successfully	

Source: Author's own work

Studies conducted by Naidoo et al, (2019) and Shen (2010) indicate that the most common employer obligations in a tertiary institution are provision of adequate training, reasonable workloads, adequate time for research, fair promotion, consultation, and funds for research.

3.9 STATE OF THE PSYCHOLOGICAL CONTRACT

The state of the psychological contract is an integrated measure that assesses the extent to which employees perceive that the organisation has met its promises and commitment and provides fairness of treatment, with the implications that this has for trust (Guest, 2004; Guest & Conway, 2002; Guest et al, 2010; Opolot & Maket, 2020). It comprises four elements, namely perception, delivery or fulfilment of the contract, trust, and fairness (Conway & Briner, 2005; Freese & Schalk, 1996, 2008; Guest & Conway, 2002; Ling & Zhongwu, 2021; Rousseau et al, 2013). The state of the psychological contract, as opposed to the psychological contract itself, describes employees' subjective perception of the

organisation's actual human resource practice (Guest & Conway, 2002; Opolot & Maket, 2020). The most important manifestation of the psychological contract is employee satisfaction (Cheng, 2021). Job satisfaction is influenced by the fulfilment of employer obligations (transactional and relational) (Cheng, 2021; Guest, 2004; Guest & Conway, 2002; Naidoo et al, 2019; Opolot & Maket, 2020; Rousseau, 2012). The presence of job satisfaction results in good relations between the employer and the employee, which translates into positive work behaviours, such as work engagement (Cheng, 2021). Thus, an understanding of the state of the psychological contract assists in explaining the consequences for employee attitudes and behaviours, such as an increase in the level of work engagement, a decrease in the level of engagement, or disengagement (Freese & Schalk, 2008; Guest & Conway, 2002).

The construct of the psychological contract is viewed as a perception, because interpretation of the contract is unipersonal and subjective (Herrera & De Las Heras-Rosas, 2020). Freese and Schalk (1996) contend that employee perceptions of the psychological contract should be understood, because they influence their work behaviour (such as work engagement). Negative perceptions of the contract can lead to negative behaviours, such as disengagement (Herrera & De Las Heras-Rosas, 2020).

Fulfilment

Psychological contract fulfilment occurs when employment parties perceive that the other party has successfully delivered their promises and obligations (Deas, 2017). Organisations need to ensure that they fulfil employees' expectations, in order to produce positive work behaviours. Employee perceptions that the organisation has failed to deliver promised expectations may create perceptions of breach or violation of their psychological contract, which will have negative effects, such as disengagement (Deas, 2017; Herrera & De Las Heras-Rosas, 2020; Morrison & Robinson, 1997; Snyman et al, 2015). Therefore, it is imperative to understand employees' expectations and ensure their fulfilment, in order to influence their level of work engagement.

Breach and violation

Breach and violation describe the overall state of the psychological contract (Freese & Schalk, 2008). A breach is a subjective, cognitive evaluation that perceived obligations existing between the employer and the employee have not been met (Conway & Briner, 2005; Rousseau, 2000). Breaches, or unmet expectations, can trigger a change in an individual's psychological contract.

Conway and Briner (2005) explain that a psychological contract violation is an extension of a psychological contract breach, and that it occurs when employees experience strong emotional reactions in response to their cognitive evaluation of a breached *obligation*. According to Ling and Zhongwu (2021), psychological breach and violations have a negative effect on work behaviour, which can manifest in the form of loss of trust in the employer and underfulfilment of employee obligations to the employer.

It can be concluded that the psychological contract is an individual's perception of the mutual obligations between an employee and an employer. Such perceptions are beyond a formal employment contract. Individual perceptions can be negative or positive. However, fulfilment, breach, or violation of individual expectations can change perceptions. Development of a psychological contract is influenced by the mental schemas that develop through the socialisation processes, such as adolescence; in the early stages of the professional career; or upon entry into an organisation. Thus, it is important to understand the factors that influence psychological contract formation and development, its typology, the main content thereof, and the state of the contract, to ensure positive work behaviours.

3.10 RELATIONSHIP BETWEEN THE PSYCHOLOGICAL CONTRACT AND WORK ENGAGEMENT

Organisations aspire to create a high level of performance, through work behaviours such as work engagement (Herrera & De Las Heras-Rosas, 2020). Such behaviours are conditioned by several factors, including the psychological contract (Herrera & De Las Heras-Rosas, 2020). Herrera and De Las Heras-Rosas (2020) found that there was a relationship between the psychological contract and work engagement. Ling and Zhongwu (2021) support Herrera and De Las Heras-Rosas's (2020) view, by suggesting that a psychological contract is a critical driving force in an organisation. They state that the creativity of employees (a characteristic of engaged employees) is related to perceptions of the psychological contract (Ling & Zhongwu, 2021). Guest and Conway (2002) suggest that organisations need to develop human resource policies and practices that contribute to making certain promises or obligations on the part of the employer.

Opolot and Maket (2020) confirm that a relationship exists between the psychological contract and work engagement. They posit that the psychological contract is a modern method that can be used to drive employee behaviours such as work engagement (Opolot & Maket, 2020). Naidoo et al, (2019) found that fulfilment of the psychological contract

influenced work engagement positively, while a breach or violation of the psychological contract led to erosion of trust, which resulted in negative outcomes of psychological contract breach, such as total disengagement or a decrease in the level of work engagement.

Garcia et al, (2021) established that the relational contract had a strong association with work behaviours such as work engagement, while the relationship between the transactional contract and work engagement was weaker. Their findings converge with those of Gresse and Linde (2020), Hui et al, (2004), and Wiechers et al, (2019), namely that employees with a predominantly transactional contract showed negative work behaviours. Gresse and Linde (2020), Hui et al, (2004), and Wiechers et al, (2019) reveal that the psychological value of monetary benefits received by employees who held a transactional contract decreased as they became accustomed to their level of income. This indicates that a relationship exists between the psychological contract and work engagement.

It was found that individuals who held a relational contract had more positive work behaviours, such as work engagement (Garcia et al, 2021). Garcia et al, (2021) explain that employees who received social and emotional favours from colleagues or the employer felt indebted to reciprocate and maintain mutual obligations, which shows a relationship between the psychological contract and work engagement.

The findings discussed above indicate that both elements (transactional and relational) of the psychological contract are essential for employees. Management needs to offer a variety of psychological contract elements to ensure a balanced psychological contract for employees. They must also be conscious of the promises they have made, and they must ensure that they are fulfilled, to avoid a breach of the psychological contract. Organisations need to continuously check for new employee expectations of the organisation, or changes in employee expectations, and avail work resources that enable employees to fulfil their obligations to the employer. Management must create relationships of trust with employees, in order to increase their levels of work engagement.

3.11 THE INFLUENCE OF SOCIO-DEMOGRAPHIC VARIABLES (AGE, GENDER, EMPLOYMENT STATUS, AND EMPLOYMENT CATEGORY) ON THE PSYCHOLOGICAL CONTRACT

This section focuses on the effect of socio-demographic variables (age, gender, employment status and employment category) on employees' perceptions of the psychological contract.

3.11.1 Age

There are three ways that age can influence the psychological contract (Adams et al, 2014; Bal, 2017; Ng & Feldman, 2009; Roberts, 2020). Age can influence the type of obligations, the type of psychological contract (transactional, relational, or balanced), and employees' reactions towards breach or violation of the psychological contract (Bal, 2017). DelCampo et al. (2010), Hess and Jepsen (2009), Restubog et al., (2010), Smola and Sutton (2002), and Twenge (2010) concur that there are different work attitudes, values, and expectations, such as work engagement and psychological contract expectations, for different ages. Poisat et al., (2018) found that failure to fulfil the expectations of different age groups negatively impacted the work behaviours (such as work engagement) of these age groups. This indicates that age as a socio-demographic variable has a moderating effect on the relationship between the psychological contract and work engagement.

A study conducted by Bal (2017) on the influence of age on the psychological contract in the Netherlands found that older employees perceived higher relational obligations (work–life balance and decision-making) than younger employees. Bal (2017) found that younger employees perceived higher transactional obligations (financial rewards) than older employees. The findings by Bal (2017) are similar to Adams et al 's (2014) findings that older employees were more concerned with a relational psychological contract, while younger employees were more concerned with a transactional psychological contract. Hess and Jepsen (2009) reported similar findings, namely that younger employees had statistically significantly higher scores than older employees for transactional and relational psychological contracts.

Poisat et al, (2018) established that younger employees were more interested in financial security, which implies that they held more of a transactional contract than a relational contract. It was revealed that older employees worked to live, and did not live to work, which suggests that they focused on balancing their personal and professional lives (Poisat et al,

2018). This implies that older employees held a balanced contract. Older employees saw money as important but were motivated to maintain a strong work relationship, which implies that they held more of a relational contract than a transactional contract (Poisat et al, 2018).

Crampton and Hodge (2007) discovered that younger employees had a stronger perception of their psychological contract than did older employees. Younger employees felt more obligated to the reciprocal relationship than did older employees (Crampton & Hodge, 2007; Poisat et al., 2018).

Research conducted by Ng and Feldman (2009) indicates that age played a role in determining the nature of the psychological contract, resultantly influencing work engagement. Bal (2017) and Ng and Feldman (2009) report that age had an influence on the flexibility of employees to change their expectations regarding the psychological contract, and that it moderated the response to psychological contract breach. Studies conducted by Bal (2017) and Ng and Feldman (2009) reveal that older employees reacted less intensely to psychological contract breach, while psychological contract breach for younger employees had a greater effect on their behavioural outcomes, such as work engagement. Bal (2017) suggests the reason for older employees' less intense reaction to psychological contract breach as malleability, as well as the increased altruism that comes with maturity. Older employees quickly forgive and return to positive behaviours (such as work engagement) and positive work relations (a relational psychological contract) with their employers (Bal, 2017; Ng & Feldman, 2009). Another study conducted by Bal (2009) reveals that older employees reacted less intensely to psychological contract breaches in terms of trust, while such breaches had a strong impact on the trust of younger employees. However, psychological contract breaches affect older employees' job satisfaction.

The findings on the influence of age on the psychological contract indicate that age has a strong influence on the psychological contract. This implies that management must understand and fulfil employee expectations regarding mutual obligations for the different age groups, and must foster trust, in order to avoid psychological contract breaches, as such negative events can negatively impact work engagement.

3.11.2 Gender

Studies conducted by Adams et al, (2014) and Cheng (2021) reveal that gender had an influence on the psychological contract and work behaviours (such as work engagement). Adams et al,'s (2014) study found that women scored higher on perceptions of relational

expectations than did men, while men scored higher on perceptions of transactional expectations than did women. Cheng (2021) discovered that male employees expected and attached great importance to transactional aspects of the psychological contract, such as high rewards. It was found that female employees' expectations of their psychological contract included having their welfare and social security catered for (Cheng, 2021). Cheng (2021) concludes that breach or violation of female and male employees' expectations led to negative work behaviours (such as a decrease in the level of work engagement, or disengagement), while fulfilment of their expectations resulted in positive work behaviours, such as an increase in the level of work engagement and fulfilment of employee obligations to the employer. Adams et al 's (2014) study reveals that there was no difference between men and women regarding their perceptions of employer obligations. This implies that gender does not have an influence on employees' perceptions of employer obligations, while it plays a role in both men and women's perceptions regarding the transactional and relational aspects of their psychological contracts.

The findings on the influence of gender on the psychological contract indicate that gender has a strong impact on the psychological contract. Management needs to understand psychological contract expectations regarding mutual obligations for both men and women, in order to create trust and fulfilment of the psychological contract. This will help to deal with the negative effects associated with psychological contract breaches and violations for both genders.

3.11.3 Employment status

Cheng's (2021) study reveals that employment status did have an influence on the relationship between the psychological contract and work engagement. Both grassroots employees, who occupied lower-level posts, and employees who occupied higher-level posts paid more attention to and had more expectations regarding transactional psychological contracts than relational psychological contracts. Cheng (2021) proposes that organisations need to improve material security, such as remuneration in the form of bonuses, basic salary, a beautiful work environment, and a good welfare system, to manage employees' psychological contracts, thereby resulting in positive work behaviours. Management need to understand the influence of employment status on the psychological contract in order to manage the effects of psychological violations for different employment categories.

3.11.4 Employment category

A study conducted by Poisat et al, (2018) shows that employment category moderates the relationship between the psychological contract and work engagement for higher-level employees (such as academics) and long-service employees in South Africa. Poisat et al, (2018) argue that work behaviours such as work engagement evolve with increased service time. The performance and work engagement of long-tenured employees such as academics are likely to be related to elements of their relational contracts, such as trust and good faith. This indicates that employment status has a moderating effect on the correlation between the psychological contract and work engagement. An understanding of the influence of employment category on the psychological contract would assist human resource practitioners to manage psychological contracts of employees with different employment statuses.

The findings on the influence of socio-demographic variables (age, gender, employment status and employment category) on the psychological contract confirm that individuals may differ in the value that they attach to the elements of the psychological contract. Thus, an understanding of employees' expectations with regard to the psychological contract is crucial to promote higher levels of work engagement. Management must understand employee differences (age, gender, employment status and employment category) in perceptions of psychological contracts, so that they can devise work engagement policies or practices that build trust and address specific employee expectations regarding mutual obligations, in order to increase the levels of work engagement.

3.12 CONCEPTUALISATION OF WORK ENGAGEMENT

The term "work engagement" was first used by Kahn (1990). Since then there have been different conceptualisations of work engagement. Kahn (1990) views work engagement as a multidimensional construct that explains the physical, cognitive, and emotional attachment of organisational members to their work roles. Maslach and Leiter (1997) offer a definition of work engagement as a unidimensional construct, where they view work engagement as the opposite of burnout. Burnout reveals incapacity or exhaustion of an employee, and unwillingness to perform, or withdrawal from performing, work (Kokkina et al, 2018; Schaufeli & Taris, 2005). According to Rothbard (2001), work engagement is a two-dimensional construct consisting of attention and absorption. Schaufeli et al, (2002) suggest that work engagement is a multidimensional construct that explains a positive, satisfying work-related state of mind among employees which is defined by vigour, dedication, and absorption.

Other scholars, such as Gifford and Young (2021), Meiyani and Putra (2019), Özer et al, (2017), and Rana and Chopra (2019), view work engagement as a universal construct for other human resource outcomes, such as satisfaction, motivation, organisational citizenship behaviour, job involvement, and commitment, among others.

The researcher has embraces Schaufeli et al.'s (2002) description of work engagement, for various reasons. The first reason is that the definition of work engagement provided by Maslach and Leiter (1997), namely that it is the opposite of burnout, has been criticised for its assumption that work engagement and burnout are polar opposites; indeed, employees can experience both burnout and work engagement at the same time (Kuok & Taormina, 2017; Schaufeli et al, 2002; Schaufeli & Taris, 2005). The second reason is that the definition provided by Kahn (1990) has lost recognition, as no measures have been developed for the proposed components of work engagement, namely cognitive, emotional, and physical attachment. Thus, the researcher has accepted Schaufeli et al's (2002) definition, because of its ability to distinguish work engagement from other related constructs (Ahuja & Gupta, 2018; Kokkina et al, 2018). This automatically means that Schaufeli et al.'s (2002) Utrecht Work Engagement Scale will be used to measure work engagement. The Utrecht Work Engagement Scale (Schaufeli et al, 2002) is the most used instrument to measure work engagement, and it has been validated in many countries across the world (Bakker et al, 2008; Kokkina et al, 2018; Schaufeli & Taris, 2005).

3.12.1 Components of work engagement

The components of work engagement, based on the definitions provided above, are shown in Table 3.5.

Table 3.5
Components of Work Engagement

Dimensions	Component(s)	Source(s)
Single dimension	The opposite of burnout	(Maslach & Leiter, 1997)
Two dimensions	Attention and absorption	(Rothbard, 2001)
Three dimensions	Physical, cognitive, and emotional attachment	(Kahn, 1990)
Three dimensions	Vigour, dedication, and absorption	(Schaufeli et al, 2002)
Universal dimensions	Job satisfaction, commitment, job involvement, motivation, and	(Gifford & Young, 2021; Meiyani & Putra, 2019; Özer

	organisational citizenship behaviour	et al, 2017; Rana & Chopra, 2019; Zayer & Benabdelhadi, 2020)

Source: Author's own work

This study has adopted Schaufeli et al' s (2002) three-component approach (dedication, absorption, and vigour), because it distinguishes work engagement from other related constructs (Kokkina et al., 2018; Schaufeli et al., 2002; Schaufeli & Taris, 2005).

3.13 THEORETICAL FRAMEWORK FOR WORK ENGAGEMENT

The concept of work engagement was originally conceived from job characteristics theory (Hackman & Oldham, 1975) and role performance theory (Franks, 2017; Weston, 2016). This research has adopted job characteristics theory as the theoretical framework for work engagement.

3.13.1 Job characteristics theory (Hackman & Oldham, 1975)

Job characteristics theory assumes that there are certain characteristics of the workplace that lead to work behaviours such as work engagement (Franks, 2017; Weston, 2016). This theory is appropriate for the study, because Kahn (1990) used the job characteristics found in job characteristics theory to explain relevant aspects of the workplace that influence psychological states. Psychological states result in affective or behavioural outcomes, such as work engagement or disengagement (Franks, 2017; Kahn, 1990; Kokkina et al, 2018; Kuok & Taormina, 2017; Schaufeli, 2014; Weston, 2016). Job characteristics theory is also used as a framework to study the effect of job characteristics on job outcomes and behaviours, such as work engagement (Franks, 2017; Hackman & Oldham, 2007; Weston, 2016). Therefore, job characteristics theory is an appropriate theoretical underpinning for investigating the concept of work engagement.

This theory assumes that employee outcomes or behaviours (such as work engagement) are positive personal behaviours that are conditioned by three psychological states, namely experienced meaningfulness of the work, experienced responsibility for the work outcomes, and experienced knowledge of the work activities (Hackman & Oldham, 2007). The

psychological states are created by the presence of five core dimensions, namely skill variety, task identity, task significance, job autonomy, and feedback (Hackman & Oldham, 1975). Skill variety is the extent to which a job requires various individual skills or talents to carry out the work. Hackman and Oldham (1975) explain task identity as the extent to which the job requires completion and visible outcomes of the job. According to Hackman and Oldham (1975), task significance refers to the extent to which the job impacts the lives of people in other organisational departments or in the external environment. Job autonomy is the extent to which the job gives the employee substantial freedom, independence, and authority to schedule the work and to decide the procedures to do the work (Hackman & Oldham, 1975). Feedback is the extent to which an individual receives direct or clear information on the results of their performance. Schaufeli et al 's (2002) definition of work engagement resembles the elements of job characteristics theory. They posit that engaged employees show dedication, they have a sense of relevance in their work, they are inspired, and they are proud of their work (Schaufeli et al, 2002). A review of the job characteristics elements shows that employees may develop a sense of pride (a characteristic of work engagement) when a job has significance or an impact on other people. Thus, job characteristics theory is an appropriate theoretical framework for investigating work engagement.

3.14 MODELS OF WORK ENGAGEMENT

There are different models of work engagement. This research considers the Gallup Workplace Audit (Gallup, 2015), the affective shift model by Bledow et al, (2011), the job demands–resources model by Bakker and Demerouti (2008), and the Utrecht Work Engagement Scale by Schaufeli et al, (2002).

3.14.1 Gallup Workplace Audit (Gallup, 2023)

According to Gallup (2015), there are three basic categories of engagement, namely actively disengaged, engaged, or not engaged.

Actively disengaged
The actively disengaged category describes employees who are always dissatisfied and spread their unhappiness in the organisation (Choudhury & Mohanty, 2018). Unhappiness of employees who fall under this category is normally spread through negative words, which can provoke other employees to leave the organisation. Choudhury and Mohanty (2018)

explain that actively disengaged employees influence others to leave the organisation, while they stay longer and attempt to remove their perceived competitors, so that they can get to the top job level.

Engaged

The engaged category consists of engaged employees who are innovative, passionate, optimistic, proactive, and committed to their work (Choudhury & Mohanty, 2018). According to Gallup (2015), engaged employees have capabilities to turn innovative ideas into a reality. Gallup (2015) asserts that engaged employees strive to create a positive work culture.

Not engaged

Employees who fall under the not engaged category follow instructions and do only what they have been told (Choudhury & Mohanty, 2018). Such employees put in time to work, but they do not have passion, and they are reactive, as they always wait for instructions from their superiors.

An understanding of the Gallup Workplace Audit model assists management to recognise work events or procedures that evoke negative behaviours, so that they can be improved. This will help management to establish a suitable strategy to enhance the work engagement of the actively disengaged and the not engaged employees, while maintaining the work engagement of the engaged employees (Chaudhary & Rangnekar, 2017; Gallup, 2015).

3.14.2 Affective shift model (Bledow et al., 2011)

Bledow et al, (2011) state that work engagement develops where there is an active interaction of positive and negative affect. They explain that negative affect is positively related to work engagement if it is followed by positive affect (Bledow et al, 2011). The affective shift model assumes that both positive and negative affect are crucial for work engagement. High work engagement is realised through a shift from negative to positive affect. According to Bledow et al, (2011), work engagement increases as people shift from a negative affect situation to a positive affect situation. An understanding of the affective shift model assists management to ensure creation of positive events that enhance work engagement (Bledow et al, 2011; Uzhenyu, 2019). Understanding this model also assists management with the knowledge that they must provide support for negative events, so that they shift to positive affect in order to increase work engagement (Bledow et al, 2011; Uzhenyu, 2019).

3.14.3 Utrecht Work Engagement Scale (Schaufeli et al., 2002)

According to Schaufeli et al, (2002), the Utrecht Work Engagement Scale assumes that there are three dimensions of work engagement, which include vigour, dedication, and absorption.

3.14.3.1 Vigour

Schaufeli et al, (2002) explain that vigour is depicted by elevated levels of energy and mental strength when working, eager to exert effort in one's work, and being persistent amidst difficulties.

3.14.3.2 Dedication

The characteristics of dedication are developing an awareness of relevance in one's work and feeling enthusiastic, inspired, challenged, and content with one's job (Schaufeli et al, 2002).

3.14.3.3 Absorption

Absorption characteristics are being completely and happily engrossed in one's work, failing to disconnect from one's work, time passing swiftly, and forgetting everything else around one (Schaufeli et al, 2002). Schaufeli et al, (2002) explain that work engagement is a constant and common affective-cognitive state that does not focus on a specific object, event, individual, or behaviour.

3.15 THE INFLUENCE OF SOCIO-DEMOGRAPHIC VARIABLES (AGE, GENDER, EMPLOYMENT STATUS, AND EMPLOYMENT CATEGORY) ON WORK ENGAGEMENT

This section discusses the effect of socio-demographic variables (age, gender, employment status and employment category) on employees' work engagement.

3.15.1 Age

Related studies indicate that age influences work engagement (Alam et al, 2022; Azam & Waheed, 2018; Bhebhe & Murindi, 2020; Busolo, 2017; Gitonga et al, 2016; Korsakienė et al, 2017; Zhuwao et al, 2019). According to Zhakata and Bhebhe (2017), each age group has its own performance behaviours and characteristics. Korsakienė et al 's (2017) study on

work engagement of employees in science, education and public institutions in Lithuania indicates that age influenced work engagement. They found that younger members of the workforce were more engaged than were older employees (Korsakienė et al, 2017). Korsakienė et al, (2017) argue that older employees are less engaged as they tend to shift focus to health issues and become less engaged to work because of failure to cope with lifelong learning. Selvaraj (2015) concurs that older employees are more concerned with life after employment than with enhancing positive behaviours such as productivity and work engagement. Korsakienė et al, (2017) explain that younger employees are highly engaged because they can easily adjust to technological developments, constant changes, and adaptation processes. The findings by Korsakienė et al, (2017) diverge from Alam et al.'s (2022) finding that older employees are more engaged than younger employees. Older employees make balanced decisions, and their thinking and work behaviours are balanced by work experience and a need for excellence (Azam & Waheed, 2018; Busolo, 2017; Gitonga et al, 2016). However, Bhebhe and Murindi (2020) report that there is no evidence that age affects work behaviours.

The findings on the relationship between age and work engagement show that age has an influence on work behaviours such as work engagement. This suggests that organisations need to understand expectations of different age categories, so that they can improve work engagement levels.

3.15.2 Gender

Chaudhary and Rangnekar's (2017) study on socio-demographic factors and work engagement in India found that there was no evidence of a relationship between gender and work engagement. A study by Bhebhe and Murindi (2020) on employee diversity and work outcomes in rural councils in Zimbabwe reports a negative relationship between gender and work behaviours, while Ahmad and Fazal (2010) and Selvaraj (2015) found that females were less engaged than males. Women have feminine characteristics, which make them want to give up, thereby reducing their work engagement levels. The findings by Bhebhe and Murindi (2020) and Chaudhary and Rangnekar (2017) differ from those of Korsakienė et al, (2017), namely that men were more engaged in their work than were women. This is attributed to the fact that women are dissatisfied with their longer working hours. The findings by Ahmad and Fazal (2010), Bhebhe and Murindi (2020), Chaudhary and Rangnekar (2017), and Selvaraj (2015) on the relationship between gender and work engagement indicate that gender influences work engagement. Management needs to recognise the different expectations of the different genders and design appropriate policies and human resource practices, in order to improve work engagement.

3.15.3 Employment status

Various studies confirm that employment status impacts work engagement (Adedeji, 2016; Barankay, 2012; Bernstein & Xin Li, 2016; Bhebhe & Murindi, 2020; Chaudhary & Rangnekar, 2017; Shahrul et al, 2019; Sidanus & Pratto, 1999). A study conducted by Sidanus and Pratto (1999) found that lower-level employees (such as temporary employees) were more engaged than employees in higher levels (such as permanent employees). Sidanus and Pratto (1999) suggest that permanent employees may not find good reasons to engage in good behaviours, as they become complacent. Chaudhary and Rangnekar (2017) report that in their study employment status positively affected work engagement in Indian business firms. Their study reveals that Indian business executives who held top posts and had a high employment status were more engaged than employees with a lower employment status. These findings are consistent with those of Bhebhe (2017) and Shahrul et al., (2019), namely that high employment status employees have a high level of work engagement, as they are paid better than employees with low-status jobs.

3.15.4 Employment category

According to Sidanus and Pratto (1999), employees in lower-level employment category (such as non- academics) tend to be depressed and demotivated with the rank they are placed in, which implies that they are less engaged than higher-level employees. However, studies conducted by Adedeji (2016), Barankay (2012), and Bernstein and Xin Li (2016) found that employees in lower-level and higher-level categories had similar levels of work engagement. Adedeji (2016) explains that employees in both categories maintain their work engagement levels, as they are concerned with boosting their profile.

The findings on the influence of employment status on work engagement indicate that there is a relationship between employment status and work engagement. Organisations must take cognisance of the differences between the different employment statuses, so that they can devise appropriate human resource strategies that cater for the different employment statuses.

The above-mentioned findings on the influence of socio-demographic variables (age, gender, employment status and employment category) on work engagement show that employees differ in their perceptions of work engagement. This means that management in organisations needs to understand the different perceptions of the different socio-demographic groups among its employees, in order to successfully manage employees' levels of work engagement

3.16 ANTECEDENTS OF WORK ENGAGEMENT

Work engagement is influenced by different antecedents (Cheng, 2021; Saks, 2019; Wushe & Shenje, 2019). They include effective leadership (Alam et al, 2022; Cheng, 2021; Jiang & Men, 2017; Strom et al, 2014; Wushe & Shenje, 2019), organisational policies and justice, training and development, rewards and recognition, task significance, employee feedback, fulfilment of the psychological contract (employee expectations and employer obligations), and perceived supervisor support (Altehrebah et al, 2019; Gifford & Young, 2021; Meiyani & Putra, 2019; Osborne & Hammoud, 2017; Rana & Chopra, 2019; Wushe & Shenje, 2019).

Effective leadership is the ability to handle organisational challenges, to give employees good direction, and to inspire confidence in employees (Alam et al, 2022; Strom et al, 2014; Wushe & Shenje, 2019). Jiang and Men (2017) and Gifford and Young (2021) concur that

leadership positively affects employee engagement. Training and development is the provision of opportunities to employees for them to develop their abilities, skills, knowledge, and to realise their potential (Cheng, 2021; Rana & Chopra, 2019; Wushe & Shenje, 2019). It is a catalyst for employee engagement, as it increases employee confidence, which results in work engagement (Wushe & Shenje, 2019).

Employee rewards consist of financial and non-financial elements, such as salary, bonuses, retirement plans, health insurance, and job security (Armstrong, 2016; Osborne & Hammoud, 2017; Rana & Chopra, 2019; Wushe & Shenje, 2019). Gifford and Young (2021) and Wushe and Shenje (2019) explain that fair rewards lead to positive behaviours, such as work engagement.

Organisational policies and procedures, such as fair recruitment and selection, flexible working, distribution of rewards, employee voice and participation, work–life balance, task design and skill variety, good employment relations, and fair promotion policies, also determine the work engagement of employees (Deepak, 2021; Hiariey & Tutupano, 2020; Meiyani & Putra, 2019; Pan et al, 2018; Saks, 2019; Wushe & Shenje, 2019). Based on the theoretical framework for work engagement by Kahn (1990), namely need satisfaction theory, and Maslach and Leiter's (1997) burnout theory, the main conditions for work engagement to take place are work meaningfulness, such as job and task design (Saks, 2019); safety, through acquisition of knowledge by training and development (Cheng, 2021; Rana & Chopra, 2019; Wushe & Shenje, 2019); and availability of resources, such as work resources, employee rewards, and effective leadership (Alam et al, 2022; Gifford & Young, 2021; Meiyani & Putra, 2019; Wushe & Shenje, 2019). The antecedents mentioned above can result in positive work behaviours, including work engagement.

3.17 EVALUATION AND SYNTHESIS

The literature reviewed indicates contradictions in the findings on the relationship between organisational justice and work engagement (Ghosh et al, 2014; Inoue et al, 2010; Law, 2014; Ledimo & Hlongwane, 2013; Nethavani & Maluka, 2020; Özer et al, 2017; Pakpahan et al, 2020; Panatik et al, 2017; Peters, 2018; Rodriguez et al, 2014; Saks, 2006; Strom et al, 2013; Tessema, 2014). It is also not clear which dimensions of organisational justice have a strong relationship with work engagement, as the findings are mixed. This implies that all the dimensions of organisational justice are equally important, as they have different influences on different employees. Thus, improving organisational justice, specifically focusing on every

dimension of organisational justice, in organisations can be a major approach for boosting the levels of work engagement.

The findings indicate that the relationships between perceived organisational justice, the psychological contract, and work engagement differ with the influence of socio-demographic variables, namely age, gender, employment status, and employment category (Aslam et al., 2020; Ghosh et al, 2014; Kim et al., 2019; Nethavani & Maluka, 2020; Özer et al, 2017; Pekurinen et al, 2017; Roberts, 2020; Saks & Gruman, 2014; Swalhi et al, 2017). It is therefore imperative that human resource practitioners understand the socio-demographic differences of their employees and accommodate them in policies, through supportive human resource practices for enhancing work engagement.

The literature reviewed on perceived organisational justice shows that it is not taken seriously, even though it has a great impact on work behaviours, specifically work engagement (Aslam et al, 2020; Gifford & Young, 2021). It has been noted that employees always check on the fairness of every organisational justice component, particularly the work procedures, processes, or outcomes. Thus, management needs to increase their focus on fairness in the workplace, in order to enhance work engagement. There is a need to devise policies and procedures that address fairness in various human resource practices, such as rewarding employees according to their workloads (distributive justice), promotion of employees on time or when due (procedural justice), consistent application of policies and work rules for all employees, treating employees with politeness and dignity (interpersonal justice), and providing employees with adequate information (informational justice).

A review of related literature on the psychological contract shows that the current business environment is complex, because of unexpected occurrences, such as the digitalisation of technology and the Covid-19 pandemic, which has led to remote working and absence of workers at physical workplaces (Alam et al, 2022; Gifford & Young, 2021; Jovanovic & Lugonjic, 2022). This has brought complex emerging psychological contracts, which has a significant effect on work engagement. This implies that organisations need to build mutual trust and friendly employment relationships with employees. There is also a need for management to implement strategies that enhance work engagement. The antecedents of work engagement are training and development, effective leadership, employee participation and involvement, job design, task significance, and fair organisational policies and procedures. It is also important to note that communication is necessary between management and employees, so as to determine employees' inner needs, in order to improve the psychological contracts. This will inform organisations of different strategies that

accommodate socio-demographic variables (age, gender, employment status and employment category), as the influence of these variables differs in the relationship between the psychological contract and work engagement.

The reviewed literature clarifies the specific aspects that make up the construct of work engagement (Ahuja & Modi, 2015; Gifford & Young, 2021; Katz & Kahn, 1978; Kokkina et al, 2018; Kuok & Taormina, 2017; Rothbard, 2001; Saks, 2006; Schaufeli et al., 2002; Schaufeli & Taris, 2005). An understanding of the characteristics of the components of work engagement helps to realise the presence or absence of the antecedents of work engagement. This suggests that an understanding of work engagement antecedents will help in devising strategies to enhance work engagement. The literature also shows that it is very difficult to understand the cognitive, physical, and emotional attachment of employees. This poses a challenge for managers and human resource experts to choose the best human resource programmes that impact employees' cognitive, emotional, and physical work engagement. It is also difficult to employ appropriate strategies that influence employees' absorption, dedication, and vigour in their work. Management needs to study and understand the socio-demographic variables of their employees (age, gender, employment status and employment category), as well as the influence of these variables on the cognitive, emotional, and physical attachment of their employees, so that they can apply appropriate work engagement strategies.

3.18 CHAPTER SUMMARY

Chapter 3 has addressed research aim 2, namely, to conceptualise perceived organisational justice, the psychological contract, and work engagement and their relationship with socio-demographic variables (age, gender, employment status and employment category).

Chapter 4 focuses on research aims 3, 4 and 5. Research aim 3 critically evaluates the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement and its antecedents as the elements of the theoretical framework that emerges from the relationship dynamics. Research aim 4, aimed at establishing a theoretical relationship between perceived organisational justice, the psychological contract, and work engagement and the socio-demographic variables (age, gender, employment status and employment category). Research aim 5, sought to develop a theoretical framework and to conceptualise its implications for work engagement strategies in the context of tertiary education institutions in Zimbabwe. The major themes to be addressed in this chapter are

construction of a theoretical framework for work engagement, the hypothetical relationships between the constructs, the implications for work engagement strategies, and an evaluation and synthesis.

CHAPTER 4: FRAMEWORK FOR WORK ENGAGEMENT: A THEORETICAL PERSPECTIVE

Chapters 2 and 3 reviewed literature on perceived organisational justice, the psychological contract, and work engagement, and also the influence of socio-demographic variables (age, gender, employment status and employment category) on the relationship between perceived organisational justice, the psychological contract, and work engagement. The review is significant in the context of this research study, and it serves the purpose of addressing research aims 1 and 2.

This chapter pertains to research aim 3 which sought to critically evaluate the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement and its antecedents as the elements of the theoretical framework that emerges from the relationship dynamics. This chapter also addresses research aim 4, which is to establish a theoretical relationship between perceived organisational justice, the psychological contract, and work engagement and the socio-demographic variables (age, gender, employment status and employment category). The chapter also addresses research aim 5, which is to develop a theoretical framework and to conceptualise its implications for work engagement strategies in the context of tertiary education institutions in Zimbabwe. The major themes to be addressed in this chapter are construction of a theoretical framework for work engagement, the hypothetical relationships between the constructs, the implications for work engagement strategies, and an evaluation and synthesis.

4.1 TOWARDS CONSTRUCTING A FRAMEWORK FOR WORK ENGAGEMENT: A THEORETICAL LENS

The levels of employee engagement determine employees' support to attain organisational goals, execute organisational strategy, and realise profits (Alam et al, 2022; Sangeeta, 2020). It is pertinent for management to understand employees' expectations as individuals and collectively (Alam et al, 2022; Deas, 2017; Sangeeta, 2020). The socio-demographic differences in terms of employees' age, gender, employment status, and employment category show that employees may not be equally engaged with similar work engagement strategies (Alam et al, 2022; Chaudhary & Rangnekar, 2017; Korsakienė et al., 2017; Shahrul et al , 2019). Thus, management needs to understand employees' socio-

demographic differences for positive work engagement to take place (Gifford & Young, 2021; Sangeeta, 2020).

Organisations that support employee engagement always ride out market turbulence and become successful in the future (Gifford & Young, 2021; Negash et al, 2019; Rao, 2021; Sangeeta, 2020). Work engagement is now being integrated into the culture of organisations (Sangeetha et al, 2018). The factors contributing to work engagement are career development prospects, fair organisational policies, employee recognition, and a positive work environment (Alam et al, 2022; Cheng, 2021; Gifford & Young, 2021).

In tough times, such as during the Covid-19 pandemic, work engagement needs to be constantly checked and improved (Sangeeta, 2020). New trends for work engagement necessitated by the Covid-19 pandemic are stronger communication with remote teams, in order to appreciate employees and cheer them up (Alam et al., 2022; Gifford & Young, 2021; Sangeeta, 2020). The use of online team building and digital learning programmes, such as video conferencing and webinars, for new skills training also determines positive work engagement (Sangeeta, 2020).

This study used Schaufeli et al's (2002) approach to work engagement, which states that there are three components that make up work engagement, namely vigour, dedication, and absorption. The characteristics of vigour are increased levels of energy, exertion of effort, and persistence in work (Budriene & Diskiene, 2020; Schaufeli et al, 2002; Wuttafon, 2016). Dedication is characterised by enthusiasm and pride in one's work (Ahuja & Gupta, 2018; Kokkina et al, 2018; Schaufeli et al, 2002). According to Schaufeli et al, (2002), absorption is characterised by immersion in one's work and difficulty detaching oneself from one's work. Schaufeli et al, (2002) view work engagement as a unique construct that is different from other known constructs, such as organisational citizenship behaviour, satisfaction, retention, and commitment, among others (Ahuja & Gupta, 2018; Budriene & Diskiene, 2020; Kokkina et al, 2018; Özer et al, 2017; Wuttafon, 2016). Thus, an understanding of the characteristics of Schaufeli et al 's (2002) components of work engagement will assist management to devise strategies that influence work engagement.

Figure 4.1 illustrates the proposed framework depicting the relationship between perceived organisational justice, the psychological contract, and work engagement and the moderating variables (age, gender, employment status and employment category).

