Graduate employability capacities, self-esteem and career adaptability among South African young adults

Orientation: Employers expect young graduates to have a well-rounded sense of self, to display a range of graduate employability capacities and to adapt to constant changes they are faced with in order to obtain and maintain employment.

Research purpose: The goals of this study are (1) to investigate whether a significant relationship exists between graduate employability capacities, self-esteem and career adaptability, (2) to ascertain if a set of graduate employability capacities, when combined with self-esteem, has a significant relationship with a set of career adaptability capacities and (3) to identify the major variables that contribute to this relationship.

Motivation for the study: The potential for career adaptability, graduate employability capacities and self-esteem of young adults promotes employability among graduates, thereby addressing and possibly reducing youth unemployment in South Africa.

Research approach, design and method: A quantitative, cross-sectional research design approach was utilised in which descriptive statistics, Pearson product-moment correlations and canonical correlation analysis were employed to accomplish the objectives of this study. Respondents (N = 332) were enrolled at further education and training (FET) colleges and were predominantly black (98.5%) and female (62%) students between the ages of 18 and 29.

Main findings: The results displayed positive multivariate relationships between the variables and furthermore showed that graduate employability capacities contributed the most in terms of clarifying the respondents' career adaptability as compared to their self-esteem.

Practical and managerial implications: This study proposes that young adults’ career adaptability can be enhanced through the development of their self-esteem and particularly their graduate employability capacities, thus making them more employable.

Contributions: Theoretically, this study proves useful because of the significant interactions found between graduate employability capacities, self-esteem and career adaptability. Empirical evidence is provided that confirms the need to enhance graduate employability and self-esteem capacities in order to improve the career adaptability of young adults. This will then assist them in dealing with the instability of the 21st-century world of work. Practically, the findings imply that young adults differ with regard to their career adaptability and that graduate employability capacities and self-esteem influence their career adaptability. Therefore, in focusing on the enhancement of young adults’ graduate employability capacities and self-esteem, an industrial psychologist and career counsellor can enhance young adults’ career adaptability, thus making them employable and adaptable to the changes in the 21st-century world of work.

Introduction

Youth or graduate unemployment is a major issue in South Africa, particularly for black youths who face unfavourable living and social conditions (Mmesi, 2015; Oluwajodu, Blaauw, Greyling & Kleynhans, 2015). Young graduates are not equipped with the required competence in terms of skills, abilities and experience that will enable them to enter and establish themselves in the turbulent world of work (Van Aardt, 2012). Furthermore, young adults are unequipped with the ability to adjust to constant change and need to obtain more than just degree-specific skills and information (Froehlich, Beausaert, Segers & Gerken, 2014). If youth unemployment rates continue to rise, it is believed that, among others, chronic unemployment, poverty, frustration and impatience among the youth may increase and that young persons’
transition from youth to adulthood may be delayed (Edgell, 2012; Graham & De Lennoy, 2016).

South African young adults in search of employment face challenges such as an economic downturn, poverty, a lack of experience and a skills profile that tends to be widely divergent from what is required by employers (Ismail, 2015; Marock, 2008; McKinsey Global Institute, 2015; Van Aardt, 2012). These young adults also need to keep abreast of changes in their environment, to continuously improve their skills and to maintain their employability (Ismail, 2015; Marock, 2008; McKinsey Global Institute, 2015; Van Aardt, 2012). In this context, increasing emphasis has been placed on employability and sustaining one’s employability (Goodman & Tredway, 2016; Potgieter, 2012).

Graduate employability capacities, healthy self-esteem levels and the competence to adapt to new challenges in the working environment (career adaptability) have been recognised as vital capacities in creating proactive, competent, employable young adults and sustaining a competitive business advantage (Chetty, 2012; Coetzee, Ferreira & Potgieter, 2015; Ismail, 2015). Young adults should not only have a degree but also be able to display a combination of personal qualities, understandings and practices (graduate employability capacities), and apply these skills constructively to their working experience (Hogan, Chamorro-Premuzic & Kaiser, 2013; Stevenson & Clegg, 2011; Yorke & Knight, 2006).

