The psychometric evaluation and predictors for two subjective career success instruments

A. M. du Toit
23653825
B.Com.Hons (Industrial Psychology)

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Supervisor: Dr. E. Koekemoer
Co-supervisor: Dr. A. Nel

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COMMENTS

Beforehand, the following facts should be kept in mind:

• The editorial style and the references in this mini-dissertation follow the prescriptions of the Publication Manual (6th edition) of the American Psychological Association (APA). This practice is in line with the policy of the Programme in Industrial Psychology of the North West University, Potchefstroom Campus, to use the APA style in all scientific documents. This policy took effect from January 1999.

• The mini-dissertation is submitted in the form of a research article.

• The editorial style was applied as specified by the South African Journal of Industrial Psychology, which also subscribes to the APA style. The construction of the tables also follows the APA guidelines.
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DECLARATION

I, Audine Marlè du Toit, hereby declare that “Psychometric evaluation and predictors of two subjective career success instruments”, is my own work and that the views and opinions expressed in this research are those of the author and of relevant literature references as shown in the references.

I further declare that the content of this research will not be handed in for any other qualification at any other tertiary institution.

AUDINE MARLÈ DU TOIT  NOVEMBER 2013
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SUMMARY

Title: The psychometric evaluation and predictors of two subjective career success instruments

Keywords: Subjective career success, police services, psychometric properties, demographic variables, human capital variables, organisational variables, Perceived Career Success Scale, Life-success Measures Scale

Subjective career success has been the focus of research for a number of years. The term refers to the individual’s personal perception of how successful he/she is in a career. In many qualitative studies subjective career success is found to be a multi-dimensional construct. Although there are quantitative instruments that measure subjective career success, they do not measure the construct on multiple dimensions. The first objective of this study was to determine the validity and reliability of two existing multi-dimensional instruments that measure subjective career success, especially in the South African context. These are the Perceived Career Success Scale (Gattiker & Larwood, 1986) and the Life-success Measures Scale (Parker & Chusmir, 1992).

The second objective was to determine which predictors can be found for subjective career success. Literature differentiates between three broad categories of variables, namely demographical (gender, language group, marital status and age), human capital (job tenure, level of education and career planning) and organisational variables (perceived organisational support and training, and development opportunities).

A convenience sample of 754 personnel from the South African Police Service was taken at stations and training colleges in the Free State, South Africa. A measuring battery that assesses subjective career success was used. This entailed the Perceived Career Success Scale as well as the Life-success Measures Scale. In addition, questions were used to ascertain the three types of variables demographic (gender, language group, marital status and age), human capital (job tenure, level of education and career planning) and organisational variables (perceived organisational support and training and development opportunities).

The following statistical analyses were done to analyse the data: descriptive and inferential statistics, Cronbach’s alpha coefficients, product-moment correlations, confirmatory factor analysis and linear regression analysis. The results of these analyses indicate that subjective
career success is indeed a multi-dimensional construct. Three dimensions (job success, interpersonal success and non-organisational success) of the Perceived Career Success Scale (Gattiker & Larwood, 1986) could be established. These dimensions yielded good reliability, but the validity remained problematic. In contrast, the Life-success Measures Scale (Parker & Chusmir, 1992) yielded four dimensions (security, social contribution, professional fulfilment and personal fulfilment). The psychometric properties of these dimensions were acceptable and showed to be reliable and valid.

In addition, various demographic, human capital and organisational variables were found to be predictors of subjective career success. Career planning, training and developmental opportunities, as well as perceived organisational support, explained the most variance.

Various recommendations were made for the context of the South African Police Service, and also for future research. The organisation is advised to apply the results from this study to adjust policies and practices in such a way that employees will experience higher levels of subjective career success. Furthermore, career discussions may be held in order to enhance opportunities for career planning and provide opportunities for relevant training and development that are aligned to the business drive of the organisation. Interventions that will increase perceived organisational support and congenial relationships could be implemented and maintained.

More research on the two subjective career success measures is needed, in order to 1) verify the validity of the Perceived Career Success Scale and 2) to apply it and the Life-success Measures Scale to other sectors and industries. It is also recommended that a more heterogeneous sample be utilised as well as longitudinal research designs in future research studies relating to subjective career success.
OPSOMMING

Titel: Die psigometriese evaluering en voorspellers van subjektiewe loopbaansukses


Subjektiewe loopbaansukses is reeds geruime tyd ’n onderwerp wat nagevors word. Sodanige sukses verwys na individue se persoonlike evaluering van die mate sukses wat hulle in hulle loopbaan ervaar. Verskeie kwalitatiewe studies het bevind dat subjektiewe loopbaansukses ’n meerdimensionele konstruk is. Tog bestaan daar tans nie ’n algemeen aanvaarde, kwantitatiewe, multidimensionele meetinstrument vir subjektiewe loopbaansukses nie. Die doel van hierdie studie was om die geldigheid en betroubaarheid vas te stel van twee bestaande multidimensionele meetinstrumente, die “Perceived Career Success Scale” en die “Life-success Measures Scale”, veral binne die Suid-Afrikaanse omgewing.

Die tweede doelwit was om vas te stel watter voorspellers daar vir subjektiewe loopbaansukses bestaan. Volgens die literatuur word hierdie voorspellers in drie kategorieë van veranderlikes verdeel, naamlik demografies (geslag, huistaal, huwelikstatus en ouderdom), menslike kapitaal (jare diens, vlak van onderrig en loopbaanbeplanning) en organisatories (waargenome organisatoriese ondersteuning asook opleiding en ontwikkelingsgeleenthede).

’n Ewekansige steekproef is gedoen onder 754 personeel lede van die Suid-Afrikaanse Polisie Diens van verskillende stasies en opleidingskolleges in die Vrystaat, Suid-Afrika. Daarna is ’n meetbattery is ingespan wat subjektiewe loopbaansukses meet (deur die Perceived Career Success Scale en die Life-success Measures Scale) asook vrae oor die onderskeie veranderlikes: demografies (geslag, huistaal, huwelikstatus en ouderdom), menslike kapitaal (jare diens, vlak van onderrig en loopbaanbeplanning) en organisatories (waargenome organisatoriese ondersteuning asook opleiding en ontwikkelingsgeleenthede).