Figure 4.1
An Integrated Overview of the Hypothesised Relationship Between Perceived Organisational Justice, the Psychological Contract, and Work Engagement
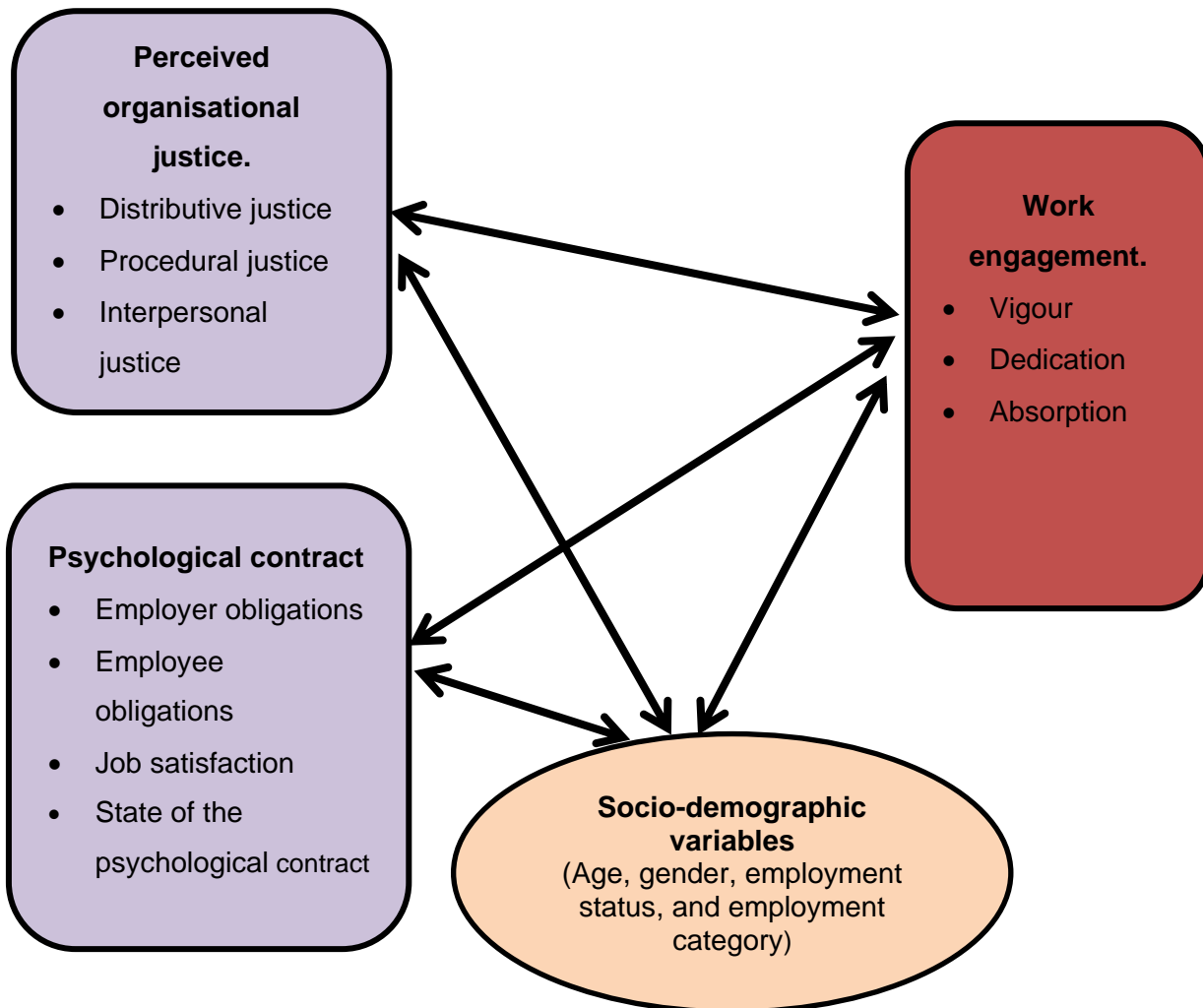
Source: Authors own work

4.1.1 Work engagement in the contemporary workplace

The contemporary workplace is characterised by changes in the work context as a result of complexities such as economic changes, technological changes, and the Covid-19 pandemic (Alam et al, 2022). The complexities in the contemporary workplace can make it difficult for management to understand or develop new forms, methods, or situations that foster work engagement. Work engagement has become a critical issue that needs attention

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for organisations to attain their goals (Alam et al, 2022; Gifford & Young, 2021; Henkel & Haley, 2020).

4.1.2 Perceived organisational justice

The construct of perceived organisational justice was conceptualised in section 3.1. This involved a comprehensive discussion of its components, namely distributive, procedural, interpersonal, and informational justice. These components are summarised in Table 3.1. Gaining insight into the perceptions of organisational justice is valuable for understanding how it relates to work engagement, as well as how various socio-demographic variables among employees (such as age, gender, employment status, and employment category) influence the relationship between perceived organisational justice and work engagement.

4.1.3 Psychological contract

The construct of the psychological contract was conceptualised in section 3.5. The characteristics, nature, types, and state of the psychological contract were discussed. The components of the psychological contract are summarised in Table 3.3. An understanding of the psychological contract can assist in establishing its relationship with work engagement, and in assessing how socio-demographic variables (such as age, gender, employment status, and employment category) impact its relationship with work engagement.

4.1.4 Work engagement

The construct of work engagement was conceptualised in section 3.12. The components, theoretical framework, and models of work engagement were discussed. A summary of the components of work engagement, namely vigour, absorption, and dedication, is provided in Table 3.5. An understanding of work engagement can assist to devise effective work engagement strategies that impact positively on organisations. Gaining an understanding of work engagement may also provide insight into specific strategies for enhancing work engagement that have a positive influence on employees with different socio-demographic characteristics, such as age, gender, employment status, and employment category.

4.1.5 Socio-demographic differences in the contemporary workplace

The socio-demographic variables of age, gender, employment status, and employment category were discussed in sections 3.4 and 3.11. The contemporary workplace employs diverse employees, who are different in terms of age, gender, employment status, and employment category. These employee differences might determine different perceptions of organisational justice and the psychological contract, which may affect employees' levels of work engagement differently. Therefore, an understanding of individual differences in terms of age, gender, employment status, and employment category is crucial to design appropriate policies, practices, and strategies that address specific employee expectations regarding organisational justice and mutual obligations, in order to enhance work engagement.

The impact of socio-demographic variables (such as age gender, employment status, and employment category) on work engagement was explored in section 3.15. The differences in employees' age, gender, employment status, and employment category might determine different levels of work engagement. A conceptual outline of the socio-demographic variables and their interrelationships on a theoretical level is provided in Chapter 3.

4.2 THEORETICAL RELATIONSHIPS BETWEEN THE CONSTRUCTS

The following section discusses the proposed theoretical relations based on the theoretical models discussed in previous sections.

4.2.1 Conceptualisation of work engagement in the tertiary education sector

The concept of work engagement has different interpretations in the tertiary education sector. Despite the fact that the literature views work engagement as a unique construct that influences other human resource outcomes. Other constructs that include job satisfaction, job involvement and organisational commitment have been described as similar to work engagement in the tertiary education sector (Saks, 2006; Saks & Gruman, 2014; Wuttafon, 2016; Yahaya et al, 2014). Work engagement is conceptualised as a new approach to motivation (Budriene & Diskiene, 2020; Meiyani & Putra, 2019; Rana & Chopra, 2019). It is also viewed as an umbrella term for positive human resource outcomes, such as employee concentration, interest in work, increased performance, knowledge application, enthusiasm, employee participation and involvement, organisational citizenship behaviour, higher

productivity, reduced absenteeism, reduced turnover, and higher productivity (Alam et al., 2022; Gifford & Young, 2021; Meiyani & Putra, 2019; Rana & Chopra, 2019; Saks, 2006, 2019; Saks & Gruman, 2014; Sangeetha et al., 2018; Wushe & Shenje, 2019; Wuttafon, 2016; Yahaya et al, 2014). Thus, the concept of work engagement refers to all the positive behaviours and human resource outcomes that employees display when performing their work.

4.2.2 Conceptualisation and evaluation of perceived organisational justice, the psychological contract, and work engagement and their relationship with socio-demographic variables (age, gender, employment status and employment category)

This section discusses the trends and the magnitude of the moderating role of socio-demographic variables (age, gender, employment status and employment category) on perceived organisational justice, the psychological contract, and work engagement.

- **Theoretical relationship between perceived organisational justice and work engagement**

Perceived organisational justice refers to how employees perceive the fairness of an organisation's procedures and interpersonal interactions (Colquitt, 2001). Organisational justice comprises four dimensions, namely distributive, procedural, interpersonal, and informational justice (Colquitt, 2001). Perceived organisational justice has its theoretical foundations in equity theory (Adams, 1965) and social exchange theory (Blau, 1964). Equity theory, propounded by Adams (1965), suggests that employees make comparisons between their input and output ratio and other employees' input and output ratios. The comparisons influence employees to develop perceptions of organisational justice (Nethavani & Maluka, 2020; Zayer & Benabdelhadi, 2020). Similar input–output ratios may determine positive behaviours, such as work engagement, while different input–output ratios may lead to negative behaviours, such as disengagement (El Alfy & David, 2017; Gifford & Young, 2021; Nethavani & Maluka, 2020). Social exchange theory, by Blau (1964), holds that there is an exchange relationship between employers and employees. The exchange relationship creates obligations and expectations between the parties in the exchange relationship (Blau, 1964). Employees may perceive justice when they receive fair treatment, and may then develop positive behaviours, or they may perceive injustice when they receive unfair treatment, and may then develop negative work behaviours (Blau, 1964; Cropanzano et al, 2017; Nethavani & Maluka, 2020).

Employees have different perceptions of fairness within an organisation. As discussed in the preceding sections, employees expect fairness in the distribution of outcomes, such as pay and promotion. Employees are also concerned with the procedures used in the distribution of work outcomes. Likewise, employees expect fair treatment with dignity and respect, and they expect truthfulness, timeliness, and adequacy of information by management when implementing policies and procedures. When employees perceive fairness in the distribution of resources, work procedures, and information they receive from management, they

develop positive behaviours, such as work engagement. When they perceive unfair treatment, they develop negative work behaviours, such as disengagement (Ghosh et al, 2014; Inoue et al, 2010; Law, 2014; Ledimo & Hlongwane, 2013b; Nethavani & Maluka, 2020; Özer et al, 2017; Pakpahan et al, 2020; Panatik et al, 2017; Peters, 2018; Rodriguez et al, 2014; Strom et al, 2014; Tessema, 2014). Based on the literature, it can be said that perceived organisational justice predicts work engagement in line with hypothesis 2.

- **Theoretical relationship between the psychological contract and work engagement**

The psychological contract is a set of individual beliefs on the mutual obligations and benefits in an exchange relationship between employers and employees (Rousseau, 1989). It is rooted in psychological contract theory (Rousseau, 1989). Psychological contract theory is influenced by social exchange theory, which was propounded by Blau (1964). Social exchange theory states that the parties in an exchange relationship are obligated to equally reciprocate contributions made by the other party to guarantee a positive exchange relationship (Blau, 1964). Employees may develop positive outcomes, such as work engagement, when they perceive that their psychological contract obligations have been met, while negative behaviours, such as disengagement, can develop when there are perceptions of breach or violation of the psychological contract (Garcia et al, 2021; Rousseau, 1989). Employees hold different perceptions of reciprocal obligations with the organisation. As such, employees expect trust, fairness, and fulfilment of employer obligations. When employees perceive fair treatment and fulfilment of the obligations by the employer, they develop positive work behaviours, such as work engagement. Employees may also develop negative work behaviours, such as disengagement, in the event of psychological contract breach or violation (Garcia et al., 2021; Gresse & Linde, 2020; Guest & Conway, 2002; Herrera & De Las Heras-Rosas, 2020; Ling & Zhongwu, 2021; Opolot & Maket, 2020; Wiechers et al, 2019; Yuexin & Hui, 2020). Therefore, it can be concluded that the psychological contract also affects work engagement. There is a theoretical relationship between socio-demographic variables (age, gender, employment status and employment category), perceived organisational justice, the psychological contract, and work engagement.

Here, a discussion of the relationship between socio-demographic variables (age, gender, employment status and employment category), as moderating variables, and perceived organisational justice, the psychological contract, and work engagement is made.

Socio-demographic variables such as age, gender, employment status, and employment category may have an influence on an individual's perception of organisational justice, and employees may have different perceptions of organisational justice (Brienza & Bobocel, 2017; Butitova, 2019; Deepak, 2021; El Alfy & David, 2017; Gifford & Young, 2021; Mengstie, 2020; Pan et al, 2018). The differences in employees' socio-demographic characteristics influences their perceptions of fairness of the organisation's treatment in terms of distribution of resources, work procedures, interpersonal relations, and informational justice (Aslam et al, 2020; Ghosh et al, 2014; Nethavani & Maluka, 2020; Ohiorenoya & Eguavoen, 2019; Özer et al, 2017; Pakpahan et al, 2020; Strom et al, 2014; Sze & Angeline, 2011).

The literature indicates that age may have an influence on perceived organisational justice. Older employees are more sensitive to the informational and interpersonal justice dimensions of organisational justice, while younger employees are more sensitive to the distributive and procedural justice dimensions (Brienza & Bobocel, 2017). The literature also shows that gender influences individual perceptions of organisational justice. Female employees perceive organisational justice more positively than male employees (Butitova, 2019; Deepak, 2021). Male employees are more sensitive to organisational justice than female employees (El Alfy & David, 2017). Employees with a long-term employment status and higher employment ranks have a lower perception of organisational justice than employees with a short-term employment status and lower employment ranks.

A review of related literature indicates that each individual has unique socio-demographic characteristics, which determine different perceptions of organisational justice. Employees may have positive perceptions of organisational justice, in which case they will develop positive work behaviours. Negative perceptions of organisational justice, such as unfair distribution of rewards, lack of respect, and mistrust, may result in negative work behaviours among employees, which will affect their work engagement (Chaudhary & Rangnekar, 2017; Korsakienė et al, 2017; Shahrul et al, 2019). Hence, it can be concluded that socio-demographic variables (age, gender, employment status, and employment category) predict perceived organisational justice.

The literature shows that individual employees have different socio-demographic characteristics (in terms of age, gender, employment status, and employment category) and have different perceptions of the psychological contract (Cheng, 2021; Cooke et al, 2020; Crompton et al, 2007; Garcia et al, 2021; House et al, 2004; Ng & Feldman, 2009; Poisat et al, 2018). Positive perceptions of the psychological contract may result in fulfilment of the

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psychological contract, while negative perceptions will result in breach or violation of the psychological contract (Gifford & Young, 2021; Meiyani & Putra, 2019; Özer et al, 2017; Rana & Chopra, 2019). As mentioned previously, positive perceptions of both organisational justice and the psychological contract may result in positive behaviours, such as work engagement, while negative perceptions of organisational justice and the psychological contract may lead to negative behaviours, such as disengagement.

The relationship between socio-demographic variables and the psychological contract may be different for a diverse socio-demographic profile of employees, as employees differ in terms of age, gender, employment status, and employment category (Adams & Rau, 2004; Bal, 2017; Cheng, 2021; Cooke et al., 2020; DelCampo et al, 2010; Farh et al., 2004; Garcia et al, 2021; Hess & Jepsen, 2009; House et al, 2004; Ng & Feldman, 2009; Poisat et al, 2018; Pramudita et al, 2021; Raja et al, 2018; Restubog et al, 2010; Roberts, 2020; Smola & Sutton, 2002; Wiechers et al, 2019).

Older employees perceive relational obligations more than transactional obligations, while younger employees perceive transactional obligations more than relational obligations (Adams et al, 2014; Bal, 2017; Hess & Jepsen, 2009; Poisat et al, 2018). Younger employees are flexible and can more easily change their expectations of the psychological contract than can older employees (Bal, 2017; Ng & Feldman, 2009). Women perceive relational aspects of the psychological contract more than transactional aspects, while men perceive transactional aspects more than relational aspects (Adams et al, 2014; Cheng, 2021). The Asian race perceives relational contracts more than transactional contracts (Garcia et al, 2021). The white race is more concerned with transactional contracts than with relational contracts (Cooke et al, 2020; Garcia et al, 2021; Pramudita et al, 2021; Wiechers et al, 2019). The black African race perceives psychological contracts negatively (Poisat et al, 2018). Both employees with a lower-level employment status and employees with a higher-level employment status pay more attention to transactional elements of the psychological contract than to relational elements (Cheng, 2021; Poisat et al, 2018).

Research studies indicate that employees with different socio-demographic variables (age, gender, employment status and employment category) have different levels of work engagement (Alam et al, 2022; Butitova, 2019; Cooke et al, 2020; Crompton et al, 2007; Garcia et al, 2021; Geldenhuys & Henn, 2017; Haley et al, 2013; Mokhine, 2020; Nethavani & Maluka, 2020; Poisat et al, 2018; Pramudita et al, 2021; Tshilongamulenzhe & Takawira, 2015). This implies that employees' different socio-demographic characteristics may predict their level of work engagement.

Older employees are more engaged than younger employees (Alam et al, 2022; Geldenhuys & Henn, 2017; Haley et al, 2013; Simpson, 2009; Zeng et al, 2019). They are more engaged as they direct all their energy to their work, because they have full-grown children, who do not take much of their attention (Alam et al, 2022; Geldenhuys & Henn, 2017).

Studies differ in the relationship that they report between gender and work engagement (Banihani et al, 2013; Crompton et al, 2007; Gulzar & Teli, 2018; Tshilongamulenzhe & Takawira, 2015). Some studies report that men are more engaged in their work than women are (Banihani et al., 2013; Crompton et al, 2007). Gulzar and Teli (2018) found that women were naturally more engaged than men, despite the competing roles that they have at work and at home. Other findings suggest that gender is neutral in its relationship with work engagement, as men and women were found to be equal in terms of work engagement (Tshilongamulenzhe & Takawira, 2015).

Related studies on the relationship between employment status and work engagement show a theoretical relationship between employment status and work engagement (Butitova, 2019; El Alfy & David, 2017; Nethavani & Maluka, 2020; Poisat et al, 2018). Lower-level employees were found to be more engaged than higher-level employees, as they were enthusiastic about promotions (El Alfy & David, 2017; Nethavani & Maluka, 2020). A related study conducted by Butitova (2019) found that higher-level employees were more engaged than lower-level employees. According to Poisat et al, (2018), work behaviours such as work engagement evolve with increased time in service, which explains the high level of work engagement for higher-level employees.

Research studies differ on the relationship that they report between employment category and employment status reveal a theoretical relationship between employment category and work engagement (Adedeji, 2016; Barankay, 2012; Bernstein & Xin Li, 2016; Sidanus & Pratto, 1999). Sidanus and Pratto (1999) report that employees in a higher employment category (such as academic employees) were found to be more engaged than lower- level category employees (such as non-academics), as they were paid better than employees in lower employment category. Other findings suggest that lower-level and higher-level employees had similar levels of work engagement (Adedeji, 2016; Barankay, 2012; Bernstein & Xin Li 2016). Both categories maintain their work engagement levels, as they are concerned with boosting their profiles (Adedeji, 2016; Barankay, 2012; Bernstein & Xin Li 2016).

In summary, socio-demographic variables (such as age, gender, employment status, and employment category) can predict work engagement. Employees with different socio-demographic characteristics will have different levels of work engagement, and different strategies for enhancing work engagement will appeal to them. Understanding the variables discussed above will help in devising human resource strategies that promote positive levels of work engagement. It is crucial to keep in mind the different socio-demographic variables of age, gender, employment status, and employment category to ensure that the strategies to foster work engagement appeal to the different employees.

Differences in these socio-demographic variables have not been examined in single research, particularly the Zimbabwean tertiary education sector. The current research is therefore intended to fill this gap. It is crucial to know that the differences in employees' socio-demographic characteristics may influence their appreciation of different work engagement strategies. This validates the use of socio-demographic variables (age, gender, employment status and employment category) as moderating variables that explain higher or lower levels of work engagement.

To address the final aim of this research, which is to develop a work engagement framework for tertiary education institutions in Zimbabwe, it is necessary to consider the diverse socio-demographic profile of this study, to ensure that appropriate strategies are put in place to cater for the work engagement of the different socio-demographic groups.

There is no single study that has investigated both organisational justice, the psychological contract, and socio-demographic variables (age, gender, employment status and employment category) as predictors of work engagement (Brienza & Bobocel, 2017; Chaudhary & Rangnekar, 2017; Deas, 2017; Deepak, 2021; Garcia et al, 2021; Gresse & Linde, 2020; Guest & Conway, 2002; Herrera & De Las Heras-Rosas, 2020; Hiariey & Tutupano, 2020; Korsakienė et al, 2017; Ling & Zhongwu, 2021; Opolot & Maket, 2020; Shahrul et al, 2019; Snyman et al, 2015). This research study aimed to address this gap.

The literature also indicates that there is a dearth of research on the variables that predict work engagement (Alam et al, 2022; Gifford & Young, 2021; Hiariey & Tutupano, 2020). Furthermore, the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement have not been explored in a single study (Bruce et al, 2014; Butitova, 2019; Deas, 2017; Freese & Schalk, 1996; Ghosh et al, 2014; Guest, 2004; Guest & Conway, 2002; Hiariey & Tutupano, 2020; Jepsen & Rodwell, 2006; Naidoo et al, 2019; Ngobeni & Bezuidenhout, 2011; Özer et al.,

2017; Pekurinen et al, 2017; Rao, 2021; Rayton & Yalabik, 2014; Saks, 2019; Snyman et al, 2015). This research aimed to address the identified gap, specifically in the Zimbabwean tertiary education sector.

4.2.3 Conceptualisation of the implications of the postulated theoretical work engagement framework for work engagement practices in tertiary education institutions in Zimbabwe

This section discusses the work engagement practices mentioned in the literature review that can be used in tertiary education institutions in Zimbabwe, as well as their implications for work engagement. The work engagement practices for tertiary education institutions are classified under three categories, namely individual-level, institutional-level, and national-level strategies.

- **Individual-level work engagement strategies**

Individual-level work engagement strategies refer to specific interventions for work engagement for different socio-demographic groups of employees in terms of age, gender, employment status, and employment category. Thus, work engagement is determined by individual differences in terms of age, gender, employment status, and employment category. It is imperative for organisations to select appropriate human resource strategies to cater for employee differences in terms of the above characteristics.

Employees of different age groups display different levels of work engagement (Alam et al, 2022). Younger employees are engaged by fulfilling their potential; promotions and challenging work may therefore be appropriate strategies for promoting their work engagement. Organisations must ensure organisational justice, particularly in their procedures for promotions and in the distribution of workloads, to determine positive perceptions of organisational justice, thereby enhancing the work engagement of their employees (Othman et al, 2019). Promotions and challenging work may also result in positive psychological contracts for younger employees, as they realise fulfilment of their psychological contracts. Training and development may also be an effective strategy for younger employees. As the younger workforce values promotions and challenging work, they require training and development to improve their skills (Hee et al, 2020). Organisations must also ensure availability of work resources and good job and task designs, as well as support for employees to perform, in order to increase their work engagement levels (Agbionu et al, 2018).

Age can also influence the type of obligations and psychological contract, as well as the reaction towards breach or violation of the psychological contract (Roberts, 2020). Organisations must ensure that they offer various types of rewards, such as financial (reasonable pay) and non-financial (employee benefits) rewards, to determine positive psychological contracts that promote the work engagement of different age groups (Osborne & Hammoud, 2017; Rana & Chopra, 2019). Relational obligations, such as work–life balance, may also lead to positive psychological contracts, thereby enhancing the work engagement of employees (Sangeeta, 2020; Vance, 2006).

There are also gender differences in work engagement (Bhebhe & Murindi, 2020; Crompton et al., 2007). Female employees are usually dissatisfied with their longer working hours, due to competing tasks at home, and they thus display a lower level of work engagement than male employees (Geldenhuys & Henn, 2017). Therefore, organisations need to design appropriate strategies for both females and males. Cheng (2021) explains that male employees expect and attach value to transactional aspects of the psychological contract, while women value relational aspects of the psychological contract. Organisations therefore need to manage the psychological contracts of their employees, by ensuring fair rewards and offering welfare and social security services to their employees, in order to enhance their work engagement (Othman et al., 2019; Sangeeta, 2020).

Lower-level and higher-level employees have different levels of work engagement. Work engagement strategies for both categories include rewards in the form of bonuses, basic salary, and a good welfare system to manage employees' psychological contracts, which will lead to higher levels of work engagement (Cheng, 2021).

- **Institutional-level work engagement strategies**

Institutional-level practices are general, structural, and systematic work engagement policies and practices for influencing work engagement for all employees, regardless of their socio-demographic characteristics. The nature of the organisation, the work environment, and the type of work require appropriate strategies for enabling work engagement (Hee et al, 2020). In a tertiary education institution, the type of work (teaching, research, university service, or innovation and industrialisation) requires many resources to perform the work tasks (Phuthi, 2022). This implies that unavailability of such resources may affect employees' output, such as research (Agbionu et al, 2018; Uzhenyu, 2019). However, employees in academic

institutions feel proud (a characteristic of work engagement) when their personal or institutional research is visible or highly ranked (Agbionu et al, 2018).

Thus, engagement strategies at the institutional level, such as availability of resources and funds; institutional orientation; institutional regulations and policies; institutional culture; a rewards and incentive system; leadership styles; fair teaching loads; a conducive environment for teaching and research, such as an e-library and access to restricted journals and research content; and institutional research visibility and ranking may enhance the work engagement of tertiary education employees (Agbionu et al, 2018; Hee et al, 2020; Heng et al, 2020; Negash et al, 2019; Shin & Cumming, 2010; Tien, 2016).

Provision of work resources, such as internet facilities, office space, and access to restricted journals, may determine perceptions of fairness, given the nature of work in tertiary education institutions. Thus, positive perceptions of organisational justice may enhance the work engagement of employees (Alam et al, 2022; Negash et al, 2019). Fair workloads, such as those for teaching and research supervision, will allow employees enough time for other work expectations, such as research and innovation (Osborne & Hammoud, 2017; Rana & Chopra, 2019). Support from management will motivate employees to fulfil their work obligations and meet the employer's expectations, thereby managing employees' psychological contracts and increasing their level of work engagement.

Institutions need to ensure that human resource policies and practices are implemented in a way that employees perceive fair treatment, promise keeping, and fulfilment of employees' expectations by the organisation. There should be organisational strategies that show the organisation's commitment to organisational justice, by implementing policies on the distribution of outcomes, including salaries; promotions; rewards; and work resources, such as office space and the internet (Colquitt & Rodell, 2015; Greenberg, 1990; Omar et al, 2018; Sheeraz et al, 2021).

Policies that communicate management's commitment to procedural justice should ensure that clear methods or processes are used, to ensure justice to employees (Agbionu et al., 2018; Altehrebah et al, 2019; Othman et al, 2019; Pattnaik & Tripathy, 2019; Rana & Chopra, 2019; Swalhi et al, 2017). In addition, policies that show the organisation's commitment to interpersonal justice must be put in place. Employer–employee relations policies, procedures, and practices, such as workers committees, works councils, codes of conduct, employee involvement and participation, and performance management policies,

must ensure respect and dignity for employees (Omar et al, 2018; Özer et al, 2017; Pattnaik & Tripathy, 2019; Swalhi et al, 2017).

Organisations must also ensure implementation of policies that intervene in informational justice. Such communication policies must consider truthfulness, adequacy of information, and implementation of the communicated procedures, and they must ensure timely action on the information released to employees (Colquitt, 2001; Colquitt & Rodell, 2015; Gifford & Young, 2021; Pattnaik & Tripathy, 2019).

In addition, organisations must develop interventions for managing employees' psychological contracts. Interventional policies, such as career plans and programmes, performance management policies, training and development policies, and promotion policies, may assist to manage employees' expectations and perceptions and control their behaviours, such as work engagement (Gresse & Linde, 2020; Ling & Zhongwu, 2021; Othman et al, 2019; Rousseau, 2000).

It is imperative for organisations to ensure that the execution of organisational strategies and interventions is also done on an individual level, to enhance the work engagement of different employees, by specifically considering employees' socio-demographic characteristics, such as their age, gender, employment status, and employment category. The work engagement of different employees may be influenced by individual perceptions of organisational justice, such as distributive, procedural, interpersonal, and informational justice (Colquitt, 2001). Different employees' work engagement may also be based on individuals' perceptions of the psychological contract, namely employer obligations, employee obligations, job satisfaction, and the state of the psychological contract (Guest, 2004; Guest & Conway, 2002; Hui et al, 2004; Rousseau, 1989). The work engagement framework emanating from this study should point out specific work engagement strategies that appeal to specific ages, genders, races, and employment statuses, as guided by the literature on related studies. For example, financial rewards have greater appeal for younger employees than non-financial rewards, while older employees value financial and non-financial rewards equally (Bal, 2017).

- **National-level work engagement strategies**

National-level work engagement strategies are external policies or practices and strategies used by external institutions or bodies that support tertiary education institutions. Government, industry, and donor agencies contribute to the work engagement of employees

in the tertiary education sector through the provision of financial, technical, and work support (Heng et al., 2020; Sam & Dahles, 2017). Such strategies include collaborative national policies, conducive national politics, recognition of sociocultural support (e.g., academic freedom, and respect and recognition of academic growth), culture development, research funding, government investment in and support of tertiary activities (infrastructure and technical support), development partners and donor support (e.g., the World Bank and UNESCO), and industry support (Bland et al., 2005; Heng et al, 2020; Negash et al, 2019; Quimbo & Sulabo, 2014; Sam & Dahles, 2017; Tien, 2016). Employees in the tertiary education sector expect to acquire all the resources for them to perform (Heng et al, 2020). Provision of financial, technical, and work support may enable employees to increase their research output and innovation, thereby resulting in positive perceptions of organisational justice and the psychological contract, which will increase their levels of work engagement.

It is assumed that implementation of the work engagement framework of the current research at Zimbabwean tertiary institutions will provide an understanding of the constructs and necessary interventions, in order to devise actions that are essential to engage employees with different socio-demographic characteristics (Agbionu et al, 2018; Alam et al, 2022; Gifford & Young, 2021; Hee et al, 2020; Osborne & Hammoud, 2017; Quimbo & Sulabo, 2014; Rana & Chopra, 2019).

4.2.4 Implications for work engagement strategies

The theoretical relationships that were discussed in section 4.2 may have numerous implications for work engagement strategies in the tertiary education sector, particularly the tertiary institutions under study in the current research across individual, institutional, and national levels, as discussed in sections 4.2.2 and 4.2.3. The theoretical work engagement framework for the tertiary education sector has to ensure that employees develop positive perceptions of organisational justice and strive to fulfil their psychological contracts.

It is vital to recognise that work engagement at individual, institutional, and national levels may be influenced by the constructs of perceived organisational justice and the psychological contract, as well as by the moderating effects of socio-demographic variables (age, gender, employment status and employment category) on the relationships between perceived organisational justice, the psychological contract, and work engagement.

At all three levels of work engagement, the work engagement of employees may be subject to good perceptions of the dimensions of organisational justice, namely distributive,

procedural, interpersonal, and informational justice (Colquitt, 2001). The work engagement practices that are put in place should therefore appeal to the different socio-demographic groups of employees to ensure their work engagement.

Work engagement at individual, institutional, and national levels may also be subject to the psychological contract of employees (Guest, 2004; Rousseau, 1989). The choice of work engagement strategies needs to consider fulfilment of employees' psychological contract, by ensuring fulfilment of employer and employee obligations, job satisfaction, and the state of the psychological contract, while bearing in mind employee differences.

The specific socio-demographic group to which an employee belongs in terms of age, gender, employment status, and employment category may also influence their work engagement, by altering their perceptions of both organisational justice and the psychological contract (Alam et al, 2022; Banihani et al, 2013; Geldenhuys & Henn, 2017; Quimbo & Sulabo, 2014; Sam & Dahles, 2017; Simpson, 2009). This implies that the choice of appropriate strategies should consider the socio-demographic characteristics of employees in order to devise specific interventions at individual, institutional, and national levels to enhance the work engagement of different employees. The theoretical work engagement framework for tertiary education institutions is presented in Table 4.1.

Table 4.1
Theoretical Work Engagement Framework for Tertiary Education Institutions

Work engagement level	Perceived organisational justice	Psychological contract	Socio-demographic variables	Work engagement strategies

Individual level Vigour Dedication Absorption	Distributive justice Procedural justice Interpersonal justice Informational justice	Employer obligations Employee obligations Job satisfaction State of the psychological contract	Age Gender Employment status Employment category	- Effective leadership - Training and development - Rewards and recognition - Task significance - Employee feedback - Fair organisational policies - Supervisor support
Institutional level Vigour Dedication absorption	Distributive justice Procedural justice Interpersonal justice Informational justice	Employer obligations Employee obligations Job satisfaction State of the psychological contract	Age Gender Employment status Employment category	- Availability of resources and funds - Institutional orientation - Institutional regulations and policies - Institutional culture - Rewards and incentive system - Leadership styles - Teaching loads - Conducive environment for teaching and research, such as an e-library and access to restricted journals and research content - Institutional research visibility

				and ranking
				and ranking
National level Vigour Dedication Absorption	Distributive justice Procedural justice Interpersonal justice Informational justice	Employer obligations Employee obligations Job satisfaction State of the psychological contract	Age Gender Employment status Employment category	• Collaborative national policies • Conducive national politics • Recognition of sociocultural support (e.g., academic freedom, and respect and recognition of academic growth) • Culture development • Research funding • Government investment and support of tertiary activities (infrastructure and technical support) • Development partners and donor support (e.g., World Bank and UNESCO) • Industry support
Implications for work engagement	Perceived organisational justice can assist to determine work engagement levels of employees with different socio-demographic	The psychological contract can assist to determine work engagement levels of employees with different socio-	Socio-demographic variables can assist to determine work engagement levels of employees with different socio-demographic characteristics to devise work	Work engagement strategies may have an effect on the work engagement of employees with different socio-demographic characteristics (age, gender, employment

	characteristics in choosing work engagement strategies.	demographic characteristics in choosing work engagement strategies.	engagement strategies for different socio-demographic groups.	status and employment category). They may appeal differently to different socio-demographic groups of employees.

Source: Author's own work

The theoretical relationships between the constructs based on the reviewed literature are outlined in Table 4.1. The theoretical work engagement framework depicted in Table 4.1 indicates the three levels of work engagement, namely the individual, the institutional, and the national level, and their effect on the work engagement of employees with different socio-demographic characteristics (age, gender, employment status and employment category).

4.3 EVALUATION AND SYNTHESIS

The main objective of the literature review was to establish the theoretical relationship between perceived organisational justice, the psychological contract, and work engagement, and to determine the influence of socio-demographic variables (age, gender, employment status and employment category) on the relationship between perceived organisational justice, the psychological contract, and work engagement. The literature review found that tertiary education institutions face challenges in engaging employees, and it is even more complex considering that employees in different socio-demographic groups have different perceptions of organisational justice and the psychological contract (Alam et al, 2022; Aslam et al, 2020; Deas, 2017; Hiariey & Tutupano, 2020; Nethavani & Maluka, 2020; Ngobeni & Bezuidenhout, 2011; Snyman et al, 2015; Tshilongamulenzhe & Takawira, 2015).

The reviewed literature indicates the reasons for work engagement challenges emanating from the complexities and stringent regulations in tertiary institutions as unfair policies, frustrating working conditions, lack of resources, work overload, inadequate teaching and research facilities, poor remuneration, and lack of support for the programmes and activities of tertiary institutions (Agbionu et al, 2018; Alam et al, 2022; Chinyoka & Mutambara, 2020;

Garwe & Tirivanhu, 2015; Gupta et al, 2015; Henkel & Haley, 2020; Majoni, 2014; Marufu & Uzhenyu, 2017; MHTESTD, 2019; Wushe & Shenje, 2019).

The work engagement strategies and interventions that can be employed by tertiary institutions at individual, institutional, and national levels include job and task design, performance management, team work and collaboration, good leadership style, training and development, and rewards (Altehrebah et al, 2019; Ariani, 2014; Azmy, 2019; Chahar & Hatwal, 2018; Gifford & Young, 2021; Jondar & Sudarsono, 2015).

In addition, the literature shows that perceived organisational justice influences work engagement (Ghosh et al, 2014; Inoue et al, 2010; Ledimo & Hlongwane, 2013; Nethavani & Maluka, 2020; Ohiorenoya & Eguavoen, 2019; Özer et al, 2017; Pakpahan et al, 2020; Panatik et al, 2017; Peters, 2018; Saks & Gruman, 2014; Strom et al, 2014). It also notes that socio-demographic variables (age, gender, employment status and employment category) can alter or control employee perceptions of organisational justice, which can reduce, increase, or maintain employees' work engagement levels (Brienza & Bobocel, 2017; Butitova, 2019; Deepak, 2021; El Alfy & David, 2017; Mengstie, 2020; Nethavani & Maluka, 2020; Pan et al, 2018).

The reviewed literature indicates that the psychological contract influences work engagement (Garcia et al, 2021; Gresse & Linde, 2020; Herrera & De Las Heras-Rosas, 2020; Ling & Zhongwu, 2021; Naidoo et al, 2019; Opolot & Maket, 2020; Wiechers et al, 2019; Yuexin & Hui, 2020). The literature also shows that the interplay of socio-demographic variables (age, gender, employment status and employment category), as moderating variables, may reduce, increase, or maintain the levels of work engagement (Adams et al, 2014; Bal, 2017; DelCampo et al, 2010; Hess & Jepsen, 2009; Ng & Feldman, 2009; Restubog et al, 2010; Roberts, 2020; Smola & Sutton, 2002; Twenge, 2010). The current study is limited in some ways, as it only focuses on perceived organisational justice and the psychological contract (the independent variables) and socio-demographic (moderating) variables (age, gender, employment status and employment category) that affect work engagement. The context of this research means that this study is also limited to a single tertiary institution, which therefore does not allow comparisons between different tertiary institutions.

The literature shows that perceived organisational justice and the psychological contract are directly related to work engagement. It also notes that socio-demographic variables (age, gender, employment status and employment category) influence the relationships between

perceived organisational justice, the psychological contract, and work engagement. The literature also indicates that socio-demographic variables influence the impact of different work engagement strategies for different socio-demographic groups of employees.

4.4 CHAPTER SUMMARY

This chapter has addressed research aim 3 which sought to critically evaluate the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement and its antecedents as the elements of the theoretical framework that emerges from the relationship dynamics.The chapter has also addressed research aims 4 and 5 of the literature review, which are to develop an integrated theoretical framework for work engagement, and to conceptualise its implications for work engagement practices in Zimbabwean tertiary education institutions. The research aims related to the literature review that were achieved in this chapter are stated below:

Research aim 4: To conceptualise the strength and/or direction of relationships between socio-demographic variables (age, gender, employment status and employment category) and (1) perceived organisational justice and (2) the psychological contract and work engagement.

Research aim 5: To conceptualise the implications of the postulated theoretical work engagement framework for work engagement practices in tertiary education institutions in Zimbabwe.

Chapter 5 will explain the empirical investigation, with the specific aim of determining the statistical strategies used to investigate the relationship between individuals' perceived organisational justice, psychological contract, and work engagement, as well as the moderating effect of individuals' socio-demographic characteristics (age, gender, employment status and employment category) on the relationship between perceived organisational justice, the psychological contract, and work engagement.

CHAPTER 5: RESEARCH METHODOLOGY

This chapter explains the statistical approaches employed for testing the empirical research hypotheses, to establish a work engagement framework for different socio-demographic groups of employees in the tertiary education sector in Zimbabwe. This was achieved through the investigation of the relationships between perceived organisational justice, the psychological contract, and work engagement, and also the moderating effect of socio-demographic variables (age, gender, employment status, and employment category) on the relationship between perceived organisational justice, the psychological contract, and work engagement.