Career adaptability has become essential for individuals who need to navigate constant change (Maree, 2012). Individuals who are highly adaptable in their careers have the ability to adjust themselves in order to meet the pressures of their working world (Autin, Douglass, Duffy, England & Allan, 2017). One of these pressures is the need to adapt to changes in careers, technology, and within and between occupations and various life roles at an unprecedented rate compared with previous generations (Del Corso, 2013). Theoretically, this is possible among young adults who utilise their strengths (Savickas & Porfeli, 2012). Those individuals who utilise their strengths are found to report higher levels of self-esteem (Minhas, 2010; Proctor, Maltby & Linley, 2009). Research (e.g. Cai et al., 2015; Öncel, 2014; Tolentino, Garcia, Restubog, Bordia & Tang, 2013) has further shown that self-esteem serves as a substantial predictor of an individual’s career adaptability. Those individuals with a well-developed self-esteem demonstrate their graduate employability capacities (strengths) confidently (Potgieter, 2012).

Although research focuses on the need for all employees to acquire and maintain certain key competencies, the researcher has grouped the competencies as follows for purposes of this study: (1) graduate employability capacities: lifelong learning, communication skills, initiative, IT and computer skills, leadership, motivation, numeracy, organisation, presentation, problem-solving and team work; (2) self-esteem: self-confidence, self-efficacy and self-skills; and (3) career adaptability: adaptability and flexibility (Ballout, 2009; Bennett, 2002; Holmes, 2013; Ismail, 2015; Song, Pacha, Moore & Zhang, 2014). This study, therefore, seeks (1) to investigate whether a significant relationship exists between graduate employability capacities, self-esteem and career adaptability, (2) to ascertain if a set of graduate employability capacities, when combined with self-esteem, has a significant relationship with a set of career adaptability capacities and (3) to identify the major variables that contribute to this relationship.

This article is structured as follows: The purpose of the research is first identified. This is followed by a literature review, which includes a discussion of the three variables of interest and is concluded with a theoretical integration. Thereafter, the research design is discussed by explaining the approach that was followed to collect the data, the methodology utilised, the ethical considerations that were followed and the statistical analysis that made the study possible. The results of the empirical study are then reported and both the descriptive and canonical correlations are explained. The results are subsequently discussed and the limitations and future research directions are outlined. The article concludes with a discussion of the practical implications.

Research purpose

This study investigates the relationship between young adults’ graduate employability capacities (Coetzee, 2010), self-esteem (Battle, 1992) and career adaptability (Savickas & Porfeli, 2012). There appears to be a lack of research that investigates the association between graduate employability capacities, self-esteem and career adaptability, particularly in South Africa. The work of De Guzman and Choi (2013) and the study by Coetzee et al. (2015) are of relevance to this particular study, seeing that they have explored the associations between graduate employability capacities and career adaptability. The study by De Guzman and Choi (2013) explored the associations between employability skills (communication, problem-solving and teamwork skills) and career adaptability among technical secondary school learners. The study by Coetzee et al. (2015) identified important associations between employability capacities such as problem-solving and decision-making skills, interactive skills, goal-directed behaviour and continuous learning orientation, as well as career adaptability among human resource professionals in their early careers.

This study extends the work of De Guzman and Choi (2013) and Coetzee et al. (2015) by focusing on young adults in South African further education and training (FET) colleges, while furthermore adding self-esteem to the possible associations. Canonical correlation analysis, in particular, was employed in this study with the aim to establish (1) whether a significant relationship exists between graduate employability capacities, self-esteem and career adaptability capacities and (2) the variables that have the greatest influence on this relationship.
Literature review
Graduate employability capacities, self-esteem and career adaptability are discussed in this section. The discussion of these three variables is followed by a section on theoretical integration.

Graduate employability capacities
In the literature, there is no full consensus as to what constitutes graduate employability capacities. Furthermore, the term ‘graduate employability capacities’ is used interchangeably with ‘graduate attributes’, ‘graduate attributes’, ‘employability attributes’, ‘employability capacities’ and ‘employability skills’. The term ‘graduate employability capacities’ is used for the purposes of this study.

Graduate employability capacities refer to those skills and attributes that are produced by an institution of higher education, which reflect the quality of personal growth and intellectual development of graduates and the relevance they bring to the workplace (Coetzee, 2012; Griesel & Parker, 2009; Steur, Jansen & Hofman, 2012). Regarded as the most critical skills in the current global job market, graduate employability capacities refer to those attributes that stimulate adaptability within revolutionising situations (Bezuidenhout, 2011; Potgieter, 2012).

