

EXPLORING SOCIO-DEMOGRAPHIC DIFFERENCES IN CAREER MATURITY IN THE SOUTH AFRICAN MILITARY

Presented at the
15th Conference of the European Association of Work and Organisational Psychology,
Maastricht, The Netherlands, May 2011

PROF RUDOLF M. OOSTHUIZEN
MR MFANISELWA A. THEMBA
PROF MELINDE COETZEE

Department of Industrial and Organisational Psychology
University of South Africa

ABSTRACT

Orientation:

The military environment poses unique challenges for the career development of individuals. Globalisation and concerns about high levels of staff turnover in the military environment have led to a renewed interest in the employability and career development of diverse groups of staff members.

Research purpose:

The objective of the study was to explore broad trends regarding how military staff in the South African military differed regarding their level of career maturity (measured by the Career Development Questionnaire). Socio-demographical variables included gender, race, age, educational level, arm of service, rank, and mustering group.

Motivation for the study:

The challenge of engaging in career development practices that address the needs of culturally diverse staff members in the military environment necessitates an understanding of the career maturity of military officers.

Research design, approach and method:

A quantitative survey was conducted on a non-probability sample of 333 military officers from the South African National Defence Force across the four arms of service (the South African Army, The South African Air Force, the South African Navy and the South African Military Health Services).

Main findings:

Descriptive and inferential statistical analyses revealed significant differences amongst the sample of military officers in terms of a number of socio-demographic variables.

Practical implications:

The findings highlight the need to consider demographic and context-specific variables when designing and implementing career development practices in military organisations.

Contribution/value-add:

This study represents original research that contributes valuable new knowledge to the field and practice of career psychology.

INTRODUCTION

Key focus of the study

Globalisation and concerns about high levels of staff turnover in the military environment have led to a renewed interest in the employability and career development of diverse groups of staff members (Milgram, 1991; Themba, 2010). The military environment poses unique challenges for the career development of individuals (Elder, Gimbel & Ivie, 1991). Military organisations present an environment with unique characteristics, that is, the combat environment. This is the environment that young military recruits are expected to adjust to during and after basic military training, because adjustment and coping with the military environment lead to effective military performance (Shalit, 1988).

The challenge of engaging in career development practices that address the needs of culturally diverse staff members in the military environment necessitates an understanding of the career maturity of military officers (Themba, 2010). Research has recognised individuals' career maturity as an important aspect of their employability and experiences of job and career satisfaction (Schreuder & Coetzee, 2011). Despite the considerable interest in the construct of career maturity, very little research has been conducted in the military context, even though the military has provided an impetus to the field of career psychology since the First World War (Keene, 1994; Super, 1983; Themba, 2010). Other than attrition, career development issues relating to career maturity (or lack of) manifest themselves in various ways in the South African armed forces, for example, dissatisfaction with chosen military career paths and the desperate need of members of the military to change careers and services (Themba, 2010). Given the paucity of research on career maturity in the military environment, this research set out to explore broad trends regarding how military staff in the South African military differed regarding their level of career maturity in terms of various socio-demographic variables.



BACKGROUND TO THE STUDY

From an organisational perspective, career development is viewed as an ongoing, formalised effort by the organisation that focuses on developing and enriching the organisation's human resources in light of both the employees' and the organisation's needs (Byars & Rue, 2004). Career development is regarded as a joint effort between the employee and the organisation and the outcome of the interaction between individual career planning and the organisational career development support system (Schreuder & Coetzee, 2011). For employees to be able to engage in satisfactory career development, a high level of career maturity is required (Schreuder & Coetzee, 2011). Career maturity implies that individuals are ready to deal with the developmental tasks required by their particular life stage, and their readiness to make career decisions (Super, 1992). According to Themba (2010), military organisations need individuals with higher levels of career maturity as their members. Military staff members need to reflect decisiveness, self-reliance and independence in their career decision making.

Theoretical foundation of career maturity

Career maturity is a construct that was introduced by Donald E. Super as "vocational maturity" in his career development theory more than 50 years ago (Coertse & Schepers, 2004; Naidoo, 1998; Patton, 2006). Career maturity is reflected by an individual's mature behaviour in coping with the tasks of career development, compared with that of others dealing with the same tasks (Super & Bohn, 1970). The focus of career maturity is on the manner in which "the individual responds to emerging demands, problems, challenges, and expectations" (Jordaan & Heyde, 1979, p. 4). This is a normative definition of the construct, as it compares an individual's career behaviour with the career behaviour expected at that stage (Osipow, 1973).