The chapter specifies the population and sample size of the research study. It also describes the measuring instruments employed in the study and provides the motivation for the choice of these instruments. Lastly, the research hypotheses formulation is explained.

The empirical phase comprises nine steps, as shown below:

Step 1: Determination and description of the sample
Step 2: Motivation for the choice of measuring instruments
Step 3: Ethical considerations in the administration of the measuring instruments
Step 4: Capturing of criterion data
Step 5: Formulation of the research hypotheses
Step 6: Statistical processing of the data
Step 7: Reporting and interpreting of the results
Step 8: Integration of the research findings
Step 9: Formulation of the research conclusions, limitations, and recommendations

This chapter addresses steps 1 to 6 and Chapters 6 and 7 address steps 7 to 9.

5.1 DETERMINATION AND DESCRIPTION OF THE SAMPLE

A sample is a subset taken from a chosen sampling frame or entire population (Shukla, 2020; Taherdoost, 2016). A population is a set, or group, of all the units to which the research findings are to be applied (Shukla, 2020). Sampling is done to make inferences about the population and to save time and money (Nardi, 2018; Shukla, 2020; Taherdoost, 2016). When choosing a sample, it is imperative to ensure that the sample represents the

population being studied (Cantwell, 2008; Creswell & Creswell, 2017; Shukla, 2020). There are two approaches to sampling, namely probability and non-probability sampling (Shukla, 2020). Probability sampling refers to a situation where every item in the population has an equal opportunity of being included in the sample (Salkind, 2018; Taherdoost, 2016). The non-probability sampling approach uses non-random ways to select sample items (Creswell & Creswell, 2017). Thus, in non-probability sampling, the chances of population items, or elements for inclusion in the sample are not equal.

The census sampling method was employed for this research study. A census is a quantitative research method that selects all the elements of the population to participate in a study (Cantwell, 2008; Golata, 2016; Ronit & Glickman, 2009). Census sampling is a probability sampling method that ensures an equal chance of inclusion for every element of the population in a study. The advantage of using the census sampling method is that it guarantees accuracy and reliability, by involving every population element in the study (Shukla, 2020). However, census sampling takes time, as it pursues specific variables and characteristics in a study (Deas, 2017).

The population in this study comprises all employees (permanent and contract, academic and non-academic) from a single tertiary education institution in Zimbabwe. A census sample of all 1,621 employees (academic and non-academic) employed at the targeted institution, who differed in age, gender, employment status, and employment category, was targeted. Participants were obliged to complete an online survey comprising the three measuring instruments, and 336 usable questionnaires were returned (*n* = 336). This translates to a response rate of 20.73%. The response rate is considered low and as such becomes a limitation. The research findings can therefore not be generalised to the entire population due to lack of representativeness.

The sample profile is characterized with the following socio-demographic variables: age, gender, employment status, and employment category. These variables were chosen based on the analysis of the literature on the influence of these variables on the relationships between perceived organisational justice, the psychological contract, and work engagement.

5.1.1 Distribution of age groups in the sample

Table 5.1 and Figure 5.1 depict the age distribution of the sample. Participants' age was categorised in ranges between 18 and 65 years. Participants aged 18 to 25 years comprised .9% of the sample, and participants in the age group 26–35 years comprised 7.4%.

Participants between 36 and 45 years constituted 50.3% of the sample, participants aged 46 to 55 years made up 34.5% of the sample, and participants in the 56–65-year age group made up 6.8%.

Table 5.1
Age Distribution of the Sample (n = 336)

Age				
	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid				
18–25 years	3	.9	.9	.9
26–35 years	25	7.4	7.4	8.3
36–45 years	169	50.3	50.3	58.6
46–55 years	116	34.5	34.5	93.2
56–65 years	23	6.8	6.8	100
Total	336	100	100	

Figure 5.1
Age Distribution of the Sample (n = 336)

Age group

■ 18-25years   ■ 26-35years   ■ 36-45years   ■ 46-55years   ■ 56-65years
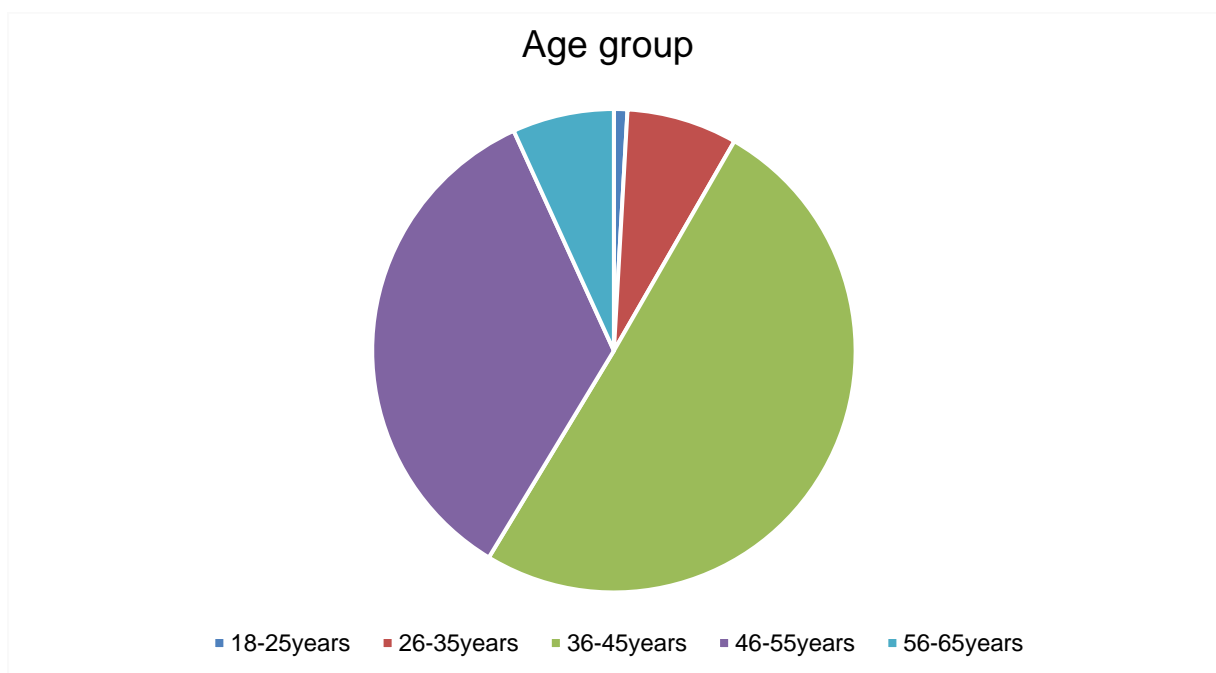
Source: Author's own work

5.1.2 Distribution of gender groups in the sample

Table 5.2 and Figure 5.2 depict the gender distribution of the sample. Male participants represented 66.1% of the sample, and female participants represented 33.9% of the sample (*n* = 336).

Table 5.2
Gender Distribution of the Sample (n = 366)

Gender					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Male**	222	66.1	66.1	66.1
	Female	114	33.9	33.9	100
	Total	336	100	100	

Figure 5.2
Gender Distribution of the Sample (n = 336)
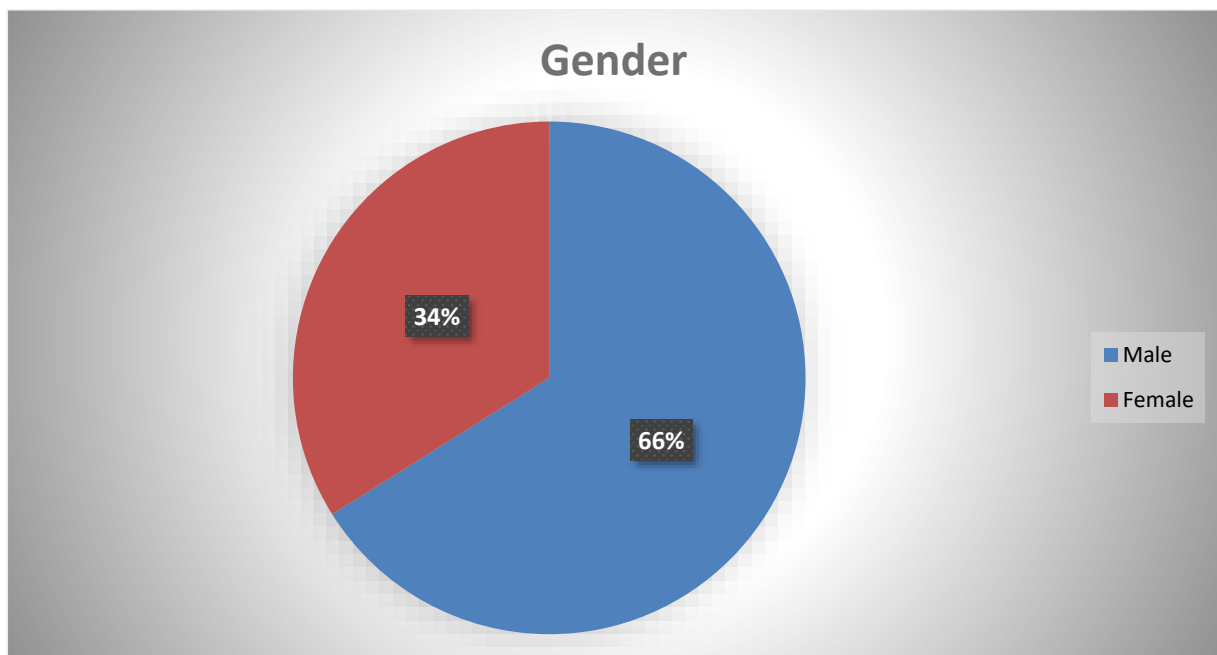
Source: Author's own work

5.1.3 Distribution of race groups in the sample

Table 5.3 and Figure 5.3 indicate the distribution of race groups in the sample. Black Africans comprised 99.1% of the sample, Coloureds comprised .6%, and Indians/Asians comprised .3% (*n* = 336).

Table 5.3
Race Distribution of the Sample (n = 336)

Race		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Black African**	333	99.1	99.1	99.1
	Coloured	2	.6	.6	99.7
	Indian/Asian	1	.3	.3	100
	Total	336	100	100	

Figure 5.3
Race Distribution of the Sample (n = 336)
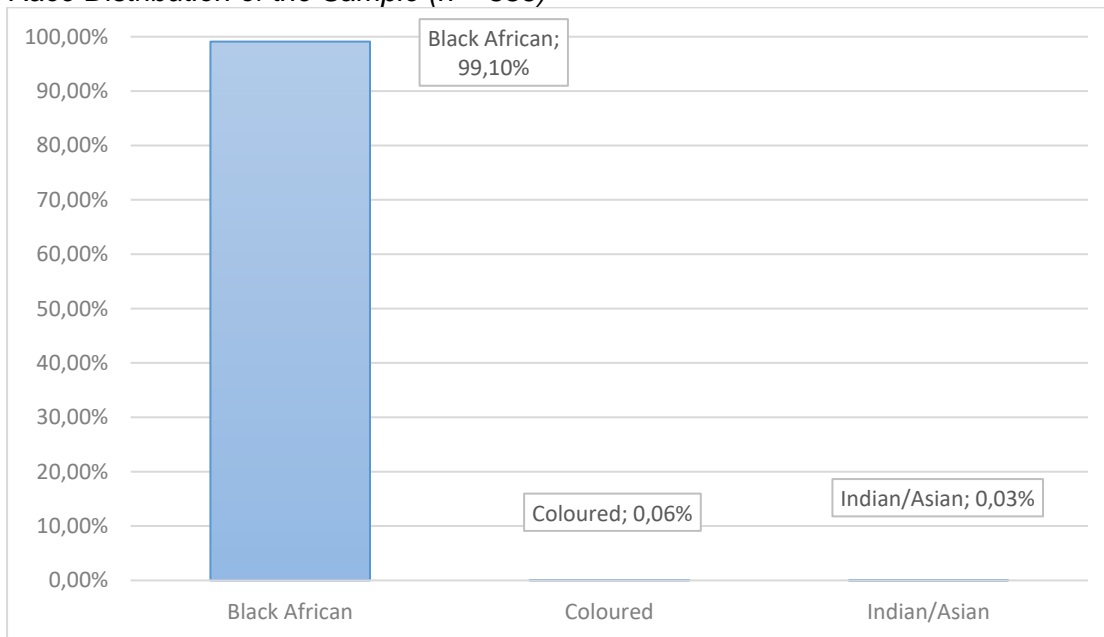
Source: *Author's own work*

5.1.4 Distribution of employment status groups in the sample

Table 5.4 and Figure 5.4 portray the distribution of employment status groups in the sample. Permanent employees comprise 86.6% of the sample, and contract employees comprise 13.4% (n = 336).

Table 5.4
Distribution of Employment Status Groups in the Sample (n = 336)

Employment status		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Permanent**	291	86.6	86.6	86.6
	Contract	45	13.4	13.4	100
	Total	336	100		

Figure 5.4
Distribution of Employment Status Groups in the Sample (n = 336)
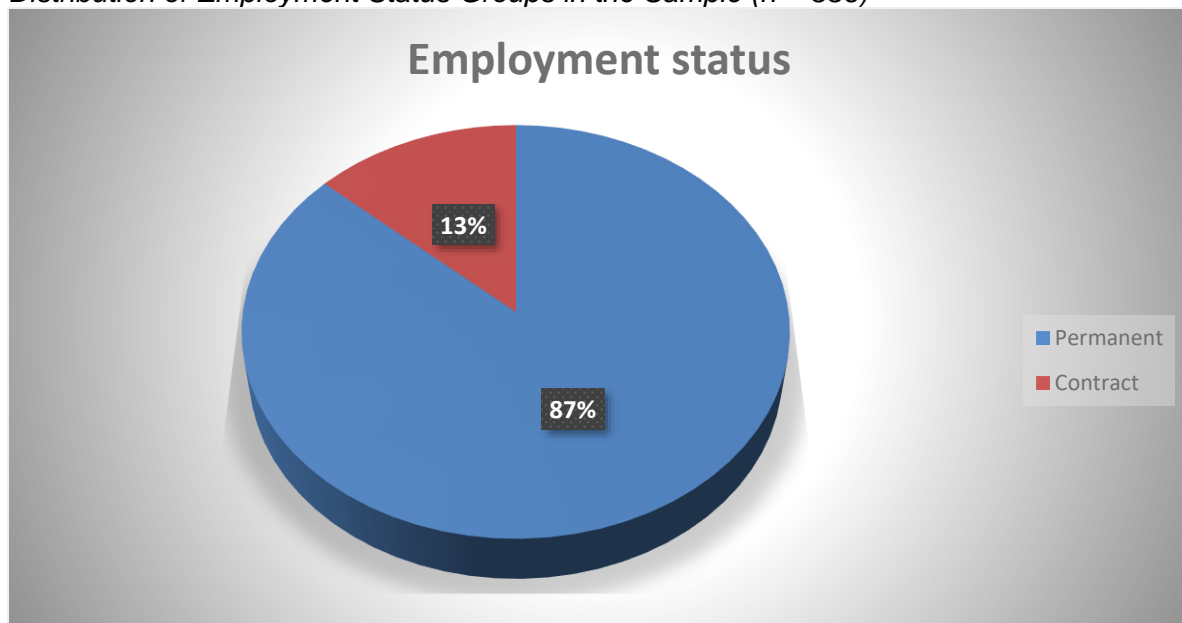
Source: Author's own work

5.1.5 Summary of the socio-demographic profile of the sample

In summary, the socio-demographic variables that need to be considered when interpreting the empirical results are age, gender, employment status, and employment category. The sample was predominantly aged between 36 and 45 years, male, black African, and permanently employed. Table 5.5 indicates the main characteristics of the sample profile.

Table 5.5
The Main Characteristics of the Sample Profile (n = 336)

Biographical variable	Predominant characteristic	Percentage
Age	36–45 years	50.3%
Gender	Male	66.1%
Race	Black African	99.1%
Employment status	Permanent	86.6%

Note: *n* = 336

5.2 MOTIVATION FOR THE CHOICE OF MEASURING INSTRUMENTS

The findings of the literature review and the instruments' appropriateness for the theories and models of the current study influenced the selection of the measuring instruments. The theories and models employed in this research study were chosen based on their ability to explain, describe, and make predictions about the research constructs. The selection of measuring instruments was influenced by the research constructs` validity and reliability.

The following section discusses the following measuring instruments:

- The Perceived Organisational Justice Measure (Colquitt, 2001);
- The PSYCONES Questionnaire (Isakkson, 2006); and
- The Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002).

5.2.1 Perceived Organisational Justice Measure (Colquitt, 2001)

This section explains the rationale for using and the purpose, administration, validity, and reliability of the Perceived Organisational Justice Measure (Colquitt, 2001), as well as the reasons for choosing it.

5.2.1.1 Rationale and purpose

The Perceived Organisational Justice Measure is a self-rating questionnaire that was developed by Colquitt (2001). It comprises questions that are concerned with participants' perceptions of fairness they experience in their organisation in four organisational justice dimensions, namely procedural, distributive, interpersonal, and informational justice (Colquitt, 2001).

5.2.1.2 Dimensions

This instrument comprises four dimensions with a total of 20 items, as described below.

- Procedural justice

The procedural justice subscale covers individuals' perceptions on the justice and fairness of organisational procedures. This subscale consists of seven questions. Some examples of questions are *"Have you been able to express your views and feelings during those procedures?"* and *"Have you had an influence over the [outcome] arrived at by those procedures?"*

- Distributive justice

The distributive justice subscale deals with individuals' perceptions regarding the fairness and equity of the organisation's distribution of resources. This subscale comprises four questions. Examples of questions are *"Does your [outcome] reflect the effort you have put into your work?"* and *"Is your [outcome] appropriate for the work you have completed?"*

- Interpersonal justice

The interpersonal justice subscale relates to individuals' perceptions of fairness of treatment they receive from their supervisors. This subscale has four questions. Example questions are *"Has [he/she] treated you in a polite manner?"* and *"Has [he/she] treated you with dignity?"*

- Informational justice

The informational justice subscale covers individuals' perceptions regarding the truth and justice of information communicated in the organisation. This subscale consists of questions such as *"Has [he/she] been candid in [his/her] communications with you?"* and *"Has [he/she] explained the procedures thoroughly?"*

5.2.1.3 Administration

The Perceived Organisational Justice Measure (Colquitt, 2001) is a self-administered questionnaire. Participants are guided on how to complete the questionnaire. The questionnaire takes 5 to 10 minutes to complete.

5.2.1.4 Interpretation

Each subscale is measured separately and indicates an individual's perceptions regarding the dimensions of organisational justice. All the subscales have a 5-point Likert-type scale. Participants are required to rate the extent to which they agree or disagree with the statements on the fairness, or equity, by management in procedures and distribution of resources, interactions with the supervisors, and information communicated within the organisation. The points of the scale are as follows:

1 = To a very small extent
2 = To a small extent
3 = To a moderate extent
4 = To a relatively large extent
5 = To a large extent

The statements denote the extent to which individuals perceive organisational justice in the organisation. A higher rating means a higher degree of organisational justice in the organisation, while a lower rating means a lower degree of organisational justice.

5.2.1.5 Reliability and validity

The Perceived Organisational Justice Measure has a high general reliability, with a Cronbach's alpha coefficient of $\alpha = .91$ (Colquitt, 2001). According to Judge and Colquitt (2004), the four subscales of organisational justice have a high reliability, namely $\alpha = .84$ for procedural justice, $\alpha = .84$ for distributive justice, $\alpha = .96$ for interpersonal justice, and $\alpha = .90$ for informational justice. A study conducted by Na'imah et al, (2022) found that the four subscales of organisational justice had a high reliability, with a Cronbach's alpha above .60. According to Snyman et al, (2022), the Perceived Organisational Justice Measure, developed by Colquitt (2001), has proven validity and internal consistency reliability.

5.2.1.6 Motivation for using the Perceived Organisational Justice Measure

The Perceived Organisational Justice Measure was designed to measure individual perceptions of organisational justice (Colquitt, 2001). Thus, this instrument is appropriate for the current research. This research study investigates the influence of the construct of organisational justice on work engagement. Using the Perceived Organisational Justice Measure had the potential to offer deep insight into the construct of organisational justice in this study.

5.2.2 PSYCONES Questionnaire (Isakkson, 2006)

This section explains the rationale for and the purpose, administration, validity, and reliability of the PSYCONES Questionnaire (Isakkson, 2006), as well as the motivation for choosing it.

5.2.2.1 Rationale and purpose

The PSYCONES Questionnaire is a self-rating questionnaire developed by Isakkson (2006). It comprises questions that relate to four aspects of the psychological contract, namely employer obligations, employee obligations, satisfaction with the psychological contract, and state of the psychological contract. The PSYCONES Questionnaire is used to determine an employee's evaluation of their psychological contract (Isakkson, 2006).

5.2.2.2 Dimensions

This instrument comprises four subscales with a total of 44 items, as described below.

- Employer obligations

The employer obligations subscale comprises questions that relate to an individual's perception of promises made by the organisation. This subscale consists of 15 questions. Some examples of questions are *"Has your organisation promised or committed itself to provide you with interesting work?"* and *"Has your organisation promised or committed itself to provide you with a reasonable secure job?"*

- Employee obligations

The employee obligations subscale focuses on an individual's perception of their promises made to the organisation. This subscale comprises 16 questions. Examples of questions are

"Have you promised or committed yourself to go to work even if you do not particularly feel well?" and *"Have you promised or committed yourself to protect your company's image?"*

- Satisfaction with the psychological contract

The satisfaction with the psychological contract subscale consists of statements that focus on an individual's emotions related to the psychological contract. This subscale has seven statements. Example statements are *"I feel happy"*, *"I feel angry"*, and *"I feel pleased"*.

- State of the psychological contract

The state of the psychological contract subscale focuses on the general state of the psychological contract. This subscale consists of seven questions. Some example questions are *"Overall, do you feel you are rewarded fairly for the amount of effort you put into your job?"* and *"To what extent do you trust senior management to look after your best interests?"*

5.2.2.3 Administration

The PSYCONES Questionnaire (Isakkson, 2006) is a self-administered questionnaire. Participants are guided on how to complete the questionnaire. The questionnaire takes 5 to 10 minutes to complete.

5.2.2.4 Interpretation

The psychological contract subscales (employer obligations, employee obligations, satisfaction with the psychological contract, and state of the psychological contract) are measured separately. The subscales indicate a participant's perceptions and feelings regarding aspects of the psychological contract, as described below:

- Employer and employee obligations

The employer and employee obligations subscales use a 6-point Likert-type scale, and they have a list of promises and commitments. Participants are asked to rate the extent to which the promises and commitments have been fulfilled, using the following scale:

0 = No, the promise has not been made
1 = Yes, but the promise has not been kept at all
2 = Yes, but the promise has only been kept a little
3 = Yes, but the promise has only been half kept

4 = Yes, the promise has been largely kept

5 = Yes, the promise has been fully kept

- Satisfaction with the psychological contract, and state of the psychological contract

The satisfaction with the psychological contract and state of the psychological contract subscales uses a 5-point Likert-type scale. Participants are asked to rate the extent to which they agree or disagree with the statements, using the following scale:

1 = Strongly disagree

2 = Disagree

3 = Neither disagree nor agree

4 = Agree

5 = Strongly agree

5.2.2.5 Reliability and validity

The PSYCONES Questionnaire is a valid and reliable questionnaire. According to Isakkson (2006), this instrument has high Cronbach's alpha coefficients, namely α = .95 for employer and employee obligations, α = .70 for satisfaction with the psychological contract, and α = .93 for state of the psychological contract. Studies conducted indicate that the PSYCONES Questionnaire is an adequate, reliable, and valid tool for measuring the psychological contract. Snyman et al., (2022) assert that this instrument has proven validity and internal consistency reliability.

5.2.2.6 Motivation for using the PSYCONES Questionnaire

This questionnaire was designed to measure individual perceptions of aspects of the psychological contract (Isakkson, 2006). Thus, this instrument is appropriate for the current research. This research study investigates the influence of the construct of the psychological contract on work engagement. Using the PSYCONES Questionnaire had the potential to offer deep insight into the construct of the psychological contract in this study.

5.2.3 Utrecht Work Engagement Scale (UWES) (Schaufeli et al, 2002)

This section explains the rationale for using and the purpose, administration, validity, and reliability of the Utrecht Work Engagement Scale (UWES) (Schaufeli et al, 2002), as well as the reasons for choosing it.

5.2.3.1 Rationale and purpose

The Utrecht Work Engagement Scale is a self-rating questionnaire developed by Schaufeli et al, (2002). It comprises questions that are concerned with the feelings participants experience in their organisation on three components of work engagement, namely vigour, dedication, and absorption (Schaufeli et al, 2002).

5.2.3.2 Dimensions

This instrument comprises three subscales with a total of 17 items, as described below:

- Vigour

The vigour subscale comprises questions that relate to an individual's feelings and energy exerted in their work in the organisation. This subscale consists of seven statements. Some examples of statements are *"At my work, I feel bursting with energy"* and *"At my job, I feel strong and vigorous"*.

- Dedication

The dedication subscale comprises questions that relate to an individual's dedication to and resilience in their work in the organisation. This subscale consists of five statements. Examples of statements are *"I find the work that I do full of meaning and purpose"* and *"I am enthusiastic about my job"*.

- Absorption

The absorption subscale comprises questions that relate to an individual's immersion and concentration in their work in the organisation. This subscale consists of six statements. Example statements are *"Time flies when I'm working"* and *"I am immersed in my work"*.

5.2.3.3 Administration

The Utrecht Work Engagement Scale is a self-administered questionnaire. Participants are given clear instructions on how to complete the questionnaire. The questionnaire takes 5 to 10 minutes to complete.

5.2.3.4 Interpretation

Each subscale is separately measured. All the subscales have a 7-point Likert-type scale. Participants are required to rate the extent to which they agree or disagree with the statements on the components of work engagement (vigour, dedication, and absorption). The points of the scale are as follows:

0 = Never
1 = Almost never (a few times a year or less)
2 = Rarely (once a month or less)
3 = Sometimes
4 = Often (once a week)
5 = Very often (a few times a week)
6 = Always (every day)

5.2.3.5 Reliability and validity

According to Schaufeli et al., (2006), internal consistency (Cronbach's alpha coefficient) values of the standardised work engagement questionnaire are between .80 and .90, which satisfies the rule of thumb, which prescribes an alpha value of .70. However, it should be noted that there has been a change in the rule for the alpha value for the work engagement questionnaire, which has been set at .80 (Schaufeli et al, 2006). This study will therefore adopt a value of .80 as the threshold for the questionnaires that will be used, as .80 is now the accepted standard. A study conducted by Sulaiman and Zahoni (2016) validated the Utrecht Work Engagement Scale and indicates satisfactory reliability, with a Cronbach's alpha of α = .92. Research conducted by Dominiques-Salas et al, (2022) and Schaufeli et al, (2017) confirms that this instrument is an adequate, valid, and reliable measure for measuring work engagement.

5.2.3.6 Motivation for using the Utrecht Work Engagement Scale

The Utrecht Work Engagement Scale was designed to measure individual levels of work engagement (Schaufeli et al, 2002). Thus, this instrument is appropriate for the current research. This research study investigates the relationships between perceived organisational justice, the psychological contract, and work engagement, as well as the moderating effect of socio-demographic variables (age, gender, employment status, and employment category) on the relationships between perceived organisational justice, the

psychological contract, and work engagement. Using the Utrecht Work Engagement Scale had the potential to offer deep insight into the construct of work engagement in this study.

5.2.4 Limitations of the measuring instruments

This research used self-report instruments. According to Costa and Hauck (2019), self-report instruments measure a participant's individual perceptions, experiences, or views, through questionnaires, surveys, or interviews. Self-report instruments are subjective and prone to overstatement (Costa & Hauck, 2019). They are also susceptible to false responses, as participants tend to answer differently to questions when they know that their responses are being captured (Stangor, 2014). Babbie and Roberts (2018) assert that research participants try to mask their attitudes, perceptions, and behaviours, by offering false and unauthentic responses to self-report measures. This is confirmed by Stangor (2014), who states that participants tend to give socially desirable responses that make them appear good and socially acceptable.

However, analysis of several research instruments that measure the research constructs investigated was done, and the following instruments were selected: the Utrecht Work Engagement Scale (Schaufeli et al, 2002), the Perceived Organisational Justice Measure (Colquitt, 2001), and the PSYCONES Questionnaire (Isakkson, 2006). The limitations of self-report measures were considered in the interpretation of the findings emanating from the research results.

5.3 ETHICAL CONSIDERATIONS IN THE ADMINISTRATION OF THE RESEARCH INSTRUMENTS

To collect data from the sample, the researcher acquired ethical clearance from Unisa's Ethics Review Committee and observed the research ethics as outlined in Unisa's (2016) policy on research ethics. The following moral principles, or ethics, were observed:

- Autonomy was observed, by respecting the autonomy, rights, and dignity of research participants;
- Beneficence was observed, by ensuring that the research makes a meaningful contribution to people`s welfare;
- Non-maleficence was observed, by avoiding harm to participants; and

- Justice was observed, by ensuring that the benefits and the risks of participation in the research were communicated to participants (Unisa, 2016).

Permission was sought from the tertiary education institution involved in this research. Online questionnaires were sent to the employees through an emailed letter. The principle of anonymity was observed by sending the questionnaire to employees using the University group email system which ensures that respondents do not have access to the emailed list. Additionally, it was not possible to see the personal details of those who completed the questionnaire. The researcher informed participants on the aim of the research and the use to which the research information would be put, as well as their role and the estimated time required to complete the questionnaire. Personal details of the researcher were provided, and assurance was given of participants' confidentiality, voluntary participation, privacy, and anonymity. Participants were asked not to disclose their identity, so as to protect their privacy and confidentiality. Data was received through an online platform, in order to guarantee confidentiality. Participation in the research was based on consent.

The research instruments used in this study are scientifically valid and reliable. The data collection process was also reliable, and data was analysed, reported, and interpreted in a fair, valid, and reliable manner.

5.4 CAPTURING OF CRITERION DATA

LimeSurvey, an online web-based software package, was utilised to distribute the survey and to obtain responses from participants. Data from the survey was exported into a Microsoft Excel spreadsheet. A participant was represented by each row, and a question was represented by each column. According to Salkind (2018), recording data on electronic platforms reduces human error in data capturing. An independent statistician scored the data using IBM SPSS version 28 (Hayes, 2018) and a Microsoft Excel spreadsheet for importing and analysing the data.

5.5 FORMULATION OF THE RESEARCH HYPOTHESES

Table 5.6 presents the research hypotheses that were formulated to achieve the study aims.

Table 5.6
Research Hypotheses

Research aim	Research hypothesis	Statistical procedure

Research aim 1: To assess the interrelationship between perceived organisational justice, the psychological contract, and work engagement and the socio-demographic variables (age, gender, employment status, and employment category) as conceptualised in a sample of participants from a Zimbabwean tertiary education institution. Research hypothesis H1 will be tested in this aim.	**H1:** There is a statistically significant positive interrelationship between perceived organisational justice, the psychological contract, and work engagement.	Spearman bivariate correlations
Research aim 2: To empirically investigate whether perceived organisational justice, and the psychological contract significantly predict work engagement. Research hypothesis H2 will be tested in this aim.	**H2:** Perceived organisational justice and the psychological contract (the independent variables) and the socio-demographic variables (age, gender, employment status, and employment category) positively and significantly predict work engagement.	Regression analysis
Research aim 3: To assess whether the empirically derived socio-demographic profile has a good fit with the data, and, based on the profile, to determine the elements of the empirically derived work engagement framework. Research hypothesis H3 will be tested in this aim.	**H3:** Based on the overall statistical relationships between perceived organisational justice and the psychological contract (the independent variables) and work engagement, there is a good fit between the elements of the empirically manifested structural model and the theoretically	Structural equation modelling in JASP 0.16.3 software.

	hypothesised model.	
Research aim 4: To determine whether there is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement. Research hypothesis H4 will be tested in this aim.	**H4:** There is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement.	Hierarchical moderated regression
Research aim 5: To determine whether individuals from different socio-demographic groups in terms of age, gender, employment status, and employment category differ significantly in their perceived organisational justice, their psychological contract, and their work engagement. This research aim relates to testing of research hypothesis H5.	**H5:** Individuals from different socio-demographic groups in terms of age, gender, employment status, and employment category differ significantly in their perceived organisational justice, their psychological contract, and their work engagement.	Tests for significant mean differences (Man Whitney U and Kruskal-Wallis Tests).

Source: Author's own work

5.6 STATISTICAL PROCESSING OF THE DATA

The research study employed a quantitative survey approach. Data in this research was analysed in four statistical procedures, or stages, namely a preliminary statistical analysis (common-method variance, measurement model validity, internal consistency reliability, and confirmatory factor analysis), a descriptive statistical analysis (means, frequency data and test assumptions, standard deviations, and skewness and kurtosis), correlation analysis (bivariate analysis using Pearson and Spearman correlations), and an inferential and multivariate statistical analysis (stepwise regression analysis, moderated mediation regression analysis, structural equation modelling, and tests for significant mean differences).

The stages in the data analysis process are shown in Figure 5.5. The process is discussed in more detail in Chapter 6.

Figure 5.5
Stages in the Data Analysis Process
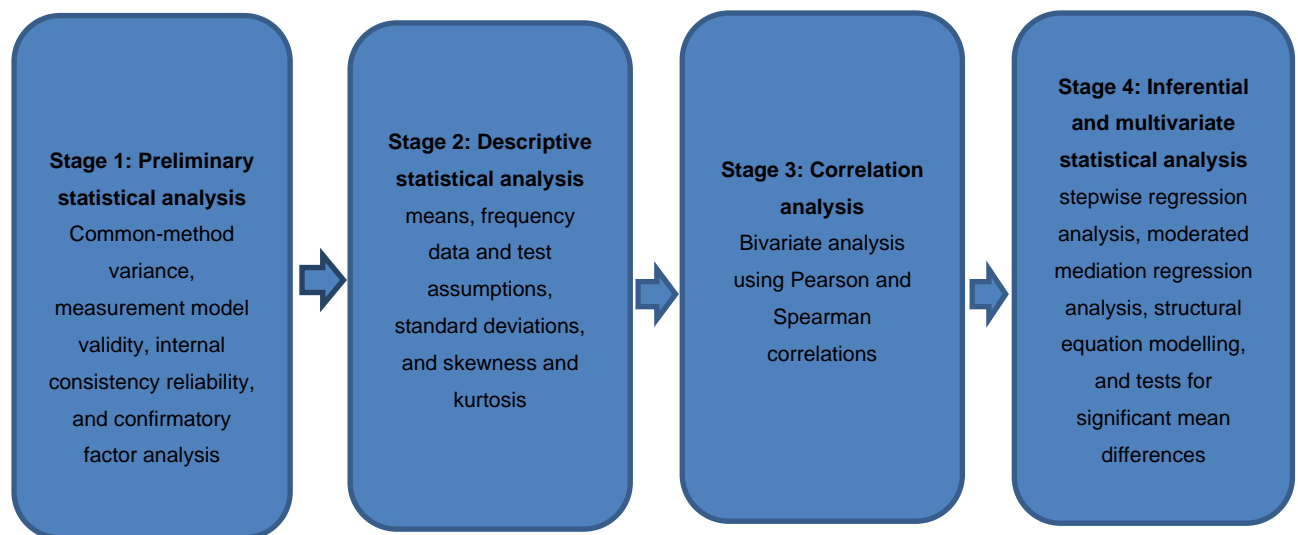
Source: Author's own work

5.6.1 Stage 1: Preliminary statistical analysis

The preliminary statistical analysis aimed at verifying the common-method variance, the measurement model validity, and the internal consistency reliability values of the data.

5.6.1.1 Step 1: Common-method variance and measurement model validity

Common-method variance is the number of spurious correlations between the variables that results from using the same method of data collection, such as self-report instruments (Chang et al., 2010; Tehseen et al, 2017). It ensues when data for both the independent and the dependent variables is obtained from the same respondent in a similar measurement context and item context (Chang et al., 2010; Podsakoff et al, 2012). Respondents usually have a social-desirability bias, where they give responses that make them look good, thereby causing common-method variance (Paulhus, 1991; Podsakoff et al, 2012). Common-method variance affects both the independent and the dependent variables in a systematic manner, thereby affecting the validity of the data (Podsakoff et al., 2012; Tehseen et al, 2017). According to Tehseen et al, (2017), common-method variance may be controlled by carefully constructing scale items to reduce ambiguity, thereby creating a psychological separation between measurements.

The Harman's single-factor test and confirmatory factor analysis were used to test the model fit data for each of the measurement's scales. This test is the most recommended statistical remedy for common-method variance (Chang et al., 2010; Jakobsen & Jensen, 2015; Paulhus, 1991; Podsakoff et al, 2012; Tehseen et al, 2017). Prudon (2015) suggests confirmatory factor analysis as another method for controlling variance for multidimensional tests. Given that the current research has multidimensional tests for the variables of perceived organisational justice, the psychological contract, and work engagement, the confirmatory factor analysis method was used to control common-method variance. Harman's single-factor test checks whether a single factor is accountable for variance in the data (Chang et al, 2010). Confirmatory factor analysis predicts the test's factor structure based on the theory that guided its construction (Prudon, 2015). The research items were loaded into the factor analysis to determine whether a general factor was the major cause of covariance between the measures (Chang et al, 2010; Jakobsen & Jensen, 2015; Podsakoff et al, 2012; Tehseen et al, 2017).

5.6.1.2 Step 2: Internal consistency reliability

Internal consistency reliability is the extent to which the measuring instrument items are related to the construct being measured (Cronbach, 1951; Davenport et al, 2015). Cronbach's alpha coefficients were employed to ascertain the internal consistency reliability of the measuring instruments used in this study. The Cronbach's alpha coefficient is a

commonly used method for measuring internal consistency reliability (Aithal & Aithal, 2020; Davenport et al, 2015; Hogan & Benjamin, 2000).

According to Cronbach (1951), the Cronbach's alpha coefficient ranges from 0 to 1, and a higher score shows a more reliable item or scale (Aithal & Aithal, 2020; Cronbach, 1951; Davenport et al, 2015). The accepted Cronbach's alpha value for a reliable scale is .70 (Davenport et al, 2015; Hogan & Benjamin, 2000).

The convergent validity of the scales was determined by calculating the average variance extracted (AVE). The AVE is a measure of the amount of variance that is captured by the construct in relation to the amount of variance due to measurement error (Mendes & Cirillo, 2021). It assesses the convergent validity of the scales, and it is commonly used to validate constructs (Mendes & Cirillo, 2021). An AVE greater than or equal to .50 is accepted as adequate for convergent validity (Aithal & Aithal, 2020). Composite reliability values should also be calculated, as the Cronbach's alpha has a tendency to underestimate reliability (Mendes & Cirillo, 2021). They were therefore calculated, and they were deemed adequate, as they were above .70.