Coetzee’s (2012) model is utilised in this study because of its relevance to South African graduates. This study also incorporates the work of Barrie (2004) and Steur et al. (2012). Coetzee (2012) identified eight core skills and attributes that constitute the graduate employability capacities of young adults, which fit into three attitudinal domains: (1) scholarship: problem-solving and decision-making skills, analytical thinking skills and enterprising skills; (2) global and moral citizenship: ethical and responsible behaviour, presenting and applying information skills and interactive skills; and (3) lifelong learning: goal-directed behaviour and an orientation towards continuous learning.

The 21st-century economy is progressing at an exponential rate, which emphasises the increasing requirement for employees to be highly qualified and highly skilled (Goodman & Tredway, 2016). Individuals who possess well-developed graduate employability capacities are most likely to engage in adaptive reasoning, action and influence and to amplify their ability to gain and to maintain suitable and sustainable employment, thereby advantaging themselves in the search for employment (Bezuidenhout, 2011; Coetzee, 2012; Fugate, Kinicki & Ashforth, 2004; Yorke & Knight, 2006).

Self-esteem
Self-esteem is defined as a socially constructed emotion that reveals insights of a person’s various self-concepts and self-images, which are grounded on the psychological requirement for being accepted and affiliated with a social unit (Battle, 1992; Baumeister & Leary, 1995; Hewitt, 2002; Maslow, 1970). Self-esteem also refers to the thirst for accurate and successful functioning, capability and accomplishment when compared with other members of one’s social unit (Battle, 1992; Baumeister & Leary, 1995; Hewitt, 2002; Maslow, 1970). Battle (1992) proposed three dimensions to self-esteem, namely general self-esteem (an individual’s overall perceptions and feelings related to his or her worth), social self-esteem (an individual’s perception and feelings related to the quality of his or her relationships with peers) and personal self-esteem (an individual’s most intimate perceptions and feelings of self).

Positive self-esteem indicates that a person fits in well with the social world, is competent and able to meet the challenges of the world, is ready to participate in life within this social context and is able to balance social demands and personal desires (Hewitt, 1998; Scheff, 1990). This is then aligned with the purpose of career construction theory (Savickas, 2013), which requires a person to adapt to the changes in the social environment in order to ensure a good person–environment compatibility.

It is believed that individuals with low levels of self-esteem are more likely to display poor psychological adjustment when faced with stressful situations (Heimpel, Wood, Marshall & Brown, 2012; Zeigler-Hill & Wallace, 2012). A general way to increase people’s self-esteem is to teach them problem-solving skills that they can apply to a range of difficulties and challenges, thereby enabling them to better adjust to complexities in their environment (Mruk, 2013). Problem-solving skills have been identified as a key attribute that will improve one’s employability (Coetzee, 2012; Griesel & Parker, 2009).

Career adaptability
One of the key components of career construction theory, namely, career adaptability, refers to a set of psychosocial resources. These resources assist in job search prospects and the formation of other career improvement opportunities, allowing a person to fit into the favoured work contexts by participating confidently in the work role (Ambiel, Carvalho, Martins & Tofoli, 2016; Duffy, 2010; Savickas, 2013; Tolentino et al., 2013). Career adaptability capacities are believed to assist individuals in coping with work-related transitions because of unanticipated changes in work and work-related environments (Savickas & Porfeli, 2012; Tolentino et al., 2013).

Career adaptability has been described with reference to four different dimensions that represent the coping mechanisms people employ to incorporate their self-concept into their vocational role and environment (Nota, Ginevra, Santilli & Sonesi, 2014; Savickas & Porfeli, 2012). These four dimensions are (1) concern (concern for one’s future), (2) control (the extent to which an individual employs control over his or her future), (3) curiosity (demonstrating curiosity in the procurement and search for self- and occupational information) and (4) confidence (the extent to which
individuals display a sense of self-esteem that will enable them to conquer hurdles that appear as they attempt to fulfil career goals (Del Corso, 2013; Savickas & Porfeli, 2012). These dimensions of career adaptability have been shown to signify general adaptive resources and strategies required at different career transitions throughout the course of life (Savickas, 2013).