According to Super (1957, p. 187), vocational or career maturity is characterised by "1) increasing orientation to vocational choice; 2) increasing amounts of vocational information and more comprehensive and detailed planning; 3) increasing consistency of vocational preferences; 4) the crystallization of traits relevant to vocational choices; and consequently, 5) increasing wisdom of vocational preferences". A person displaying these qualities in the early stages of career development is regarded as career-mature, and is therefore expected to be better adjusted in his or her career. Langley (1990) and Langley, Du Toit and Herbst (1996) identified the following five common developmental dimensions as essential stages of individuals' career development leading to career maturity:

- Obtaining self-information and converting this information to self-knowledge. Information on the following career-related aspects may enhance an individual's self-knowledge and self-insight: career guidance needs, importance of life roles, work values, occupational interests, career development life stage; personality, aptitudes, and family functioning.
- Acquiring decision-making skills and applying them in effective decision-making.
- Gathering career information and converting it into knowledge of the occupational world. Information on different occupations, training facilities and development opportunities, and financial support for further studies are useful information to increase individuals' career information.
- Integrating self-knowledge and knowledge of the occupational world to enable career decision making.
- Implementing knowledge (self-information and career information) in career planning and decision making.

As a multi-dimensional construct, career maturity is influenced by diverse demographic factors and people's unique life situations (Naidoo, 1998; Raskin, 1998). According to Osipow (1973), career-mature behaviour is also influenced by, and generally will reflect the unique needs of a particular life stage. Studies investigating correlates of career maturity have therefore taken a cross-cultural and contextual approach, focusing on variables such as age, gender, ethnicity, and socio-economic status (Naidoo, 1998; Patton & Creed, 2001; Raskin, 1998). However, research on the relation between age, ethnicity, and socio-economic status and career maturity seems to be inconsistent (Powell & Luzzo, 1998; Westbrook & Sanford, 1991; Super & Nevill, 1984).

In the light of the foregoing, the hypothesis can be stated as follows:
The differences between the military officers' career maturity levels will be significantly defined by their socio-demographic characteristics.



EXPLORING SOCIO-DEMOGRAPHIC DIFFERENCES IN CAREER MATURITY IN THE SOUTH AFRICAN MILITARY

© 2011 Prof RM Oosthuizen oosthrm@unisa.ac.za
 © 2011 Mr MA Themba a_them@ma2.sun.ac.za
 © 2011 Prof M Coetzee coetzm1@unisa.ac.za

RESEARCH OBJECTIVE

It was pointed out in the introduction that the challenge of engaging in career development practices that address the needs of culturally diverse staff members in the military environment necessitates an understanding of the career maturity of military officers (Themba, 2010). The objective of the study was therefore to explore broad trends regarding how military staff in the South African military differed regarding their level of career maturity. Socio-demographical variables included gender, race, age, educational level, arm of service, rank, and mustering group. Given the paucity of research on career maturity in the military environment and the increasing concerns about high levels of staff turnover (Themba, 2010) this study is regarded as important.

Potential value-add by the research

With a younger generation entering the South African workforce, along with the changing demographic profile of racial and gender groups brought about by employment equity legislation, the finding of this study may potentially contribute to the design of career development practices that address the unique needs of diverse groups of military staff members in the various arms of service of the South African National Defence Force.