Die volgende statistiese analises is gebruik om die data te ontleed: beskrywende en inferensiële statistiese tegnieke, Cronbach se alfakoëffisiënt, produk-moment-korrelasies en bevestigende-faktor-analises asook linière regressiewe analises. Die resultate van hierdie ontledings dui daarop dat subjektiewe loopbaansukses inderdaad ’n multidimensionele
konstruk is. Daar is drie dimensies vasgestel vanuit die Perceived Career Success Scale, naamlik werk-, interpersoonlike en nie-organisatoriese sukses. Hierdie dimensies het aanvaarbare betroubaarheidsvlakke getoon, maar die geldigheid daarvan was steeds problematies. Daarteenoor het die Life-success Measures Scale vier dimensies opgelewer, naamlik sekuriteit/sekerheid, sosiale bydrae, professionele vervulling en persoonlike vervulling. Die psigometriese eienskappe van hierdie dimensies was meer aanvaarbaar.

Voorts is bevind dat sekere demografiese, menslike kapitaal en organisatoriese veranderlikes wel as voorspellers vir subjekiwse loopbaansukses kan dien. Die veranderlikes, loopbaanbeplanning, opleiding en ontwikkelingsgeleenthede asook gewaarworde organisatoriese ondersteuning het die grootste variantsie getoon.

Verskeie aanbevelings is gemaak vir die Suid-Afrikaanse Polisiediens om op te volg, asook vir verdere navorsing. ’n Aanbeveling aan die organisasie is om die resultate van hierdie studie te benut en sodoende beleide en gebruikte so te verander dat werknemers hoër vlakke subjektiewe loopbaansukses kan beleef. Voorts word besprekings oor loopbaanbesetting aanbeveel sodat beter geleenthede geskep word vir aktiwiteite gereg op loopbaanbeplanning asook vir die verskaffing van relevante opleiding- en ontwikkelingsgeleenthede in ooreenstemming met die organisasie se strategiese doelwitte. Intervensies wat gewaarworde organisatoriese ondersteuning asook vriendskaplike verhoudings bevorder, kan ingestel en gehandhaaf word.

Verdere navorsing is nodig oor die twee meetinstrumente vir subjekiwse loopbaansukses om 1) die geldigheid van die Perceived Career Success Scale te bepaal; en 2) dit asook die Life-success Measures Scale in ander sektore en ondernemings toe te pas. Daar word ook aanbeveel dat in die vervolg ’n heterogene steekproef gebruik asook longitudinale navorsingsontwerpe ingespan word in toekomstige navorsingsprojekte rakende subjekiwse loopbaansukses.
CHAPTER 1

INTRODUCTION

1.1 PROBLEM STATEMENT

Presently the perception of the nature of career success differs from what previously was regarded as being successful. During agrarian times, hard work and survival were considered as career success (Savickas, 2000), whereas during times of industrialisation, loyalty to organisations and advancement up the organisational hierarchy indicated success (Heslin, 2005a). During these modern times, success thus was measured by the amount of “verifiable attainments” the individual obtained during a career (Heslin, 2005a; Savickas, 2000). This implied the use of “objective measures” such as promotions and salary increase (Russo, Kelly, & Deacon, 1991). However, the current work environment is characterised by globalisation, economic uncertainty and technological changes (Admundson, 2005; Countinho, Dam & Blustein, 2008; Savickas, 2000). Therefore the conception of a career and the accompanying possibilities of success have changed dramatically.

According to Arthur, Khapova and Wilderom, (2005) the definition of a career has changed. Careers are increasingly characterised as an unpredictable series of experiences, which include a combination of work as well as non-work activities through different life-stages. The literature distinguishes two distinct views of career success, namely objective and subjective career success (Judge, Cable, Boudreau, & Bretz, 1995; Nabi, 1999; Ng, Eby, Sorensen, & Feldman, 2005). Objective career success comprises remuneration such as salary level, as well as and ascendancy such as promotions received. In contrast, subjective career success includes aspects such as career enjoyment and job satisfaction (Judge et al., 1995; Ng et al., 2005).

From objective to subjective career success

Traditionally, objective career success had been considered the sole determinant to an individual’s level of a successful occupation (Arthur et al., 2005). However, according to recent literature career success is perceived more in terms of work-related outcomes and experiences at any point in an individual’s life (Arthur, et al., 2005). Therefore such forms of success are considered to be changing consistently, as personal priorities are rearranged (Dany, 2003; Dries, 2011). In addition, the traditional incentives (e.g. promotion up the
hierarchical ladder in an organisation) are perceived to have lost their significance (Dries, Pepermans & Carlier, 2008; McDonald & Hite, 2008). Seeking internal fulfilment through developing and learning experiences in both work and non-work activities, are perceived to have become more rewarding (Tu, Forret & Sullivan, 2006). Employees currently also value career aspects such as employment stability, income, aspirations and learning opportunities (Arthur et al., 2005), leading to the concept and measurement of subjective career success.

According to Powell and Mainiero (1992), subjective career success was proposed as a more important determinant of success than objective success. Therefore it is necessary to determine the extent of subjective career success that individuals experience directly, and affect the organisation indirectly. Notwithstanding this need, there currently is no general consensus among researchers on a valid and reliable instrument to measure an individual’s level of subjective career success. An analysis conducted by Dries (2011) found that approximately 15% of studies on subjective career success are qualitative in nature; the remaining 85% do employ quantitative methods.