Career concern describes the degree to which employees are future oriented and proactive in their preparation for impending career tasks and challenges (Savickas & Porfeli, 2012). Being concerned about one’s future requires one to be alert, engaged, prepared and responsive (Savickas, 2013). Career control describes the degree to which employees accept personal responsibility pertaining to influencing their development and work environment by displaying self-discipline, effort and determination (Savickas & Porfeli, 2012). Individuals with a low sense of career control may display career indecision and struggle to cope with the 21st-century work environment (Coetzee et al., 2015; Del Corso, 2013).

Career curiosity involves individuals exploring possible future selves and opportunities and thinking about how they may influence various work roles and environments (Savickas & Porfeli, 2012). In order to adjust to changes in the working world, individuals need to be inquisitive and adventurous and take risks (Savickas, 2013). Career confidence describes individuals’ beliefs that they can transform their career goals into reality and successfully rise above any obstacles (Savickas & Porfeli, 2012). The way in which individuals deal with the stressors they face throughout their lifetime, both occupationally and personally, displays their career confidence (Del Corso, 2013).

When faced with the turbulent working world of the 21st century, young adults who possess career adaptability resources are more likely to flourish (Maree, 2012; Savickas & Porfeli, 2012). Young adults need to learn to adapt to, to become accustomed to and to delight in constant change (Blewitt, 2010). Employees are required to accept responsibility for their careers and, therefore, greater emphasis is placed on psychological, career-related meta-capacities such as graduate employability capacities, career adaptability and a high concept of self (self-esteem) (Ferreira & Coetzee, 2010).

**Theoretical integration**

Graduate employability capacities, self-esteem and career adaptability are important self-supervised psychosocial resources for individuals’ continuous learning and employability (Bezuidenhout, 2011; Coetzee, 2012). Being career adaptable involves engaging in lifelong learning to acquire new skills and procedures, transferring skills within and between contexts, effectively dealing with any uncertainty, viewing new situations as opportunities rather than obstacles and being self-aware and reflecting on one’s own actions (Creed, Macpherson & Hood, 2010). Young adult graduates need to have a willingness to learn, which constitutes lifelong learning, and this willingness or enthusiasm to learn arises primarily from a good level of self-esteem (Ceccatelli & Battista, 2012; Coetzee, 2012).

As separate parts, graduate employability capacities, self-esteem and career adaptability are crucial to enhancing young adults’ employability. The purpose of this research is to investigate whether graduate employability capacities and self-esteem, when combined, will influence young adults’ career adaptability and ultimately affect their employability. More specifically, the research question posed in this study is: Do graduate employability capacities and self-esteem predict and explain young adults’ career adaptability?

It is believed that through the exploration of this research question, career counsellors can focus on these capacities in enhancing young adults’ career adaptability, thereby helping them to be more adaptable to the turbulent world of work and, therefore, more employable.

**Research design**

**Research approach**

A cross-sectional, quantitative research approach was followed to collect primary data. This took the form of a paper-based, self-report questionnaire to allow for a statistical analysis of the data and for associations to be made between the variables.

**Method**

**Participants**

A non-probability convenience sample (N = 332) of undergraduate young adult learners contributed to this study. The participants (aged 18–29) were enrolled at two South African FET colleges; 98.5% of the participants were black people and 62% were women. In total, 95% of the sample was represented by unemployed individuals.

**Measuring instruments**

Graduate employability capacities were measured using the graduateness skills and attributes scale (GSAS) (Coetzee, 2010). The GSAS is a self-rating multifactorial scale that is measured on a six-point Likert scale (1 = never; 6 = always) and consists of 64 items in total. There are eight subscales, namely problem-solving and decision-making skills (eight items, e.g. ‘I make quick but clear decisions that spur others on toward action’), enterprising skills (nine items, e.g. ‘I prefer to work under my own direction’), analytical thinking skills (four items, e.g. ‘I feel confident in my ability to draw insightful conclusions from numerical data’), interactive skills (16 items, e.g. ‘I can communicate my viewpoints with clarity and fluency in English’), presenting and applying information skills (five items, e.g. ‘I can write my ideas and opinions clearly to convince my audience’), ethical and responsible behaviour (five items, e.g. ‘I accept responsibility for the results of my decisions and actions’), goal-directed behaviour (10 items, e.g. ‘I develop plans for specific goals...
and tasks’) and continuous learning orientation (seven items, e.g. ‘I monitor my performance against deadlines and milestones’). Coetzee (2010) confirmed the construct’s convergent and discriminant validity through the use of exploratory factor analysis and correlational analysis. In terms of this study, the overall GSAS obtained a reliability coefficient of 0.95, while the internal consistency reliability coefficients for the subscales ranged between 0.58 (ethical and responsible behaviour) and 0.85 (interactive skills).