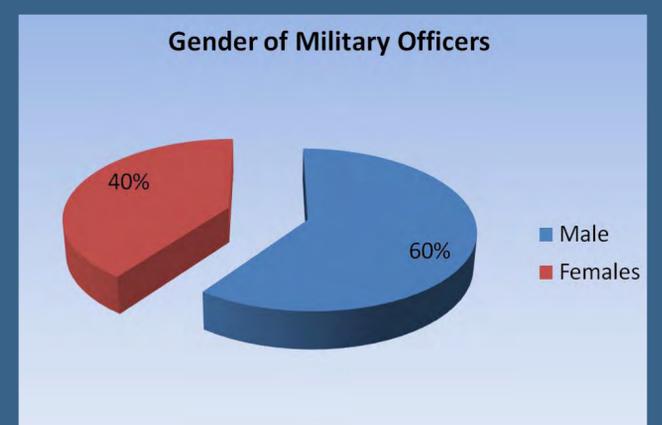
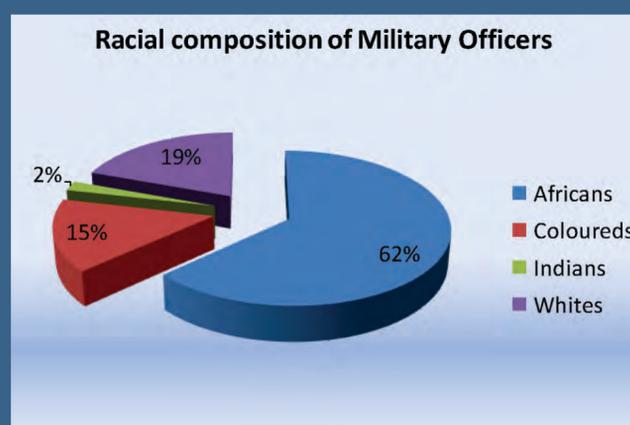
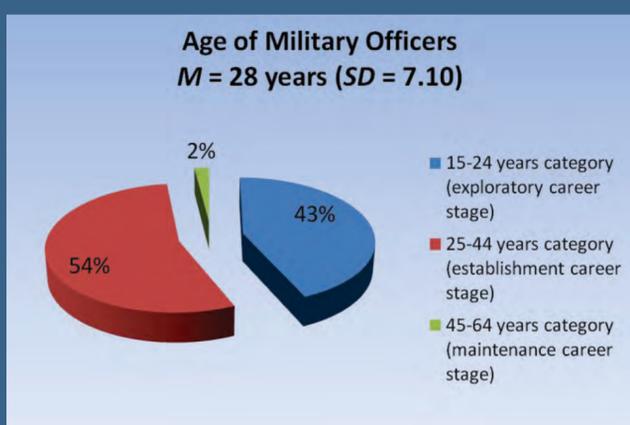
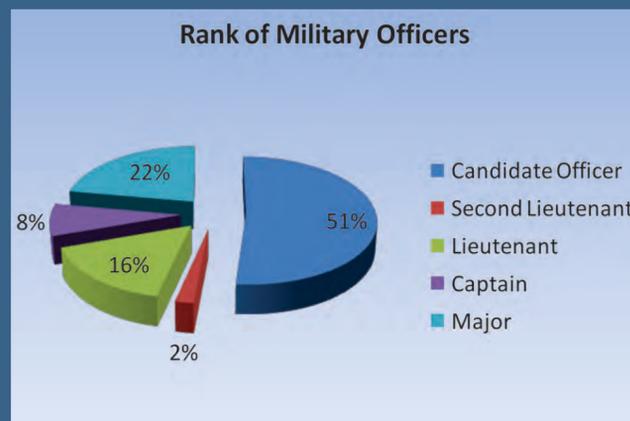
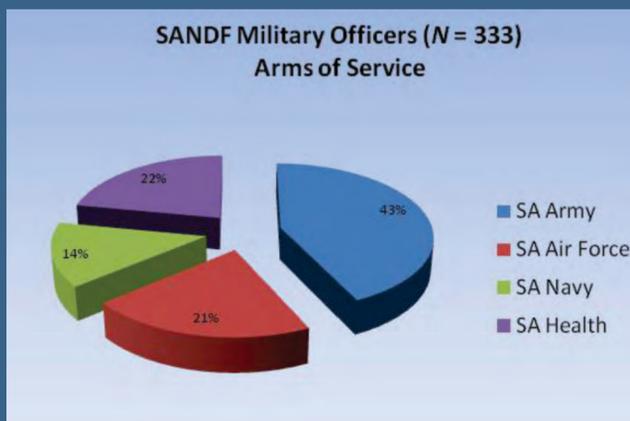
RESEARCH DESIGN

Research approach

A quantitative survey design using primary data was used to achieve the research objective.