In the literature the instruments used most often to measure subjective career success include those developed by Greenhaus, Parasuraman and Wormley (1990); Nabi (1999); Parker and Chusmir (1992); as well as Gattiker and Larwood (1986). From these instruments the one most prevalent in previous research are the one-dimensional instrument developed by Greenhaus et al., (1990), which consists out of five items. However, Arthur et al., (2005) advanced the possibility that subjective career success have multiple dimensions. The instrument of Nabi (1999) measures intrinsic and extrinsic job success, by using a combination of the scales developed by Greenhaus et al. (1990), as well as by Gattiker and Larwood (1986). Both Gattiker and Larwood (1986) and Parker and Chusmir (1992) have developed multi-dimensional questionnaires that warrant further investigation.

Gattiker and Larwood (1986) developed a five-factor instrument, namely the Perceived Career Success Scale (henceforth referred to as PCSS). Of this scale four factors relate to organisational success (i.e. job-, interpersonal-, financial- and hierarchical success) and one factor relates to a non-organisational success factor (i.e. life success). This instrument consists of 23 self-reported items, which reveal five different dimensions of success. According to this instrument, job success refers to the following: development opportunities, responsibility, performance at work, support from managers, being happy at work and having a feeling of dedication to work. In concordance, interpersonal success refers to: having the
respect and acceptance of colleagues, the confidence of supervisors and getting positive evaluations on work done. **Financial success** means fair compensation or even having a higher income in comparison to colleagues. **Hierarchical success** refers to opportunities for promotion and the achieving of career goals. **Life success (non-organisational success)** implies to be happy in non-work related areas of life (Gattiker & Larwood, 1986)

Another instrument which is designed to measure subjective career success on multiple dimensions, is the Life-success Measures Scale (henceforth referred to as LSMS) developed by Parker and Chusmir (1992). This scale consists of 42 self-report items and six theoretically distinct sub-scales, namely status/wealth, social contribution, family relationships, professional fulfilment, personal fulfilment and security. In this instrument the dimensions can be explicated as follows: **status/wealth** refers to getting public recognition, having influence and a high income; **social contribution** focuses on being able to help others and being useful to society; **family relationships** implies having a happy marriage and being good at parenting; **professional fulfilment** implies being committed to and satisfied with work and the organisation, as well as having the respect of superiors and colleagues; and **security** means having long-term economic and job-related stability, regular pay increases and productive benefits; **personal fulfilment** entails gaining personal meaning and happiness, experiencing inner peace, self-respect, contentment and enjoying activities that are not related to work (Parker & Chusmir, 1991).

Generally, the PCSS, developed by Gattiker and Larwood (1986), focuses on the individual’s perception of career success in comparison to his/her peers. This model has a greater focus on work-related aspects that will influence the experience of career success. This is in line with the traditional definition of subjective career success, which refers to positive outcomes from work-related experiences (see Arthur et al., 2005). In contrast, the LSMS of Parker and Chusmir (1992), measures subjective career success from a personal perspective. This model has a greater focus on non-organisational success. Such success refers to aspects that will enable the individual to experience a feeling of success beyond the scope of work. This is in agreement with Heslin (2005b) and Valcour and Ladge (2008), who states that subjective career success spans a broader range of outcomes, including non-work activities and roles.

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1 *Life success* has been replaced with *non-organisational success* throughout this dissertation to prevent confusion with the Life-success Measures Scale.
On closer inspection of the two instruments, some similarities and differences are noted between their dimensions. Specifically, the dimensions “Financial success” of the PCSS is somewhat similar to “Status/wealth” and “Security” of the LSMS; “Hierarchical success” (PCSS) and “Professional fulfilment” (LSMS), as well as “Non-organisational success” (PCSS) and “Family relationships” and “Personal fulfilment” (LSMS), share similarities, although the focus of each factor differs in each instrument. “Job success” and “Interpersonal success” are unique factors to the PCSS, whereas “Social contribution” is unique to the LSMS.

Although both the PCSS and LSMS measure subjective career success on various dimensions, the focus of each instrument is different. Therefore, it may be beneficial to investigate both instruments as it might provide a holistic view on all aspects related to subjective career success. Comparing results of both instruments might yield valuable information on the exact factors that are most dominant for subjective career success within the South African context.

According to the Employment Equity Act (No. 55 of 1998), all psychological tests need to be proven scientifically to be valid and reliable. Such tests should also be applied fairly to all participants, in order to prevent unfair discrimination. Therefore the validity and reliability of instruments is extremely important, especially when administered within a South African context. The validity of an instrument concerns what it measures and how well it does so, whereas the reliability of an instrument refers to the consistency in which a construct is measured across time and under standardised circumstances. This implies that similar results should be obtained every time the instrument is administered (Foxcroft & Roodt, 2009).

Both the instruments developed by Gattiker and Larwood (1986), as well as by Parker and Chusmir (1992), have shown acceptable levels of reliability during its developmental stages abroad. The Cronbach’s alpha coefficients found for the PCSS ranged from 0.65 to 0.83, which proved reliability (Bozionelos, 1996; Gattiker & Larwood, 1986). Concurrently, the LSMS also showed internal consistency with the subscales’ alpha coefficients ranging from 0.67 to 0.87, which also proved reliability (Parker & Chusmir, 1992). Different from reliability, the validity of an instrument refers to how well it measures that what it claims to measure (Foxcroft & Roodt, 2009). Construct validity of the LSMS was determined through factor analysis, which differentiates between six distinct factors (Parker & Chusmir, 1991; 1992). Although the PCSS was employed in several international studies, (Bozionelos, 1996;
Dries, 2011; Gattiker & Larwood, 1986), information on its validity is not available. These instruments have not been utilised in studies in South Africa, and therefore it is not known how these instruments perform within the South African context.