Self-esteem was measured using the Culture-Free Self-esteem Inventory for Adults (CFSEI 2-AD) (Battle, 1992). The CFSEI 2-AD is a self-rating scale that consists of 40 items (e.g. ‘I can do most things as well as others’, ‘I am usually successful when I attempt important tasks or assignments’ and ‘I often feel that I am not good at all’). A six-point Likert scale (1 = strongly disagree; 6 = strongly agree) was used to record the responses of the participants to each of the 40 items. There are four subscales, namely general self-esteem (16 items, e.g. ‘I am happy most of the time’), personal self-esteem (eight items, e.g. ‘I am as nice looking as most people’), social self-esteem (eight items, e.g. ‘Most people I know like me’) and lie items (eight items, e.g. ‘I have taken something that does not belong to me’). The lie items can be referred to as a subtest that indicates defensiveness. Battle (1992) confirmed content validity of the CFSEI 2-AD through the development of a construct definition of self-esteem and through the recoding of items meant to encompass all aspects of the construct. Internal consistency for the factor analysis proved the data to be significant (0.81) (Battle, 1992). In terms of this study, the overall GSAS obtained a reliability coefficient of 0.91, while the internal consistency reliability for the subscales ranged between 0.71 (control) and 0.80 (confidence). In terms of this study, the overall CAAS and the reliability of the subscales ranged from 0.71 (control) and 0.85 (interactive skills).

Career adaptability capacities were measured using the Career Adapt-Abilities Scale (CAAS) (Savickas & Porfeli, 2012). The CAAS is a self-rating multifactorial scale that is measured on a five-point Likert scale (1 = not strong; 5 = strongest) and consists of 24 items divided into 4 subscales: concern (six items, e.g. ‘Realising that today’s choices shape my future’), control (six items, e.g. ‘Keeping upbeat’), curiosity (six items, e.g. ‘Exploring my surroundings’) and confidence (six items, e.g. ‘Working up to my ability’). Within the South African context, Maree (2012) confirmed the instrument’s construct and structural validity through the use of confirmatory factor analysis, where he found that the internal consistency reliability of the overall CAAS was 0.91 and the reliability of the subscales ranged from 0.71 (control) to 0.80 (confidence). In terms of this study, the overall CAAS obtained a reliability coefficient of 0.91, while the internal consistency reliability coefficients for the subscales ranged between 0.68 (concern) and 0.78 (curiosity).

Procedure

Paper-based questionnaires were distributed to participants at the beginning of one of their classes and were collected at the end of the class. Respondents were given approximately 20–25 min to complete the questionnaires. A total of 355 students completed the questionnaires, after which 332 questionnaires were identified as usable for the purpose of the study (N = 332). Thus, a response rate of 93.5% was achieved. Data were coded, cleaned and captured.

Statistical analysis

Descriptive statistics (means, standard deviations and Cronbach’s alpha coefficients), Pearson product-moment correlations and canonical correlation analysis were employed in the study using JMP software (from SAS). In interpreting Pearson’s correlations (r), Cohen’s (1992) practical significance was used, that is, r < 0.1 (small practical effect), r < 0.3 (moderate practical effect) and r > 0.50 (large practical effect). In order to counter multicollinearity, concerns were set at r > 0.90 (Hair, Black, Babin & Anderson, 2010). With regard to the canonical statistics, self-esteem and graduate employability capacities were combined to form the skills scores (independent variable) and career adaptability (dependent variable).