RESEARCH METHOD

Participants



EXPLORING SOCIO-DEMOGRAPHIC DIFFERENCES IN CAREER MATURITY IN THE SOUTH AFRICAN MILITARY

© 2011 Prof RM Oosthuizen oosthrm@unisa.ac.za
 © 2011 Mr MA Themba a_them@ma2.sun.ac.za
 © 2011 Prof M Coetzee coetzm1@unisa.ac.za

Measuring instrument

The *Career Development Questionnaire (CDQ)* (Langley, 1990) is a self-rated multi-factorial measure designed to determine the career maturity or readiness of adolescents and young adults to make decisions on their career in the South African context. The CDQ consists of 100 items which measure the following five dimensions of career maturity: self-information (20 items), decision-making (20 items), career information (20 items), integration of career information on the self with information on the world of work (20 items), and career planning (20 items). An individual's response to the items (statements) of the CDQ is a forced choice between either True or False. Langley (1990) reports reliability coefficients of the CDQ that are higher than 0.90 for the total score and higher than 0.70 for the subscales among university students. The internal consistency reliability coefficients reported in the CDQ manual for high school students across the language groups range from 0.66 to 0.82 (Langley, 1990; Langley et al., 1996). Langley (1990) and Langley et al. (1996) reported high intercorrelations between the various scales of the CDQ. The assumption is that an individual who maintains a certain level of career maturity on one dimension would be expected to maintain a similar level on others (Langley, 1990; Langley et al., 1996). In terms of the present study, Table 1 shows that high reliability coefficients ranging between 0.70 and 0.89 were obtained for the CDQ. The intercorrelation coefficients shown in Table 1 indicate interdependence between the scales of the CDQ, thus providing evidence of construct validity (that is, the five scales seem to measure the same construct, namely career maturity).

Table 1 Reliability coefficients and intercorrelations of the CDQ (N = 333)

	Reliability coefficient	Self-Information	Decision-Making	Career Information	Integration	Career Planning
Self-Information	0.70	1.00	0.66**	0.44**	0.59**	0.62**
Decision-Making	0.79	0.66**	1.00	0.60**	0.67**	0.70**
Career Information	0.85	0.44**	0.60**	1.00	0.64**	0.64**
Integration	0.80	0.59**	0.67**	0.64**	1.00	0.70**
Career Planning	0.82	0.60**	0.70**	0.60**	0.70**	1.00
Scale overall	0.89					

**p ≤ 0.01

Statistical analysis

The Statistical Program for Social Sciences (SPSS, 2008) was used to analyse the data. Descriptive statistics and inferential statistics were calculated. The Kuder-Richardson 20 (KR 20) was used to assess the internal consistency of the measuring instrument. T-tests were used to compute the differences between groups (males and females, and the combat and non-combat mustering groups). ANOVAS were performed to test for significant mean differences between the various racial, age, educational level, arm of service, and rank groups. The Schéffe multiple comparison of means post-hoc test was used to evaluate the significance of the mean difference between two biographical groups. In order to counter the probability of a type 1 error the significance value was set at the 95% confidence interval level (p ≤ 0.05).

RESEARCH PROCEDURE

Ethical clearance and written permission to conduct the study was obtained from the SANDF, and each military unit's Officer Commanding at the various military bases. Participation was voluntary and participants were given the opportunity of attending one of several allocated sessions. At the beginning of each session the researcher explained the purpose of the research and participants were assured of confidentiality and anonymity and the voluntary nature of participation. A cover letter was provided that explained the purpose of the research, procedure, potential benefits, confidentiality, anonymity, participation and withdrawal. All participants also completed a written consent form.

RESULTS

Table 2 Summary of significant mean differences in terms of socio-demographic variables on the CDQ

CDQ variables	Socio-demographic variable	Highest mean scores	Level of significance
Self-information	Arm of service	SA Air Force	*
	Military rank	Candidate Officer	**
	Level of education/gender	Female (diploma/degree)	*
	Arm of service/gender	Female (SA Navy)	**
Decision-making	Level of education/gender	Male (matric)	*
	Level of education/gender	Female (diploma/degree)	*
	Arm of service/gender	Female (SA Navy)	*
	Military rank/gender	Male (Candidate Officer)	*
	Military rank/gender	African (combat)	*
Career information	Gender	Male	*
	Arm of service	SA Air Force	*
	Level of education/gender	Male (matric/post matric)	*
	Military rank/gender	Male (Candidate Officer)	*
	Race/mustering group	African (combat)	*
Integration	Level of education/gender	Female (diploma/degree)	**
	Arm of service/gender	Female (SA Navy)	*
Career planning	Mustering group	Combat	*
	Arm of service	SA Air Force	*
	Arm of service/gender	Female (SA Navy)	**
	Military rank/gender	Male (Candidate Officer)	*
	Race/mustering group	African (combat)	*
Overall maturity	Gender/Educational level	Female (diploma/degree)	*
	Level of education/gender	Male	*
	Mustering group/Educational level	Combat (post-matric)	*
		Non-combat (diploma/degree)	*
	Race/Military rank	White (Candidate Officer)	*
	Race/mustering group	African (combat)	*
	Arm of service/Military rank	SA Army (Candidate Officer)	***
	Mustering group/Military rank	SA Army (Candidate Officer)	***
	Arm of service/age	SAMHS (Candidate Officer)	***
		Combat (Candidate Officer)	*
	Arm of service	SA Air Force (18-24 yrs)	*
	Arm of service/gender	SA Navy (25-44 yrs)	**
	Military rank/gender	SA Air Force	*
		Female (SA Navy)	*
	Male (Candidate Officer)	*	