Having these measuring instruments proven valid and reliable within the South African context may add value to the body of research knowledge on subjective career success in South Africa. Dries et al. (2008) urge that more studies are needed on subjective career success. In addition, research in South Africa is also needed in order to capture the diversity of perspectives in the current South African workforce. The topic of career success already has been researched among working adults and women (Oliver & Karim, 2012; Stumpf & Tymon, 2012), MBA students (e.g. Supanco, 2011), managers and support personnel (e.g. Gattiker & Larwood, 1986; Mohd, Ismail & Garavan, 2011) and various other populations. However, only a few studies on subjective career success have been conducted in South Africa. These studies were undertaken among human resource management practitioners (Botha, 2011), the South African National Defence Force (Ditsela, 2012), professionals in the public and private sectors (Lemmer & de Villiers, 2004), as well as academic staff (Riordan & Louw-Potgieter, 2011).

The studies mentioned were either qualitative in nature (Ditsela, 2012; Lemmer & de Villiers, 2004) or, in the case where a quantitative method was utilised, different measuring instruments were applied. Botha (2011) made use of the Career Success Orientation measure and Riordan & Louw-Potgieter (2011) used instruments developed by Kirchmeyers (2002) and Turban and Doherty (1994). Although these studies used valid and reliable career success instruments from abroad, both measure career success as a one-dimensional construct (Botha, 2011; Kirchmeyers, 2002; Turban & Doherty, 1994). In contrast, Arthur et al. (2005) indicated that subjective career success is a multi-dimensional construct.

Although subjective career success have been researched extensively in South Africa (see Botha, 2011; Ditsela, 2012 & Riordan & Louw-Potgieter, 2011), it has not been investigated within the South African Police Service. The South African Police Service (SAPS) consists of a hierarchical structure of twelve levels (from constable to general) and fifteen core components, which entail visible policing, detective services, crime intelligence and legal services (South African Police Service, 2012a & 2012b). In such an organisation, one would expect that objective career success should easily be attainable, through promotions and work diversity. However, this is not the case. Research done by Newman, Masuku and Dlamini
(2006) found that a large number of police members have the perception of being discriminated against on the basis of certain demographical characteristics as far as promotions and the allocation of resources are concerned. This perception is confirmed by a number of lawsuits filed against the SAPS, including Minister of Safety and Security v Coetzer and Others (2003); SAPU obo Lotter v SAPS (2002); Solidarity obo Barnard v SAPS (2010).

Not only do SAPS members face organisational challenges; they also operate in a highly stressful work environment, characterised by a high crime rate and limited resources (Mostert & Rothmann, 2006). According to Watson, Volschenk, Jacobs and Bhullar (2007), members are exposed on a regular basis to gruesome crime scenes, hostage taking, shooting incidents, provocation and other traumatic incidents, which has the potential to make them react negatively towards their careers. In light of this information, the attainment of objective career success seems unlikely. To counter this perception, a focus on experiences of subjective career success can be an important factor that keep police members motivated and engaged in their career and public services (Judge, et al., 1995). Furthermore, a study on subjective career success possibly would yield valuable information to the organisation, which could help it to create clear, concise and successful career options for its members.

Predictors of career success

In addition to the importance of having valid and reliable measures for subjective career success, it is also important to investigate the various predictors of subjective career success. Individuals spend about a third of their time at work and therefore the need for a successful career can be expected. Those members, who experience a high level of subjective career success, feel more successful in their careers (Nabi, 1999). Therefore the inference can be drawn that if an individual’s subjective career success contributes to the overall success of an organisation (i.e. Judge, Higgins, Thoresen, & Barrick, 1999; Supanco, 2011; Yu, 2011), it certainly would be to the advantage of the organisation to know the nature of those factors. Nevertheless, the literature is unclear on the exact variables that predict subjective career success (Supanco, 2011), even though various studies was undertaken to determine these factors (Judge et al., 1995; Ng et al., 2005; Supangco, 2011).

The meta-analyses done by Ng et al. (2005) and the empirical research conducted by Judge et al. (1995) and Park (2010), as well as by Nabi (1999), all concur that the most prevalent
demographical predictors of subjective career success are gender, language groups, marital status and age.

Other variables that contribute significantly to the level of career success that an individual experiences have been categorised by Ng et al. (2005) as follows: human capital, organisational and motivational variables. Variables for human capital entail: hours worked, work experience, willingness to transfer and social capital (Ng et al., 2005), occupational tenure, international experience and accomplishment rating (Judge et al., 1995), as well as a calling that directs work orientation (Park, 2010). In light of these findings Ng et al. (2005) and Judge et al. (1995) agree that job tenure and level of education are particularly strong predictors of subjective career success. Ng et al. (2005) and Park (2010) added the variable of career planning to this list.

There are numerous organisational variables that predict subjective career success. These include: career sponsorship, supervisor support, organisational resources (Ng et al., 2005), whether the organisation is a public firm, the perception of a successful career and the number of employees employed by the organisation (Judge et al., 1995). Other variables are: the level of employment security experienced the progression possibilities (Nabi, 1999) and the organisation’s learning climate (Park, 2010). Ng et al. (2005), Nabi (1999) and Park (2010), consider training and development opportunities as well as perceived organisational support as strong predictors of subjective career success (Ballout, 2006; Chen, 2010).

Lastly, motivational variables that predict career success include the following: number of after hours per month, hours worked per week and the hours desired to work (Judge et al., 1995), networking (Nabi, 1999) and ambition (Judge et al., 1995; Nabi, 1999).

In summary, it is suggested in the literature that the perception of career success has changed for both the individual and the organisation (Heslin, 2005a; Savickas, 2000). Traditional methods to determine career success (such as using “objective” methods) do not capture the essence of career success adequately. The measuring of subjective career success is therefore of greater importance (Powell & Mainiero, 1992). However, in the literature there is no agreement on the quantitative instruments used to measure subjective career success. Determining the validity and reliability of existing measures for subjective career success within the South African context can certainly help address this need. In addition, knowing which variables may predict subjective career success may also assist organisations in enhancing the career success of their employees. Thus, in light of the current circumstances
and work environment within the SAPS, research done on this organisation may be valuable to help address the need for subjective career success for employees of the SAPS.