5.6.2 Stage 2: Descriptive statistical analysis

Descriptive statistical analysis entails synthesizing data obtained from population samples by determining means, standard deviations, and the kurtosis and skewness of the categorical and frequency data (Kumar, 2019). Descriptive statistical analysis summarises large amount of data and present the data in an appropriate manner (Coleman, 2018). Simply put, descriptive statistics offer a comprehensive, logical, and clear picture of a large amount of data (Kumar, 2019). This research study employed descriptive statistical analysis to interpret the data aspects related to the research constructs, namely perceived organisational justice, the psychological contract, and work engagement.

This stage involved two steps:
(1)   Determining the means, standard deviations, and kurtosis and skewness of the categorical and frequency data; and
(2)   Testing assumptions (correlation analysis, multiple regression analysis, and tests for significant mean differences).

5.6.2.1 Step 1: Means, standard deviations, and kurtosis and skewness of frequency data.

The means and standard deviations for all the construct variables were calculated. The mean score is determined by dividing the sum of the tested values by the total number of values in a group (Kumar, 2019). It is used to ascertain a sample`s central tendency (Coleman, 2018). The variability of the sample responses is determined by calculating the standard deviation. The standard deviation shows the variability by quantifying the distance from the mean score (Kumar, 2019). A higher standard deviation shows more opinion differences within the sample (Kumar, 2019).

Skewness is the direction and deviation of a distribution of scores from perfect symmetry (Demir, 2022). A symmetrical-distribution data set looks similar to the left and the right of the centre point (Demir, 2022). There are two types of skewness, namely positive and negative skewness (Cain et al, 2016). Left skewed distributions indicate negative skewness and right skewed distributions indicate positive skewness (Cain et al, 2016). Kurtosis measures whether the data is heavy-tailed or light-tailed relative to a normal distribution (Demir, 2022).

5.6.2.2 Step 2: Test for assumptions

The objective of this research is to make credible inferences from data from a sample drawn from a population. Challenges may occur when random samples from a larger population are used to deliver exact values appropriate for the whole population. Thus, statistical tools were utilised to establish confidence levels to make inferences.

The multivariate procedures and the tests for significant mean differences that were used in this research study are based on the following assumptions:

(a)   the accuracy of data entered into the data file, and missing values;
(b)   the ratio of cases to independent variables;
(c)   outliers (univariate and multivariate);
(d)   normality, linearity, and homoscedasticity; and
(e)   multicollinearity and singularity.

(a) The accuracy of data entered into the data file, and missing values

The data set was screened to avoid miscoding and to ensure data accuracy. SAS version 9.4 (2013) was used to determine frequency statistics for all the items. The minimum and maximum values and the means and standard deviations were examined. All items fall in the

probable range of values, and the data was therefore accepted for additional analysis. No missing values were detected, as completed questionnaires were only accepted.

(b) The ratio of cases to independent variables

Determination of a sample size is based on its sufficiency in statistical power (Verma & Abdel-Salam, 2019). The sample size has an influence on the accurateness of a sample in representing the population. De Vaus and de Vaus (2013) state that the general rule of thumb for determining the adequate size for a sample is $N \geq 50 + 8m$ (where m represents the number of independent variables). Using the equation, the required sample was $n = 74$. Therefore, the sample size of $n = 336$ was deemed adequate to attain acceptable statistical power in this study.

(c) Outliers

An outlier is a data value that is significantly different from other values in the sample (Sullivan et al, 2021). Outliers exert a disproportionately large influence on the statistical analysis; they reduce and distort information in a data set (Sullivan et al, 2021; Wada, 2020). Graphical methods can be used to identify possible outliers (Wada, 2020). In this research, outliers were discovered by investigating the box plot of all the variables` standardised normal scores (Tukey, 1977; Wada, 2020).

(d) Normality, linearity, and homoscedasticity

Normality tests assess the likelihood that the given data set comes from a normal distribution (Orcan, 2020; Singh & Masuku, 2014). Technically, the assumption of normality proposes that the distribution of sample means is normal (Clement & Bradley-Garcia, 2022; Singh & Masuku, 2014). The assumption of multivariate normality asserts that a linear relationship exists among dependent and covariate pairs among all groups (Salkind, 2010). This research study used skewness and kurtosis tests and the Kolmogorov–Smirnov test, which are considered suitable for investigating multivariate normality (Orcan, 2020).

The assumption of linearity assumes that a linear relationship exists between the variables of the study (Verma & Abdel-Salam, 2019). This assumption also proposes that a linear relationship exists between the dependent and covariate pairs across all groups (Salkind, 2010). The most common procedure to test linearity is the scatter plot (Salkind, 2010; Verma

& Abdel-Salam, 2019). A depiction of an oval shape in a scatter plot confirms a linear relationship between the variables (Verma & Abdel-Salam, 2019).

The homoscedasticity assumption asserts that there is similarity in the variance of errors across all levels of dependent and independent variables (Salkind, 2010; Wada, 2020). Homoscedasticity can be visually tested by a scatter plot (Salkind, 2010; Verma & Abdel-Salam, 2019). The absence of patterns in the scatter plot means that the errors are random, thereby confirming the assumption of equal variance (Verma & Abdel-Salam, 2019). The test for homoscedasticity in this research was bivariate scatter plots. The scatter plots did not indicate any pattern (error).

(e) Multicollinearity and singularity

Verma and Abdel-Salam (2019) explain multicollinearity as a strong correlation that exists between two or more variables ($r > .80$). Multicollinearity occurs when the redundancy between the variables is excessive (Salkind, 2010; Wada, 2020). Singularity occurs when perfect correlation exists between the variables ($r = 1.00$) (Salkind, 2010; Verma & Abdel-Salam, 2019).

The variance inflation factor (VIF) test was used to measure multicollinearity and singularity in this research. The acceptable level for multicollinearity is a VIF less than 10 (Verma & Abdel-Salam, 2019). The tests indicated no errors.

5.6.3 Stage 3: Correlation analysis

Correlation analysis measures an association between variables (Schober et al, 2018). In correlated data, a change in a single variable is accompanied by a constant and predictable change in another variable (Schober et al, 2018; Verma & Abdel-Salam, 2019). In this study, correlation analysis methods were used to test the strength and direction of the relationship between socio-demographic variables (age, gender, employment status, and employment category) and perceived organisational justice, the psychological contract, and work engagement.

The Pearson product-moment correlation coefficient (r) was used to determine the strength and direction of the relationship between the variables. The Pearson product-moment correlation coefficient defines a linear relationship between two interval/ratio variables (Verma & Abdel-Salam, 2019).

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Schober et al., (2018) and Verma and Abdel-Salam (2019) provide the following characteristics of Pearson product-moment correlation analysis:

- Its values range from −1 (a relationship with a perfect inverse) to 0 (no relationship) to +1 (a perfect direct relationship);
- Scatter plots with values clustered on a straight line are utilised to illustrate linear relationships; and
- A tighter grouping clustered on the straight line signifies a higher linear correlation, whilst weak relationships are indicated by widely spread values.

A cut-off point of $r \geq .30$ (a medium effect) at $p \leq .05$ was used to define practical significance of correlation coefficients in this study.

5.6.4 Stage 4: Inferential and multivariate statistical analysis

An inferential statistical analysis was used to draw conclusions from the data. The analysis had the following steps:

Step 1: Stepwise regression analysis
Step 2: Structural equation modelling
Step 3: Moderated mediation modelling
Step 4: Tests for significant mean differences

5.6.4.1 Step 1: Stepwise regression analysis

Stepwise regression analysis is a statistical process that reviews the statistical significance of independent variables in a linear regression model (Wang & Chen, 2016). It evaluates the order of importance of variables and selects useful subsets of variables in order to develop a final model (Wang & Chen, 2016). A regression model describes a relationship that's exists among a dependent variable and two or more independent variables (Wang & Chen, 2016). Thus, stepwise regression analysis using SPSS version 3.4 was used to test the statistical significance of the independent variables (perceived organisational justice and the psychological contract) in predicting the dependent variable (work engagement). Stepwise regression analysis was deemed appropriate to determine the interrelationships between perceived organisational justice, the psychological contract, and work engagement when addressing research aim 1 of the empirical study.

Research aim 1: To assess the interrelationship between perceived organisational justice, the psychological contract, and work engagement. *This research aim relates to testing of research hypothesis 1 (H1).*

5.6.4.2 Step 2: Structural equation modelling

Structural equation modelling is a multivariate method which is used to fit a network of constructs to data, in order to explain and interpret relationships between latent and observed variables in various theoretical models (Civelek, 2018). This technique also assesses the fit between the elements of the structural and the hypothesised models (Civelek, 2018). Thus, structural equation modelling evaluates the ability of the sample data to support the theoretical model. There are two methods of structural equation modelling, namely the one-stage method and the two-stage method (Moutinho & Hutcheson, 2011).

The one-stage method processes the statistical analysis that has parallel estimates of the measurement and the structural models (Moutinho & Hutcheson, 2011). The two-stage method starts with development of the measurement model and then amends it in order to estimate the structural model (Moutinho & Hutcheson, 2011). Structural equation modelling was used to test whether the empirical elements of the work engagement framework that manifested from the results have a good fit with the data.

A structural equation model was established for this study to evaluate the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model that was based on the statistical relationship between perceived organisational justice, the psychological contract, and work engagement.

Structural equation modelling was therefore conducted to test research aim 3 of the empirical study.

Research aim 3: To assess whether the empirically derived relationships between perceived organisational justice, the psychological contract, and work engagement determine the elements of the empirically derived work engagement framework. *This research aim relates to testing of research hypothesis 3 (H3).*

5.6.4.3 Step 3: Moderated mediation regression analysis

Moderated mediation regression analysis is a statistical technique that explains the relationship between an independent and a dependent variable as transferred via an intervening (mediating) variable (Clement & Bradley-Garcia, 2022; Hayes, 2018, 2020; Preacher et al, 2007). This technique also explains the degree to which a moderating variable alters the strength, or magnitude, of an association between an independent and a dependent variable (Clement & Bradley-Garcia, 2022).

Such regression analysis using SPSS version 3.4 was performed to achieve research aim 4 of the empirical study.

> **Research aim 4:** To determine whether there is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement. *This research aim relates to testing of research hypothesis 4 (H4).*

5.6.4.4 Step 4: Tests for significant mean differences

In order to choose a statistical test for data analysis, data has to be subjected to normality tests, in the form of the Kolmogorov–Smirnov test (KS test), the Shapiro–Wilk test, and a stem-and-leaf plot (Johnson, 2022; Khan, 2021). If data is normally distributed, parametric tests are adopted, and if data is not normally distributed, it can be transformed and parametric tests can still be used, or it can be used as it is but non-parametric tests, which are suitable for data that is not normally distributed, can be adopted (Khan, 2021). In this study, the Kolmogorov–Smirnov test was used to test for normality, and as the data did not follow a normal distribution, non-parametric tests were used. Specifically, mean differences between age, gender, employment status, and employment category groups were tested using the Kruskal–Wallis *H* test. The Kruskal–Wallis *H* test works well with a dependent variable that is an interval, ratio, or ordinal variable across different independent groups that are categorical in nature (Johnson, 2022). In this study, the Kruskal–Wallis *H* test compares the ranks of the different independent groups. Tests for significant mean differences were performed to test whether different socio-demographic groups in terms of age, gender, employment status, and employment category differ significantly regarding their perceived organisational justice, their psychological contract, and their work engagement. Kruskal–Wallis *H* tests were used to address research aim 5 of the empirical study.

Research aim 5: To determine whether individuals from different age, gender, employment status, and employment category groups differ significantly in their perceived organisational justice, their psychological contract, and their work engagement. *This research aim relates to testing of research hypothesis 5 (H5).*

5.6.5 Level of statistical significance

In order to determine whether the mean scores were significantly different from each other, a test of statistical significance was conducted. The level of significance is the potential to make a Type I error, which implies that the null hypothesis can be rejected despite it being true (Johnson, 2022; Khan, 2021). By contrast, a Type II error implies failure of the researcher to reject a false null hypothesis (Khan, 2021). In this study, for any statistical analysis to be deemed significant, the p value should be less than or equal to .05 ($p \leq .05$), which translates to a 95% confidence level. A 95% confidence interval means that there is a 5% probability that when the null hypothesis is rejected when $p \leq .05$, there is a chance of it being incorrect. Results showing $p \leq .05$ lead to a rejection of the null hypothesis, meaning that the results are deemed significant. In the event that the p value is greater than or equal to .05 ($p \geq .05$), it shows that results are non-significant.

5.6.5.1 Level of significance: Stepwise regression analysis

Stepwise regression is used for model selection to decide on which variable to include in a regression model, by way of parameter inference (Wang & Chen, 2016). Parameter inference means testing whether the parameters are significantly different from zero (Verma & Abdel-Salam, 2019). Put differently, stepwise regression is used to select independent variables that can be used in the final multiple regression model (Khan, 2021). Stepwise regression involves inclusion and exclusion of independent variables in an iterative fashion and testing the statistical significance of the variables at each iterative step (Khan, 2021; Verma & Abdel-Salam, 2019). There are two approaches to stepwise regression, namely the forward selection approach and the backward elimination approach. The forward selection approach starts with no variables and incrementally adds each variable, at the same time testing for statistical significance (Wang & Chen, 2016). The backward elimination approach starts with a full model (with all the variables) and then removes a single variable to test the variable's importance when compared to the results of the remaining variables (Wang & Chen, 2016).

5.6.5.2 Level of significance: Structural equation modelling

Structural equation modelling (SEM) is evaluated based on the goodness of fit (Civelek, 2018). Goodness of fit refers to how similar matrices in the model are enough to answer the preformulated hypotheses (Civelek, 2018; Orcan, 2020). A larger goodness of fit value means that there is a better fit. The comparative fit index (CFI) tests for non-centrality when there is a shift between the preformulated model and the base model. This index ranges between 0 and 1, where a large value indicates a better model fit; a model is deemed acceptable when the CFI value is greater than or equal to .90 (Civelek, 2018). The Akaike information criterion (AIC) compares models with different variables, and it penalises models with higher AIC values. The lower the AIC value, the better the model. The root mean square error of approximation (RMSEA) relates to the residuals in the model, and it measures the closeness of the variance-covariance matrix and the implied matrix in the model. RMSEA values range from 0 to 1; the smaller the RMSEA value, the better the model fit. The threshold for an acceptable model is an RMSEA value of less than .05 (Civelek, 2018; Orcan, 2020). The standardised root mean square residual (SRMR) takes a square root when the residuals in the model are squared, and it indicates how bad a model is. The closer to 0 the SRMR value is, the better the model.

5.6.5.3 Level of significance: Moderated mediation regression analysis

Moderated mediation regression analysis emphasises the need to go beyond determination of the level of association between variables to explore how the associations occur (mediation) and when they occur (moderation) (Clement & Bradley-Garcia, 2022). Thus, the term "moderated mediation" is when one variable has an effect on how an association between other variables occurs (moderated mediation), which indicates the nature of the relationships between the variables under study (Clement & Bradley-Garcia, 2022). Specifically, moderated mediation occurs when the mediation relationship is dependent on the level, or extent, of the moderator (Hayes, 2018). In this study, the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement are significantly moderated by individuals' socio-demographic characteristics (age, gender, employment status, and employment category). In order to estimate the confidence intervals in the moderated mediation regression analysis, bootstrapping of the confidence intervals was done to make inferences on the estimates of the regression coefficients. Bootstrapping involves random selection of a data set and replicating it (Dogan, 2017). The bootstrap confidence intervals produced in the moderated mediation process are used to predict the regression coefficients of the bootstrap sample

(Dogan, 2017; LaFontaine, 2021). Bootstrapping makes multiple iterations, refining the estimates produced for the analysis (Lafontaine, 2021). Bootstrapped lower and upper 95% confidence intervals were used to interpret the main effects and the interaction effects of the variables used in this study.

5.6.5.4: Level of significance: Tests for significant mean differences.

As stated earlier, the study set the acceptable range of significance at $p \leq .05$, and this implies that the tests for mean differences are deemed significant (Khan, 2021; Verma & Abdel-Salam, 2019). To determine the effect sizes of the tests for significant mean differences, Cohen's *d* was employed, which is used to estimate the between-subject effects for grouped data. Generally, Cohen's *d* is interpreted as follows: small ($d = .2$), medium ($d = .5$), and large ($d = .8$); however, the values are arbitrary, and rigid interpretation cannot be enforced (Johnson, 2022; Verma & Abdel-Salam, 2019).

5.7 CHAPTER SUMMARY

This chapter explored the empirical investigation. The chapter described the population and the sample, and it explained the motivation for the choice of research instruments, ethical considerations, the capturing of the criterion data, the formulation of the research hypotheses, and the statistical processing of the data.

Chapter 6 presents the results of the empirical study. The following research questions related to the empirical study will be addressed in Chapter 6:

Research question 1: What is the statistical interrelationship between perceived organisational justice, the psychological contract, and work engagement-related attributes as conceptualised in a sample of participants from a Zimbabwean tertiary education institution? *This research question relates to testing of hypothesis 1 (H1).*

Research question 2: Do perceived organisational justice and the psychological contract and their attributes significantly predict work engagement? *This research question relates to testing of research hypothesis 2 (H2).*

Research question 3: Based on the overall statistical relationships between perceived organisational justice and the psychological contract (the independent variables) and work

engagement (the dependent variable), is there a good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model? *This research question relates to testing of hypothesis 3 (H3).*

Research question 4: Do individuals' socio-demographic characteristics (age, gender, employment status, and employment category) influence the strength and/or direction of the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement? *This research question relates to testing of research hypothesis 4 (H4).*

Research question 5: Do individuals from different socio-demographic groups in terms of age, gender, employment status, and employment category differ significantly regarding perceived organisational justice, the psychological contract, and work engagement? *This research question relates to testing of hypothesis 5 (H5).*

Research question 6: What are the empirical elements of the work engagement framework that manifested from the results, and does the manifested socio-demographic profile have a good fit with the data?

CHAPTER 6: RESEARCH RESULTS

The outcomes of the statistical investigations that were carried out are presented in this chapter. The hypotheses formulated for the study are tested, and they are confirmed or rejected, in this chapter. The chapter starts by presenting the preliminary statistical analysis results. This is achieved by testing for common-method bias and providing a validity and reliability analysis. Confirmatory factor analysis (CFA) is performed to ascertain the measurement model fit,before structural equation modelling (SEM) is conducted. Descriptive statistics for all the variables are reported, before a correlation analysis is run. The results in terms of the inferential statistics for the SEM, the moderated linear regression analysis, and other tests, are presented last. The chapter ends with a section on confirmation of the research hypotheses.

This chapter reports the statistical results that relate to the following empirical research aims:

Research aim 1: To assess the interrelationship between perceived organisational justice, the psychological contract, and work engagement as conceptualised in a sample of participants from a Zimbabwean tertiary education institution. *This research aim relates to testing of research hypothesis 1 (H1).*

Research aim 2: To empirically investigate whether perceived organisational justice and the psychological contract significantly predict work engagement. *This research aim relates to testing of research hypothesis 2 (H2).*

Research aim 3: To assess whether the empirically derived relationships between perceived organisational justice, the psychological contract, and work engagement determine the elements of the empirically derived work engagement framework. *This research aim relates to testing of research hypothesis 3 (H3).*

Research aim 4: To determine whether there is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement. *This research aim relates to testing of research hypothesis 4 (H4).*

Research aim 5: To determine whether individuals from different age, gender, employment status, and employment category groups differ significantly in their perceived organisational

justice, their psychological contract, and their work engagement. *This research aim relates to testing of research hypothesis 5 (H5).*

6.1 PRELIMINARY STATISTICAL ANALYSIS: TESTING FOR COMMON-METHOD BIAS

This section focuses on common-method variance testing, measurement model validity, and scale reliability. As the research employed a cross-sectional design and self-rating measures, the potentiality of common-method variance was checked. Common-method variance, also known as common-method bias (CMB), refers to the consistent variation that arises from use of a specific method of data collection, such as self-report surveys (Jakobsen & Jensen, 2015). CMB can occur if a single factor arises from the statistical analysis. This can also happen during factor analysis, where one overall factor can account for most of the variation (Kock, 2015; Kock et al, 2021). Single-factor CFA was executed to assess common-method variance. The results are shown in Table 6.1. Goodness of fit was determined based on certain criteria, in which the root mean square error of approximation (RMSEA) and the standardised root mean square residual (SRMR) should be less than .08, and the comparative fit index (CFI), the Tucker–Lewis index (TLI), and the normed-fit index (NFI) should be .90 or higher. JASP 0.16.3 statistical software was utilised for this analysis (JASP Team, 2022).

Table 6.1
Single-Factor CFA

Measuring instrument	Single-factor CFA
Perceived Organisational Justice Measure (POJM)	Chi-square/degrees of freedom (*df*) = 24.70*** CFI = .68 TLI = .64 NFI = .67 RMSEA = .27 SRMR = .09 Akaike information criterion (AIC) = 12520.43

PSYCONES Questionnaire (PQ)	Chi-square/*df* = 13.41***
	CFI = .50
	TLI = .47
	NFI = .48
	RMSEA = .19
	SRMR = .14
	AIC = 39916.19
Utrecht Work Engagement Scale (UWES)	Chi-square/*df* = 20.26***
	CFI = .81
	TLI = .79
	NFI = .81
	RMSEA = .24
	SRMR = .03
	AIC = 13926.48

Notes: $n = 336$; ***$p < .000$

Source: Author's own work

6.1.1 Testing for CMB with the Perceived Organisational Justice Measure (POJM)

After performing single-factor CFA with the subscales of the POJM, the results indicated that the model lacked significant overall fit. According to the fit indices computed, the model was not a good fit for the single factor. Values for the CFI, the TLI, and the NFI were less than the threshold of .90. Additionally, the RMSEA value was above .08, which signifies poor fit for the single-factor model. Specifically, for the POJM single-factor model, the CFI was .68, the TLI was .64, the NFI was .67, the AIC was 12520.43, the RMSEA was .27, the SRMR was .09, and the chi-square/*df* ratio was 24.70 ($p < .000$). Based on these results, it can be inferred that perceived organisational justice was not affected by common-method bias.

6.1.2 Testing for CMB with the PSYCONES Questionnaire (PQ)

After performing single-factor CFA with the subscales of the PQ, the results revealed that the model lacked significant overall fit. According to the fit indices computed, the model was not a good fit for the single factor. Values for the CFI, the TLI, and the NFI were less than the threshold of .90. Additionally, the RMSEA value was above .08, which signifies poor fit for the single-factor model. Specifically, for the PQ single-factor model, the CFI was .50, the TLI was .47, the NFI was .48, the AIC was 39916.19, the RMSEA was .19, the SRMR was .14, and the chi-square/*df* ratio was 13.41 ($p < .000$). Based on these results, it can be inferred that the psychological contract was not affected by common-method bias.

6.1.3 Testing for CMB with the Utrecht Work Engagement Scale (UWES)

After performing single-factor CFA with the subscales of the UWES, the results indicated that the model lacked significant overall fit. According to the fit indices computed, the model was not a good fit for the single factor. Values for the CFI, the TLI, and the NFI were less than the threshold of .90. Additionally, the RMSEA value was above .08 which signifies poor fit for the single-factor model. Specifically, for the UWES single-factor model, the CFI was .81, the TLI was .79, the NFI was .81, the AIC was 13926.48, the RMSEA was .24, the SRMR was .03, and the chi-square/*df* ratio was 20.26 ($p < .000$). Based on these results, it can be inferred that work engagement was not affected by common-method bias.

As depicted in Table 6.1, the single-factor CFA results for the subscales of the POJM, the PQ, and the UWES are in line with the benchmarks recommended by Jakobsen and Jensen (2015), Jordan and Troth (2020), and Kock et al., (2021) for testing for CMB. Based on these results, it can be observed that CMB was not a significant concern that could have impacted the research outcomes. Therefore, the study proceeded to evaluate other preliminary statistical results, by examining the measurement scales` validity and reliability.

6.2 PRELIMINARY STATISTICAL ANALYSIS: ASSESSING THE CONSTRUCT VALIDITY AND RELIABILITY OF THE MEASURING SCALES

Multifactor measurement model validity was first evaluated through CFA. JASP software version 0.16.3 (JASP Team, 2022) was utilised to perform CFA to assess the construct validity of the POJM, the PQ, and the UWES scales. It is crucial to assess measurement model validity, which is the primary focus in CFA, to draw valid conclusions about the model fit before proceeding with analysis (Hair et al., 2021; Kock et al, 2021).

One of the main advantages of CFA is its ability to provide a comprehensive evaluation of model fit. By examining various fit indices, such as the CFI, the TLI, and the RMSEA, researchers can assess the ability of the model to reproduce the observed covariance matrix (Sarstedt et al, 2021). These fit indices provide quantitative measures of goodness of fit, allowing researchers to determine whether the proposed model adequately represents the data (Knapp, 2022). This information is crucial for evaluating the validity and reliability of the measurement model. Goodness of fit is considered satisfactory if the RMSEA and the SRMR

values are less than .08, and the TLI, CFI, and NFI values are above the minimum acceptable threshold of .90 (Hair et al, 2021; Knapp, 2022).

Another advantage of CFA is its ability to assess discriminant validity, which is the extent to which different constructs are distinct from each other (Johnson, 2022; Orcan, 2020). This assessment is essential for ensuring that the observed variables measure separate latent constructs, and not overlapping or redundant dimensions. The subscales` internal consistency was examined by calculating the Cronbach's alpha, the composite reliability (CR), and the average variance extracted (AVE). Assessment of the fit indices and the internal consistency statistics was also done.

The focus of this section is to present and interpret the internal consistency reliability statistics for the Perceived Organisational Justice Measure (POJM) (Colquitt, 2001), the PSYCONES Questionnaire (PQ) (Isakkson, 2006), and the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002). Cronbach's alpha coefficients (in IBM SPSS Statistics), average variance extracted (AVE), and composite reliability (CR) values (in JASP 0.16.3 software) were calculated to investigate the three above mentioned measurement scales` internal consistency. Values above .60 were acceptable, while those above .70 were a sign of good construct validity and reliability, as recommended by Hair et al, (2021) and Thakkar (2020).

6.2.1 Assessing the construct validity and reliability of the Perceived Organisational Justice Measure (POJM)

Table 6.2 reports the CFA results for the Perceived Organisational Justice Measure (POJM).

Table 6.2
Results for the CFA Testing the Construct Validity of the POJM

Measuring instrument	Multifactor CFA
Perceived Organisational Justice Measure (POJM) Distributive justice Procedural justice Interpersonal justice Informational justice	Chi-square/df = 4.36*** CFI = .96 TLI = .95 NFI = .94 RMSEA = .10 SRMR = .02 AIC = 9048.43

The multifactor CFA for the construct of perceived organisational justice revealed that the overall construct validity of the subscales was satisfactory. The SRMR was below .08, and the CFI, TLI, and NFI were above .90, which indicates acceptable model fit. However, the RMSEA was above the .08 threshold. Specifically, it was found that the CFI was .96, the TLI was .95, the NFI was .94, the AIC was 9048.43, the RMSEA was .10, the SRMR was .02, and the chi-square/*df* ratio was 4.36 ($p < .000$). As most of the fit indices for this construct were acceptable, the measurement model fit for the POJM was satisfactory.

The internal consistency reliability and the convergent and discriminant validity of the POJM are reported in Table 6.3.

Table 6.3
Reliability and Validity of the POJM

Scale dimension	Cronbach's alpha coefficient	CR	AVE
Distributive justice	.98	.98	.93
Procedural justice	.97	.97	.81
Interpersonal justice	.98	.98	.94
Informational justice	.98	.98	.91

Notes: $n = 336$; ***$p < .000$

Source: Author's own work

The POJM questionnaire was used to measure distributive, procedural, interpersonal, and informational justice. The results for the reliability of all the four subscales, in the form of Cronbach's alpha coefficients, AVE, and composite reliability values, are presented in Table 6.3. The subscales for the POJM measure had high levels of reliability and internal consistency (> .80). The Cronbach's alpha coefficients ranged from .97 to .98, the AVE from .81 to .94, and the composite reliability values from .97 to .98. According to Hair et al, (2021), constructs are reliable when the AVE is greater than .50. Overall, all the coefficients revealed acceptable convergent validity for the POJM.

6.2.2 Assessing the construct validity and reliability of the PSYCONES Questionnaire (PQ)

Table 6.4 presents the results for the CFA used to test the construct validity of the PSYCONES Questionnaire (PQ).

Table 6.4
Results for the CFA Testing the Construct Validity of the PQ

Measuring instrument	Multifactor CFA
PSYCONES Questionnaire (PQ)	Chi-square/*df* = 4.80***
Employer obligations	CFI = .90
Employee obligations	TLI = .94
Job satisfaction	NFI = .91
State of the psychological contract	RMSEA = .10
	SRMR = .05
	AIC = 32133.41

Notes: $n = 336$; ***$p < .000$

Source: Author's own work

The multifactor CFA for the construct of the psychological contract revealed that the overall construct validity of the subscales was satisfactory. The SRMR was below .08, and the CFI, TLI, and NFI were above .90, which indicates acceptable model fit. However, the RMSEA was above the .08 threshold. Specifically, it was found that the CFI was .90, the TLI was .94, the NFI was .91, the AIC was 32133.41, the RMSEA was .10, the SRMR was .05, and the chi-square/*df* ratio was 4.80 ($p < .000$). As most of the fit indices for this construct were acceptable, the measurement model fit for the PQ was satisfactory.

Table 6.5 presents the internal consistency reliability and convergent and discriminant validity of the PQ.

Table 6.5
Reliability and Validity of the PSYCONES Questionnaire (PQ)

Scale dimension	Cronbach's alpha coefficient	CR	AVE
Employer obligations	.98	.98	.79
Employee obligations	.98	.98	.77

Job satisfaction	.91	.90	.61
State of the psychological contract	.97	.97	.82

Notes: $n = 336$; ***$p < .000$

Source: Author's own work

The PQ measured employer obligations, employee obligations, job satisfaction, and the state of the psychological contract. The Cronbach's alpha coefficients, the AVE and the composite reliability values for each of the four subscales are presented in Table 6.5. Each of the subscales of the PQ had acceptable levels of reliability and internal consistency. The Cronbach's alpha coefficients ranged from .91 to .98, the AVE from .61 to .82, and the composite reliability values from .90 to .98. Overall, all the coefficients indicated acceptable convergent validity for the PQ.

6.2.3 Assessing the construct validity and reliability of the Utrecht Work Engagement Scale (UWES)

Table 6.6 presents the results for the CFA conducted for the Utrecht Work Engagement Scale (UWES).

Table 6.6
Results for the CFA Testing the Construct Validity of the UWES

Measuring Instrument	Multifactor CFA
Utrecht Work Engagement Scale (UWES)	Chi-square/df = 7.73***
Vigour	CFI = .94
Dedication	TLI = .93
Absorption	NFI = .93
	RMSEA = .14
	SRMR = .01
	AIC = 12401.23

Notes: $n = 336$; ***$p < .000$
Source: Author's own work

The multifactor CFA for the construct of work engagement revealed that the overall construct validity of the subscales was satisfactory. The SRMR was below .08, and the CFI, TLI, and NFI were above .90. However, the RMSEA was above the .08 threshold. Specifically, it was found that the CFI was .94, the TLI was .93, the NFI was .93, the AIC was 12401.23, the RMSEA was .14, the SRMR was .01, and the chi-square/df ratio was 7.73 ($p < .000$). As

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most of the fit indices for this variable were acceptable, the measurement model fit for work engagement was satisfactory.

Table 6.7 presents the internal consistency reliability and convergent and discriminant validity of the UWES measure.

Table 6.7
Reliability and Validity of the Utrecht Work Engagement Scale (UWES)

Scale dimension	Cronbach's alpha coefficient	CR	AVE
Vigour	.98	.98	.90
Dedication	.98	.98	.91
Absorption	.98	.98	.89

Notes: $n = 336$; ***$p < .000$

Source: Author's own work

The UWES measured vigour, dedication, and absorption. The results for the reliability of the three subscales are presented in Table 6.7. The subscales for work engagement showed high internal consistency reliability. The results show acceptable Cronbach's alpha coefficients for the dimensions of the UWES, namely .98 each. The AVE ranged between .89 and .91. The composite reliability values were all .98. Overall, all the coefficients indicated acceptable convergent validity for the UWES.

The results of the multifactor CFA demonstrated that the three measurement scales (for perceived organisational justice, the psychological contract, and work engagement, respectively) had strong structural validity. This implies that the scales measured the constructs they are intended to measure. Based on these results, it was reasonable to proceed with testing the research hypotheses, as the measures were deemed reliable and suitable. Therefore, the study proceeded with confidence to report the internal consistency and scale reliability for the different questionnaires used to measure perceived organisational justice, the psychological contract, and work engagement, respectively.

Based on the results of the preliminary analysis, reported above, the following is noted:
- The POJM (Colquitt, 2001) indicated satisfactory overall construct validity, and the subscales were also valid and reliable;
- The PQ (Isakkson, 2006) revealed satisfactory overall construct validity, and the subscales were also valid and reliable; and

- The UWES (Schaufeli et al, 2002) displayed satisfactory overall construct validity, and the subscales were also valid and reliable.

6.3 DESCRIPTIVE STATISTICS

This section focuses on describing the measures of central tendency and the variability of the three constructs measured in this study, namely perceived organisational justice, the psychological contract, and work engagement. The statistics reported include the mean and the standard deviation, which measure the average and the spread of the distribution, respectively. Additionally, kurtosis and skewness are reported, which refer to the shape of the distribution and the degree of asymmetry in the data. Knapp (2022) contends that descriptive statistics provide an important summary, which helps to lay the foundation for further statistical analysis.

6.3.1 Means, standard deviations, skewness, and kurtosis for perceived organisational justice (POJ)

To determine the score for overall perceived organisational justice (POJ), the average scores for all the dimensions (procedural, distributive, interpersonal, and informational justice) were computed. The higher the scores for the dimensions, the higher the overall score for perceived organisational justice would be. The descriptive statistics for POJ and its dimensions are presented in Table 6.8.

Table 6.8
Means, Standard Deviations, Skewness, and Kurtosis for POJ

Variable	Mean	SD	Skewness	Kurtosis
Perceived organisational justice	1.98	1.02	.74	−.44
Procedural justice	1.85	1.00	.92	−.19
Distributive justice	1.78	1.04	1.15	−.25
Interpersonal justice	2.23	1.27	.52	−1.05
Informational justice	2.15	1.14	.45	−1.00

Note: $n = 336$

Source: Author's own work

The mean scores for POJ and its dimensions ranged from 1.78 to 2.23. Respondents rated interpersonal justice the highest, with a mean of 2.23 (SD = 1.27), while distributive justice was rated the lowest, with a mean of 1.78 (SD = 1.04). The skewness values ranged from

.45 to 1.15. This shows that the distribution was somewhat asymmetrical. The kurtosis values were in the range of −1.05 to −.19, which signifies that the distribution of POJ scores was relatively flat compared to a normal distribution.

6.3.2 Means, standard deviations, skewness, and kurtosis for the psychological contract (PC)

Mean scores for employer obligations, employee obligations, job satisfaction, and state of the psychological contract were computed. These scores were also used to calculate the average score for overall psychological contract (PC). If the scores for the dimensions were high, the score for overall psychological contract would also be high. The descriptive statistics for the psychological contract and its dimensions are depicted in Table 6.9.

Table 6.9
Means, Standard Deviations, Skewness, and Kurtosis for PC

Variable	Mean	SD	Skewness	Kurtosis
Psychological contract	2.81	1.02	.34	−.55
Employer obligations	2.47	1.16	.79	−.07
Employee obligations	3.51	1.49	−.20	−1.18
Job satisfaction	3.01	.93	.00	−.37
State of the psychological contract	1.75	.95	1.03	−.03

Note: $n = 336$

Source: Author's own work

Table 6.9 shows the mean scores for the psychological contract and its dimensions, which range from 1.75 to 3.51. Respondents rated employee obligations the highest, with a mean of 3.51 (SD = 1.49), while state of the psychological contract was rated the lowest, with a mean of 1.75 (SD = .95). The skewness values range from −.20 to 1.03, which indicates that the distributions are somewhat symmetrical, while the kurtosis values range from −1.18 to −.03, which indicates that the distributions are relatively normal in shape. These results suggest that the data is relatively normally distributed, which is desirable for statistical analysis.

6.3.3 Means, standard deviations, skewness, and kurtosis for work engagement (WE)

To determine the score for overall work engagement (WE), the mean scores of all the items (vigour, dedication, and absorption) were computed. If the scores for the dimensions were

high, the score for overall work engagement would also be high. The descriptive statistics for work engagement and its dimensions are presented in Table 6.10.

Table 6.10
Means, Standard Deviations, Skewness, and Kurtosis for WE

	Mean	SD	Skewness	Kurtosis
Work engagement	3.20	1.84	.38	−1.02
Vigour	3.09	1.89	.43	−1.00
Dedication	3.34	1.96	.37	−1.09
Absorption	3.20	1.83	.51	−.82

Note: $n = 336$

Source: Author's own work

The results presented in Table 6.10 show the mean scores for work engagement and its dimensions, which range from 3.09 to 3.34. Respondents rated dedication the highest, with a mean of 3.34 (SD = 1.96), while vigour was rated the lowest, with a mean of 3.09 (SD = 1.89). The skewness values range from .37 to .51, which indicates that the distributions are somewhat asymmetrical, while the kurtosis values range from −1.09 to −.82, which indicates that the distributions are relatively flat compared to a normal distribution. These results suggest that data was not normally distributed, therefore it was considered when interpreting the results and selecting appropriate statistical tests. It is important to note, however, that moderate deviations from normality may not significantly impact the results of statistical analyses, particularly with larger sample sizes.

Based on the descriptive statistics presented above for perceived organisational justice, the psychological contract, and work engagement, the following is noted:

- The results indicate that respondents scored highest on the interpersonal justice dimension of perceived organisational justice. This suggests that respondents perceived their interactions with others in the workplace as just and fair. By contrast, the lowest score was recorded for the distributive justice dimension.
- Respondents scored highest on the employee obligations dimension of the psychological contract. By contrast, the lowest ratings were observed on the state of the psychological contract dimension.
- Finally, dedication was rated high. By contrast, low levels of vigour were recorded, which signifies that respondents have a lack of energy in and enthusiasm towards their work.

6.4 CORRELATION ANALYSIS

Correlations were performed to examine the nature, or direction and magnitude, of the relationships between the research variables. In the current research, Spearman's rank-order correlation coefficients were calculated using JASP 0.16.3 software, to examine the nature of the relationships between perceived organisational justice, the psychological contract, and work engagement in a Zimbabwean tertiary institution. The Spearman's correlation is used when the data does not meet the assumptions of parametric tests, such as normal distribution and equality of variance. The following hypothesis is tested in this section:

H1: There is a statistically significant positive interrelationship between perceived organisational justice, the psychological contract, and work engagement.

6.4.1 Correlations between perceived organisational justice (POJ), the psychological contract (PC), and work engagement (WE)

The results of the correlation analysis of perceived organisational justice, the psychological contract, and work engagement are reported in Table 6.11.