*p ≤ 0.05; **p ≤ 0.01

EXPLORING SOCIO-DEMOGRAPHIC DIFFERENCES IN CAREER MATURITY IN THE SOUTH AFRICAN MILITARY

© 2011 Prof RM Oosthuizen oosthrm@unisa.ac.za
© 2011 Mr MA Themba a_them@ma2.sun.ac.za
© 2011 Prof M Coetzee coetzm1@unisa.ac.za

FINDINGS AND DISCUSSION

Overall, the mean scores indicated that the participants seem to have achieved an adequate level of career maturity, with their decision making skills (and the ability to apply these skills in effective decision making) being a particular strength. The participants also seem to be especially strong in integrating their self-knowledge and their knowledge of the occupational world, obtaining personal information about themselves, and converting this information into self-knowledge. These skills have been related to inner value capital attributes which result in career self-insight (Schreuder & Coetzee, 2011). Career self-insight arouses career motivation, leads to greater role clarity and experiences of career success (Eby, Butts & Lockwood, 2003). Although adequate, the participants' ability to implement their knowledge in career planning and gathering career information, and converting these into knowledge of the occupational world seem to be skills that require further enrichment. Coetzee (2008) regards these skills as important career enablers in the career decision making process. The results of the present study are in agreement with Yates's (1987) findings on a previous study that reflected greater scores for a military sample than a sample of college seniors on career planning, career exploration, and decision-making.

Gender, educational level, arm of service and rank

- Although the results indicated no significant differences between males and females on overall career maturity, educational level did seem to significantly influence the maturity level of the female and male participants. From the findings it appears that the female participants who had a degree/diploma level qualification, and especially those in the SA Navy, seemed significantly stronger in mastering the career development tasks associated with their particular life stage than their male counterparts, and those male and females with only a matric or post matric level qualification. More specifically, the females who had a diploma/degree level qualification (and especially those in the SA Navy) seemed to be especially strong in making effective career-related decisions and integrate relevant personal information with occupation-related information. These female participants seemed to have well-defined information about the self, that is, clearly defined life roles, work values, and occupational interests that seemed to have informed their career decision making. According to Pool and Sewell (2007), people with a higher degree qualification tend to demonstrate high levels of self-efficacy and self-confidence. Cocchiara, Kwesiga, Bell and Baruch (2009) found in this regard that women are positively affected by inner-value capital attributes which people gain through increased self-awareness, self-esteem, self-efficacy and confidence.

Mustering groups, race, educational level, and rank

- Overall, the combat participants seemed to be stronger in their ability to do career planning than their non-combat counterparts. More specifically, the combat participants with the rank of Candidate Officer, and the African combat participants seemed to feel more ready for making career decisions and dealing with career-related tasks than the other rank and race groups of the combat participants. The African combat participants also seemed to feel positive about career- and occupation-related information and using these in their career planning. This could be attributed by the current employment equity and affirmative action legislation which has opened up more career advancement opportunities for blacks and especially African people in South African workplaces (Schreuder & Coetzee, 2011).
- Similarly to the observations made for the male and female participants, educational level also appears to have influenced the overall career maturity level of the combat and non-combat groups. The non-combat groups with a diploma/degree seemed to be stronger in their readiness to make career decisions than those non-combat participants who had only a matric or post-matric level qualification. However, the opposite is observed in terms of the combat participants, where those participants with a diploma/degree level qualification seemed to feel less ready or able to make career decisions than those combat participants with only a matric or post matric

level qualification. Considering previous research which indicates that people with higher levels of education tend to be more career-mature (Naidoo et al., 1998), one could argue that the nature of the combat military environment may be incompatible with the type of educational qualification held by the combat participants and that they may feel restricted in their career choices (Themba, 2010).