1.1.1 Literature review

Subjective career success

Subjective career success is defined as: “the accomplishment of desirable work-related outcomes at any point in a person’s work experiences over time” (Arthur et al., 2005, p. 179). Or it can be described as: “the positive material and psychological outcomes resulting from one’s work-related activities and experience” (Callanan & Greenhaus, 2006, p. 148). Valcour and Ladge (2008) state that subjective career success does not depend on the achievement of outcomes endorsed by the society, which include promotions and high earnings. Such success rather involves an individual’s personal internal perspectives, evaluations and interpretations of success achieved during a career (Arthur et al., 2005). A broader range of outcomes is also included such as meaning, work-life balance, identity and contribution to a worthwhile cause. This implies that the individual will experience career success according to his/her own judgement based on personal standards (Gattiker & Larwood, 1986).

In the literature the concept of subjective career success was proposed as a more important determinant of success than objective success (Powell & Mainiero, 1992). Nevertheless the subjective perspective received attention in only approximately 25% of the research done on career success (Heslin, 2005a). In a meta-analytic study by Arthur et al. (2005) it was found that 72-78% of studies undertaken on career success, did mention the subjective concept of career success, but only 15% of these research articles actually focused exclusively on subjective career success, by employing both the qualitative and quantitative methods. This indicates the lack of research about the subjective perspective on career success (Heslin, 2005a).

Predictors of subjective career success

According to literature, there exist different categories of predictors of subjective career success (Ng et al., 2005; Park, 2010). For purposes of this study, these are condensed into three categories, namely demographic, human capital and organisational variables (Ng et al., 2005).
Demographic variables include amongst others, gender, marital status, age and language groups. With regard to gender and marital status, it was found that women are perceived to experience lower levels of subjective career success, due to gender discrimination (Oliver & Karim, 2012). This condition may lead to lower aspirations and less career satisfaction (Blair-Loy, 2003; Settles, Cortina, Malley, & Stewart, 2006). From a different angle, Bradley, Brown and Dower (2009), as well as Maintier, Joulain and Le Floc’h (2011), have found that both men and woman hold the same career aspirations, but women experience success at lower hierarchical levels than men and this experience manifests differently. As for the variable age, Judge et al. (1995) found that it is related negatively to subjective career success. A possible reason could be that priorities change over time and work is not considered as important.

Human capital variables consist of job tenure, level of education and career planning. Nabi (2003) found that an extended tenure at an organisation do predict higher levels of subjective career success, especially when the individual experience loyalty towards the organisation. According to Clark and Oswald (1996), Ng et al. (2005), as well as Wayne, Linden, Kram and Graf (1999), the level of education will influence subjective career success positively. Nabi (2003) found that individuals who engage in career planning strategies (such as networking and self-nomination) experiences higher levels of subjective career success, especially towards their colleagues and their work role.

Organisational variables are the following: perceived organisational support and training and development opportunities. Organisational support was found to be a predictor of subjective career success by Ballout (2005) and Chen (2010). The research of Ng et al. (2005) and Wayne et al. (1999), found a positive relationship between training and development opportunities and the subjective career success experienced by employees.

Given this background, it is therefore of great importance for both the individual and the organisation to determine the nature of these predicting variables, so that the necessary adjustments can be made to help employees obtain the maximum level of subjective career success.

1.1.2 Theoretical framework

Subjective career success will be explained by using the contest-mobility and sponsored-mobility model of career success (Ng et al., 2005). The contest-mobility model was
developed by Turner (1960) and suggests that each person participates in an open “contest”. All participants within a basic framework have various strategies to apply in order to attain credentials, which are associated with coveted outcomes or a status (Marshall, 1998; Turner, 1960). No individual will have any advantage over another and therefore the “winners” will be those that have the qualities required to obtain success. Rosenbaum (1984) postulates that individuals are engaged in constant competition with others and are simultaneously bettering themselves in order to succeed. According to Becker (1964) the labour market places a high value on human capital. This model can be applied to subjective career success, in the sense that certain variables will be related positively to subjective career success. These include job tenure, level of education and career planning, as well as perceived organisational support (Ng et al., 2005). This implies that as an individual’s job tenure, level of education, career planning and perceived organisational support increases, the level of subjective career success experienced by this individual will also increase.

The sponsored-mobility model asserts that an individual only has access to a limited amount of strategies and that a selected group, the elite, control individuals and outcomes according to their desired results (Marshall, 1998). Turner (1960) states that an individual’s status is not earned, but rather given to him/her, based on some objective criterion. In order to gain access to the desired outcomes or status, the individual must be sponsored by one or more of the elite group. The implication is that no matter what effort an individual puts in, the outcome is determined by the elite; those with greater success are the ones that have been sponsored more by the elite (Ng et al., 2005). This implication is true for organisations as well: those sponsored by organisations will have greater resources available to them, which will enable them to experience subjective career success. Therefore, in an organisation, those employees that are sponsored will have access to training and opportunities to develop their skills.

Ng et al. (2005) suggest that demographic variables will determine who in the organisation will be sponsored more readily. Gender and racial bias will ensure that white men, for instance, will be favoured above women and members of other minority groups (Kanter, 1977). An individual’s marital status (Ng, et al., 2005; Pfeffer & Ross, 1982) and age may also influence the amount of sponsorship received from an organisation. This model can be applied to subjective career success in the sense that training and opportunities to develop skills will be related positively to subjective career success. Demographic variables such as gender, language groups, marital status and age, will be related positively or negatively to subjective career success. This, however, depends on the sponsorship of the organisation:
Being a white married male above a certain age will relate positively to subjective career success, whereas being a non-white unmarried young female will relate negatively to such success (Ng et al., 2005).