The following function was computed: graduate employability capacities and self-esteem (independent variable) and career adaptability (dependent variable). Wilks’s lambda chi-square test was performed to test for the significance, r²-type effect size (yielded by 1 – 0.λ), of the overall canonical correlation between the independent and dependent variates of a canonical function. In order to counter the probability of a Type I error, the significance value for interpreting the results was set at a 95% confidence interval (FP ≤ 0.05). The cut-off criteria for canonical factorial loadings (≥0.30) were used to interpret the relative importance of the canonical structure correlations or loadings in deriving the canonical variate constructs (Hair et al., 2010). The redundancy index was also considered in assessing the magnitude of the overall correlational relationships between the two variates of a canonical function and the practical significance of the predictive ability of the canonical relationship (Hair et al., 2010). The squared canonical correlation (Rc²) values of ≤0.12 (small practical effect), ≥0.13 ≤ 0.25 (medium practical effect) and ≥ 0.26 (large practical effect) (FP ≤ 0.05) (Cohen, 1992) were also considered in the interpretation of the magnitude of the practical significance of the results.

Ethical consideration

Ethical clearance and permission was obtained from the University of South Africa, the Department of Higher Education and Training (DHET) and the two facilitating FET colleges. Participants were invited to participate voluntarily and were required to sign an informed consent form that was attached to the front of each questionnaire. A biographical
questionnaire, the CFSEI 2-AD, the GSAS and the CAAS were distributed.

Results

Descriptive statistics and correlations

Table 1 displays the reliability coefficients that indicate the acceptable internal consistency reliability of the three scales and the subscales. The overall scale reliability coefficient of the GSAS (α = 0.95), the overall self-esteem scale (α = 0.82) and the overall career adaptability scale (α = 0.91) were very high, implying strong overall consistency for the three scales.

Also displayed in Table 1 are the correlations between the GSAS, the CFSEI 2-AD and the CAAS variables, which ranged from $r \geq 0.21$ (small practical effect) to $r \geq 0.62$ (large practical effect), indicating significant positive associations between self-esteem, graduate employability capacities and career adaptability variables. The GSAS subscales displayed high correlations with the overall GSAS scale ($r \geq 0.67 \leq 0.94$). The CAAS subscales also correlated strongly with the overall CAAS scale ($r \geq 0.80 \leq 0.88$).

The significant intercorrelations between the GSAS, the CFSEI 2-AD and the CAAS variables were moderate to large in effect size ($r \geq 0.15 \leq 0.40$; $p \leq 0.01$), which implies that multicollinearity did not affect the interpretation of the canonical correlation results. The association between gender and the CFSEI 2-AD, the GSAS and the CAAS was mostly insignificant and small in practical effect and was therefore regarded as negligible.

Canonical correlations

Canonical correlation analysis was used to study the multivariate relationships between the eight GSAS scores (problem-solving and decision-making skills, enterprising skills, analytical thinking skills, interactive skills, presenting and applying information skills, ethical and responsible behaviour, goal-directed behaviour and continuous learning orientation), the three CFSEI 2-AD scores (general self-esteem, personal self-esteem and social self-esteem) and the four CAAS scores (career concern, career control, career curiosity and career confidence). The GSAS scores and the CFSEI 2-AD scores were treated as independent variables and were combined to form the skills set variable, and the CAAS scores were treated as dependent variables.

Table 2 confirms that the full model was significant, using Wilks’s multivariate (Wilks’s lambda, $\lambda = 0.49$, function 1: $F_p = 5.73$; $p = 0.0001$). Only the first function was significant and contributed 45% ($R_c^2 = 0.45$) of the overall explained variation, relative to the first function. The full model $r^2$-type effect size (yielded by $1 - \lambda$) was 0.51 (large practical effect), indicating that the full model explained an adequate proportion – about 51% – of the variance shared between the two variable sets. The redundancy index (Table 2) indicated that the skill variate (graduate employability capacities and self-esteem) explained 31% ($R_c^2 = 0.31$; large practical effect) of the overall variance in the career adaptability canonical variate variables and was able to predict 45% (large practical effect) of the proportion of the overall variance in the dependent canonical variate construct (career adaptability).

Table 2 further displays that the four CAAS variables were all loaded positively with the career adaptability canonical construct and were assumed to represent high career adaptability. Career concern ($R_c = 0.70$) displayed the lowest loading in comparison to career control ($R_c = 0.76$), curiosity ($R_c = 0.87$) and confidence ($R_c = 0.96$).

Social self-esteem ($R_c = 0.36$) displayed the highest loading with the skills canonical construct when compared with the other self-esteem capacities. Ethical and responsible behaviour ($R_c = 0.57$) displayed the lowest loading with the skills canonical construct when compared with the other graduate employability capacities such as analytical thinking skills ($R_c = 0.62$), presenting and applying information skills ($R_c = 0.72$), goal-directed behaviour ($R_c = 0.78$), enterprising skills ($R_c = 0.83$), interactive skills ($R_c = 0.88$) and continuous learning orientation ($R_c = 0.88$).