Table 6.11

Bivariate Correlations between Perceived Organisational Justice, the Psychological Contract, and Work Engagement

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Procedural justice	—													
2. Distributive justice	.82***	—												
3. Interpersonal justice	.79***	.77***	—											
4. Informational justice	.79***	.76***	.92***	—										
5.PERCEIVED ORGANISATIONAL JUSTICE	.90***	.87***	.95***	.95***	—									
6. Employer obligations	.66***	.66***	.69***	.69***	.73***	—								
7. Employee obligations	.54***	.54***	.55***	.57***	.59***	.59***	—							
8. Job satisfaction	.34***	.37***	.42***	.41***	.42***	.45***	.46***	—						
9. State of the psychological contract	.50***	.53***	.61***	.57***	.59***	.56***	.63***	.61***	—					
10. PSYCHOLOGICAL CONTRACT	.61***	.63***	.68***	.67***	.70***	.78***	.88***	.72***	.82***	—				
11. Vigour	.53***	.52***	.57***	.56***	.59***	.56***	.75***	.58***	.71***	.80***	—			
12. Dedication	.49***	.49***	.55***	.55***	.57***	.54***	.73***	.59***	.70***	.79***	.93***	—		
13. Absorption	.51***	.52***	.56***	.56***	.58***	.53***	.73***	.57***	.68***	.78***	.94***	.94***	—	
14. WORK ENGAGEMENT	.53***	.53***	.58***	.57***	.60***	.56***	.75***	.59***	.72***	.81***	.98***	.98***	.98***	—

* $p < .05$, ** $p < .01$, *** $p < .001$

6.4.1.1 Bivariate correlations between the dimensions of POJ

The summary statistics in Table 6.11 show that in general, there were strong positive correlations between informational, interpersonal, distributive, and procedural justice. The correlation coefficients ranged from .76 to .92. The strongest correlation was noted between informational justice and interpersonal justice ($r = .92$, $p < .001$). This was followed by the correlations between procedural and distributive justice ($r = .82$, $p < .001$), procedural and informational justice ($r = .79$, $p < .001$), and distributive and interpersonal justice ($r = .77$, $p < .001$). Informational justice and distributive justice had a correlation coefficient of .76 ($p < .001$). As a result, all these dimensions had significant strong correlations with the overall perceived organisational justice variable.

6.4.1.2 Bivariate correlations between the dimensions of the psychological contract

The results in Table 6.11 indicate moderate to strong positive correlations between the dimensions of the psychological contract. The correlation coefficients ranged from .45 to .63, which indicates a moderate to strong positive relationship between the dimensions. The strongest correlation was observed between employee obligations and state of the psychological contract ($r = .63$, $p < .001$), followed by the correlation between state of the psychological contract and job satisfaction ($r = .61$, $p < .001$), followed by the correlation between employee obligations and employer obligations ($r = .59$, $p < .001$), followed by the correlation between state of the psychological contract and employer obligations ($r = .56$, $p < .001$), followed by the correlation between employee obligations and job satisfaction ($r = .46$, $p < .001$), and finally the correlation between employer obligations and job satisfaction ($r = .45$, $p < .001$) (a moderate practical effect size). As a result, all these dimensions had significant strong correlations with the overall psychological contract variable.

6.4.1.3 Bivariate correlations between POJ and the psychological contract

The statistics presented in Table 6.11 show that there were significant positive correlations between all the dimensions of perceived organisational justice and all the dimensions of the psychological contract, which indicates that employees who perceived high levels of organisational justice also tended to have high levels of the psychological contract. The correlation coefficients range from .34 to .69, which indicates a moderate to strong positive relationship between the dimensions. Based on the correlation coefficients and the *p* values provided, the two pairs with the strongest positive correlations were interpersonal justice and employer obligations ($r = .69$, $p < .001$) and employer obligations and informational justice (r

= .69, $p < .001$). By contrast, the two pairs with the weakest positive correlations were job satisfaction and procedural justice ($r = .34$, $p < .001$) and job satisfaction and distributive justice ($r = .37$, $p < .001$). As a result, the constructs of overall psychological contract and overall perceived organisational justice had a significant positive correlation ($r = .70$, $p < .001$). These two variables moved in the same direction.

6.4.1.4 Bivariate correlations between the dimensions of work engagement

The statistics summarised in Table 6.11 show that there were strong positive correlations between the dimensions of work engagement. The correlation coefficients ranged from .93 to .94, which indicates very strong positive relationships between the dimensions. The strongest correlation was observed between dedication and absorption ($r = .94$, $p < .001$). This was followed by the correlations between vigour and absorption ($r = .94$, $p < .001$) and between vigour and dedication ($r = .93$, $p < .001$). As a result, all these dimensions had significant very strong positive correlations with the overall work engagement variable.

6.4.1.5 Bivariate correlations between perceived organisational justice and work engagement

The statistics summarised in Table 6.11 indicate that there were significant correlations between the dimensions of work engagement and those of perceived organisational justice. These results show that employees who perceive high levels of organisational justice tend to have high levels of work engagement. The correlation coefficients ranged from .49 to .57, which indicates a moderate to strong positive relationship between the dimensions. Based on the correlation coefficients and p values provided, the three pairs with the strongest positive correlations were interpersonal justice and vigour ($r = .57$, $p < .001$), interpersonal justice and absorption *($r = .56$, $p < .001$)*, and informational justice and vigour ($r = .56$, $p < .001$). The two pairs with the weakest positive correlations were dedication and procedural justice ($r = .49$, $p < .001$) and dedication and distributive justice ($r = .49$, $p < .001$). As a result, the variables of overall perceived organisational justice and overall work engagement had a significant positive correlation ($r = .60$, $p < .001$) (a moderate practical effect size).

6.4.1.6 Bivariate correlations between the psychological contract and work engagement

The results in Table 6.11 show that there were significant positive correlations between the dimensions of the psychological contract and those of work engagement, which indicates that employees who perceive a strong psychological contract with their employer also tend

to experience high levels of work engagement. The correlation coefficients ranged from .53 to .75, which indicates a moderate to strong positive relationship between the dimensions. The three pairs with the strongest correlations were employee obligations and vigour ($r = .75$, $p < .001$), employee obligations and dedication ($r = .73$, $p < .001$), and employee obligations and absorption ($r = .73$, $p < .001$). The two pairs with the weakest correlations were employer obligations and absorption ($r = .53$, $p < .001$) and employer obligations and dedication ($r = .54$, $p < .001$). As a result, overall psychological contract and overall work engagement had a significant positive correlation ($r = .81$, $p < .001$).

6.4.2 Preliminary analysis 1: The interrelationship between perceived organisational justice (POJ), the psychological contract (PC), and work engagement (WE)

Based on the results of the bivariate correlations, presented above, the study found enough evidence to suggest that there were significant positive correlations between perceived organisational justice and the psychological contract ($p < .001$), between perceived organisational justice and work engagement ($p < .001$), and between the psychological contract and work engagement ($p < .001$). As a result, the following hypothesis is confirmed:

H1: There is a statistically significant positive interrelationship between perceived organisational justice, the psychological contract, and work engagement.

6.5 INFERENTIAL STATISTICAL ANALYSIS

After testing for CMB, validity and reliability of the scales assessment, and presenting the descriptive statistics and bivariate correlations, as described in the sections above, the study proceeded to evaluate the other hypotheses, using inferential statistics. Since the study collected sample data, inferential statistics were utilised to draw conclusions about the distribution of the population. The inferential statistics are reported and interpreted in four stages, as indicated below:

Stage 1: Stepwise regression analysis
Stage 2: Moderated regression analysis
Stage 3: Structural equation modelling
Stage 4: Tests for significant mean differences

6.6 INFERENTIAL STATISTICAL ANALYSIS: STEPWISE REGRESSION ANALYSIS

Stepwise regression with backward elimination is a statistical method used for selection of variables in regression analysis (Knapp, 2022). The purpose of this approach is to determine the most significant predictors among a set of independent variables (Wang & Chen, 2016). Stepwise regression provides an automated approach to variable selection, which can be advantageous when dealing with many potential predictor variables. Instead of manually considering each variable and its impact on the model, stepwise regression evaluates variables based on their statistical significance and contribution to the model's predictive power. This section reports on the stepwise regression analysis with backward elimination, using IBM SPSS Statistics 28, which was utilised to determine the effect of the psychological contract and perceived organisational justice on work engagement. As stated earlier, this was done to address research aim 2. Stepwise multiple linear regression analysis was used to evaluate the significance of the results in providing evidence for accepting research hypothesis 2 (H2).

H2: Perceived organisational justice and the psychological contract (the independent variables) significantly predict work engagement (the dependent variable).

During the process, all the main variables (perceived organisational justice [POJ] and the psychological contract [PC]), together with their dimensions (procedural, distributive, informational, and interpersonal justice; and employer obligations, employee obligations, job satisfaction, and state of the psychological contract), were entered as predictors of work engagement (WE). This was meant to allow the estimation process to come up with the best combination of predictors of work engagement. As a result, four steps were performed. Only the results of the final acceptable model are presented in Table 6.12 below.

Table 6.12
Final Step: Stepwise Regression Analysis

Variable	Standardised coefficient (β)	Std error	t	Sig.	Tolerance	VIF
(Constant)		.17	−5.28	.00		
Employer obligations	−.37	.01	−6.04	.00	.25	3.97
State of the psychological contract	.24	.09	4.92	.00	.40	2.49
Psychological contract	.81	.13	11.52	.00	.19	5.34
Perceived organisational justice	.15	.08	3.05	.00	.40	2.53

Dependent variable: WE

F = 186.88; p = .00

R-squared = .69

Adjusted R-squared = .68

The results of the stepwise regression modelling show that employer obligations, state of the psychological contract, overall psychological contract, and overall perceived organisational justice were significant predictors of work engagement. Table 6.12 shows that the overall model (F = 186.88; p = .00; adjusted R^2 = .68; a large practical effect) accounted for 68% of the variation in work engagement. Closer inspection of the standardised coefficients shows that in absolute terms, the psychological contract contributed the most in explaining the variance in work engagement (β = .81; p = .00), followed by employer obligations (β = −.37; p = .00), state of the psychological contract (β = .24; p = .00), and perceived organisational justice (β = .15; p = .00). These results suggest that all the independent variables selected during the stepwise regression modelling were significant predictors of work engagement. As a result, preliminary analysis 2, stated below, is made.

6.6.1 Preliminary analysis 2: The effect of POJ and PC on WE

Based on the results of the stepwise multiple linear regression, presented above, the study found enough evidence to conclude that both perceived organisational justice and the psychological contract were significant predictors of work engagement. The following hypothesis is therefore confirmed:

H2: Perceived organisational justice and the psychological contract (the independent variables) significantly predict work engagement (the dependent variable).

6.7 INFERENTIAL STATISTICS: MODERATED HIERARCHICAL REGRESSION ANALYSIS

Moderated hierarchical regression analysis was conducted to further investigate the effect of perceived organisational justice and the psychological contract on work engagement, using socio-demographic variables (age, gender, employment status, and employment category) as intervening variables. Hypothesis 4 was tested in this stage:

H4: The relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement are significantly moderated by individuals' socio-demographic characteristics.

The study utilised the IBM SPSS procedure developed by Hayes (2018) to perform regression-based moderation analysis. The objective of this analysis was to investigate whether socio-demographic factors moderated the relationship between perceived organisational justice and work engagement, as well as the relationship between the psychological contract and work engagement. Here, the primary aim was to determine the main effects and the interaction effects. To mitigate multicollinearity between the main effects and the interaction effects, the continuous variables were mean-centred prior to analysis.

6.7.1 The influence of age on the relationship between POJ, PC, and WE

Table 6.13 shows the results of the moderation effects of age on the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement. The 18–35-year age group was the reference category.

Table 6.13
Moderated Regression Analysis: Examining the Influence of Age on the Relationships between POJ, PC, and WE

Outcome variable: WE	b	SE	t	P	LLCI	ULCI
Main predictor: POJ						
Constant	4.23	.36	12.06	.00	3.54	4.92
POJ	1.03	.22	4.77	.00	.61	1.46
Age 36–45	−1.09	.37	−2.96	.01	−1.82	−.37
Age 46–55	−1.18	.38	−3.18	.01	−1.92	−.45
Age 56–65	−1.21	.50	−2.46	.02	−2.18	−.25
POJ*Age 36–45	−.02	.25	−.05	.96	−.50	.48
POJ*Age 46–55	.19	.25	.77	.45	−.30	.68
POJ*Age 56–65	.27	.28	.96	.35	−.28	.80
Model information:						
R-squared = .42; *F* = 52.69,						
p = .00						
Test(s) of highest-order unconditional interaction(s):						
POJ*Age: *R*-squared change = .01,						
F = .85; *p* = .47						
Main predictor: PC						
Constant	3.51	.25	14.10	.00	3.02	4.00
PC	1.52	.13	12.12	.00	1.27	1.77
Age 36–45	−.34	.27	−1.28	.21	−.86	.19

Age 46–55	−.41	.27	−1.51	.14	−.93	.13
Age 56–65	−.17	.34	−.51	.62	−.82	.49
PC*Age 36–45	−.21	.15	−1.40	.17	−.51	.09
PC*Age 46–55	−.05	.16	−.30	.77	−.35	.26
PC*Age 56–65	.08	.17	.47	.65	−.26	.42

Model information:
R-squared = .65; *F* = 146.65,
p = .00

Test(s) of highest-order unconditional interaction(s):
PC*Age: *R*-squared change = .00,
F = 1.65; *p* = .18

Notes: n = 336; LLCI: lower-level confidence interval; ULCI: upper-level confidence interval; SE: standard error

Source: Author's own work

The results in Table 6.13 show that the first model explained 42% of the variance in work engagement, and that the overall model was statistically significant (F (7, 328) = 52.69, $p <$ .001).

Closer inspection of the main effects reveals that POJ was a significant predictor of work engagement (b = 1.03, t(328) = 4.77, $p <$ .001), after controlling for age. The second variable, age, significantly influenced work engagement. Academic employees in the age groups of 36–45, 46–55, and 56–65 years reported lower levels of work engagement than those in the 18–35-year category. However, the interaction effects between POJ and age groups were not significant for any of the three age categories (POJ*Age 36–45: b = −.02, t(328) = −.05, p = .96; POJ*Age 46–55: b = .19, t(328) = .77, p = .45; POJ*Age 56–65: b = .27, t(328) = .96, p = .35). The results of the unconditional interactions show that inclusion of the interaction terms in the model resulted in an R-squared change of .01. The F-test for the interaction effect was not statistically significant (F (3, 328) = .85, p = .47), which suggests that age is not a significant moderator of the relationship between perceived organisational justice and work engagement.

The results in Table 6.13 show that the second model (PC as the predictor) accounted for 65% of the variance in work engagement, and that the overall model was statistically significant (F (7, 328) = 146.65, $p <$ .001). The main effects show that PC was a significant predictor of work engagement (b = 1.52, t(328) = 12.12, $p <$ .00). Age had an impact on work engagement, with employees in the age groups of 36–45, 46–55, and 56–65 years reporting lower levels of work engagement than those in the 18–35-year category. However, the interaction effects between PC and age groups were not significant for any of the three age categories (PC*Age 36–45: b = −.21, t(328) = −1.40, p = .17; PC*Age 46–55: b = −.05,

$t(328) = -.30$, $p = .77$; PC*Age 56–65: $b = .08$, $t(328) = .47$, $p = .65$). Closer inspection of the unconditional interactions shows that addition of the interaction terms did not change the model

(R-squared change = .00). The F-test for the interaction effect was not statistically significant ($F(3, 328) = 1.65$, $p = .18$), which suggests that age was not a significant moderator of the relationship between the psychological contract and work engagement.

6.7.2 The influence of gender on the relationship between POJ, PC, and WE

Table 6.14 shows the results of the moderation effects of gender on the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement. Males were the reference category.

Table 6.14
Moderated Regression Analysis: Examining the Influence of Gender on the Relationships between POJ, PC, and WE

Outcome variable: WE	b	SE	t	P	LLCI	ULCI
Main predictor: POJ						
Constant	2.60	.24	10.95	.00	2.13	3.07
POJ	1.11	.24	4.75	.00	.65	1.56
Female	.46	.17	2.70	.01	.13	.79
POJ*Female	.04	.17	.22	.83	−.30	.37
Model information:						
R-squared = .40; *F* = 73.72,						
p = .00						
Test(s) of highest-order unconditional interaction(s):						
POJ*Gender: *R*-squared change = .00,						
F = .05; *p* = .83						
Main predictor: PC						
Constant	2.69	.19	14.37	.00	2.32	3.06
PC	1.43	.20	7.29	.00	1.04	1.81
Female	.39	.14	2.92	.01	.13	.65
PC*Female	.07	.14	.51	.62	−.21	.34
Model information:						
R-squared = .62; *F* = 180.78,						
p = .00						
Test(s) of highest-order unconditional interaction(s):						
PC*Gender: *R*-squared change = .00,						
F = .25; *p* = .62						

Notes: $n = 336$; LLCI: lower-level confidence interval; ULCI: upper-level confidence interval; SE: standard error

Source: Author's own work

The results of the first model in Table 6.14 show the moderation effects of gender on the relationship between perceived organisational justice and work engagement. It can be observed that the model explained 40% of the variance in work engagement, and that the overall model was statistically significant ($F_{(3, 332)}$ = 73.72, $p < .001$). The main effects reveal that POJ was a significant predictor of work engagement (b = 1.11, $t(332)$ = 4.75, $p < .001$). Gender was also a significant predictor of work engagement, with females (b = .46, $t(332)$ = 2.70, $p = .01$) reporting higher levels of work engagement than males. However, the moderation analysis shows that the interaction effects between POJ and gender were not significant in influencing work engagement (POJ*Female: b = .04, $t(332)$ = .22, $p = .83$). Addition of the interaction term to the model did not change the R-squared (R-squared change = .00). The F-test for the interaction term yielded a non-significant result ($F_{(1, 332)}$ = .05, $p = .83$), and no interaction effect was therefore observed.

Table 6.14 shows that the second model accounted for 62% of the variance in work engagement. This overall model was statistically significant ($F_{(3, 332)}$ = 180.78, $p < .001$). The main effects showed that PC was a significant predictor of work engagement (b = 1.43, $t(332)$ = 7.29, $p < .001$). Gender was also a significant predictor of work engagement, with females (b = .39, $t(332)$ = 2.92, $p = .01$) reporting higher levels of work engagement than males. However, the interaction between PC and gender was not significant in predicting work engagement (PC*Female: b = .07, $t(332)$ = .51, $p = .62$). The unconditional interactions show that addition of the interaction term to the model did not change the R-squared (R-squared change = .00). The F-test for the interaction effect yielded a non-significant result ($F_{(1, 332)}$ = .25, $p = .62$), and therefore an interaction effect was not observed.

6.7.3 The influence of employment status on the relationship between POJ, PC, and WE

Table 6.15 shows the results of the moderation effects of employment status on the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement. Permanent employees were the reference category.

Table 6.15

Moderated Regression Analysis: Examining the Influence of Employment Status on the Relationships between POJ, PC, and WE

Outcome variable: WE	b	SE	t	P	LLCI	ULCI
Main predictor: POJ						
Constant	1.81	.31	5.96	.00	1.21	2.41
POJ	1.30	.25	5.23	.00	.81	1.78
Contract	1.24	.27	4.58	.00	.71	1.77
POJ*Contract	−.16	.21	−.76	.45	−.57	.25
Model information:						
R-squared = .44; *F* = 111.01,						
p = .00						
Test(s) of highest-order unconditional interaction(s):						
POJ*Contract: *R*-squared change = .00,						
F = .57; *p* = .45						
Main predictor: PC						
Constant	2.51	.28	9.07	.00	1.97	3.05
PC	1.35	.20	7.02	.00	.97	1.72
Contract	.61	.26	2.41	.02	.12	1.11
PC*Contract	.05	.17	.27	.79	−.29	.38
Model information:						
R-squared = .65; *F* = 315.36,						
p = .00						
Test(s) of highest-order unconditional interaction(s):						
PC*Contract: *R*-squared change = .00,						
F = .07; *p* = .79						

Notes: *n* = 336; LLCI: lower-level confidence interval; ULCI: upper-level confidence interval; SE: standard error

Source: Author's own work

The results in Table 6.15 indicate that the first model explained 44% of the variance in work engagement. The overall model was statistically significant ($F_{(3, 329)}$ = 111.01, $p < .001$). The results for the main effects show that POJ was a significant predictor of work engagement (b = 1.30, $t(329)$ = 5.23, p = .00). Employment status was also a significant predictor of work engagement, with contract employees reporting higher levels of work engagement than permanent employees (b = 1.24, $t(329)$ = 4.58, p = .00). However, closer inspection of the interaction effects reveals that the interaction effects between POJ and employment status were not significant (POJ*Contract: b = −.16, $t(329)$ = −.76, p = .45). Inclusion of the interaction term in the model did not change the *R*-squared (*R*-squared change = .00). The *F*-test for the interaction effect yielded a non-significant result ($F_{(1, 329)}$ = .57, p = .45). Therefore, employment status had no significant moderation effect on the relationship between POJ and WE.

Table 6.15 indicates that the second model accounted for 65% of the variance in work engagement, and that the overall model was statistically significant (F (3, 329) = 315.36, $p <$ .001). An analysis of the main effects shows that PC was a significant predictor of work engagement (b = 1.35, t(329) = 7.02, p = .00). Employment status was also a significant predictor of work engagement, with contract employees reporting higher levels of work engagement than permanent employees (b = .61, t(332) = 2.41, p = .02). However, the interaction effects between PC and employment status were not significant in predicting work engagement (PC*Contract: b = .05, t(329) = .27, p = .79). Addition of the interaction term to the model did not change the R-squared (R-squared change = .00). The F-test for the interaction effect yielded a non-significant result (F (1, 329) = .07, p = .79), which suggests that there was insufficient evidence to support the presence of a significant interaction effect.

6.7.4 The influence of employment category on the relationship between POJ, PC, and WE

Table 6.16 presents the results of the moderation effects of employment category on the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement. Academic employees were the reference category.

Table 6.16

Moderated Regression Analysis: Examining the Influence of Employment Category on the Relationships between POJ, PC, and WE

Outcome variable: WE	b	SE	t	P	LLCI	ULCI
Main predictor: POJ						
Constant	3.27	.25	13.26	.00	2.79	3.75
POJ	1.13	.23	5.03	.00	.69	1.58
Non-academic	−.06	.17	−.34	.74	−.39	.28
POJ*Non-academic	−.03	.17	−.13	.90	−.34	.30
Model information:						
R-squared = .38; *F* = 77.50, *p* = .00						
Test(s) of highest-order unconditional interaction(s):						
POJ*Non-academic: *R*-squared change = .00, *F* = .02; *p* = .90						
Main predictor: PC						
Constant	3.06	.19	16.20	.00	2.69	3.43
PC	1.55	.16	9.89	.00	1.24	1.86
Non-academic	.10	.13	.71	.48	−.17	.35
PC*Non-academic	−.09	.11	−.79	.44	−.30	.13
Model information:						
R-squared = .63; *F* = 271.63, *p* = .00						
Test(s) of highest-order unconditional interaction(s):						
PC*Non-academic: *R*-squared change = .00, *F* = .62; *p* = .43						

Notes: *n* = 336; LLCI: lower-level confidence interval; ULCI: upper-level confidence interval; SE: standard error

Source: Author's own work

The results in Table 6.16 reveal that the first model explained 38% of the variance in work engagement ($F(3, 326) = 77.50$, $p < .001$), which indicates that at least one of the predictors had a significant effect on work engagement. The results for the main effects show that POJ was a significant predictor of work engagement ($b = 1.13$, $t(326) = 5.03$, $p = .00$). However, employment category was not a significant predictor of work engagement ($b = −.06$, $t(326) = −.34$, $p = .74$). Likewise, the interaction effects between POJ and employment category were not significant (POJ*Non-academic: $b = −.03$, $t(326) = −.13$ $p = .90$). Inclusion of the interaction term in the model did not change the *R*-squared (*R*-squared change = .00). The *F*-test for the interaction effect yielded a non-significant result ($F(1, 326) = .02$, $p = .90$). Therefore, it was observed that employment category was not a significant moderator of the relationship between POJ and WE.

Table 6.16 reveals that the second model accounted for 63% of the variance in work engagement ($F(3, 326) = 271.63$, $p < .001$), which indicates that at least one of the

predictors had a significant effect on work engagement. The results for the main effects show that PC was a significant predictor of work engagement (b = 1.55, $t(326)$ = 9.89, p = .00). However, employment category was not a significant predictor of work engagement (b = .10, $t(326)$ = .71, p = .48). Likewise, the interaction effects between PC and employment category were not significant (PC*Non-academic: b = −.09, $t(326)$ = −.79, p = .44). Inclusion of the interaction term in the model did not change the R-squared (R-squared change = .00). The F-test for the interaction effect yielded a non-significant result ($F(1, 326)$ = .62, p = .43). Therefore, it was observed that employment category was not a significant moderator of the relationship between PC and WE.

6.7.5 Preliminary analysis 3: Moderation of socio-demographic variables on the relationships between POJ, PC, and WE

The empirical results obtained from the stepwise regression analysis provide evidence for rejecting hypothesis 4 (H4).

> **H4:** The relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement are significantly moderated by individuals' socio-demographic characteristics.

As can be seen in Table 6.17, the moderated hierarchical regression analysis shows that the socio-demographic variables (age, gender, employment status, and employment category) did not moderate the relationships between POJ, PC, and WE. Overall, the socio-demographic variables had no significant moderation effects.

Table 6.17
Summary of the Influence of Socio-Demographic Variables on the Research Constructs

Socio-demographic variable	Main predictor variable	Practical moderation effect
Age	Perceived organisational justice (POJ)	Not significant
	Psychological contract (PC)	Not significant
Gender	Perceived organisational justice (POJ)	Not significant
	Psychological contract (PC)	Not significant
Employment status	Perceived organisational justice (POJ)	Not significant
	Psychological contract (PC)	Not significant
Employment category	Perceived organisational justice (POJ)	Not significant
	Psychological contract (PC)	Not significant

Source: Author's own work

The findings obtained from the hierarchical moderated regression analysis assisted in the development of a work engagement framework. The results obtained show that the socio-demographic variables (age, gender, employment status, and employment category) have no significant moderation on the relationships between perceived organisational justice, the psychological contract, and work engagement. This implies that the results cannot be utilised in the development of a work engagement framework. Contrary to what was expected, the results indicate that socio-demographic variables (age, gender, employment status, and employment category) do not moderate the effects of POJ on WE and PC on WE.

6.8 STRUCTURAL EQUATION MODELLING (SEM)

Two SEM models were developed using the results from the bivariate correlation analysis and the stepwise regression analysis as the basis. The SEM framework in JASP 0.16.3 software was used to evaluate the following hypothesis:

> **H3:** Based on the overall statistical relationships between perceived organisational justice and the psychological contract, and work engagement, there is a good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

The goodness of fit statistics for the two tested SEM models are provided in Table 6.18. Model 1 consisted of the overall constructs and Model 2 comprised all the items of each construct which had loadings onto the respective construct of each scale. The maximum likelihood estimation was applied to analyse the covariance structure.

Table 6.18
Model Fit Statistics: Competing Structural Models

Model	Chi-square/*df*	P	RMSEA	SRMR	CFI	TLI	NFI	AIC
1	55.38***	.00	.40	.17	.60	.50	.60	8766.45
2	9.66***	.00	.16	.06	.94	.92	.93	6731.71

Notes: $n = 336$, ***$p < .001$

Source: Author's own work

The results in Table 6.18 show that the two models were tested and compared using several fit indices. Based on the information provided, it appears that Model 2 is a better-fitting

model than Model 1. The fit indices reported for Model 2 are better than those reported for Model 1.

The chi-square to degrees of freedom ratio (chi-square/df) is a measure of model fit, and the value for Model 2 (9.66) is lower than that for Model 1 (55.38). The root mean square error of approximation (RMSEA) and the standardised root mean square residual (SRMR) values are lower for Model 2 (.16 and .06, respectively) than for Model 1 (.40 and .17, respectively), which suggests better model fit for Model 2. Additionally, the comparative fit index (CFI), Tucker–Lewis index (TLI), and normed fit index (NFI) values for Model 2 (.94, .92, and .93, respectively) are higher than those for Model 1 (.60, .50, and .60, respectively). These indices indicate that Model 2 has better relative fit when compared to Model 1. In summary, based on the fit indices provided, Model 2 appears to be a better-fitting model than Model 1.

After identifying the model with the best fit, standardised path coefficients were examined to assess the relationship between exogenous latent constructs and their effects on the endogenous variable. The standardised path coefficients for Model 2 are presented in Table 6.19.

Table 6.19
Standardised Path Coefficients for the Final Hypothesised Structural Equation Model

Predictor	Outcome	Estimate	Std error	z	p
Perceived organisational justice	Work engagement	.24	.09	2.55	.01
Psychological contract	Work engagement	.92	.07	12.72	.00

Note: $n = 336$

Source: Author's own work

Figure 6.1 depicts a path diagram showing the effect of perceived organisational justice and the psychological contract on work engagement.

Figure 6.1
Standardised Path Coefficients for the Final Hypothesised Structural Equation Model
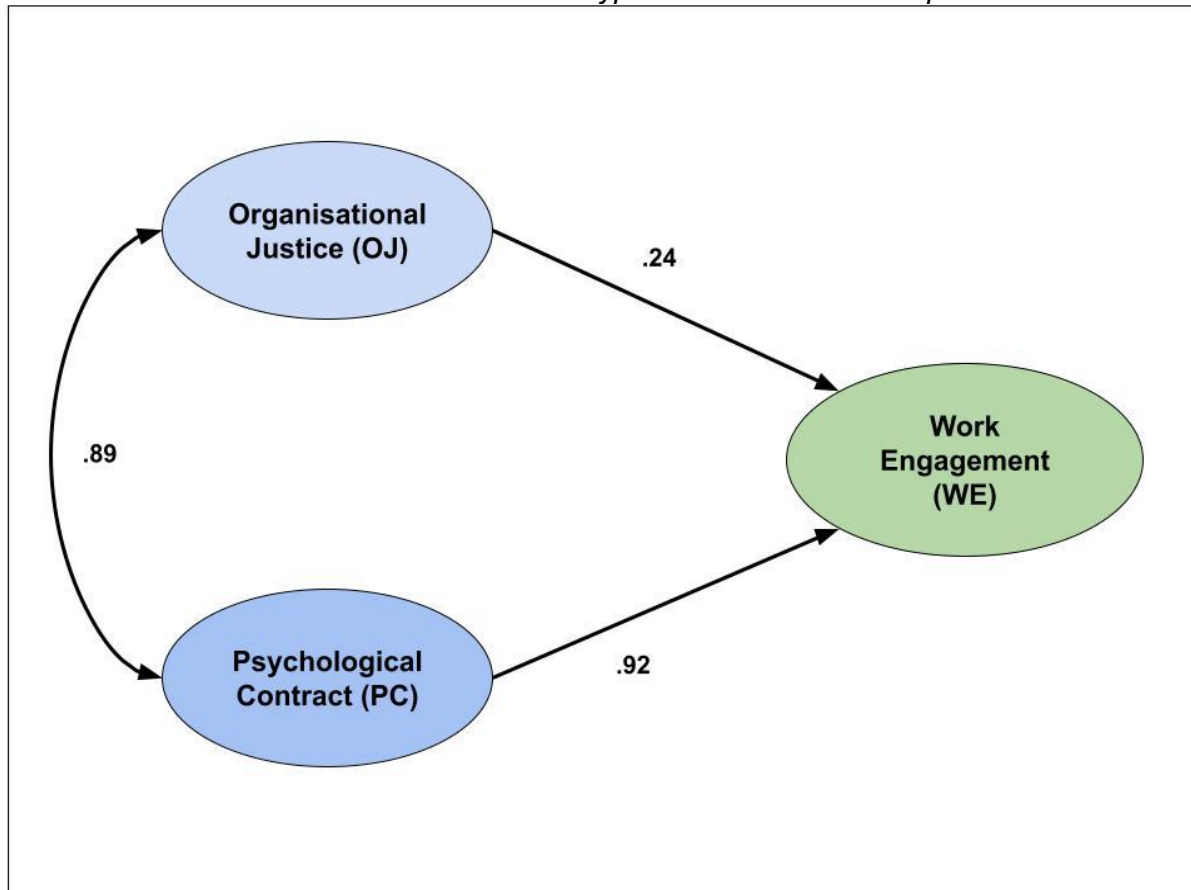
Source: Author's own work

It is clear from Table 6.19 and the visual representation in Figure 6.1 that both perceived organisational justice and the psychological contract are significant predictors of work engagement in Zimbabwean institutions of higher learning. Evidence is thereby provided to support hypothesis 3 (H3):

H3: Based on the overall statistical relationships between perceived organisational justice and the psychological contract, and work engagement, there is a good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

6.8.1 Preliminary analysis 4: Developing a work engagement framework

The structural equation modelling revealed that all the components of perceived organisational justice (procedural, distributive, interpersonal, and informational justice) and the psychological contract (employer obligations, employee obligations, job satisfaction, and state of the psychological contract) are predominant elements in the work engagement framework. Specifically, the structural equation modelling indicated that perceived organisational justice and the psychological contract are significant predictors of work engagement. Table 6.20 provides an overview of the work engagement framework that was developed from canonical correlation analysis and structural equation modelling.

Table 6.20
Empirically Manifested Work Engagement Framework

Variable	Description	Predictive influence on work engagement
Perceived organisational justice	It relates to individual experiences in an organisational setting in terms of fairness based on situational and personal factors (Colquitt, 2001).	Employees who experience feelings of equity perceive justice as present and increase their levels of work engagement. Employees who perceive injustice decrease their levels of work engagement.
Psychological contract	It explains the perceptions of the reciprocal expectations and obligations implied in the employment relationship (Guest et al., 2010).	Employees who perceive fulfilment of promises and obligations by the organisation increase their levels of work engagement. Employees who perceive a breach or violation of their psychological contract become dissatisfied with their psychological contract and decrease their levels of work engagement.

Source: Author's own work

6.9 TESTS FOR SIGNIFICANT MEAN DIFFERENCES

The purpose of this section is to use inferential statistical analysis to address research hypothesis 5 (H5).

H5: The socio-demographic groups (in terms of age, gender, employment status, and employment category) differ significantly in their perceived organisational justice, their psychological contract, and their work engagement.

Since the data was not normally distributed, non-parametric tests in the form of the Kruskal–Wallis *H* test and the Mann–Whitney *U* test were used to evaluate if there were any significant differences in the mean ranks for perceived organisational justice, the psychological contract, and work engagement across the socio-demographic variables. According to Wadgave and Khairnar (2019), non-parametric tests are powerful and effective in controlling Type I and Type II errors in the analysis of studies with non-normally distributed data.

The socio-demographic groups that were evaluated are the following:
- Age (18–35, 36–45, 46–55, 56–65);
- Gender (Male and Female);
- Employment status (Permanent and Contract); and
- Employment category (Academic and Non-academic).

6.9.1 Age

Table 6.21 summarises the Kruskal–Wallis tests that were conducted to evaluate the significant differences in the levels of perceived organisational justice, the psychological contract, and work engagement across the different age groups.

Table 6.21
Tests for Significant Mean Differences: Age

Variable	Age	*N*	Mean rank (*M*)	Kruskal–Wallis *H*	*df*	*p*
Procedural justice	18–35	28	181.00	15.763	3	.001
	36–45	169	152.43			
	46–55	116	177.60			
	56–65	23	225.41			
Distributive justice	18–35	28	198.41	5.437	3	.142
	36–45	169	159.33			
	46–55	116	174.17			
	56–65	23	170.87			
Interpersonal justice	18–35	28	174.20	8.738	3	.033
	36–45	169	158.97			
	46–55	116	171.04			
	56–65	23	218.76			
Informational justice	18–35	28	173.48	6.566	3	.087
	36–45	169	157.63			
	46–55	116	175.99			
	56–65	23	204.57			
PERCEIVED ORGANISATIONAL JUSTICE	18–35	28	180.48	10.218	3	.017
	36–45	169	154.81			
	46–55	116	178.75			
	56–65	23	198.11			
Employer obligations	18–35	28	172.05	6.022	3	.111
	36–45	169	156.85			
	46–55	116	178.75			
	56–65	23	198.11			
Employee obligations	18–35	28	235.86	16.049	3	.001
	36–45	169	156.68			
	46–55	116	169.46			
	56–65	23	168.48			
Job satisfaction	18–35	28	222.66	12.588	3	.006
	36–45	169	160.48			
	46–55	116	161.47			
	56–65	23	196.91			
State of the psychological contract	18–35	28	233.04	18.755	3	< .001
	36–45	169	159.80			
	46–55	116	160.26			
	56–65	23	195.41			
PSYCHOLOGICAL CONTRACT	18–35	28	222.43	11.703	3	.008
	36–45	169	156.57			
	46–55	116	170.06			
	56–65	23	182.67			
Vigour	18–35	28	219.43	10.393	3	.016
	36–45	169	160.66			
	46–55	116	163.49			
	56–65	23	189.39			
Dedication	18–35	28	228.77	13.866	3	.003
	36–45	169	159.25			
	46–55	116	163.50			
	56–65	23	188.35			

Absorption	18–35	28	227.20	13.585	3	.004
	36–45	169	157.26			
	46–55	116	167.21			
	56–65	23	186.15			
WORK ENGAGEMENT	18–35	28	228.79	14.136	3	.003
	36–45	169	157.86			
	46–55	116	165.45			
	56–65	23	188.65			

Note: $n = 336$

Source: Author's own work

The results in Table 6.21 show the mean scores for perceived organisational justice and its dimensions across the age groups. The Kruskal–Wallis test results are also presented. A Kruskal–Wallis test was conducted to ascertain if there were significant differences in the mean rank scores of the four age groups on perceived organisational justice and its dimensions. The results indicate that there were significant differences in the mean ranks across the age groups for procedural justice ($H = 15.76$, $df = 3$, $p = .00$), interpersonal justice ($H = 8.74$, $df = 3$, $p = .03$), and overall perceived organisational justice ($H = 10.22$, $df = 3$, $p = .02$). Those between 56 and 65 years scored significantly higher than other age groups for procedural justice ($M = 225.41$), interpersonal justice ($M = 218.76$), and overall perceived organisational justice ($M = 198.11$). However, there were no significant differences in the mean ranks for distributive justice ($H = 5.44$, $df = 3$, $p = .14$) and informational justice ($H = 6.57$, $df = 3$, $p = .09$) across the four age groups. The results suggest that there were significant differences in mean ranks for procedural justice, interpersonal justice, and overall perceived organisational justice across the four age groups.