1.2 RESEARCH QUESTIONS

Based on the above mentioned problem statement the following research questions were developed:

- Do the two instruments for subjective career success used in this study (i.e. Perceived Career Success Scale of Gattiker & Larwood (1986) and the Life-success Measures Scale of Parker & Chusmir (1992)), provide valid and reliable measurements for subjective career success among employees of the SAPS?
- Which demographic variables (i.e. gender, language groups, marital status and age) are significant predictors of subjective career success for employees of the SAPS?
- Which human capital variables (i.e. job tenure, level of education and career planning) are significant predictors of subjective career success for employees of the SAPS?
- Which organisational variables (i.e. training and development opportunities and perceived organisational support) are significant predictors of subjective career success for employees of the SAPS?
- What recommendations can be made to the SAPS and future research on the attainment of subjective career success in South Africa?

1.3 RESEARCH OBJECTIVES

The research objectives are divided into a general objective and specific objectives which are drawn from it.

1.3.1 General objective

The general objective of this research is to establish the validity and reliability of two available instruments that measure subjective career success, and to investigate the predictive validity of demographic, human capital and organisational variables for subjective career success as measured by these instruments.
1.3.2 Specific objectives

The specific objectives of this study entail the following:

- To establish the validity and reliability of the two instruments measuring subjective career success that was used in this study, namely the Perceived Career Success Scale of Gattiker & Larwood (1986) and the Life-success Measures Scale of Parker & Chusmir (1992) – when applied among employees of the SAPS.
- To determine which demographic variables (i.e. gender, language groups, marital status and age) are significant predictors of subjective career success for employees of the SAPS.
- To determine which human capital variables (i.e. job tenure, level of education and career planning) are significant predictors of subjective career success for employees of the SAPS.
- To determine which organisational variables (i.e. training and development opportunities and perceived organisational support) are significant predictors of subjective career success for employees of the SAPS.
- To make recommendations for future research and practice.

1.4 EXPECTED CONTRIBUTION OF THE STUDY

1.4.1 Contribution to the individual

Most individuals have limited opportunities for objective advancement in their careers and if they do advance, they may reach a plateau at some stage (Tremblay, Roger & Toulouse, 1995). However, it is still paramount for employees to have a sense of being successful in order for them to continue performing and to derive meaning from their work (Ng, et al., 2005). Thus, it is important that individuals have a greater understanding of what subjective career success holds for them or what factors lead to the experience of subjective career success. This understanding will enable them to take responsibility for their career paths and thereby to align both professional and personal goals to obtain success.

1.4.2 Contribution to the organisation

Opportunities for promotion and advancement are limited within any organisation, including the SAPS (Newman, et al. 2006). Therefore it is impossible for all employees to reach the “top of the corporate ladder” (Financial Management, 2012). However, if an organisation has
a clearer understanding of its employees’ needs, especially what they consider as subjective career success, then management will be able to adjust policies and practices accordingly. These adjustments will ensure that all individuals experience some level of career success, especially in a personal meaningful way (in other words, subjective career success). This will ensure continued performance and commitment from all employees, which, in turn, will increase the revenue and competitive advantage of the organisation (Chovwen, 2012; Ng, et al., 2005).

In the case of the SAPS, the understanding of subjective career success is extremely important. In an organisation where its employees risk their lives on daily, subjective career success is non-negotiable. Furthermore, Tobah (2010) found that higher levels of satisfaction with a job, increases ethical behaviour in the organisation. This has implications for practices of compromised values and corruption, especially in a service organisation, such as SAPS. Having an understanding of the impact of subjective career success will help to create clear, concise and successful career options for its members. In the instance where the two instruments under discussion are found to be valid and reliable, organisations would be able to use these instruments with confidence. The instruments will help them obtain the relevant information that will enable them to pinpoint which factors ensure their employees’ experience of subjective career success.

1.4.3 Contribution to industrial/organisational literature

Only limited studies have been done on subjective career success in South Africa, especially by using quantitative methods. The present study contributes to the current literature on the quantitative measurement of subjective career success in South Africa. It helps to outline the psychometric properties of two instruments that measure subjective career success, as currently there is no generally accepted measuring instrument for subjective career success in South Africa. If these instruments are found to be valid and reliable within the South African context, it could also be applied for other research purposes and studies on career success.

1.5 RESEARCH DESIGN

1.5.1 Research approach

The study follows the method of a quantitative research approach. Quantitative studies are characterised by a large number of respondents and use statistically valid and objective measuring instruments from which conclusions are drawn (Anderson, 2006). A cross-
sectional approach is employed, where data is collected from a sample of a selected population at one point in time (Olsen & George, 2004). This is the most economical and timeous method in which to conduct the study.

1.5.2 Research method

This study consists of a literature review and an empirical study. Results that are obtained are presented in the form of a research article.

1.5.2.1 Literature review

A comprehensive literature review is done on subjective career success and its relationship with different dimensions of variables: demographic (i.e. gender, language groups, marital status, & age), human capital (i.e. job tenure, level of education, & career planning) and organisational (i.e. training and development opportunities & perceived organisational support).

Articles relevant to this study, published from 1986 – 2012, was obtained by means of computer searches and accessing internet data bases such as: Academic Search Complete; Africa-Wide Information; Business Source Complete; CINAHL; EbscoHost; EconLit; Emerald; Health Source – Consumer Edition; Health Source – Nursing/Academic Edition; Humanities International Complete; MasterFile Premier; Nexis; ProQuest; PsycArticles; PsycInfo; SACat; SAePublications and Science Direct.

1.5.2.2 Research participants

Convenience sampling was taken for this study among employees of the SAPS in the Free State. The sample size consisted of 754 members who represent various ranks in the SAPS, as well as clerical personnel. The sample includes participants from different genders, language groups, marital status and ages. The study was conducted in the Free State Province of South Africa.