Age and arm of service

- It is interesting to observe that the overall career maturity of participants in the exploration phase of their careers (18 to 24 years) and those in the establishment phase of their careers (25 to 44 years) differed significantly from those in the South African Air Force and those in the South African Navy. The major developmental tasks during the exploration phase of career development (late adolescence) are developing an occupational self-image, assessing alternative occupations, developing initial occupational choice, pursuing necessary post-school education and developing one's employability (Greenhaus, Callanan & Godshalk, 2010). During the establishment phase, stabilisation, security and advancement become priorities (Schreuder & Coetzee, 2011). Both of these career development phases require career maturity, or a readiness to deal with the developmental life tasks relevant to the particular life stage. In this regard, those participants aged between 18 and 24 years who are employed in the SA Air Force appeared to be more ready than those aged between 25 and 44 years to deal with the life tasks associated with their particular career development life stage. It appears from the findings that they feel less ready to engage in career-related tasks. The opposite is observed in terms of the participants employed in the SA Navy. These findings suggest the need for supportive career development interventions from the organisation in helping these participants deal positively with the development tasks of their particular life stages.

Military rank, race and arm of service

- The results of the empirical study also showed no significant mean difference on career maturity among the racial groups that participated in the present study. This is in contrast with previous findings which found significant differences in career maturity among racial groups (Pieterse, 2005; Reid-Van Niekerk & Van Niekerk, 1990; Watson et al., 1995; White, 1987).
- It appears from the findings that rank and arm of service influenced the maturity level of participants. The white participants with the rank of Officer Candidate, and especially those participants in the SA Army, seemed to have significant higher levels of career maturity than the higher ranking participants. One could argue in this regard that these participants felt positively about their careers due to the hierarchical career path possibilities in the military environment, and hence, ready to engage in career-related tasks and making career decisions. It is interesting to observe that in the SA Health and Military Services (SAHMS), the higher ranking participants (especially those with the rank of Major) felt significantly more positive in engaging in career-related developmental tasks than those participants with a lower rank. One could argue that lower ranking participants in the SAHMS may either feel less positive about their career mobility possibilities than the higher ranking staff, or be in need of supportive career development interventions and information to increase their career maturity.
- The findings suggest that especially those with the rank of Lieutenant and Captain may be in need of career- and occupational related information to guide them in their career decision making. In this regard, the participants in the SA Air Force seem to be especially strong in their career decision making abilities. They seem to feel significantly more positive about their knowledge regarding their life roles, work values, and occupational interests (self-information), career- and occupation-related information, making career decisions and doing career planning than those participants in the other arms of service. Career self-insight and career planning skills have been related to people's psychological career resources which were found to significantly influence their job and career satisfaction, and the meaning they attach to their working lives (Coetzee, 2008; Coetzee & Bergh, 2009).

CONCLUSIONS



- The findings presented in this study highlight the need to take into consideration demographic and context-specific variables when designing and implementing career development practices in military organisations. Based on the research findings, the following are suggested for career development practices within the military context:
- The military can improve the level of career maturity among its young and new members by facilitating greater self-awareness, improving the supply of information regarding military career mobility opportunities, and enhancing effective career decision-making.
- The military can facilitate career maturity among older military members by providing career counselling practices that encourage exploration of career opportunities and effective career decision-making beyond the exploration stage.
- Despite military officers in this study reflecting adequate levels of career maturity, the military should recognise that individual differences existed among these officers, requiring career development interventions tailored for individual needs.
- The military should introduce career development practices that address the specific needs of women with different educational levels in their respective career stages, and generally enhance their career maturity.
- The military should recognise the influence of military-specific variables and educational levels on the readiness of its members to deal with career-related tasks and challenges.
- The military should also recognise the influence of its members' cultural and socio-economic factors when dealing with career-related tasks and challenges.
- The military can explore the role of education in facilitating career maturity as part of its career development strategy.
- It can be concluded that this study represents original research that contributes new knowledge to the field of career psychology that can be used to guide career development practices in the South African National Defence Force.

UNISA



university
of south africa