Table 2 further displays that when 0.30 was used as the cut-off value for interpreting the results, the self-esteem and graduate employability capacities positively contributed in explaining the variance of all the career adaptability variables: career concern ($R_c = 0.47$; 22%), career control ($R_c = 0.51$; 26%), career curiosity ($R_c = 0.58$; 34%) and career confidence ($R_c = 0.64$; 42%). The career adaptability variables contributed positively in explaining the variance of all the graduate employability capacities: interactive skills ($R_c = 0.59$; 35%), continuous learning orientation ($R_c = 0.59$; 35%), problem-solving skills ($R_c = 0.57$; 32%), enterprising skills ($R_c = 0.56$; 31%), goal-directed behaviour ($R_c = 0.53$; 28%), presenting and applying information skills ($R_c = 0.48$; 23%), analytical thinking skills ($R_c = 0.42$; 18%) and ethical and responsible behaviour ($R_c = 0.39$; 15%).

Discussion

The aim of this study was to establish (1) whether a significant relationship exists between graduate employability capacities, self-esteem and career adaptability capacities, (2) if a set of graduate employability capacities, when combined with self-esteem, has a significant relationship with a set of career adaptability capacities and (3) the variables that have the greatest influence on this relationship.

The results of this study revealed significant associations between graduate employability capacities, self-esteem and career adaptability capacities. This is confirmed by the following research findings: Individuals with high self-esteem are able to demonstrate graduate employability capacities better than those with low self-esteem (Potgieter, 2012). Career adaptability is positively related to self-esteem (Tolentino et al., 2013). Individuals with high levels of career adaptability show high graduate employability capacities (Coetzee et al., 2015; De Guzman & Choi, 2013).
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<th>Variable</th>
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TABLE 2: Results of the standardised canonical correlation analysis for the first canonical function with the detailed graduateness skills and attributes scale variables.

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<th>Variate variables</th>
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<th>Canonical coefficients</th>
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<th>Canonical cross-loadings (Rc)</th>
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<td>0.30</td>
<td>0.96</td>
<td>0.64</td>
<td>0.42</td>
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| Career adaptability variables | Career concern | 0.11 | 0.70 | 0.47 | 0.22 |
|                               | Career control    | 0.10 | 0.76 | 0.51 | 0.26 |
|                               | Career curiosity   | 0.28 | 0.87 | 0.58 | 0.34 |
|                               | Career confidence  | 0.63 | 0.96 | 0.64 | 0.42 |

Note: Overall model fit measures (function 1): Overall $\lambda^2 = 0.31; F(p) = 5.73 (p < 0.0001); dF = 52; S14.20; Overall proportion: 0.45; Wilk’s lambda ($\lambda$) = 0.49 ($F^² ≤ 0.05$); $r^²$-type effect size: 1.0. $\lambda = 0.51$ (large practical effect). Redundancy index (standardised variance of career adaptability explained by graduate attributes and self-esteem): Proportion = 0.31, V = 332.

The results of this study further revealed that when graduate employability capacities are combined with self-esteem capacities, these capacities have a significant relationship with career adaptability capacities. The study also showed that the variables that have the greatest influence on this relationship are all the graduate employability capacities (continuous learning orientation, interactive skills, problem-solving skills, enterprising skills, goal-directed behaviour, presenting and applying information, analytical thinking and ethical and responsible behaviour).

These findings are confirmed by the study of De Guzman and Choi (2013). They found that problem-solving and decision-making skills, interactive skills and presenting and applying information skills are strong predictors of career adaptability. The study by Coetzee et al. (2015) also supports the findings of this study. The study by Coetzee et al. (2015) revealed the importance of problem-solving and decision-making skills and interactive skills in predicting an individual’s level of career adaptability; however, the results further revealed that goal-directed behaviour and continuous learning orientation are the strongest predictors of career control, career curiosity and career confidence, but not of career concern.