1.5.2.3 Measuring instruments

The following measuring instruments were utilised in the present study:

**Subjective career success:** Two instruments are used that measure subjective career success, namely the Perceived Career Success Scale (PCSS) developed by Gattiker and Larwood (1986) and the Life-success Measures Scale (LSMS) of Parker and Chusmir, (1992).
The *Perceived Career Success Scale* of Gattiker and Larwood (1986) consist of five factors (23 items). These are: job success (eight items, e.g. “I am most happy when I am at work”), interpersonal success (four items, e.g. “I am respected by my peers”), financial success (three items, e.g. “I am earning as much as I think my work is worth”), hierarchical success (four items, e.g. “I am pleased with the promotions I have received so far”) and non-organisational success (four items, e.g. “I am happy with my private life”). All the items are scored on a five-point frequency-rating scale ranging from 1 (*disagree completely*) to 5 (*agree completely*). The Cronbach’s alphas for these factors range from 0.65 to 0.79. These entail the following: job success: 0.75; interpersonal success: 0.79; financial success: 0.74; hierarchical success: 0.65; and non-organisational success: 0.71 (Gattiker & Larwood, 1986). This measurement was utilised in studies by Bozionelos (1996), (2011) and Gattiker and Larwood (1988; 1989; 1990).

The *Life-success Measures Scale* of Parker and Chusmir (1992) consist of six factors (42 items). These are: status/wealth (eight items, e.g. “Getting others to do what I want”), social contribution (eight items, e.g. “Being able to give help, assistance, advice and support to others”), family relationships (eight items, e.g. “Having a happy marriage”), personal fulfilment (eight items, e.g. “Having inner peace and contentment”), professional fulfilment (five items, e.g. “Being accepted at my work”) and security (five items, e.g. “Having long-term job security”) (Chusmir & Parker, 2001; Parker & Chusmir, 1991). Each item is rated according to the individual’s perception of success on a five-point scale, ranging from 1 (*never important*) to 5 (*always important*). The Cronbach’s alphas for these factors range from 0.67 to 0.87. These entail: status/wealth: 0.85; social contribution: 0.84; family relationships: 0.87; personal fulfilment: 0.82; professional fulfilment: 0.67 and security: 0.72 (Parker & Chusmir, 1992). This measurement was utilised in research done by Dries (2011), Dries *et al.* (2008) and Hon and Rensvold (2006).

The shortened version of the *Survey of Perceived Organisational Support* (Eisenberger, Huntington, Hutchison & Sowa, 1986) is employed in this study. This instrument consist of 16 items (e.g. “The organisation values my contribution to its well-being”) seven of which are reversed items (e.g. “The organisation fails to appreciate any extra effort from me”) and is measured on a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). It indicates a Cronbach’s alpha coefficient of 0.97 (Eisenberger, Fasolo & LaMastro, 1990).
The variable *Career planning* was measured by employing the instrument developed by Gould (1979). This instrument consists of six items (e.g. “I have a plan for my career”), three of which were reversed items (e.g. “My career objectives are not clear”). These items are measured on a six-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). This instrument indicates a Cronbach’s alpha coefficient of 0.80-0.83 (Aryee & Debra, 1993, Ng et al., 2005, Park, 2010).

A demographic questionnaire was administered to determine the demographic characteristics of the sample in the study. Information was gathered about gender, language groups, marital status and age. Questions were also included that focused on job tenure and training and development opportunities. To determine job tenure, the following question was posed: “How long have you been employed by your current employer?” For training and development opportunities, the question was posed: “Throughout your tenure at (SAPS), in how many formal training and development programmes (include on-site and off-site programmes) have you participated?” (following the method of Wayne et al., 1999).

**1.5.2.4 Research procedure**

The research procedure was as follows. Permission was first obtained from the SAPS to conduct the research at police service institutions in the Free State. The entire research project was evaluated by the appointed research committee of SAPS. As soon as written permission was secured from the Head: Strategic Management, then various stations and training colleges were visited. Permission was asked whether members of these stations and training colleges could complete the pencil-and-paper questionnaires. The visits were to explain the objectives and importance of the study to the respondents. This procedure was repeated during data collection. The data was collected at the various stations and training colleges, where the questionnaires were administered. Confidential, anonymous and voluntary participation were emphasised. Feedback on the results was given to the SAPS in the Free State.

**1.5.2.5 Statistical analysis**

The collected data were analysed with the use of the SPSS and AMOS programmes (Arbuckle, 2010; SPSS Inc., 2011). Techniques that were applied included descriptive and inferential statistics. Descriptive statistics refer to the measurement of central tendency (the mean) and of variance (the standard deviation) as well as the kurtosis and skewness of the
collected data. These techniques organise large quantities of quantitative data, in order to compile a summary of the tendencies that are observed from the collected data (Heiman, 2004).

Confirmatory factor analysis were done on the two instruments measuring subjective career success, to determine whether the sample yielded the same multidimensionality of the theoretical constructs as was expected (Brown, 2006). Using the AMOS programme the “goodness of fit” was determined by statistically appraising the fit of a model to the covariance matrix. Various indices were computed to confirm the goodness of fit. These included the chi-square ($\chi^2$), the chi-square/degrees of freedom ($\chi^2$/df or CMIN/DF) values; also the Normed Fit Index (NFI), Incremental Fit Index (IFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI) and root mean square error of approximation (RMSEA). The $\chi^2$ value had to be insignificant, whilst the CMIN/DF value had to be $\leq$5.00/2.00. A value of 0.90 or above indicated a good fit to all the indices (Byrne, 2010). A value smaller than 0.80 for RMSEA indicates an acceptable fit, whereas values greater than 0.10 should lead to model rejection (Cudeck & Browne, 1993). The reliability of the theoretically identified constructs was measured with Cronbach’s alpha coefficients ($\alpha$). The fit was considered to be acceptable when $\alpha > 0.70$ (George & Mallery, 2003; Nunnally & Bernstein, 1994).

Product-moment correlation was applied to determine the convergent validity between the dimensions of the two instruments which measure subjective career success. The practical significance of these results was determined by calculating effect sizes, for which medium effect (0.30) and large effect (0.50) was established by the correlation coefficients guidelines (Steyn & Swanepoel, 2008). Statistical significance is set at the 1% level ($p \leq 0.01$). By using the SPSS programme, linear regression analysis was done to determine which demographic, human capital and organisational variables were significant predictors of the dimensions of the two instruments that measure subjective career success. Statistical significance was found to be at $p \leq 0.05$ and $p \leq 0.01$.