With regard to the psychological contract, Table 6.21 reveals that there were significant differences in the mean ranks across the age groups for the dimensions of employee obligations ($H = 16.05$, $df = 3$, $p = .00$), job satisfaction ($H = 12.59$, $df = 3$, $p = .01$), state of the psychological contract ($H = 18.76$, $df = 3$, $p = .00$), and overall psychological contract ($H = 11.70$, $df = 3$, $p = .01$. Those between 18 and 35 years scored significantly higher than other age groups for employee obligations ($M = 235.86$), job satisfaction ($M = 222.66$), state of the psychological contract ($M = 233.04$), and overall psychological contract ($M = 222.43$). However, there were no significant differences in the mean ranks for employer obligations ($H = 6.02$, $df = 3$, $p = .11$) across the four age groups. The results suggest that there were significant differences in mean ranks for employee obligations, job satisfaction, state of the psychological contract, and overall psychological contract across the four age groups.

Regarding work engagement, Table 6.21 indicates that there were significant differences in the mean ranks across the age groups for the dimensions of vigour (H = 10.39, df = 3, p = .02), dedication (H = 13.87, df = 3, p = .00), absorption (H = 13.59, df = 3, p = .00), and overall work engagement (H = 14.14, df = 3, p = .00). Those between 18 and 35 years scored significantly higher than other age groups for vigour (M = 219.43), dedication (M = 228.77), absorption (M = 227.20), and overall work engagement (M = 228.79). These results suggest that there were significant differences in mean ranks for work engagement and its dimensions across all four age groups.

6.9.2 Gender

Table 6.22 provides a summary of the Mann–Whitney U tests conducted to evaluate if there were any significant differences in the levels of perceived organisational justice, the psychological contract, and work engagement across genders.

Table 6.22
Tests for Significant Mean Differences: Gender

Variable	Gender	N	Mean rank (*M*)	Mann–Whitney U	Wilcoxon W	z	p
Procedural justice	Male	222	179.39	10236.50	16791.50	−3.04	.00
	Female	114	147.29				
Distributive justice	Male	222	176.13	10961.00	17516.00	−2.19	.03
	Female	114	153.65				
Interpersonal justice	Male	222	179.09	10303.50	16858.50	−2.92	.00
	Female	114	147.88				
Informational justice	Male	222	179.07	10307.50	16862.50	−2.90	.00
	Female	114	147.92				
PERCEIVED ORGANISATIONAL JUSTICE	Male	222	179.83	10138.00	16693.00	−3.06	.00
	Female	114	146.43				
Employer obligations	Male	222	177.07	10752.00	17307.00	−2.28	.02
	Female	114	151.82				
Employee obligations	Male	222	173.16	11619.50	18174.50	−1.23	.22
	Female	114	159.43				
Job satisfaction	Male	222	165.62	12014.50	36767.50	−.76	.45
	Female	114	174.11				
State of the psychological contract	Male	222	171.74	11935.00	18490.00	−.91	.36
	Female	114	162.19				
PSYCHOLOGICAL CONTRACT	**Male**	**222**	**174.06**	**11419.00**	**17974.00**	**−1.47**	**.14**
	Female	**114**	**157.67**				
Vigour	Male	222	165.79	12052.50	36805.50	−.72	.47
	Female	114	173.78				
Dedication	Male	222	166.43	12195.50	36948.50	−.55	.58
	Female	114	172.52				

Absorption	Male	222	167.88	12515.50	37268.50	−.17	.87
	Female	114	169.71				
WORK ENGAGEMENT	Male	222	167.10	12342.50	37095.50	−.37	.71
	Female	114	171.23				

Note: $n = 336$

Source: Author's own work

The results in Table 6.22 show the mean scores for perceived organisational justice and its dimensions across the gender categories. The Mann–Whitney U test results indicate significant differences in perceived organisational justice based on gender across multiple dimensions. For procedural justice, male participants had a significantly higher mean rank ($M = 179.39$) than female participants ($M = 147.29$, $z = −3.04$, $p = .00$). For distributive justice, male participants had a significantly higher mean rank ($M = 176.13$) than female participants ($M = 153.65$, $z = −2.19$, $p = .03$). For interpersonal justice, male participants had a significantly higher mean rank ($M = 179.09$) than female participants ($M = 147.88$, $z = −2.92$, $p = .00$). Additionally, for informational justice, male participants had a significantly higher mean rank ($M = 179.07$) than female participants ($M = 147.92$, $z = −2.90$, $p = .00$). As a result, for overall perceived organisational justice, male participants had a significantly higher mean rank ($M = 179.83$) than female participants ($M = 146.43$, $z = −3.06$, $p = .00$). These results demonstrate that male participants consistently perceived higher levels of organisational justice and its dimensions, which suggests possible gender disparities in the perception of justice in the academic institution investigated.

With regard to the psychological contract, for the dimension of employer obligations, male participants had a significantly higher mean rank ($M = 177.07$) than female participants ($M = 151.82$, $z = −2.28$, $p = .02$). However, there were no significant differences for employee obligations ($z = −1.23$, $p = .22$), job satisfaction ($z = −.76$, $p = .45$), state of the psychological contract ($z = −.91$, $p = .36$), and overall psychological contract ($z = −1.47$, $p = .14$) between females and males. Only employer obligations had significant differences between males and females, while the other variables had no significant differences.

The results in Table 6.22 show that there were no significant gender differences in work engagement and its dimensions between males and females. There were no significant differences in vigour ($z = −.72$, $p = .47$), dedication ($z = −.55$, $p = .58$), absorption ($z = −.17$, $p = .87$), and overall work engagement ($z = −.37$, $p = .71$) between males and females. These results show that the perceptions of males and females were similar regarding work engagement.

6.9.3 Employment status

Table 6.23 provides a summary of the Mann–Whitney U tests conducted to evaluate if there were any significant differences in the levels of perceived organisational justice, the psychological contract, and work engagement across the different employment statuses.

Table 6.23
Tests for Significant Mean Differences: Employment Status

Variable	Employment status	N	Mean rank (*M*)	Mann–Whitney *U*	Wilcoxon *W*	*z*	*p*
Procedural justice	Permanent	291	168.36	5714.00	6617.00	−.72	.47
	Contract	42	157.55				
Distributive justice	Permanent	291	166.63	6002.00	48488.00	−.20	.84
	Contract	42	169.60				
Interpersonal justice	Permanent	291	165.46	5663.50	48149.50	−.80	.42
	Contract	42	177.65				
Informational justice	Permanent	291	165.86	5778.50	48264.50	−.59	.55
	Contract	42	174.92				
PERCEIVED ORGANISATIONAL JUSTICE	Permanent	291	166.84	6064.00	48550.00	−.08	.93
	Contract	42	168.12				
Employer obligations	Permanent	291	169.50	5384.000	6287.00	−1.26	.21
	Contract	42	149.69				
Employee obligations	Permanent	291	158.29	3576.000	46062.00	−4.36	.00
	Contract	42	227.36				
Job satisfaction	Permanent	291	157.43	3326.500	45812.50	−4.80	.00
	Contract	42	233.30				
State of the psychological contract	Permanent	291	160.74	4290.500	46776.50	−3.34	.00
	Contract	42	210.35				
PSYCHOLOGICAL CONTRACT	Permanent	291	160.75	4293.500	46779.50	−3.12	.00
	Contract	42	210.27				
Vigour	Permanent	291	159.18	3834.00	46320.00	−3.95	.00
	Contract	42	221.21				
Dedication	Permanent	291	158.93	3764.00	46250.00	−4.07	.00
	Contract	42	222.88				
Absorption	Permanent	291	158.73	3703.50	46189.50	−4.18	.00
	Contract	42	224.32				
WORK ENGAGEMENT	Permanent	291	158.84	3736.50	46222.50	−4.10	.00
	Contract	42	223.54				

Note: $n = 336$

Source: Author's own work

The results in Table 6.23 show the mean scores for perceived organisational justice and its dimensions across employment statuses. There were no significant differences in overall perceived organisational justice between permanent and contract employees ($z = −.08$, $p = .93$). Likewise, there were no significant differences in procedural justice ($z = −.72$, $p = .47$),

distributive justice (z = −.20, p = .84), interpersonal justice (z = −.80, p = .42), and informational justice (z = −.59, p = .55) between contract and permanent employees. These results show that the perceptions of both permanent and contract employees were similar regarding organisational justice.

Table 6.23 shows the mean scores for the psychological contract and its dimensions across employment statuses. There were significant differences in the psychological contract between permanent and contract employees, except in the dimension of employer obligations. For employee obligations, contract employees had a significantly higher mean rank (M = 227.36) than permanent employees (M = 158.29, z = −4.36, p = .00). For job satisfaction, contract employees had a significantly higher mean rank (M = 233.30) than permanent employees (M = 157.43, z = −4.80, p = .00). For state of the psychological contract, contract employees had a significantly higher mean rank (M = 210.35) than permanent employees (M = 160.74, z = −3.34, p = .00). As a result, for overall psychological contract, contract employees had a significantly higher mean rank (M = 210.27) than permanent employees (M = 160.75, z = −3.12, p = .00). These results demonstrate that contract employees consistently perceived higher levels of the psychological contract and its dimensions than permanent employees.

The results in Table 6.23 show that there were significant differences in work engagement between permanent and contract employees. For vigour, contract employees had a significantly higher mean rank (M = 221.21) than permanent employees (M = 159.18, z = −3.95, p = .00). For dedication, contract employees had a significantly higher mean rank (M = 222.88) than permanent employees (M = 158.93, z = −4.07, p = .00). For absorption, contract employees had a significantly higher mean rank (M = 224.32) than permanent employees (M = 158.73, z = −4.18, p = .00). As a result, for overall work engagement, contract employees had a significantly higher mean rank (M = 223.54) than permanent employees (M = 158.84, z = −4.10, p = .00). These results demonstrate that contract employees consistently perceived higher levels of work engagement and its dimensions than permanent employees.

6.9.4 Employment category

Table 6.24 provides a summary of the Mann–Whitney U tests conducted to evaluate if there were any significant differences in the levels of perceived organisational justice, the psychological contract, and work engagement across different employment categories.

Table 6.24
Tests for Significant Mean Differences: Employment Category

Variable	Employment category	N	Mean rank (*M*)	Mann–Whitney *U*	Wilcoxon *W*	*z*	*p*
Procedural justice	Academic	195	176.67	10984.50	20164.50	−2.71	.00
	Non-academic	135	149.37				
Distributive justice	Academic	195	172.61	11776.00	20956.00	−1.78	.08
	Non-academic	135	155.23				
Interpersonal justice	Academic	195	176.29	11057.50	20237.50	−2.59	.01
	Non-academic	135	149.91				
Informational justice	Academic	195	177.74	10776.00	19956.00	−2.92	.00
	Non-academic	135	147.82				
PERCEIVED ORGANISATIONAL JUSTICE	Academic	195	178.30	10666.50	19846.50	−3.00	.00
	Non-academic	135	147.01				
Employer obligations	Academic	195	178.04	10716.50	19896.50	−2.90	.00
	Non-academic	135	147.38				
Employee obligations	Academic	195	176.97	10925.00	20105.00	−2.63	.00
	Non-academic	135	148.93				
Job satisfaction	Academic	195	169.42	12397.50	21577.50	−.90	.37
	Non-academic	135	159.83				
State of the psychological contract	Academic	195	168.54	12569.50	21749.50	−.75	.46
	Non-academic	135	161.11				
PSYCHOLOGICAL CONTRACT	Academic	195	178.58	10611.00	19791.00	−3.00	.00
	Non-academic	135	146.60				
Vigour	Academic	195	171.27	12037.50	21217.50	−1.33	.18
	Non-academic	135	157.17				
Dedication	Academic	195	174.71	11367.00	20547.00	−2.13	.03
	Non-academic	135	152.20				
Absorption	Academic	195	173.31	11640.50	20820.50	−1.81	.07
	Non-academic	135	154.23				
WORK ENGAGEMENT	Academic	195	173.42	11618.50	20798.50	−1.83	.07
	Non-academic	135	154.06				

Note: *n* = 336

Source: Author's own work

The results in Table 6.24 show the mean scores for perceived organisational justice and its dimensions across employment categories. The Mann–Whitney *U* test results are also presented. The results show that there were significant differences in perceived organisational justice between academic and non-academic employees, except in distributive justice, which had a non-significant mean rank (*z* = −1.78, *p* = .08). For procedural justice, academic employees had a significantly higher mean rank (*M* = 176.67) than non-academic employees (*M* = 149.37, *z* = −2.71, *p* = .00). For interpersonal justice, academic employees had a significantly higher mean rank (*M* = 176.29) than non-academic

employees (M = 149.91, z = −2.59, p = .01). For informational justice, academic employees had a significantly higher mean rank (M = 177.74) than non-academic employees (M = 147.82, z = −2.92, p = .00). As a result, for overall perceived organisational justice, academic employees had a significantly higher mean rank (M = 178.30) than non-academic employees (M = 147.01, z = −3.00, p = .00). These results show that academic employees consistently perceived higher levels of organisational justice and its dimensions than non-academic employees.

Table 6.24 shows the mean scores for the psychological contract and its dimensions across employment categories. The results show that there were significant differences in the psychological contract between academic and non-academic employees, except in job satisfaction (z = −.90, p = .37) and state of the psychological contract (z = −.75, p = .46). For employer obligations, academic employees had a significantly higher mean rank (M = 178.04) than non-academic employees (M = 147.38, z = −2.90, p = .00). For employee obligations, academic employees had a significantly higher mean rank (M = 176.97) than non-academic employees (M = 148.93, z = −2.63, p = .00). For overall psychological contract, academic employees had a significantly higher mean rank (M = 178.58) than non-academic employees (M = 146.60, z = −3.00, p = .00). These results reveal that academic employees consistently perceived higher levels of the psychological contract than non-academic employees.

The results in Table 6.24 show the mean scores for work engagement and its dimensions across employment categories. There were significant differences in dedication between academic and non-academic employees. For dedication, academic employees had a significantly higher mean rank (M = 174.71) than non-academic employees (M = 152.20, z = −2.13, p = .03). However, the other dimensions showed no significant difference in mean ranks between academic and non-academic employees. These results reveal that there were no significant differences in mean ranks for work engagement between academic and non-academic employees.

Table 6.25 provides a summary of the tests for significant mean differences and shows that statistically significant differences between participants from different socio-demographic groups (in terms of age, gender, employment status, and employment category) pertaining to the variables of perceived organisational justice, the psychological contract, and work engagement. It should be noted that there were no significant mean differences between the socio-demographic variable of gender and the variables of both the psychological contract

and work engagement, while significant mean differences were found between gender and the variables of perceived organisational justice.

Table 6.25
Summary of Significant Socio-Demographic Differences

Variable	Source of difference	Lowest mean ranking	Highest mean ranking
Procedural justice	Age	36–45	56–65
	Gender	Female	Male
	Employment category	Non-academic	Academic
Distributive justice	Gender	Female	Male
Interpersonal justice	Age	36–45	56–65
	Gender	Female	Male
	Employment category	Non-academic	Academic
Informational justice	Gender	Female	Male
	Employment category	Non-academic	Academic
POJ	Age	36–45	56–65
	Gender	Female	Male
	Employment category	Non-academic	Academic
Employer obligations	Gender	Female	Male
	Employment category	Non-academic	Academic
Employee obligations	Age	36–45	18–35
	Employment status	Permanent	Contract
	Employment category	Non-academic	Academic
Job satisfaction	Age	36–45	18–35
	Employment status	Permanent	Contract
State of the psychological contract	Age	36–45	18–35
	Employment status	Permanent	Contract
PC	Age	36–45	18–35
	Employment status	Permanent	Contract
	Employment category	Non-academic	Academic
Vigour	Age	36–45	18–35
	Employment status	Permanent	Contract
Dedication	Age	36–45	18–35
	Employment status	Permanent	Contract
	Employment category	Non-academic	Academic

Absorption	Age	36–45	18–35
	Employment status	Permanent	Contract
WE	Age	36–45	18–35
	Employment status	Permanent	Contract

Source: Author's own work

The research findings obtained from the tests for significant mean differences provide partial evidence for accepting research hypothesis 5.

> H5: The socio-demographic groups (in terms of age, gender, employment status, and employment category) differ significantly in their perceived organisational justice, their psychological contract, and their work engagement.

6.9.5 Preliminary analysis 5: Developing a work engagement framework

The study`s central hypothesis stated that a relationship existed between perceived organisational justice, the psychological contract, and work engagement. In addition, the study hypothesised that employees' socio-demographic characteristics (age, gender, employment status, and employment category) influence the strength and/or direction of the relationships between perceived organisational justice, the psychological contract, and work engagement. Lastly, the study posited that relationships that exist between perceived organisational justice, the psychological contract, and work engagement would be used to develop a work engagement framework for employees in Zimbabwean tertiary education institutions. The significant associations stated below should be taken into consideration when developing a work engagement framework for tertiary institutions in Zimbabwe. It is important to note that the work engagement framework will only be relevant to one tertiary education institutions in Zimbabwe, and not the broader tertiary environment. The empirical results can only be used to provide valuable insights for replicating future studies.

Significant associations between the variables indicated the following work engagement elements that should be considered to enhance the work engagement of employees in a tertiary education environment:

- The correlation analysis revealed that:

The perceived organisational justice dimensions (informational, interpersonal, distributive, and procedural justice) and the psychological contract dimensions (employer obligations,

employee obligations, state of the psychological contract, and job satisfaction) are important in predicting work engagement.

The empirical study has offered new information on the impact of perceived organisational justice and the psychological contract on work engagement in tertiary institutions in Zimbabwe. Thus, management needs to recognise the importance of perceived organisational justice and the psychological contract in fostering work engagement, by establishing clear policies and practices for managing employees' perceptions of organisational justice and the psychological contract, in order to enhance their level of work engagement. Organisations need to offer various types of rewards, such as allowances, bonuses, and welfare and social security services, to enhance the work engagement of their employees (Rana & Chopra, 2019; Sangeeta, 2020). There is a need to give employees enough of the required resources to efficiently perform their work tasks. Resources such as frequent internet and e-library services, conducive office space with access to a power supply and the internet, and work gadgets such as computers and printers are important for work tasks such as research, teaching, and innovation (Phuthi, 2022). It is also important to ensure fairness in the allocation of infrastructure resources, research funds, and rewards among employees. Justice in the distribution of resources enhances employees' perceptions of organisational justice, thereby influencing their work engagement (Deepak, 2021). The management of tertiary institutions in Zimbabwe needs to develop consistent and fair procedures for allocating resources, to promote positive perceptions of procedural justice.

There is also a need for management to promote dignity, respect, and good communication between employees and their supervisors, to ensure interactional justice, which will enhance employees' work engagement. Management needs to put in place works councils and codes of conduct that promote respect and dignity for employees (Pattnaik & Tripathy, 2019). Establishing clear communication channels will ensure that timely and correct information is provided to employees (Gifford & Young, 2021). This will assist in aligning employees' expectations and perceptions with the organisation, in order to increase their satisfaction with the psychological contract.

The management of tertiary institutions also needs to be flexible and accommodate the changing needs and expectations of employees in the ever-changing environment, such as enabling remote working, to improve employees' work–life balance (Alam et al., 2022; Jovanovic & Lugonjic, 2022). Management needs to put in place career plans and programmes to manage employees' expectations and perceptions (Gresse & Linde, 2020).

- The stepwise regression indicated that
  - Employer obligations, state of the psychological contract, overall psychological contract, and overall perceived organisational justice are significant predictors of work engagement, and that
  - Employee obligations, job satisfaction, informational justice, interpersonal justice, distributive justice, and procedural justice are not significant predictors of work engagement.

The results of the empirical study suggest that employer obligations, state of the psychological contract, overall perceived organisational justice, and overall psychological contract are distinctive in predicting work engagement. Thus, the management of tertiary institutions needs to prioritise these predictors of work engagement. There is a need to fulfil obligations such as fair workloads, fair rewards, and recognition of academic freedom towards employees, so as to ensure good perceptions of organisational justice (Negash et al., 2019). Management must also develop transparent policies; guarantee job security and opportunities for career growth, through promotions; provide support for learning and development programmes; and ensure inclusive decisions. Employees feel engaged when they are considered important in decision-making (Garcia et al., 2021). Management needs to deliver on promises they make to employees, and they should strive to address violations of their psychological contracts, in order to improve the state of employees' psychological contracts, which could influence their levels of work engagement.

- The moderated hierarchical regression analysis indicated that
Socio-demographic variables age, gender, employment status and employment category did not influence the relationships between perceived organisational justice, the psychological contract, and work engagement.

The empirical study revealed that employees in tertiary institutions perceive organisational justice and the psychological contract regardless of their socio-demographic differences in terms of age, gender, employment status and employment category. Thus, perceptions of justice and the psychological contract among employees in tertiary institutions are not influenced by these socio-demographic differences. This implies that management should focus on individual needs and expectations, by creating equal opportunities for employees regardless of their age, gender, employment status and employment category. Provision of equal opportunities should focus on improving the perceptions of organisational justice and the psychological contract for all employees (Jovanovic & Lugonjic, 2022).

- The results of the structural equation modelling highlighted that

Perceived organisational justice and the psychological contract are important in predicting work engagement.

The results of the empirical study revealed that perceived organisational justice and the psychological contract play a significant role in influencing work engagement in tertiary institutions. Thus, management needs to ensure fairness in the allocation of resources, methods for determining rewards, and fair treatment of employees, and they need to deliver on promises made to employees, to manage their perceptions of organisational justice and their psychological contracts, so that they can experience higher levels of work engagement (Cheng, 2021; Osborne & Hammoud, 2017; Othman et al., 2019).

- The results of the tests for significant mean differences showed that
  - Age was a source of significant difference for perceived organisational justice,
  - Gender was a source of significant difference for perceived organisational justice,
  - Employment category was a source of significant difference for perceptions of organisational justice,
  - Age was a source of significant difference for perceptions of the psychological contract,
  - Employment status was a source of significant difference for perceptions of the psychological contract,
  - Employment category was a source of significant difference for perceptions of the psychological contract,
  - Gender was not a source of significant difference for perceptions of the psychological contract,
  - Age was a source of significant difference for work engagement,
  - Employment status was a source of significant difference for work engagement, and
  - Gender was not a source of significant difference for work engagement.

The empirical results indicated various socio-demographic differences in perceptions of organisational justice and the psychological contract. This implies that the management of tertiary institutions in Zimbabwe needs to recognise and address socio-demographic differences in perceptions of organisational justice and the psychological contract. There is a need to create an inclusive work environment for employees to develop perceptions of equity in the distribution of resources, workloads, promotions, and access to work resources, as

well as perceptions of fair human resource policies and practices (Hee et al., 2020; Othman et al., 2019). The management of tertiary institutions needs to be aware that perceptions of injustice and breach of the psychological contract may decrease levels of work engagement (Deepak, 2021; Garcia et al., 2021). Thus, management needs to do regular assessment of employees' perceptions of organisational justice and the psychological contract among the different socio-demographic groups, in order to resolve disparities.

Figure 6.2 presents an overview of the empirically manifested work engagement framework, which can be adopted when formulating work engagement strategies.

Figure 6.2
Empirically Manifested Work Engagement Framework for Tertiary Education Institutions
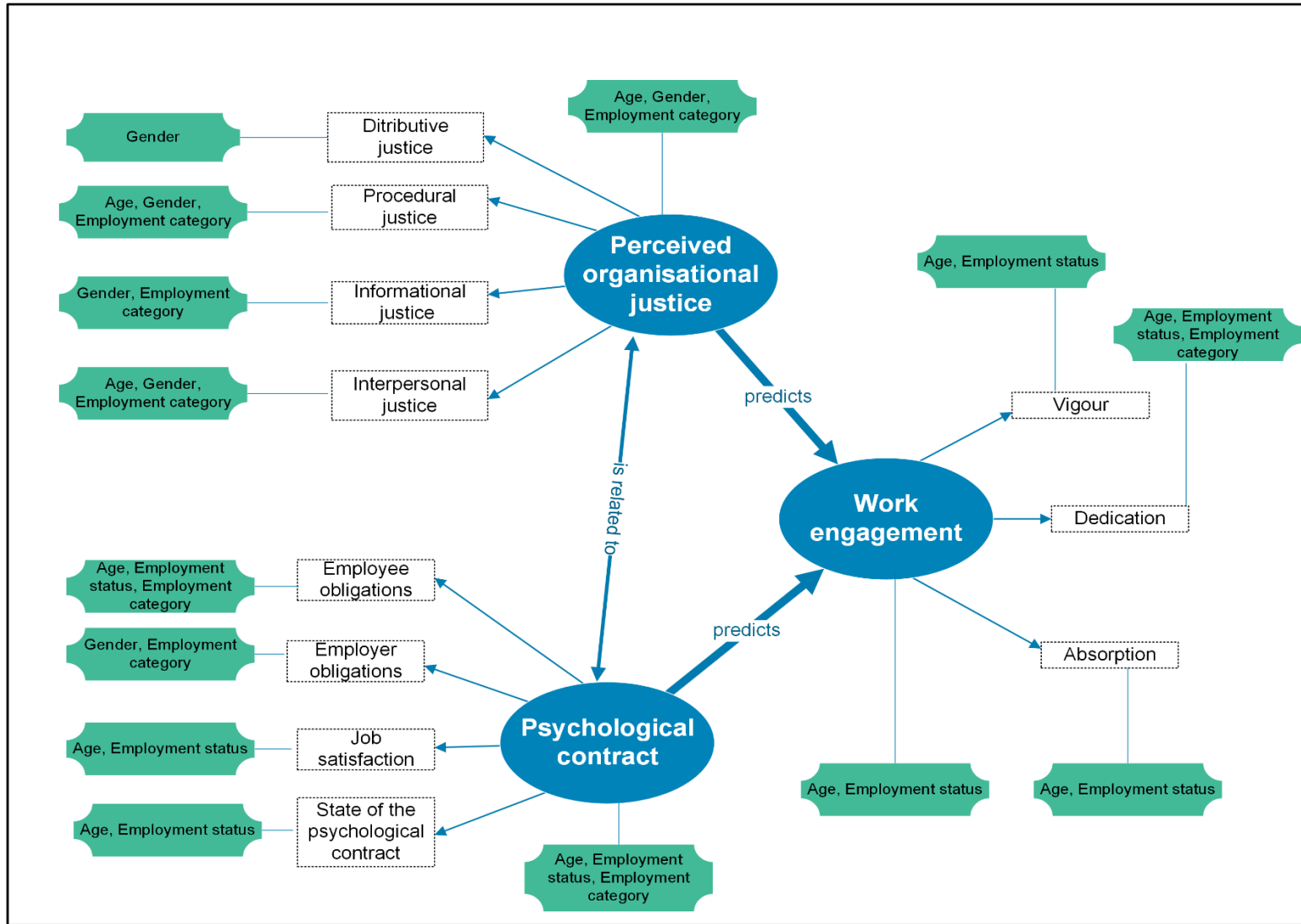
Source: Author's own work

6.10 DISCUSSION AND INTEGRATION OF RESULTS

This section integrates and discusses the participants` socio-demographic profile. It also discusses the descriptive statistics and the research aims related to the empirical study.

6.10.1 Socio-demographic profile of the sample

The socio-demographic profile of the participants reveals that participants were mainly in the 36–45-year age group and predominantly male. Older employees are mature and engaged, and their decisions and work behaviour are balanced by work experience and a need for excellence (Alam et al, 2022; Azam & Waheed, 2018). They react less to psychological contract breaches and organisational injustice (Bal, 2017; Brienza & Bobocel, 2017). The sample in this study consisted mostly of members of the black African race. The black African race has lower engagement than other races (Clement & Bradley-Garcia, 2022; Poisat et al, 2018). Most participants had a permanent employment status. The majority of participants were academic employees. Employees in higher ranks and with a permanent employment status have lower levels of engagement, and they do not find good reasons to engage in good behaviours, as they become complacent (Sidanus & Pratto, 1999). Other races, such as the Coloured, Indian/Asian, and white races, were not represented in the sample. However, this was taken into consideration in the interpretation of the results. The non-representative nature of the sample limits generalisability of the results to tertiary institutions in Zimbabwe.

6.10.2 Discussion of the descriptive statistics

This section interprets and discusses the mean scores for the research constructs, namely POJ, PC, and WE.

6.10.2.1 Sample profile of participants: Perceived organisational justice

Table 6.8 is relevant to this section. With regard to perceived organisational justice, the results of this study reveal that all the aspects of perceived organisational justice (informational, interpersonal, distributive, and procedural justice) are important factors to consider. The results suggest that employees are likely to increase their work engagement if they perceive fairness in all aspects of organisational justice. Nethavani and Maluka (2020) argue that all the dimensions of organisational justice have an impact on work engagement. Related studies on organisational justice and work engagement in tertiary institutions have

found that organisational justice is very low and still far from a reality in tertiary institutions (Aslam et al, 2020; Nethavani & Maluka, 2020; Ohiorenoya & Eguavoen, 2019). In tertiary institutions, the distribution of resources is not related to employees' workloads or qualifications (Ohiorenoya & Eguavoen, 2019). Application of procedures on human resource policies and practices is not fair, as manifested in the phenomenon of overdue promotions; the treatment received by employees is not the same as what management considers fair (Aslam et al, 2020; Nethavani & Maluka, 2020; Ohiorenoya & Eguavoen, 2019). The negative perceptions of organisational justice determine low levels of work engagement in academic institutions (Nethavani & Maluka, 2020). Management in tertiary education institutions should therefore ensure organisational justice, in order to increase the work engagement of their staff.

Organisational justice is a principal virtue and a key variable in any organisation, as it influences human resource behaviours and outcomes, such as work engagement (Aslam et al, 2020; Deepak, 2021; Rahmah, 2020). Therefore, management must engage in organisational justice practices such as fairness in salary distribution and resource allocation, appropriate methods for determining rewards, treating employees with respect, and timely communication, which will promote feelings of equity among employees, which may help to maintain or develop positive work behaviours among staff in tertiary institutions.

6.10.2.2 Sample profile of participants: The psychological contract

Table 6.9 refers for this section. Regarding the psychological contract, the results of this study reveal that employer obligations, employee obligations, state of the psychological contract, and job satisfaction are important factors to consider. The results suggest that employees will likely increase their work engagement if the organisation fulfils its promises and employees' expectations. It is revealed that participants felt that their promises in fulfilling their obligations to the employer were only half kept. The rationale for a psychological contract is based on reciprocation of mutual obligations, in order to develop positive emotions about the job and the state of the psychological contract (Gardner et al, 2020; Handy et al, 2020).

The results of the study also reveal a perceived imbalance between employer contribution and employee contribution, given that employees kept fulfilling their obligations despite the employer's inability to reciprocate. In an exchange relationship, both parties have obligations to reciprocate the actions of the other party (Blau, 1964; Deas, 2017, Rayton & Yalabik, 2014). Employees develop and exhibit positive behaviours like work engagement when they

perceive the organisation`s fulfillment of its obligations. (Cropanzano et al, 2017, Garcia et al, 2021; Gresse & Linde, 2020; Handy et al, 2020). The results of the study also show that participants were neutral on whether or not they were satisfied with their job. This shows that participants were unclear whether they were happy, angry, pleased, violated, or disappointed. The results also reveal that participants were dissatisfied with the state of their psychological contract. Participants felt that they were not rewarded fairly, and they did not trust management. They felt that they were treated unfairly by management. Deas (2017) argues that the best way to manage employee expectations is to manage employees' psychological contract. The perceived obligations that exist between the parties in an employment (exchange) relationship affect the feelings, attitudes, judgements, and behaviours towards each other (Hansen et al, 2013). Thus, management and human resource practitioners must ensure that they fulfil their promises and commitments, in order to foster positive behaviours. Managing psychological contracts in tertiary institutions is complex, due to differences in employment contracts, working time, and nature of work (Alam et al, 2022; Dominiques-Salas et al, 2022; Jovanovic & Lugonjic, 2022; Naidoo et al, 2019; Shen, 2010). Therefore, management and human resource practitioners in tertiary education institutions must regularly assess the state of the psychological contract, in order to understand the different expectations of employees with different types of contracts (Freese & Schalk, 2008; Guest & Conway, 2002; Guest et al, 2010). Past studies have found that adequate time for research, reasonable workloads, fair promotions, and consultation are critical aspects for managing employees' psychological contracts in tertiary institutions (Guest & Conway, 2002; Naidoo et al, 2019; Shen, 2010). Therefore, human resource practitioners should take note of the critical aspects in this regard, in order to maintain or increase levels of work engagement.

6.10.2.3 Sample profile of participants: Work engagement

Table 6.10 is applicable to this section. Regarding work engagement, the results of this study reveal that vigour, dedication, and absorption are important factors to consider. The results show that participants were not fully engaged. The sample profile indicates that participants had mental resilience, persistence, and investment in their work only a few times in a month. Participants reported that they felt that their work was important and were passionate about and proud of their job only a few times in a month. In addition, participants revealed that they had difficulty detaching themselves from their work and focusing on their work only a few times in a month. The mean score for overall work engagement indicates that participants were not fully engaged, considering all the components of work engagement. Gallup (2017) argues that the low level of work engagement is a worldwide

crisis. Globally, only 15% of workers can be described as fully engaged in their work, while 85% are either not engaged or actively disengaged (Gallup, 2023). Past studies also indicate that the working conditions in tertiary institutions that arise from inadequate teaching and research facilities, high workloads, poor remuneration, and unfavourable policies are frustrating and can result in disengagement (Agbionu et al, 2018; Ohiorenoya & Eguavoen, 2019; Phuthi, 2022; Uzhenyu, 2019). Employee work engagement thrives in an environment where positive emotions, such as involvement and pride, are encouraged (Cheng, 2021; Meiyani & Putra, 2019; Rana & Chopra, 2019). Employees feel engaged when there is good leadership, communication and feedback, social support and team work, meaningful work, and good working relationships (Chahar & Hatwal, 2018; Gifford & Young, 2021; Kreimer & Kinicki, 2010; Ma & Cheng, 2021; Mansoor & Hassan, 2016). They develop high levels of engagement when there are good working relationships and there is recognition, clear job and task design, and career growth (Altehrebah et al, 2019; Gifford & Young, 2021; Jondar & Sudarsono, 2015). Tertiary education employees feel engaged in an environment that is responsive; that has good platforms that celebrate employee creativity; and that has support from government, industry, and development partners and donors (Ohiorenoya & Eguavoen, 2019; Quimbo & Sulabo, 2014; Wang & Heng, 2009). Therefore, management and human resource practitioners should practice work engagement practices that foster work engagement.

6.10.2.4 Integration of main findings

In conclusion, the sample profile across different scales shows that participants perceived organisational injustice in the dimensions of informational justice, interpersonal justice, distributive justice, and procedural justice. Participants felt that they had half kept their promises and commitments to their employer, but that their employer had not reciprocated on their promises and commitments to the employee. They were unclear on their feelings regarding job satisfaction, that is, whether they were happy, angry, pleased, violated, or disappointed. Participants also revealed that they were not satisfied with the state of their psychological contract, as they felt that they were not rewarded fairly, they were treated unfairly, and they did not trust management. The features indicated in the sample profile were considered in the construction of a work engagement framework for tertiary institutions.

6.10.3 Research aim 1: Discussion of the correlation analysis results

Research aim 1: To assess the interrelationship between perceived organisational justice, the psychological contract, and work engagement as conceptualised in a sample of

participants from a Zimbabwean tertiary education institution. *This research aim relates to testing of research hypothesis 1 (H1).*

6.10.3.1 The relationship between the independent variables (perceived organisational justice and the psychological contract)

Table 6.11 is relevant to this section. Participants felt that there were significant positive correlations between all the dimensions of perceived organisational justice and the psychological contract. The variable of overall psychological contract significantly and positively predicted the variable of overall perceived organisational justice, as well as its constituent variables separately (procedural justice, distributive justice, interpersonal justice, and informational justice). The results suggest that if employees have positive perceptions of their psychological contract, they are likely to have high levels of perceived organisational justice and its dimensions (procedural justice, distributive justice, interpersonal justice, and informational justice). The inverse is also true, namely that participants with high levels of perceived organisational justice are likely to have positive perceptions of their psychological contract, while low levels of perceived organisational justice will result in negative perceptions of the psychological contract.

The results of this study confirm Estredder et al 's (2019) finding that employees with positive perceptions of organisational justice also have positive perceptions of their fulfilment obligations, while perceptions of injustice in the procedures and distribution of resources are associated with perceptions of breach or violation of the psychological contract. The findings of this research also support those of Perreira et al, (2018) and Snyman et al, (2022), who found that there were significant positive associations between perceived organisational justice and the psychological contract.

6.10.3.2 The relationship between perceived organisational justice and work engagement

The results in Table 6.11 show that there were significant positive correlations between the dimensions of perceived organisational justice and work engagement, which indicates that employees who had positive perceptions of organisational justice also tended to experience higher levels of work engagement. The variable of overall perceived organisational justice significantly and positively predicted the variable of overall work engagement, as well as each one of the constituent variables of work engagement (vigour, dedication, and absorption). The results of this study suggest that if employees have positive perceptions of organisational justice, they are likely to have high levels of the dimensions of work

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engagement (vigour, dedication, and absorption). The findings confirm past research, which found that there were positive associations between perceived organisational justice and work engagement, as perceptions of justice can influence work engagement (Nethavani & Maluka, 2020; Ohiorenoya & Eguavoen, 2019; Pakpahan et al, 2020).

6.10.3.3 The relationship between the psychological contract and work engagement

Table 6.11 indicates that there were significant correlations between the dimensions of work engagement and the psychological contract. The variable of overall psychological contract significantly and positively predicted the variable of overall work engagement, as well as each of the constituent variables of work engagement (vigour, dedication, and absorption). The results suggest that if an employee has positive perceptions of their psychological contract, they are likely to have high levels of the dimensions of work engagement (vigour, dedication, and absorption). The findings of this research confirm those of Ling and Zhongwu (2021), namely that fulfilment of the psychological contract has a strong positive association with work engagement. This study's findings are also similar to those of Garcia et al, (2021), Gresse and Linde (2020), Herrera and De Las Heras-Rosas (2020), and Opolot and Maket (2020).

6.10.3.4 Main findings

The correlation analysis provided significant findings that indicated positive correlations between perceived organisational justice and the psychological contract, perceived organisational justice and work engagement, and the psychological contract and work engagement. The correlations between perceived organisational justice, the psychological contract, and work engagement prove that when employees perceive organisational justice as fair, they experience a positive psychological contract and become positively engaged in their work. The results of the study confirm Estredder et al 's (2019) finding that positive perceptions of psychological contract fulfilment by employees determined positive perceptions of organisational justice, while a violation of the psychological contract had negative effects on perceived organisational justice. Past studies also reveal that employees who had positive perceptions of psychological contract fulfilment and organisational justice showed higher levels of work engagement (Aslam et al, 2020; Clement & Bradley-Garcia, 2022; Gresse & Linde, 2020; Nethavani & Maluka, 2020; Opolot & Maket, 2020). Therefore, management needs to ensure fairness in organisational procedures and the distribution of resources and information, in order to manage employees' psychological contracts.

Furthermore, organisational justice perceptions and psychological contract perceptions should be fulfilled, so that employees can be positively engaged in their work.