The results of this study are further confirmed by the notion that career adaptability and graduate employability capacities are likely to have an impact on each other (De Guzman & Choi, 2013). Graduates with team-building skills are better able to adjust themselves in the work environment (Singh & Singh, 2008). How individuals adapt to situations depends on their problem-solving skills (Del Corso & Rehfuss, 2011). Lifelong learning (goal-directed behaviour and continuous learning orientation) assists individuals in proactively adjusting to changes in their working environment (Coetzee et al., 2015). Individuals’ career adaptability is developed through relationships with others (interactive skills) in that attitudes and beliefs of significant others influence individuals’ attitudes and beliefs with respect to their career-related decisions (Del Corso & Rehfuss, 2011).

Being career adaptable means accepting personal responsibility related to one’s self- and career development, taking the initiative to explore possible future work roles, influencing one’s work environment and being proactive in preparing for career-related tasks and challenges (Savickas & Porfeli, 2012). This becomes possible when people utilise, among others, responsible behaviour skills (personal responsibility), enterprising skills (taking initiative), presenting and applying information skills (convincingly communicating and influencing others in the work environment) and goal-directed behaviour (proactive preparation for career changes).

Young adults recognise the need to accept responsibility for their own employability and career development and have focused on acquiring graduate employability capacities and the ability to adapt to contemporary work demands with the aim of strengthening their odds to gain and to maintain suitable and sustainable employment (Bezuidenhout, 2011; Savickas & Porfeli, 2012). The possession of career adaptability capacities, graduate employability capacities and self-esteem by young adults not only promotes their employability, but also enables organisations to gain and to sustain a competitive advantage in the turbulent world of work (Coetzee et al., 2015; Ismail, Ferreira & Coetzee, 2016).

This research highlights the significance of career adaptability in enabling young adults to cope with the constant changes and demands that they encounter in the 21st-century world of work. Cultivating career adaptability and graduate employability capacities prepares and equips young graduates to deal with uncertainties in the working world and simultaneously enhances their employability, which will combat youth unemployment in South Africa. It is important that career counsellors focus on helping young persons to improve their decision-making skills (graduate employability capacities), self-knowledge (and thus self-esteem) and occupational exploration or career planning skills (career adaptability), thereby assisting them in establishing successful careers (Zunker, 2012).
Limitations and future research directions

Certain limitations associated with the current study must be noted. Owing to the small sample size and the sampling strategy utilised, the findings cannot be generalised to the South African young adult population. The interpretations of the findings of this study are limited by the correlational design and by the cross-sectional nature of the data, implying that no interpretations can be made relating to the causality of the associations of the variables. The study is also limited to a particular moment in time. According to Hair et al. (2010), canonical correlation analysis is a maximisation technique and researchers should be open to the possibility of overestimating when interpreting the results because of the intensification of the linear composites. As a result of the self-report nature of the study, the possibility of common-method bias should be noted.

Future research could reproduce this study, using a more representative sample, especially in terms of age, race and gender. Future longitudinal studies could also clarify the relationships between graduate employability capacities, self-esteem and career adaptability as reported in this study and may also supply evidence of the way in which these variables evolve over time as individuals progress from one transition to the next.

Practical implications

This study proposes that young adults’ career adaptability may be improved through the development of their graduate employability capacities. Industrial psychologists and career counsellors should engage in interventions to assist young adults in enhancing their graduate employability capacities in order to enhance their career adaptability and, consequently, their employability.

Individuals who measure high on career adaptability are sought after by employers because they respond to transitions better than those who measure low on career adaptability. Career development interventions should concentrate on supporting young adults in formulating their employability capacities in order to increase their confidence and self-efficacy in demonstrating their ability to manage their careers and employability (Del Corso, 2013). Career adaptability resources can be enhanced through the facilitation of career interventions such as time-perspective workshops that promote future orientation and planfulness (concern), information-seeking activities (curiosity), self-esteem enhancement (confidence) and decision-making training (control) (Savickas, 2013; Tolentino et al., 2015).

Conclusion

Young South African adults have to develop graduate employability capacities and have to be self-aware and self-confident in their abilities to become and to remain employed. In addition, they have to be more adaptable to any changes in the working world. Graduate employability capacities predict a large variance in young adults’ career adaptability, indicating that industrial psychologists and career counsellors should strive to enhance the graduate employability capacities of young South African adults to ensure that they are more career adaptable and therefore more employable.

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Competing interests

The author declares that she has no financial or personal relationships that may have inappropriately influenced her in writing this article.

References