6.10.3.5 Counterintuitive findings

All the constituent variables of the independent variable of perceived organisational justice, namely procedural, distributive, interpersonal, and informational justice, significantly correlated with the dependent variable of work engagement. This diverges from the findings of studies conducted by Ghosh et al., (2014) and Law (2014), who found that only distributive justice correlated with work engagement. A study conducted by Panatik et al, (2017) found that distributive justice was not related to work engagement. Another study, by Özer et al, (2017), found that procedural justice was related to work engagement. Previous research studies have found that of the four dimensions of perceived organisational justice, distributive justice was more significant in developing countries (such as Zimbabwe) (Raja et al., 2018; Sheeraz et al, 2021).

6.10.4 Research aim 2: Discussion of the stepwise regression results

Research aim 2: To empirically investigate whether perceived organisational justice and the psychological contract significantly predict work engagement. *This research aim relates to testing of research hypothesis 2 (H2).*

6.10.4.1 Main findings

Table 6.12 applies to this section. The stepwise regression analysis results show that employer obligations, state of the psychological contract, overall psychological contract, and overall perceived organisational justice were significant predictors of work engagement. In absolute terms, to explaining the variance in work engagement, the psychological contract contributed the most, followed by employer obligations, state of the psychological contract, and perceived organisational justice. The results of this study are similar to the findings of past studies. Studies conducted by Pakpahan et al, (2020), Özer et al, (2017), and Tessema (2014) reveal that all the dimensions of perceived organisational justice significantly predicted work engagement. A study conducted by Cheng (2021) found that employer obligations significantly predicted work engagement. Past studies also reveal that overall psychological contract significantly predicted work engagement (Herrera & De Las Heras-Rosas, 2020; Ling & Zhongwu, 2021; Özer et al, 2017). The implication for the work

engagement of employees in Zimbabwean tertiary institutions is that employer obligations, state of the psychological contract, overall perceived organisational justice, and overall psychological contract could determine employees' levels of work engagement. Therefore, the management of tertiary institutions should ensure fulfilment of their promises and commitments to employees, as well as justice in the distribution of resources, methods to determine resources, respect to employees, and accuracy and timeliness in communication to employees.

6.10.4.2 Counterintuitive findings

Employee obligations and satisfaction with the psychological contract showed no significant relationships with work engagement. The results of the study diverge from those of previous studies, which found that employee obligations and job satisfaction were significant predictors of work engagement (Cheng, 2021; Herrera & De Las Heras-Rosas, 2020; Naidoo et al, 2019). Distributive justice showed no significant relationship with work engagement. The results of this research study contradict those of previous studies, which found that of the four dimensions of perceived organisational justice, distributive justice was more significant in predicting work engagement in developing countries (such as Zimbabwe) (Raja et al, 2018; Sheeraz et al, 2021).

6.10.5 Research aim 4: Discussion of the moderating effects

Research aim 4: To determine whether there is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement. *This research aim relates to testing of research hypothesis 4 (H4).*

6.10.5.1 Main findings

The results of this research found that socio-demographic variables (age, gender, employment status, and employment category) did not contribute to the development of the work engagement framework regarding the moderating effect of socio-demographic variables on the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement (see Tables 6.13 to 6.16). This implies that there are no specific work engagement practices for the different socio-demographic groups of employees in tertiary institutions in Zimbabwe. The results of

this study are similar to those of past studies, which found that age, race, and employment status did not moderate the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement (Brienza & Bobocel, 2017; Butitova, 2019; El Alfy & David, 2017; Min et al, 2014; Mingzheng et al, 2014; Nethavani & Maluka, 2020). However, the results of this study diverge from those of past studies, which reveal that age and race moderated the relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement (Deepak, 2021; Pan et al., 2018).

The findings therefore suggest that all the relevant work engagement practices equally influence the work engagement of employees in tertiary institutions in Zimbabwe regardless of the socio-demographic group to which they belong. As a result, organisations should employ similar work engagement practices that strengthen employees' perceptions of organisational justice and promote satisfaction with their psychological contract across the different employee groups in terms of age, gender, employment status, employment category.

6.10.5.2 Counterintuitive findings

This research reveals that socio-demographic variables (age, gender, employment status, employment category) did not moderate the relationships between perceived organisational justice, the psychological contract, and work engagement in the tertiary education sector in Zimbabwe. Regarding the moderation of socio-demographic variables (age, gender, employment status, employment category) on the relationship between the psychological contract and work engagement, the findings of this research contradict those of Snyman (2021), who found that the aforementioned socio-demographic variables moderated the relationship between the psychological contract and work behaviours (such as work engagement) in a tertiary education environment.

Other studies on the influence of different socio-demographic variables, such as age, gender, employment status, employment category, found that different socio-demographic variables moderated the relationships between different independent variables (such as perceived organisational justice and the psychological contract) and work behaviours (such as work engagement) (Adams et al, 2014; Bal, 2017; Brienza & Bobocel, 2017; Butitova, 2019; Cheng, 2021; Deepak, 2021; El Alfy & David, 2017; Garcia et al, 2021; Gifford & Young, 2021; Michel & Hargis, 2017; Nethavani & Maluka, 2020; Panatik et al, 2017; Poisat et al, 2018).

A study conducted by Brienza and Bobocel (2017) found that age moderated the relationship between perceived organisational justice and work engagement. Studies conducted by Deepak (2021) and Gifford and Young (2021) indicate that gender moderated the relationship between perceived organisational justice and work engagement. Findings by Michel and Hargis (2017) and Pan et al, (2018) indicate that race moderated the relationship between perceived organisational justice and work engagement. Regarding employment status, Butitova (2019), El Alfy and David (2017), and Nethavani and Maluka (2020) found that employment status moderated the relationship between perceived organisational justice and work engagement.

Adams et al, (2014), Bal (2017), and Poisat et al, (2018) found that age moderated the relationship between the psychological contract and work engagement. Studies conducted by Adams et al, (2014) and Cheng (2021) reveal that gender had a moderating effecting on the relationship between the psychological contract and work engagement. Lastly, studies conducted by Cheng (2021) and Poisat et al, (2018) found that employment status had a moderating effect on the relationship between the psychological contract and work engagement.

6.10.6 Research aim 3: Discussion of the SEM results.

Research aim 3: To critically evaluate the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement and its antecedents as the elements of the theoretical framework that emerges from the relationship dynamics. *This research aim pertains to testing of research hypothesis 3 (H3).*

6.10.6.1 Main findings

Overall, the results of the SEM (see Table 6.19 and Figure 6.1) indicate that perceived organisational justice and the psychological contract were significant predictors of work engagement. Specifically, the psychological contract was the strongest predictor of work engagement. Perceived organisational justice was a weaker predictor of work engagement compared to the psychological contract. The results of this study confirm the findings of past studies, which found that perceived organisational justice significantly predicted work engagement (Koodamara & Sashidhir, 2019; Ohiorenoya & Eguavoen, 2019; Özer et al, 2017; Pakpahan et al, 2020; Wiechers et al, 2019). The findings also confirm those of past studies, which conclude that the psychological contract was a strong predictor of work

engagement (Garcia et al, 2021; Gresse & Linde, 2020; Herrera & De Las Heras-Rosas, 2020; Ling & Zhongwu, 2021; Opolot & Maket, 2020; Wiechers et al, 2019).

The results were very useful in determining the antecedents that contributed the most to explaining the work engagement of participants. Participants who perceived organisational justice positively reported higher levels of work engagement, while those who perceived fulfilment of employer obligations would perceive the psychological contract as fair, which would improve their levels of work engagement.

6.10.6.2 Counterintuitive findings and new insights derived from the results

The results of the SEM indicated that the psychological contract is stronger than perceived organisational justice in predicting work engagement. These findings contradict those of Aslam et al, (2020), Deepak (2021), and Rahmah (2020), who found perceived organisational justice to be the strongest predictor of human resource behaviours and outcomes, such as work engagement.

Contradictory to the current research findings showing that all the elements of perceived organisational justice and the psychological contract significantly predicted work engagement, past studies conducted by Ghosh et al, (2014), Law (2014), and Panatik et al, (2017) found that of the components of perceived organisational justice, distributive justice did not predict work engagement. The findings of the current study also diverge from those of Panatik et al, (2017), who report that only procedural justice, followed by informational and interpersonal justice, predicted work engagement.

In contrast to the findings of the current study, namely that overall perceived organisational justice predicted all the components of work engagement, a study conducted by Panatik et al, (2017) found that only procedural and distributive justice predicted all the components of work engagement, while the dimension of interactional (informational and interpersonal) justice predicted only the vigour and dedication components of work engagement.

The results of the current study reveal that all the components of the psychological contract predicted work engagement. A study conducted by Naidoo et al, (2019) reports that only state of the psychological contract predicted work engagement, while another study, conducted by Garcia et al, (2021), concluded that only employer obligations predicted work engagement.

6.10.7 Research aim 5: Discussion of the tests for significant mean differences

Research aim 5: To determine whether individuals from different age, gender, employment status and employment category groups differ significantly in their perceived organisational justice, their psychological contract, and their work engagement. *This research aim relates to testing of research hypothesis 5 (H5).*

6.10.7.1 Age

The results of this study indicate that the 18–35-year age group scored significantly higher than the 36–45-year age group on the procedural justice dimension of perceived organisational justice. This finding is consistent with Brienza and Bobocel (2017), who found that younger employees generally perceived procedural justice more positively than older employees. However, the 18–35-year age group scored lower than the 56–65-year age group on procedural justice. With regard to interpersonal justice, the 56–65-year age group scored significantly higher than the 18–35-year, the 36–45-year, and the 46–55-year age groups. The 56–65-year age group also scored significantly higher than the other age groups on overall perceived organisational justice. The findings are consistent with Brienza and Bobocel (2017), who found that older employees were more sensitive to interpersonal justice than younger employees.

On the procedural justice and interpersonal justice dimensions of perceived organisational justice, the age group of 56–65 years scored significantly higher than the 36–45-year age group. This is in line with Bal et al., (2010) and Ng and Feldman (2009), who found that older employees were very mature and had better emotional and regulation skills, and therefore they reacted less to unfair treatment compared to younger employees, as they always considered good working relationships.

With regard to the employee obligations dimension of the psychological contract, the 18–35-year age group scored significantly higher than the 36–45-year, the 46–55-year, and the 56–65-year age groups. Regarding job satisfaction, the 18–35-year age group scored significantly higher than the other age groups. On state of the psychological contract, the 18–35-year age group scored significantly higher than the other age groups. The findings reveal that the 18–35-year age group was more likely than the other age groups to perceive employee obligations, job satisfaction, and the state of the psychological contract positively. For the variable of overall psychological contract, the 18–35-year age group scored significantly higher than the other age groups. The findings of the current study indicate that

the age groups of 36–45 years, 46–55 years, and 56–65 years were less likely than the age group of 18–35 years to perceive employee obligations, job satisfaction, and the state of their psychological contract positively. The results of this study converge with findings by Adams and Rau (2004), Bal et al., (2010), Crampton and Hodge (2007), Hess and Jepsen (2009), and Ng and Feldman (2009), who concluded that younger employees perceived the psychological contract more positively than older employees. Crampton and Hodge (2007) argue that older employees quickly forgive and focus more on managing relationships than younger employees. Thus, the management of tertiary institutions needs to implement age-conscious work engagement strategies accordingly, in order to manage younger and older employees' psychological contracts. Additionally, there is a need for management to understand the kind of obligations that younger and older employees expect from the organisation.

Regarding the vigour, dedication, and absorption dimensions of work engagement, the 18–35-year age group scored significantly higher than the 36–45-year, the 46–55-year, and the 56–65-year age groups. This finding reveals that the 18–35-year age group were more likely to be engaged in their work than the other age groups. The implication is that management must devise work engagement strategies that increase the work engagement of all age groups.

6.10.7.2 Gender

With regard to the procedural justice dimension of perceived organisational justice, male employees scored significantly higher than female employees. Regarding distributive justice, males scored significantly higher than females. The findings of the current research confirm those of Butitova (2019), El Alfy and David (2017), and Deepak (2021), who report that males perceived organisational justice more positively than females. On interpersonal justice, males scored significantly higher than females. Additionally, on informational justice, males scored significantly higher than females. These research findings diverge from those of Butitova (2019), Deepak (2021), and El Alfy and David (2017), who found that men scored higher than women on procedural justice while women scored higher than men on the distributive, interpersonal, and informational justice dimensions. For the variable of overall perceived organisational justice, males scored significantly higher than females. The findings of this research are similar to those of Butitova (2019) and El Alfy and David (2017). These results suggest that females were less likely than males to have positive perceptions of procedural, distributive, interpersonal, and informational justice. It is suggested that women perceive unfair organisational justice due to discrimination based on gender characteristics

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rather than job characteristics, which results in gender discrimination against women (Deepak, 2021). Thus, organisations need to improve the perceptions of females on all the dimensions of organisational justice.

Regarding the employer obligations dimension of the psychological contract, males scored significantly higher than females. The findings reveal that females were less likely than males to perceive employer obligations positively. The results of the current study are in line with the findings of Adams et al, (2014) and Cheng (2021). Adams et al, (2014) and Cheng (2021) found that females were more sensitive to the content of the psychological contract than males, and that their expectations of their psychological contract included having their welfare and social security catered for. Although there were no statistically significant differences in terms of gender for the variable of overall psychological contract in this study, management needs to understand gender differences with regard to the psychological contract, and they need to implement work engagement strategies that appeal to all gender groups.

On the three dimensions of work engagement, there were no statistically significant gender differences. Ahmad et al, (2016) and Selvaraj (2015) found that women were more likely than men to display positive work behaviours, such as work engagement. Although there were no significant gender differences for the variable of work engagement in this study, human resource management practitioners in tertiary education institutions need to know the expectations of both males and females, so as to develop work engagement practices that appeal to both gender groups.

6.10.7.3 Employment status: Differences in terms of the framework for work engagement

Regarding the four dimensions of perceived organisational justice, there were no statistically significant differences in terms of employment status. Sora et al, (2021) assert that contract employees have feelings of job insecurity. They state that feelings of job insecurity induce feelings of low procedural justice, which lead to negative perceptions of procedural justice (Sora et al, 2021). Thus, management must be aware of contract employees' views on procedural justice, in order to improve their perceptions regarding organisational procedures. Butitova (2019) found that permanent employees were less likely than contract employees to perceive organisational justice positively. Although there were no significant differences in terms of employment status for the variable of perceived organisational justice in this study, the management of tertiary institutions should understand the differences in perceptions of organisational justice between employees with different employment statuses, and they

should take this into consideration when developing work engagement strategies to improve the work engagement levels of their employees.

With regard to the employee obligations, job satisfaction, and state of the psychological contract dimensions of the psychological contract, permanent employees scored significantly lower than contract employees. The results of this study suggest that permanent employees were less likely than contract employees to perceive mutual obligations and satisfaction with their psychological contract. The findings are similar to those of Butitova (2019) in a similar study.

On the work engagement dimensions of vigour, dedication, and absorption, permanent employees scored significantly lower than contract employees. The research findings reveal that contract employees were more likely to persevere, feel more energy for their work, and develop a sense of pride in and be inspired by their job than permanent employees. The management of tertiary institutions should devise work engagement practices that address the different expectations of permanent and contract employees, in order to increase the level of work engagement of employees in the organisation.

6.10.7.4 Employment category: Differences in terms of the framework for work engagement

On the procedural justice dimension of perceived organisational justice, academics scored significantly higher than non-academics. Additionally, academics scored significantly higher on interpersonal justice and informational justice. For the variable of overall perceived organisational justice, academics scored significantly higher than non-academics. The results of this study imply that non-academic employees were less likely to perceive the procedural, interpersonal, and informational justice dimensions as positive compared to academic employees. The findings on academic employees' perceptions of organisational justice confirm Butitova's (2019) findings that employees who occupy higher-level posts with higher salaries perceive organisational justice more positively than employees with low job grades. This study's findings are also similar to the findings of studies conducted by Bhebhe and Murindi (2020), Chaudhary and Rangnekar (2017), and Shahrul et al, (2019). Organisations need to focus on improving the perceptions of non-academic employees regarding organisational justice, in order to foster positive work engagement.

Regarding the employer obligations and employee obligations dimensions of the psychological contract, academics scored significantly higher than non-academics. For the variable of overall psychological contract, academics scored significantly higher than non-

academics. The findings of the current research diverge from the findings of similar studies conducted by Cheng (2021) and Poisat et al, (2018), who found that lower-level employees (non-academics) and higher-level employees (academics) reacted similarly to breach or violation of the psychological contract. The results of this study indicate that non-academic employees were less likely than academic employees to perceive the psychological contract positively. The management of tertiary institutions should be aware of these differences to ensure all-encompassing work engagement practices that promote positive work engagement for all employees.

With regard to the dedication dimension of work engagement, academics scored significantly higher than non-academics. However, there were no significant differences in terms of employment category for the variable of work engagement. Bhebhe and Murindi (2020), Chaudhary and Rangnekar (2017), and Shahrul et al, (2019) found that higher-level employees, such as academics, were more highly engaged than lower-level employees. Research conducted by Adedeji (2016), Barankay (2012), and Bernstein and Xin Li (2016), however, reported that lower-level and higher-level employees had similar levels of work engagement. Although the current study found no significant differences in terms of employment category for the variable of work engagement, the management of tertiary institutions should devise work engagement practices that address the different expectations of academic and non-academic employees, so as to increase the level of work engagement of employees in the organisation.

6.10.7.5 Main findings

From the above discussion, it can be noted that socio-demographic differences ought to be considered when developing a work engagement framework for tertiary institutions. The socio-demographic groups in terms of age, gender, and employment category showed significant mean differences in their perceptions of organisational justice. This implies that socio-demographic variables are important in the development of a work engagement framework.

The socio-demographic groups in terms of age, employment status, and employment category showed significant differences in their perceptions of the psychological contract. However, there were no significant differences in terms of gender in perceptions of the psychological contract.

With regard to work engagement, the socio-demographic groups in terms of age and employment status showed significant differences. There were, however, no significant differences in terms of gender and employment category. The tests for significant mean differences provide partial evidence to support for research hypothesis 5 (H5).

6.10.7.5 Counterintuitive findings

Regarding significant mean differences, no significant mean differences were observed for employment status (permanent or contract) and perceived organisational justice. This finding contradicts the findings of previous studies conducted by El Alfy and David (2017) and Nethavani and Maluka (2020), who found that employees from different employment status groups differed significantly in perceived organisational justice.

Additionally, no significant differences were found for gender and the psychological contract. The finding of this study diverges from Adams et al, (2014) and Cheng et al 's (2021) finding that employees from different gender groups differed significantly in their perceptions of the psychological contract. Lastly, there were no significant differences that were observed for gender and work engagement. These findings are different from those of past studies, which found that employees from different gender groups differed significantly in their work engagement (Ahmad & Zafar, 2018; Bhebhe & Murindi, 2020; Chaudhary & Rangnekar, 2017; Selvaraj, 2015).

6.11 DECISIONS CONCERNING THE RESEARCH HYPOTHESES

The decisions made concerning the research hypotheses are presented in Table 6.26.

Table 6.26
Decisions Regarding the Research Hypotheses

Research aim	Research hypothesis	Statistical procedure	Supportive evidence provided?	Decision
Research aim 1: To assess the interrelationship between perceived organisational justice, the	H1: There is a statistically significant positive interrelationship between perceived organisational	Correlation analysis	Yes	Accepted, as the *p* values are less than .001 for all the bivariate correlations.

psychological contract, and work engagement as conceptualised in a sample of participants from a Zimbabwean tertiary education institution.	justice, the psychological contract, and work engagement.			
Research aim 2: To empirically investigate whether perceived organisational justice and the psychological contract significantly predict work engagement.	H2: Perceived organisational justice and the psychological contract (the independent variables) significantly predict work engagement (the dependent variable).	Stepwise regression analysis	Yes	Accepted, as the standardised coefficients had *p* values less than .001.
Research aim 3: To assess whether the empirically derived relationships between perceived organisational justice, the psychological contract, and work engagement have a good fit with the data, and, based on the profile, to determine the elements of the	H3: Based on the overall statistical relationships between perceived organisational justice and the psychological contract, and work engagement, there is a good fit between the elements of the empirically manifested structural model and the	Structural equation modelling	Yes	Accepted, as the best SEM model had satisfactory fit indices.

empirically derived work engagement framework.	theoretically hypothesised model.			
Research aim 4: To determine whether there is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement.	H4: The relationships between (1) perceived organisational justice and work engagement and (2) the psychological contract and work engagement are significantly moderated by individuals' socio-demographic characteristics (age, gender, employment status and employment category).	Moderated hierarchical regression analysis	Yes (partially)	Rejected, as age, gender, employment status, and employment category did not moderate the relationships (p values were greater than .05).
Research aim 5: To determine whether individuals from different age, gender, employment status, and employment category groups differ significantly in their perceived organisational justice, their	H5: The socio-demographic groups (in terms of age, gender, employment status and employment category) differ significantly in their perceived organisational justice, their psychological contract, and their	Tests for significant mean differences (Kruskal–Wallis H tests and Mann–Whitney U tests)	Yes (partially)	Partially accepted. Perceived organisational justice (POJ) differed significantly in terms of gender and employment category ($p <$ .05). The psychological contract (PC)

psychological contract, and their work engagement.	work engagement.	differed significantly in terms of age, employment status, and employment category ($p <$ .05). Work engagement (WE) differed significantly in terms of age and employment status ($p < .05$).

Source: Author's own work

6.12 CHAPTER SUMMARY

This chapter presented the results of the analysis carried on the effect of perceived organisational justice and the psychological contract on work engagement. The chapter started by presenting the preliminary statistical analysis with regard to testing for common-method bias using confirmatory factor analysis, as well as the assessment of the construct validity and reliability of the measuring instruments used in the study. Cronbach's alpha coefficients, the average variance extracted, and the composite reliability were estimated to determine the internal consistency reliability of the subscales of the instruments. The study proceeded to test the different hypotheses, by using bivariate correlation analysis, stepwise regression analysis, structural equation modelling, moderated hierarchical regression analysis, and tests for significant mean differences across the different socio-demographic variables.

The following empirical research aims were achieved:

Research aim 1: To assess the interrelationship between perceived organisational justice, the psychological contract, and work engagement as conceptualised in a sample of participants from a Zimbabwean tertiary education institution. *This research aim relates to testing of research hypothesis 1 (H1).*

Research aim 2: To empirically investigate whether perceived organisational justice and the psychological contract significantly predict work engagement. *This research aim relates to testing of research hypothesis 2 (H2).*

Research aim 3: To assess whether the empirically derived relationships between perceived organisational justice, the psychological contract, and work engagement determine the elements of the empirically derived work engagement framework. *This research aim relates to testing of research hypothesis 3 (H3).*

Research aim 4: To determine whether there is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement. *This research aim relates to testing of research hypothesis 4 (H4).*

Research aim 5: To determine whether individuals from different age, gender, and employment status groups differ significantly in their perceived organisational justice, their psychological contract, and their work engagement. *This research aim relates to testing of research hypothesis 5 (H5).*

Chapter 7 concludes the study and suggests possible recommendations to address research aim 7, which sought to draw conclusions and propose recommendations for human resource practitioners with regard to work engagement practices.

CHAPTER 7: CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

This chapter focuses on research aim 7, which seeks to formulate conclusions and recommend work engagement practices to human resource practitioners. The drawbacks of the literature review and part of empirical study are explained in this chapter. The chapter also gives recommendations for practical implementation of the findings, as well as recommendations for future research studies.

7.1 CONCLUSIONS

This section offers conclusions derived from the literature review, empirical study and the research aims as outlined in Chapter 1.

7.1.1 Conclusions related to the literature review

The general aim of the research was to develop a work engagement framework for tertiary education institutions in Zimbabwe based on the relationships between perceived organisational justice, the psychological contract, and work engagement, as well as the moderating effect of socio-demographic variables (age, gender, employment status, and employment category) on the relationships between perceived organisational justice, the psychological contract, and work engagement. The research also aimed to conceptualise work engagement within the tertiary education context, as well as to conceptualise perceived organisational justice and the psychological contract. In addition, the research aimed to establish the influence of socio-demographic variables (age, gender, employment status, and employment category) on the relationships between perceived organisational justice, the psychological contract, and work engagement.

The conclusions that follow were drawn for specific theoretical research aims regarding the relationship dynamics of the variables applicable to this study.

7.1.1.1 Research aim 1:
To conceptualise work engagement within the tertiary education context.

Research aim 1 was achieved in Chapter 2.

Zimbabwe is facing challenges that include effects of the Covid-19 pandemic, rising inflation, foreign currency shortages, and large public debt (Chinyoka & Mutambara, 2020; Chirisa et

al, 2021; Garwe & Tirivanhu, 2015; Jovanovic & Lugonjic, 2022). The aforementioned challenges have led to reduced government support for tertiary education activities, such as recruitment and rewards, as the government, which is the major funder for tertiary activities, has failed to sustain the tertiary sector wage bill (Chirisa et al, 2021; Garwe & Tirivanhu, 2015; Majoni, 2014; MHTESTD, 2019; Uzhenyu, 2019). The decline in government support in tertiary institutions has led to frustrating working conditions, as a result of inadequate teaching and research facilities, poor remuneration, and unfavourable policies, which affect the work engagement of employees (Agbionu et al, 2018). The challenges affecting tertiary education institutions are occurring at a time when the tertiary education system is expanding and student enrolments are increasing. A hiring freeze and the slow pace at which vacant posts are being filled in the tertiary education sector have caused high workloads for academics and professionals, which have resulted in increased work roles and workloads for tertiary education staff (Gurira, 2011; Uzhenyu, 2019). The Covid-19 pandemic, the digitalisation of work, and economic uncertainty have presented a new normal, in the form of remote working, which has implications for employee engagement (Jovanovic & Lugonjic, 2022). As employees work from home, they end up with pressure from competing roles at work and at home, such as homeschooling and work responsibilities, as well as workplace dynamics such as the speed and complexity with which business moves in the contemporary employment environment, which requires organisations to do work tasks in less time to meet business targets (Alam et al, 2022; Paul, 2016; Rao, 2021). Employees end up working on first priorities, which could result in workload problems, as they may fail to reconcile competing work priorities. Such high workloads lead to frustration, which could result in disengagement of employees from their work (Paul, 2016; Sangeetha et al, 2018).

Grounded on the literature review, the following conclusions can be made regarding work engagement in the tertiary environment:

- More than other institutions, tertiary education institutions rely on the innovation, creativity, and willingness of employees. This makes it vital to have fully engaged employees (Alzyoud, 2018; David & Ogidi, 2022; MHTESTD, 2019).

- The quality of a country's human capital depends on the ability, relevance, and agility of employees in the tertiary education sector. Employees can only be creative and agile if they have high levels of work engagement (MHTESTD, 2019).

- Employees in the tertiary education sector play a major role in a country's growth, and they therefore need to be engaged (Coetzee & Rothmann, 2005; Sangeeta, 2018).

- Contemporary organisations have diverse employees when it comes to age, gender, employment status, and employment category, among other socio-demographic variables (Deas, 2017; Deas & Coetzee, 2022; Van der Walt & Du Plessis, 2010).

- Employees from different socio-demographic groups, such as age, gender, employment status, and employment category, have different attitudes, beliefs, and needs, which poses a challenge to management in ensuring that all the socio-demographic groups are kept engaged (Deas & Coetzee, 2022).

- Engaging different socio-demographic groups has proven to be difficult for organisations, as differences in socio-demographic characteristics can impact the choice of appropriate work engagement strategies (Ngobeni & Bezuidenhout, 2011).

- Failure to provide resources such as remuneration and teaching and research facilities causes employees to disengage themselves from their roles (Saks, 2006).

- Critical requirements for engaging employees in tertiary education institutions include research funding and time off for research, fair promotions and reasonable workloads, appropriate procedures for allocating resources, and effective communication (Aslam et al, 2020; Naidoo et al, 2019; Shen, 2010).

- Institutional factors, such as leadership support and infrastructural facilities, influence the work engagement of employees (Negash et al, 2019; Shin & Cumming, 2010).

- National factors, such as national policies that recognise academic freedom, conducive national politics, donor support, and a culture of respect, influence the engagement of employees (Heng et al, 2020; Quimbo & Sulabo, 2014; Sam & Dahles, 2017).

- There is a great need to establish appropriate human resource interventions for effective work engagement, to make a meaningful contribution to organisational success (Alzyoud, 2018; Hiariey & Tutupano, 2020; Phuthi, 2022; Uzhenyu, 2019).

7.1.1.2 Research aim 2:

To conceptualise perceived organisational justice, the psychological contract, and work engagement, as well as their relationship with socio-demographic variables (age, gender, and employment status).

Research aim 2 was achieved in Chapter 3.

The following conclusions were drawn:

- Organisational justice is an important factor that influences work engagement in an organisation (Aslam et al, 2020; Deepak, 2021; Hiariey & Tutupano, 2020; Nethavani & Maluka, 2020; Özer et al, 2017; Rahmah, 2020; Tansky, 1993). However, organisational justice is biased and socially constructed. Employees have different views on what is just and what is unjust. Therefore, the management in tertiary institutions have to grasp the concept of organisational justice (Folge & Cropanzano, 1998; Nethavani & Maluka, 2020; Ohiorenoya & Eguavoen, 2019; Sahni et al., 2018).

- Perceived organisational justice is overlooked in tertiary education, despite its role in influencing various work behaviours, such as work engagement (Colquitt, 2001; Deconinck, 2010; El Alfy & David, 2017; Hiariey & Tutupano, 2020; Pan et al, 2018; Pekurinen et al, 2017).

- All the dimensions of perceived organisational justice (distributive, procedural, interpersonal, and informational justice) influence work engagement (Özer et al., 2017; Pakpahan et al, 2020; Tessema, 2014).

- Equity theory (Adams, 1965) informs the concept of organisational justice, by explaining that employees compare the ratio of their perceived work outcomes (rewards, promotions, recognition, and work equipment) to their work inputs (time, performance, and effort) to perceive fairness or unfairness. Social exchange theory (Blau, 1964) also informs the concept, by explaining the exchange interactions between an organisation and employees, and their influence on work behaviours.

- The literature review showed that different socio-demographic groups perceive organisational justice and work engagement differently, but fairness is fundamental for different socio-demographic groups. Older employees are more sensitive to the

dimensions of informational and interpersonal justice, while younger employees are more sensitive to the dimensions of distributive and procedural justice (Brienza & Bobocel, 2017). Male employees perceive organisational justice more positively and display higher levels of work engagement than female employees (El Alfy & David, 2017). The literature review also showed that the black African race is more concerned with procedural justice than with other dimensions of organisational justice (Cropanzano et al, 2001). The literature indicates that employees who hold higher-level jobs with higher salaries perceive organisational justice more positively and report higher levels of work engagement than employees with low job grades, while employees with a permanent employment status have negative perceptions of organisational justice, which may result in decreased levels of work engagement (Butitova, 2019).

- Employees from different socio-demographic groups differ in the organisational justice dimensions to which they are sensitive (Deepak, 2021). Management therefore needs to understand the organisational justice perceptions of the different socio-demographic groups, in order to manage organisational justice.

- Employee contributions or outcomes, such as work engagement, rely on management of employee expectations, which are formed in a psychological contract (Armstrong, 2011; Deas, 2017; Guest, 2004).

- Psychological contracts are informal, subjective in nature, and not legally binding, and they explain employee opinions of the mutual obligations and expectations that are inferred in the employment relationship (Guest et al, 2010)

- Social exchange theory (Blau, 1964) is based on the principle of reciprocity between the employer and the employee, where either party reciprocates the actions of the other party. The psychological contract captures the shared obligations and promises that are inferred in the employment relationship, as well as the perceived delivery of the deal (Guest & Conway, 2002). Thus, it is assumed that the psychological contract is a mechanism, besides perceived organisational justice, that explains levels of work engagement.

- Management of the psychological contract is complex, because of workforce flexibility and different patterns of working hours; the different types of employment contracts, such as short-term or long-term, relational or transactional; the nature of work; and

various socio-demographic differences (Alam et al, 2022; Dominiques-Salas et al, 2022; Guest, 2004; Jovanovic & Lugonjic, 2022).

- The younger generational workforce is engaged through fulfilling their personal potential, promotions, and tough assignments, while the older generational workforce is engaged through money (Ngobeni & Bezuidenhout, 2011).

- Comprehending the concepts of perceived organisational justice, the psychological contract, and work engagement, and also the moderating role of socio-demographic variables, helps to raise awareness employees' perceptions and expectations regarding organisational justice and their psychological contracts. This will assist in the development of an effective work engagement framework for employees in the tertiary education sector in Zimbabwe.

7.1.1.3 Research aim 3:

To critically evaluate the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement and its antecedents as the elements of the theoretical framework that emerges from the relationship dynamics

Research aim 3 was achieved in Chapter 4.

The reviewed literature indicates relationships between perceived organisational justice, the psychological contract, and work engagement and the elements of the theoretical framework.

(a) Conclusions regarding the theoretical relationship between perceived organisational justice and the psychological contract

Perceptions of organisational justice are strongly correlated with an individual's perceptions of the psychological contract. An individual with positive perceptions of organisational justice reports positive perceptions of the psychological contract, while negative perceptions of organisational justice will determine negative perceptions of the psychological contract (Estredder et al, 2019; Perreira et al, 2018; Snyman et al, 2022).

(b) Conclusions regarding the theoretical relationship between perceived organisational justice and work engagement

Perceptions of organisational justice correlate with levels of work engagement. An individual who perceives organisational justice positively will report higher levels of work engagement (Nethavani & Maluka, 2020; Ohiorenoya & Eguavoen, 2019; Pakpahan et al., 2020).

(c) Conclusions regarding the theoretical relationship between the psychological contract and work engagement

Perceptions of the psychological contract influence levels of work engagement. An individual's perceptions of fulfilment of the psychological contract will determine higher levels of work engagement (Garcia et al, 2021; Gresse & Linde, 2020; Herrera & Carlos De Las, 2020; Opolot & Maket, 2020).

(d) Conclusions regarding the elements of the theoretical framework

An integrated theoretical framework for work engagement was constructed in Chapter 4 (see Figure 4.1). Social exchange theory (Blau, 1964) and equity theory (Adams, 1965) informed the theoretical work engagement framework, by explaining the relationship dynamics between the research constructs. The theoretical work engagement framework showed that perceived organisational justice may have a great influence on the work engagement of employees (Gifford & Young, 2021; Nethavani & Maluka, 2020; Zayer & Benabdelhadi, 2020). The literature review revealed that the psychological contract may also have a positive impact on employees' work engagement. Socio-demographic variables may also have an influence on an individual's perceptions of organisational justice and their psychological contract, which may result in different levels of work engagement (Brienza & Bobocel, 2017; Deepak, 2021; Gifford & Young, 2021; Mengstie, 2020; Pan et al, 2018). Thus, managers in tertiary institutions need to consider employee differences when developing work engagement strategies.

- ***Individual-level*** work engagement strategies are important for employee differences in terms of age, gender, employment status, and employment category, as well as various other socio-demographic factors (Alam et al, 2022; Othman et al, 2019).

- ***Institutional-level*** work engagement strategies, such as rewards, fair teaching loads, fair and clear human resource policies, a supportive leadership style, a conducive work environment, and an e-library and access to restricted journals, are critical for enabling

work engagement, regardless of an employee's socio-demographic characteristics (Agbionu et al, 2018; Hee et al, 2020; Phuthi, 2022; Uzhenyu, 2019).

- ***National-level*** work engagement strategies, such as government, industry, and donor agency support, also contribute to the work engagement of employees in tertiary institutions, through provision of financial and technical support (Heng et al, 2020; Sam & Dahles, 2017).

- The literature review also revealed that implementing a work engagement framework for tertiary institutions may provide an understanding of the constructs and appropriate interventions to enhance the work engagement of a diverse workforce (Agbionu et al, 2018; Alam et al, 2022; Gifford & Young, 2021; Quimbo & Sulabo, 2014; Rana & Chopra, 2019; Sam & Dahles, 2017).

7.1.1.4 Research aim 4:

To conceptualise the strength and/or direction of relationships between socio-demographic variables (age, gender, employment status and employment category) and (1) perceived organisational justice and (2) the psychological contract and work engagement.

Research aim 4 was achieved in Chapter 4.

The literature review showed that an employee's socio-demographic characteristics (age, gender, employment status and employment category) may influence their work engagement, by altering their organisational justice perceptions and their psychological contract (Alam et al, 2022; Banihani et al, 2013; Geldenhuys & Henn, 2017; Quimbo & Sulabo, 2014; Sam & Dahles, 2017).

Thus, the management of tertiary institutions must be informed that the appropriateness of work engagement strategies at individual, organisational, and national levels should be informed by employees' socio-demographic characteristics.

7.1.1.5 Research aim 5:

To conceptualise the implications of the postulated theoretical work engagement framework for work engagement practices in tertiary education institutions in Zimbabwe.

Research aim 5 was achieved in Chapter 4.

The literature review indicated that the theoretical relationships between the research constructs may have implications for work engagement strategies.

The reviewed literature shows that the modern workplace has changed. The Covid-19 pandemic has presented a new normal in the workplace, and the digitalisation of technology has ushered in remote working, which has altered employees' psychological contracts and perceptions of fairness (Aslam et al, 2020; Dominiques-Salas et al, 2022; Jovanovic & Lugonjic, 2022). The literature further reveals that human resource practitioners need to implement policies and strategies to enhance employees' work engagement. The current study endeavors to close the research gap, by establishing strategies to engage workers. Critical factors to enhance work engagement that were revealed by the literature review include supportive leadership, effective communication, learning and development, lucrative rewards, performance management, career growth, and teamwork and collaboration (Alam et al, 2022; Altehrebah et al, 2019; Azmy, 2019; Gifford & Young, 2021; Jovanovic & Lugonjic, 2022; Pan et al., 2018).

Management should therefore strive to develop positive perceptions of organisational justice and psychological contract fulfilment. The work engagement practices to be implemented should appeal to different socio-demographic groups, in order to ensure work engagement (Gifford & Young, 2021; Guest, 2004; Naidoo et al, 2019; Rousseau, 1998).

7.1.2 Conclusions related to the empirical study

The empirical study addressed the following aims:

- To assess the interrelationship between perceived organisational justice, the psychological contract, and work engagement as conceptualised in a sample of participants from a Zimbabwean tertiary education institution. *This research aim pertains to testing of research hypothesis 1 (H1).*

- To empirically investigate whether perceived organisational justice and the psychological contract significantly predict work engagement. *This research aim pertains to testing of research hypothesis 2 (H2).*

- To assess whether the empirically derived relationships between perceived organisational justice, the psychological contract, and work engagement determine the elements of the empirically derived work engagement framework. *This research aim pertains to testing of research hypothesis 3 (H3).*

- To determine whether there is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement. *This research aim pertains to testing of research hypothesis 4 (H4)*

- To determine whether individuals from different age, gender, employment status, and employment category groups differ significantly in their perceived organisational justice, their psychological contract, and their work engagement. *This research aim pertains to testing of research hypothesis 5 (H5).*

- To examine the empirical elements of the work engagement framework that manifested from the results, and to determine if the manifested socio-demographic profile has a good fit with the data. *This research aim pertains to testing of research hypothesis 6 (H6).*

- To draw conclusions and propose recommendations for human resource practitioners with regard to work engagement practices.

7.1.2.1 Research aim 1:

To assess the interrelationship between perceived organisational justice, the psychological contract, and work engagement. Research aim 1 pertains to testing of research hypothesis 1 (H1).

The first aim, which was to assess the interrelationship between perceived organisational justice, the psychological contract, and work engagement and socio-demographic variables (age, gender, employment status, and employment category) as conceptualised in a sample of participants from a Zimbabwean tertiary education institution, was addressed in Chapter 6. Evidence to support research hypothesis 1 (H1) was provided.

Conclusion: Significant positive relationships exist between perceived organisational justice and the psychological contract, perceived organisational justice and work engagement, and

the psychological contract and work engagement. Perceived organisational justice, the psychological contract, and work engagement are all significantly related to each other. Thus, employees who experience positive organisational justice may perceive fulfilment of the promises and commitments of the employer, thereby increasing their levels of work engagement. Therefore, the management of the tertiary institution should ensure fairness and fulfilment of the psychological contract, to increase levels of work engagement.

7.1.2.2 Research aim 2:

To empirically investigate whether perceived organisational justice and the psychological contract significantly predict work engagement. This research aim relates to testing of research hypothesis 2 (H2).

The second aim, which was to empirically investigate whether perceived organisational justice and the psychological contract significantly predict work engagement, was addressed in Chapter 6. Evidence to support research hypothesis 2 (H2) was provided.

Conclusion: The following conclusions were drawn, based on the empirical results:
- Overall perceived organisational justice significantly predicts work engagement;
- Employer obligations significantly predict work engagement;
- State of the psychological contract significantly predicts work engagement; and
- Overall psychological contract significantly predicts work engagement.

The management of tertiary institutions should consider and observe all the dimensions of perceived organisational justice, by implementing work engagement strategies that address all the dimensions of perceived organisational justice. Management should also ensure commitment to and fulfilment of their obligations to employees, and they should devise work engagement strategies that foster employee satisfaction with the overall psychological contract.

7.1.2.3 Research aim 3:

To assess whether the empirically derived relationships between perceived organisational justice, the psychological contract, and work engagement determine the elements of the empirically derived work engagement framework. This research aim relates to testing of research hypothesis 3 (H3).

The third aim, which was to assess whether the empirically derived socio-demographic profile has a good fit with the data, and, based on the profile, to determine the elements of the empirically derived work engagement framework, was addressed in Chapter 6. Evidence to support research hypothesis 3 (H3) was provided.

Conclusions: Based on the results of the empirical study, all the dimensions of perceived organisational justice and all the dimensions of the psychological contract are predominant elements of the work engagement framework.

- Procedural justice contributed to explaining high levels of work engagement;
- Distributive justice contributed to explaining high levels of work engagement;
- Interpersonal justice contributed to explaining high levels of work engagement;
- Informational justice contributed to explaining high levels of work engagement;
- Employer obligations contributed to explaining high levels of work engagement;
- Employee obligations contributed to explaining high levels of work engagement;
- Satisfaction with the psychological contract contributed to explaining high levels of work engagement; and
- State of the psychological contract contributed to explaining high levels of work engagement.

7.1.2.4 Research aim 4:

To determine whether there is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement. This research aim relates to testing of research hypothesis 4 (H4).

The fourth aim, which sought to determine whether there is a significant interaction (moderating) effect between the socio-demographic variables of employees and (1) their perceived organisational justice and (2) their psychological contract in predicting their work engagement, was addressed in Chapter 6. Partial evidence was provided to support research hypothesis 4 (H4).

Conclusions: Grounded on the empirical results, the following conclusions were drawn:
- The socio-demographic variables (age, gender, employment status, and employment category) did not moderate the relationships between perceived organisational justice, the psychological contract, and work engagement. Therefore, relationships that exist

between perceived organisational justice, the psychological contract, and work engagement are unconditional on socio-demographic variables.

7.1.2.5 Research aim 5:

To determine whether individuals from different age, gender, employment status, and employment category groups differ significantly in their perceived organisational justice, their psychological contract, and their work engagement. This research aim relates to testing of research hypothesis 5 (H5).

The fifth aim, which was to determine whether individuals from different age, gender, employment status, and employment category groups differ significantly in their perceived organisational justice, their psychological contract, and their work engagement, was addressed in Chapter 6. Partial supportive evidence for research hypothesis 5 (H5) was provided.

Conclusions:

- Individuals from different age groups differed significantly in their psychological contracts;
- Individuals from different age groups differed significantly in their work engagement;
- Individuals from different gender groups differed significantly in their perceived organisational justice;
- Individuals from different employment status groups differed significantly in their psychological contracts;
- Individuals from different employment status groups differed significantly in their work engagement;
- Individuals from different employment category groups differed significantly in their perceived organisational justice;
- Individuals from different employment category groups differed significantly in their psychological contracts.

Table 7.1 presents conclusions based on the empirical results of the study.

Table 7.1
Conclusions Related to the Empirical Study

Socio-demographic variable	Conclusion
Age	• Employees in the 56–65-year age group appeared to be more satisfied with procedural justice, interpersonal justice, and overall perceived organisational justice than other age groups. • The 18–35-year age group appeared to be more satisfied with their employee obligations, satisfaction with the psychological contract, state of the psychological contract, and the overall psychological contract than other age groups.
	• The 18–35-year age group seemed to be more engaged in terms of dedication, absorption, and overall work engagement than other age groups.
Gender	• Males seemed to be more satisfied with all the dimensions of organisational justice than females. • Males were more likely to be satisfied with the employer obligations than females.
Employment status	• Contract employees were more likely to perceive that they had fulfilled their obligations to the employer than permanent employees. • Contract employees appeared to be more satisfied with satisfaction with the psychological contract than permanent employees. • Contract employees appeared to be more satisfied with the state of their psychological contract and the overall psychological contract than permanent employees. • Contract employees appeared to be more engaged in terms of vigour, dedication, and absorption than permanent employees. • Contract employees appeared to be more engaged (overall work engagement) than permanent employees.
Employment category	• Academic employees seemed to be more satisfied with procedural justice than non-academic employees. • Academic employees seemed to be more satisfied with interpersonal justice than non-academic employees. • Academic employees were more satisfied with informational

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	justice than non-academic employees.
	• Academic employees appeared to be more satisfied with overall perceived organisational justice than non-academic employees.
	• Academic employees were more likely to perceive employer obligations positively than non-academic employees.
	• Academic employees seemed to be more satisfied with their obligations to the employer than non-academic employees.
	• Academic employees appeared to be more satisfied with the overall psychological contract than non-academic employees.
	• Academic employees seemed to be more engaged in terms of dedication than non-academic employees.

Source: Author's own work

7.1.2.6 Research aim 6:

To examine the empirical elements of the work engagement framework that manifested from the results, and to determine if the manifested socio-demographic profile has a good fit with the data. This research aim relates to testing of research hypothesis 6 (H6).

The sixth aim, which was to examine the empirical elements of the work engagement framework that manifested from the results, and to determine if the manifested socio-demographic profile has a good fit with the data, was addressed in Chapter 6. Supportive Evidence supporting research hypothesis 6 (H6) was provided.

Conclusions: The following conclusions can be drawn from the empirical results:

• As the first empirical aim revealed significant positive relationships that exist between perceived organisational justice and the psychological contract, perceived organisational justice and work engagement, and the psychological contract and work engagement, a work engagement framework for tertiary institutions in Zimbabwe could be constructed (see Figure 6.2). This suggests that perceived organisational justice and the psychological contract are important aspects that can explain the work engagement levels of employees from different socio-demographic groups. Specifically, the aspects of perceived organisational justice and the psychological contract explain employees' perceptions of justice regarding the procedures, distribution of resources, communication of information, and interpersonal relations, as well as employees' perceptions regarding the reciprocal actions within the organisation. This research revealed that positive perceptions of organisational justice determine positive

perceptions of the psychological contract, which result in enhanced work engagement. The empirical findings reveal the importance of this study by indicating the importance of perceived organisational justice and the psychological contract in improving work engagement.

7.1.3 Conclusions related to the central hypothesis.

As stated in Chapter 1, the central hypothesis of this study was that relationships exist between perceived organisational justice, the psychological contract, and work engagement. The study hypothesised that perceived organisational justice and the psychological contract predict work engagement. It also hypothesised that employees' socio-demographic characteristics (age, gender, employment status, and employment category) influence the strength and/or direction of the relationships between perceived organisational justice, the psychological contract, and work engagement. Lastly, the study hypothesised that the relationships that exist between perceived organisational justice, the psychological contract, and work engagement, as well as the moderating effect of socio-demographic variables (age, gender, employment status, and employment category), would be used to develop a work engagement framework for employees in Zimbabwean tertiary education institutions. The evidence to confirm the central hypothesis was provide by the literature review and the empirical study.

7.1.4 Conclusions related to the field of human resource management.

Grounded on the literature review, the conclusions, interpretations from the literature review, and the results obtained from the empirical study, should contribute to the field of human resource management and work engagement in the tertiary sector.

The literature review offered new insights into the work engagement of staff in tertiary institutions, particularly the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement, as well as the role that socio-demographic variables play in the relationships between perceived organisational justice, the psychological contract, and work engagement. New insights were also provided on the concepts and the theoretical models that foster perceived organisational justice, the psychological contract, and work engagement.

The literature review also informed the construction of a framework for work engagement in the tertiary environment, highlighting the organisational justice elements and the

psychological contract elements that need consideration when developing work engagement strategies. The findings provide evidence that human resource managers and human resource specialists need to concentrate on the concepts and theoretical models that impact the variables of perceived organisational justice, the psychological contract, and work engagement.

New information was also revealed on the differences between socio-demographic groups regarding their perceptions of organisational justice and the psychological contract, which will guide managers to develop their work engagement strategies accordingly. The empirical study also identified the constituent variables that contribute to explaining the variables that have a significant influence on work engagement. All the elements of perceived organisational justice (distributive, procedural, interpersonal, and informational justice) and all the elements of the psychological contract (employer obligations, employee obligations, satisfaction with the psychological contract, and state of the psychological contract), overall perceived organisational justice, and overall psychological contract contributed to explaining high levels of work engagement.

In consideration of these findings, organisations should pay attention to employees' expectations regarding organisational justice and the psychological contract, in order to develop and implement appropriate work engagement strategies.

The empirical study also showed that organisations need to have knowledge of the properties of the measuring instruments (the Perceived Organisational Justice Measure [POJM], the PSYCONES Questionnaire [PQ], and the Utrecht Work Engagement Scale [UWES]) before administering them in organisational programmes. It is imperative for organisations to consult trained and qualified specialists, to interpret the results obtained from the previously stated instruments, so as to ensure fairness and accuracy. Management should also exercise care in ensuring that they provide clear and supportive feedback to employees, without threats. Lastly, socio-demographic differences (age, gender, employment status, and employment category) should be considered when developing work engagement strategies, as the empirical study indicated significant differences in the perceptions of organisational justice and the psychological contract and the levels of work engagement of different socio-demographic groups.

7.2 LIMITATIONS

This section discusses the limitations of the literature review and the empirical study.

7.2.1 Limitations of the literature review

The exploratory, descriptive, and explanatory research into relationships between perceived organisational justice, the psychological contract, and work engagement and socio-demographic variables (age, gender, employment status and employment category) was limited by the aspects discussed below:

- Various work engagement variables can predict work engagement. However, the study only investigated perceived organisational justice and the psychological contract. Additionally, many socio-demographic variables that can moderate the relationships between perceived organisational justice, the psychological contract, and work engagement. However, the study only explored age, gender, employment status, and employment category. Thus, the study could not provide comprehensive knowledge on the factors that have a potential impact on the work engagement of employees in the tertiary education sector in Zimbabwe.

- Numerous sectors in Zimbabwe are experiencing challenges in engaging their valuable employees. However, this study focused on the engagement of employees in the tertiary sector. Therefore, the findings cannot be generalised to other tertiary institutions in Zimbabwe.

- Despite past studies that have been conducted on the relationships between perceived organisational justice, the psychological contract, and work engagement and socio-demographic variables, minimal research has been conducted in the Zimbabwean context. Additionally, past studies have investigated these variables in isolation, and little research has highlighted the relationships between these variables in terms of work engagement.

- The study and the interpretation of the research findings was confined to the discipline of human resource management. Prospective research need to consider constructs from other disciplines and study the trends and patterns that may arise.

7.2.2 Limitations of the empirical study

The size and the quality of the research sample limit the generalisability of the findings.

The properties of the measuring instruments (the POJM, the PQ, and the UWES) could be limited due to the reasons highlighted below:

- Although the sample comprised 336 participants, a larger sample is required to establish the true relationship between perceived organisational justice, the psychological contract, and work engagement and socio-demographic variables (age, gender, employment status, and employment category) in this study.
- The sample consisted predominantly of black male permanent academic employees in the age group of 36–45 years. Therefore, the empirically manifested work engagement framework can only be considered relevant to the sample of participants, and not to the broader Zimbabwean tertiary education sector, due to underrepresentation of certain groups. However, the study results provide new discoveries for replication in future studies.
- The self-report questionnaires that were administered as measuring instruments in this study (the POJM, the PQ, and the UWES) were interpreted through the personal perceptions, experiences, and views of the participants, which may have influenced the research results.
- Several variables that affect work engagement were excluded in this study. Their inclusion may have influenced the findings of the study.
- The socio-demographic variables were limited to age, gender, employment status, and employment category. Inclusion of other socio-demographic variables might have influenced the findings of the research.
- The study was limited to one tertiary institution. The researcher could have made a greater contribution to the body of knowledge had the study been conducted at numerous tertiary institutions.
- The use of a cross-sectional survey as the research design meant that causality in significant relationships could not be determined, as the researcher could not control the research variables. It also provides a once-off picture of the study.
- Nonetheless, the study provides information on the relationships between the variables in a tertiary environment. The results obtained from this study can be viewed as the basis upon which future studies can advance and further explore the work engagement practices of the entire tertiary sector in Zimbabwe.

7.3 RECOMMENDATIONS

Grounded on the research findings, as well as the conclusions and limitations of the study, the following recommendations are proposed for the discipline of human resource management (HRM) and for further research in this field.

7.3.1 Recommendations for the field of human research management

The findings of this study, including the significant relationships that manifested, can make a meaningful contribution to the advancement of the individual and organisational interventions for increasing employees' work engagement.

Regarding the sample profile, employees from all age groups showed a greater need for organisational justice in the dimensions of distributive and informational justice. All employees from the different age groups showed a greater need in terms of their psychological contract, particularly employer obligations. Female employees showed a greater need for organisational justice in all the dimensions of organisational justice (distributive, procedural, interpersonal, and informational justice). They also showed a greater need in terms of the employer obligations dimension of the psychological contract. Lastly, the sample profile revealed that permanent employees showed a greater need for work engagement.

The sample profile also revealed that permanent employees showed a greater need in terms of the employee obligations, satisfaction with the psychological contract, and state of the psychological contract dimensions of the psychological contract. Non-academic employees showed a greater need for most of the dimensions of organisational justice (procedural, interpersonal, and informational justice). Additionally, non-academic employees showed a greater need in terms of the employer obligations dimension of the psychological contract. It is important to note that these groups of employees require work engagement interventions at individual and organisational levels. The interventions should aim to improve employees' perceptions of organisational justice and their psychological contracts, in order to increase their levels of work engagement.

Individual-level interventions:

There is a great need for organisations to hold discussions with individual employees, in order to understand information on their perceptions and expectations regarding organisational justice and the psychological contract.

Organisations should consider views of employees who have feelings of injustice, by allowing open communication systems. Open communication systems assist by providing feedback from employees on their perceptions regarding the organisation's distribution and allocation of resources, as well as access to information, and their perceptions regarding relationships with their supervisors. This would help organisations to improve organisational justice (Deepak, 2021).

There is a need for organisations to develop platforms that encourage employee creativity, and to ensure recognition of employees, so as to enhance their psychological contract (Cheng, 2021; Gifford & Young, 2021). Organisations must also ensure fairness in the distribution of resources and workload (Nethavani & Maluka, 2020; Phuthi, 2022).

Organisations must ensure that promotions are done timeously, and they must ensure clear job and task design (Altehrebah et al., 2019).

Organisation-level interventions:

Organisations could make use of the POJM, the PQ, and the UWES to identify specific work engagement factors, to develop and implement work engagement strategies that are aligned with perceived organisational justice and the psychological contract.

They should develop a culture of openness and transparency, by communicating organisational policies and procedures to reinforce organisational justice. Organisations should develop standardised human resource procedures and systems and update them regularly, so as to improve organisational justice.

Additionally, organisations need to ensure that employees hold realistic perceptions of the organisation, by regularly assessing their expectations and ensuring fulfilment of the promises made to employees (Alam et al., 2022; Jovanovic & Lugonjic, 2022).

Organisations should also involve employees in decision-making, and they should communicate changes in policies and procedures, to manage breach of the psychological contract.

They should offer competitive rewards and invest in job security and training and development, in order to manage their employees' psychological contracts, which would increase employees' levels of work engagement (Naidoo et al., 2019).

There is a need to provide adequate resources, such as computers, printers, conducive offices with a power supply, and reliable internet access, so that employees can perform their work tasks (Phuthi, 2022).

7.3.2 Recommendations for future research

The sample mainly comprised male permanent academic employees in the age group of 36–45 years, who were represented by a single tertiary institution. Future research studies ought to make use of independent and larger samples that represent diverse socio-demographic groups, to broaden the generalisability of the findings.

Future studies need to focus on a more detailed investigation of the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement and socio-demographic variables (age, gender, employment status, and employment category). An understanding of these variables was limited in this study. Future research would be significant for human resource practitioners and managers in improving work engagement strategies at individual and organisational levels.

Future researchers are encouraged to conduct longitudinal studies, in order to evaluate the cause-and-effect relationships between the variables in different organisational settings. Future studies need to establish the anticipated implementation challenges, and they should also consider the financial and economic implications of the empirically manifested framework, in order to make the framework viable and sustainable.

7.4 EVALUATION OF THE CONTRIBUTION OF THE STUDY

This study aimed to develop a work engagement framework for employees in the tertiary education sector in Zimbabwe, by investigating the relationship between perceived

organisational justice, the psychological contract, and work engagement, as well as the moderating effect of socio-demographic variables (age, gender, employment status, and employment category) on the relationship between perceived organisational justice, the psychological contract, and work engagement. The results indicated that relationships do exist between the variables, and that the variables of perceived organisational justice and the psychological contract predict work engagement. They also showed that socio-demographic variables do not moderate the relationships between perceived organisational justice, the psychological contract, and work engagement. The results showed that employees from different socio-demographic groups differ in terms of their perceptions of organisational justice and the psychological contract. The findings of this study enable an improved understanding of work engagement in the tertiary sector.

7.4.1 Value added on a theoretical level

The literature review showed that relationships exist between perceived organisational justice, the psychological contract, and work engagement. The contribution of the tertiary education sector to the growth of a country and changes in the contemporary environment have exposed the need for tertiary institutions to improve their work engagement strategies.

The reviewed literature further indicated that perceived organisational justice and the psychological contract are predictors of work engagement. The literature also assisted in the development of a theoretical framework for work engagement.

The study contributed by identifying the moderation effects of socio-demographic variables (age, gender, employment status, and employment category) on the relationships between perceived organisational justice, the psychological contract, and work engagement. It also reviewed current literature on significant differences in the perceptions of different socio-demographic groups regarding organisational justice, their psychological contract preferences, and their work engagement levels.

7.4.2 Value added on an empirical level

Empirically, the study added value by developing an empirically tested work engagement framework that can be used to inform work engagement practices in the Zimbabwean context. The study is unique in the combination of the research constructs employed and the utilisation of several statistical procedures to reveal the variables that are pertinent in interpreting the work engagement of employees in the tertiary education sector.

Furthermore, no previous research has been conducted in the context of work engagement in Zimbabwe on the specific relationships between perceived organisational justice, the psychological contract, and work engagement and socio-demographic variables (age, gender, employment status, and employment category). This study also added value by establishing that socio-demographic variables (age, gender, employment status, and employment category) do not moderate the relationships between perceived organisational justice, the psychological contract, and work engagement.

The empirically tested work engagement framework could be helpful in strengthening the work engagement of employees in the tertiary education context.

7.4.3 Value added on a practical level

The study added value by establishing the significant relationships that exist between perceived organisational justice, the psychological contract, and work engagement, as well as the moderating effect of socio-demographic variables (age, gender, employment status, and employment category) on a practical level. The study also contributed by finding that perceived organisational justice and the psychological contract predicted work engagement. It also contributed by finding that socio-demographic factors (age, gender, employment status, and employment category) do not moderate the relationships between perceived organisational justice, the psychological contract, and work engagement. In addition, the study contributed by providing work engagement strategies aimed at enhancing perceptions of organisational justice and improving the psychological contract of employees, which may increase levels of work engagement. Future research should improve and broaden understanding on the relevant variables. The findings have indeed made a notable contribution to the current body of knowledge on the work engagement of employees in the context of the Zimbabwean tertiary education sector.

7.5 REFLECTION ON THE DOCTORATE, AND CONCLUSION

In conclusion, the researcher gained a broad understanding of the relationship dynamics between perceived organisational justice, the psychological contract, and work engagement and socio-demographic variables (age, gender, employment status, and employment category), as well as the work engagement factors that can inform the development of a work engagement framework for a diverse socio-demographic profile. The researcher is also hopeful that the study results have offered new insights to the current literature on the work

engagement of tertiary education sector employees. The work engagement framework also provides a broad perspective of how employees' perceptions of organisational justice and the psychological contract predict their work engagement in the tertiary sector. The researcher gained deep insight into the concepts of perceived organisational justice, the psychological contract, work engagement, work engagement strategies, and socio-demographic variables. She also acquired rich knowledge on data analysis and statistical reporting. The researcher also learnt to focus on the bigger picture, rather than the face-value results on work engagement. Through completing this study, the researcher gained valuable principles in perseverance, patience, multitasking, and tolerance.

The doctorate achieved by completing the current study contributes to the enhancement of education, by increasing the number of PhD-qualified employees in the tertiary education sector. Furthermore, the doctorate contributes to national objectives of Zimbabwe in terms of innovation, by developing a framework to increase the work engagement of tertiary employees. Additionally, the study offers a great contribution to research, which is crucial in improving education in the Zimbabwean tertiary education environment.

7.6 CHAPTER SUMMARY

This chapter discussed the conclusions, limitations, and recommendations of the study in relation to the theoretical and empirical findings. The chapter provided a synthesis of the study, and it offered recommendations for the field of human resource management. The contribution of the study is that the findings of the study provided support for the development of a work engagement framework for employees in the tertiary education sector in Zimbabwe, based on the relationships between perceived organisational justice, the psychological contract, work engagement, and socio-demographic variables (age, gender, employment status, and employment category). The following research aim was achieved:

Research aim 7: To draw conclusions and propose recommendations for human resource practitioners with regard to work engagement practices.

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APPENDICES

APPENDIX 1: QUESTIONNAIRE

RESEARCH QUESTIONNAIRE BOOKLET

DEVELOPING A WORK ENGAGEMENT FRAMEWORK FOR EMPLOYEES IN THE TERTIARY EDUCATION SECTOR IN ZIMBABWE

INFORMED CONSENT FORM

Name of researcher: Pride Mkandatsama
Contact details: 0773 902 747
Email address: pridemkandatsama@gmail.com
Title of the research: Developing a work engagement framework for employees in the tertiary education sector in Zimbabwe.

Purpose of the research: To investigate the influence of perceived organisational justice and psychological contract on work engagement and examine the moderating effect of socio demographic characteristics (age, gender, race and employment status on the relationships between perceived organisational justice and psychological contract and its impact on work engagement in order to develop a work engagement framework for employees in the tertiary education sector of Zimbabwe.

Expected duration of participation: 45 minutes

Your participation: The study focuses on employees in the tertiary education sector. Therefore your participation would contribute to the represantiveness of the sample. The results of this study could assist in the development of a work engagement framework for employees in the tertiary education sector in Zimbabwe.

Procedures: The study will involve the completion of four questionnaires:
- **Section A:** Biographical Information Questionnaire
- **Section B:** Organizational Justice Questionnaire
- **Section C:** Psychological Contract Questionnaire
- **Section D:** Work Engagement Questionnaire

You are required to fill out the questionnaires manually (with a pen) and return it to the researcher.
Risk involved: Taking part in this study does not cause any harm but you are free to contact the researcher for any concerns and additional information.
Participants' rights: Consent has been sought from your academic institution management. Your participation in the study is voluntary and you are free to withdraw from the study if you are not willing.
Confidentiality: Results or information obtained from the study will be treated as confidential and anonymous. Information of any participant will be treated as private and will only be known by the researcher. The results of this study will be used for research purposes only and may be included in a scientific journal.
Questions: For questions relating to the study, please contact Pride Mkandatsama at pridemkandatsama@gmail.com
Willingness to participate: Your participation in this study may contribute to the engagement of employees in the tertiary education environment. Please show your willingness to participate by signing a copy of the Informed Consent Form. By signing the Consent Form, it signifies your understanding of its' contents and the nature of the study as well as agreement to take part in the study.

Kind regards,

AGREEMENT TO PARTICIPATE IN RESEARCH PROJECT

Name: …………………………………………………………………….

Phone number: …………………………………………………………..

E-mail address: …………………………………………………………..

I, ………………………………………………….

ID: ……………………………………………………..

agree to participate in the research project, as outlined in the accompanying letter, which is being conducted by Pride Mkandatsama.

I clearly understand that:

- the information gathered from the completed questionnaires will be used for research purposes only, and
- the information concerning me will be treated as confidential, and will not be made available to any other person, including members of my organisation.
- individual feedback will not be provided to participants.

Signed: ………………………….

Date: …………………………….

QUESTIONNAIRES

Instructions
The following questionnaire comprises questions regarding your perceptions of your current work situation. Please read each question carefully and tick the answer which most suits your view. No answer is right or wrong so provide an honest answer to all items.

The questionnaire is divided into four sections:

- **Section A:** Biographical Information Questionnaire
- **Section B:** Organisational Justice Questionnaire
- **Section C:** Psychological Contract Questionnaire
- **Section D:** Work Engagement Questionnaire

Please answer all the questions. It will take approximately 45 minutes to complete. Your answers to the questions will only be used for research purposes.

Thank you for participating in this research project.

SECTION A: BIOGRAPHICAL INFORMATION

Mark the relevant box with an X:

1. Please indicate your age group.

1	18 – 25 years	
2	26 – 35 years	
3	36 – 45 years	
4	46 – 55 years	
5	56 – 65 years	

2. Please indicate your actual age.

3. Please indicate your gender.

1	Male	
2	Female	

4. Please indicate your Race.

1	Black African	
2	Coloured	
3	Indian/Asian	
4	White	
5	Other (please specify)	

5. What is your marital status?

1	Single	
2	Married	
3	Divorced	
4	Widowed	

6. How long have you been employed at your current organisation?

1	Less than 5 years	
2	6 to 10 years	
3	11 to 15 years	
4	More than 15 years	

7. How many years have you been employed in total (all employees)?

1	Less than 5 years	
2	6 to 10 years	
3	11 to 15 years	
4	More than 15 years	

8. What is your employment status?

1	Permanent	
2	Contract	
3	Other (please specify)	

9. In which category does your employment fall?

1	Academic	
2	Non- Academic	
3	Other (please specify)	

10. What is your current job level?

1	Secretary	
2	Administrative assistant	
3	Junior lecturer	
4	Lecturer	
5	Senior lecturer	
6	Associate Professor	
7	Professor	
8	Other (please specify)	

11. What is your highest educational qualification?

1	National Certificate	
2	National Diploma	
3	Higher National Diploma	
4	Bachelor's Degree	
5	Master`s Degree	
6	Doctoral Degree	
7	Other (please specify)	

12. How long have you been in your current position?

1	Less than a year	
2	1 – 2 years	
3	3 – 5 years	
4	6 – 10 years	
5	11 – 15 years	
6	16 – 20 years	
7	More than 20 years	

SECTION B: ORGANISATIONAL JUSTICE QUESTIONNAIRE (Colquitt, 2001)

Please answer the following statements on the following continuum of fives scales, with:

1 = *To an very* *small extent*	*2 =* *To a small* *extent*	*3 =* *To a moderate* *extent*	*4 =* *To a relatively* *large extent*	*5 =* *To a large* *extent*

PROCEDURAL JUSTICE

The following items refer to the procedures used to arrive at your (outcome). To what extent:

							Office use
1	Have you been able to express your views and feelings during those procedures?	1	2	3	4	5	
2	Have you had influence over the (outcome) arrived at by those procedures?	1	2	3	4	5	
3	Have those procedures been applied consistently?	1	2	3	4	5	
4	Have those procedures been free of bias?	1	2	3	4	5	
5	Have those procedures been based on accurate information?	1	2	3	4	5	
6	Have you been able to appeal the (outcome) arrived at by those procedures?	1	2	3	4	5	
7	Have those procedures upheld ethical and moral standards?	1	2	3	4	5	

DISTRIBUTIVE JUSTICE

The following items refer to your (outcome). To what extent:

							Office use
8	Does your (outcome) reflect the effort you have put into your work?	1	2	3	4	5	
9	Is your (outcome) appropriate for the work you have completed?	1	2	3	4	5	
10	Does your (outcome) reflect what you have contributed to the organization?	1	2	3	4	5	
11	Is your (outcome) justified, given your performance?	1	2	3	4	5	

INTERPERSONAL JUSTICE

The following items refer to (the authority figure who enacted the procedure). To what extent:

							Office use
12	Has (he/she) treated you in a polite manner?	1	2	3	4	5	
13	Has (he/she) treated you with dignity?	1	2	3	4	5	
14	Has (he/she) treated you with respect?	1	2	3	4	5	
15	Has (he/she) refrained from improper remarks or comments?	1	2	3	4	5	

INFORMATIONAL JUSTICE

The following items refer to (the authority figure who enacted the procedure). To what extent:

							Office use
16	Has (he/she) been candid in (his/her) communications with you?	1	2	3	4	5	
17	Has (he/she) explained the procedures thoroughly?	1	2	3	4	5	
18	Were (his/her) explanations regarding the procedures reasonable?	1	2	3	4	5	
19	Has (he/she) communicated details in a timely manner?	1	2	3	4	5	
20	Has (he/she) seemed to tailor (his/her) communications to individuals' specific needs?	1	2	3	4	5	

SECTION C: PSYCHOLOGICAL CONTACT QUESTIONNAIRE (Psycones, 2006)

Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 0 to 5 point scale next to the statement. Please try to answer every question as honestly as possible.

EMPLOYER OBLIGATIONS

Below is a list of some promises and commitments which organisations sometimes make to their employees. For each, I would like you to consider whether such a promise has been made by this organisation, either formally or informally, and the extent to which it has been fulfilled.

0 = No	1 = Yes, but promise not kept at all	2 = Yes, but promise only kept a little	3 = Yes, promise half-kept	4 = Yes, promise largely kept	5 = Yes, promise fully kept

	STATEMENT	SCALE						Office use
21	Has your organisation promised or committed itself to provide you with interesting work?	0	1	2	3	4	5	
22	Has your organisation promised or committed itself to provide you with a reasonable secure job?	0	1	2	3	4	5	
23	Has your organisation promised or committed itself to provide you with good pay for the work you do?	0	1	2	3	4	5	
24	Has your organisation promised or committed itself to provide you with a job that is challenging?	0	1	2	3	4	5	
25	Has your organisation promised or committed itself to allow you to participate in decision-making?	0	1	2	3	4	5	
26	Has your organisation promised or committed itself to provide you with a career?	0	1	2	3	4	5	
27	Has your organisation promised or committed itself to provide a good working atmosphere?	0	1	2	3	4	5	
28	Has your organisation promised or committed itself to ensure fair treatment by management and supervision?	0	1	2	3	4	5	
29	Has your organisation promised or committed itself to be flexible in	0	1	2	3	4	5	

	STATEMENT	SCALE						Office use
	matching demands of non-work roles with work?							
30	Has your organisation promised or committed itself to provide possibilities to work together in a pleasant way?	0	1	2	3	4	5	
31	Has your organisation promised or committed itself to provide you with opportunities to advance and grow?	0	1	2	3	4	5	
32	Has your organisation promised or committed itself to provide you with a safe working environment?	0	1	2	3	4	5	
33	Has your organisation promised or committed itself to improve your future employment prospects?	0	1	2	3	4	5	
34	Has your organisation promised or committed itself to provide an environment free from violence and harassment?	0	1	2	3	4	5	
35	Has your organisation promised or committed itself to help you deal with problems you encounter outside work?	0	1	2	3	4	5	

EMPLOYEE OBLIGATIONS

The following list consists of some promises and commitments that people sometimes make to their organisation. For each, I would like you to consider whether you made such a promise to this organisation, either formally or informally, and the extent to which it has been fulfilled.

0 = No	1 = Yes, but promise not kept at all	2 = Yes, but promise only kept a little	3 = Yes, promise half-kept	4 = Yes, promise largely kept	5 = Yes, promise fully kept

	STATEMENT	SCALE						Office use
36	Have you promised or committed yourself to go to work even if you do not particularly feel well?	0	1	2	3	4	5	
37	Have you promised or committed yourself to protect your company's image?	0	1	2	3	4	5	
38	Have you promised or committed yourself to show loyalty to your organisation?	0	1	2	3	4	5	
39	Have you promised or committed yourself to work overtime or extra hours when required?	0	1	2	3	4	5	
40	Have you promised or committed yourself to be polite to students or the public when they are being rude and unpleasant to you?	0	1	2	3	4	5	
41	Have you promised or committed yourself to be a good team player?	0	1	2	3	4	5	
42	Have you promised or committed yourself to turn up for work on time?	0	1	2	3	4	5	
43	Have you promised or committed yourself to volunteer to do tasks outside your job requirements?	0	1	2	3	4	5	
44	Have you promised or committed yourself to develop your skills to be able to perform well in this job?	0	1	2	3	4	5	
45	Have you promised or committed yourself to meet the performance expectations in your job?	0	1	2	3	4	5	
46	Have you promised or committed yourself to accept an internal transfer if necessary?	0	1	2	3	4	5	
47	Have you promised or committed yourself to provide the organisation with innovative suggestions for improvement?	0	1	2	3	4	5	

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	STATEMENT	SCALE						Office use
48	Have you promised or committed yourself to develop new skills and improve your current skills?	0	1	2	3	4	5	
49	Have you promised or committed yourself to respect the rules and regulations of the institution?	0	1	2	3	4	5	
50	Have you promised or committed yourself to work enthusiastically on jobs you would prefer not to be doing?	0	1	2	3	4	5	
51	Have you promised or committed yourself to take responsibility for your career development?	0	1	2	3	4	5	

JOB SATISFACTION

Looking overall at how far this organisation has or has not kept its promises and commitments, to what extent do you agree with the following statements?

1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree

							Office use
52	I feel happy	1	2	3	4	5	
53	I feel angry	1	2	3	4	5	
54	I feel pleased	1	2	3	4	5	
55	I feel violated	1	2	3	4	5	
56	I feel disappointed	1	2	3	4	5	
57	I feel grateful	1	2	3	4	5	

STATE OF THE PSYCHOLOGICAL CONTRACT

Please answer the following statements on the following continuum of fives scales, with:

1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree

		1	2	3	4	5	Office use
58	Overall, do you feel you are rewarded fairly for the amount of effort you put into your job?	1	2	3	4	5	
59	To what extent do you trust senior management to look after your best interests?	1	2	3	4	5	
60	Do you feel that organisational changes are implemented fairly in your organisation?	1	2	3	4	5	
61	In general, how much do you trust your organisation to keep its promises and commitments to you and other employees?	1	2	3	4	5	
62	Do you feel you are fairly paid for the work you do?	1	2	3	4	5	
63	To what extent do you trust your immediate supervisor to look after your best interests?	1	2	3	4	5	
64	Do you feel fairly treated by managers and supervisors?	1	2	3	4	5	

SECTION D: WORK ENGAGEMENT QUESTIONNAIRE, (Schaufeli& Bakker,2003)

The following statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the '0' (zero) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

0	Almost never 1	Rarely 2	Sometimes 3	Often 4	Very often 5	Always 6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

							Office Use
Vigour							
65. At my work, I feel bursting with energy* (VI1)	1	2	3	4	5	6	
66. At my job, I feel strong and vigorous (VI2)*	1	2	3	4	5	6	
67. When I get up in the morning, I feel like going to work (VI3)*	1	2	3	4	5	6	
68. I can continue working for very long periods at a time (VI4)	1	2	3	4	5	6	
69. At my job, I am very resilient, mentally (VI5)	1	2	3	4	5	6	
70. At my work I always persevere, even when things do not go well (VI6)	1	2	3	4	5	6	
Dedication							
71. I find the work that I do full of meaning and purpose (DE1)	1	2	3	4	5	6	
72. I am enthusiastic about my job (DE2)*	1	2	3	4	5	6	
73. My job inspires me (DE3)*	1	2	3	4	5	6	
74. I am proud on the work that I do (DE4)*	1	2	3	4	5	6	
75. To me, my job is challenging (DE5)	1	2	3	4	5	6	
Absorption							
76. Time flies when I'm working (AB1)	1	2	3	4	5	6	
77. When I am working, I forget everything else around me (AB2)	1	2	3	4	5	6	
78. I feel happy when I am working intensely (AB3)*	1	2	3	4	5	6	

79. I am immersed in my work (AB4)*	1	2	3	4	5	6
80. I get carried away when I'm working (AB5)*	1	2	3	4	5	6
81. It is difficult to detach myself from my job (AB6)	1	2	3	4	5	6

THANK YOU FOR YOUR VALUABE TIME!!

APPENDIX 2: ETHICAL CLEARANCE LETTER

UNISA | university of south africa

UNISA HRM ETHICS REVIEW COMMITTEE

Date: 04 December 2020

Dear Mrs Pride Mkandatsama

Decision: Ethics approval from December 2020 to December 2025

NHREC Registration #: (if applicable)

ERC Reference #: 2020_HRM_015

Name: Mrs Pride Mkandatsama

Student: #62102435

Researcher(s):   Name: Mrs Pride Mkandatsama
E-mail address, telephone # pridemkandatsama@gmail.com, +263773902747

Supervisor(s):   Name: Prof Nadia Ferreira
E-mail address, telephone # ferren@unisa.ac.za, 012 429 3966

Co-supervisor(s):   Name: Dr Aida Deas
E-mail address, telephone # deasaj@unisa.ac.za, 012 429 8436

Working title of research:
DEVELOPING A WORK ENGAGEMENT FRAMEWORK FOR EMPLOYEES IN THE TERTIARY EDUCATION SECTOR IN ZIMBABWE

Qualification: PhD

Thank you for the application for research ethics clearance by the Unisa HRM Ethics Review Committee for the above mentioned research. Ethics approval is granted for P Mkandatsama for a period of **five (5) years**.

The **low risk application** was **reviewed** by a Sub-committee of URERC on 18 November 2020 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment. The ethics application was approved on 04 December 2020.

The proposed research may now commence with the provisions that:

1. **The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.**