1.5.2.6 Ethical considerations

For any research project to succeed it is imperative that the project is conducted in an ethical and fair manner. This implies that participation are voluntary; participants are well informed regarding the goal of the research, as well as the possible impact it could have on them, especially that no harm can be done; confidentiality and privacy had been emphasised (Salkind, 2009).
1.6 OVERVIEW OF THE CHAPTERS

The findings of this research will be discussed in Chapter 2 in the form of a research article. Chapter 3 consists of the conclusions, limitations and recommendations of this research.

1.7 CHAPTER SUMMARY

This chapter presented the problem statement, outlined the research questions and posed the research objectives. The measuring instruments were highlighted and the research methods utilised in this study explained. This was followed by a brief overview of the chapters.
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CHAPTER 2

RESEARCH ARTICLE
The psychometric evaluation and predictors for two subjective career success instruments

Abstract

The objective of this study was firstly, to determine whether two subjective career success instruments are valid and reliable within the South African context. Secondly, the aim was to determine which demographic, human capital and organisational variables are significant predictors of subjective career success.

A cross-sectional survey design was used in this study. The sample included employees of the South African Police Service in the Free State province \( (N = 754) \). Confirmatory factor analysis was conducted on two instruments measuring subjective career success. These are the instruments of Gattiker and Larwood (1986) and that of Parker and Cushmir (1992). Linear regression analyses were performed to determine specific demographic, human capital and organisational predictors of subjective career success.

Construct validity indicated that the Perceived Career Success Scale of Gattiker and Larwood (1986) consists of three factors (i.e. job success, interpersonal success and non-organisational success); also that the Life-success Measures Scale of Parker and Chusmir (1992) consists of four factors (i.e. security, social contribution, professional fulfilment and personal fulfilment). Various demographic, human capital and organisational variables were found to be predictors of subjective career success. Recommendations were made for practice and future research.

Key words: subjective career success, psychometric properties, Police Service employees, demographic variables, human capital variables, organisational variables, Perceived Career Success Scale, Life-success Measures Scale
Introduction

Over the last decade, individuals seem to focus progressively more on their own career achievements than on the collective achievement of the organisation they are working for (Eby, Butts & Lockwood, 2003). This is known as subjective career success, or perceiving one’s success from a personal, subjective point of view. Subjective career success had been the focus of research for at least the past thirty years (Arthur, Khapova, & Wilderom, 2005; Ditsela, 2012; Gattiker & Larwood, 1986; Parker & Chusmir, 1992). Among the results of research on subjective career success it was proposed that this type of success is a multi-dimensional construct (Arthur et al., 2005; Dries, Pepermans & Carlier, 2008; Zhou, Sun, Guan, Li & Pan, 2012). In other words, it is a collective term consisting of multiple components or facets. Taking into account the complex human nature with its diverse motivations and psychological needs that underlie behaviour (Ginzberg, Ginsburg, Axelrad, & Herma, 1951; Maslow, 1943), it stands to reason that the experience of subjective career success would be just as diverse. For example, Dries et al. (2008) found that subjective career success consists of aspects concerning performance, advancement, creativity, satisfaction, cooperation, contribution, recognition and security.

Although exponents of previous qualitative research found subjective career success to be multi-dimensional (Dries et al., 2008, Visagie, 2012; Zhou et al., 2012), most quantitative studies employed a one dimensional instrument (Botha, 2011; Kirchmeyers, 2002; Riordan & Louw-Potgieter, 2011; Turban & Doherty, 1994). According to Dries (2011) when a quantitative approach is utilised, the instrument developed by Greenhaus, Parasuramon and Wormley (1990) is used most often (i.e. a one dimensional instrument). This is followed by the instrument of Nabi (1999), which is a two dimensional instrument (covering intrinsic or extrinsic job success). Other instruments that measure subjective career success include the Career Success Orientation Measure (Botha, 2011) and the instruments developed by Kirchmeyers (2002) and Turban and Doherty (1994). All these instruments measure subjective career success in terms of only one dimension. Another issue concerning the measurement of subjective career success is that quantitative studies focusing on subjective career success often make use of measurements that originally were designed to measure career satisfaction (Ali, Shaharudin & Anuar, 2012; De Vos, De Hauw & Van der Heijden, 2011; Hofmans, Dries & Pepermans, 2008). Seemingly these constructs share similarities in how it is operationalised, that is, regarding to the personal appraisal of work-related outcomes.
(Arthur et al., 2005; Bozionelos, 2008). Nevertheless it is possible that these are distinct aspects of the overall work experience. Given the issues relating to subjective career success, Zhou et al. (2012) stated that a comprehensive multi-dimensional instrument of subjective career success should be developed in order to confirm the validity of these qualitative results.

In terms of instruments that are available to measure subjective career success as a multi-dimensional construct, instruments that come to the fore, are that of Gattiker and Larwood (1986) and of Parker and Chusmir (1992). These researchers have developed the multi-dimensional instruments concerned specifically for measuring subjective career success. These instruments measure subjective career success on various dimensions. The dimensions include job, interpersonal, financial, hierarchical and non-organisational success, and also focus on status/wealth, security, social contribution, family relationships, professional fulfilment, personal fulfilment and security. It seems to be the only multi-dimensional instruments that exist currently and therefore need to be investigated further. In terms of the focus of these two instruments, similarities and differences are found.

The Perceived Career Success Scale (henceforth PCSS), developed by Gattiker and Larwood (1986), has a greater focus on work-related aspects that may influence levels of subjective career success. Emphasis is also placed on an individual’s perception of success that he/she achieved in comparison with colleagues and peers. The Life-success Measures Scale (henceforth LSMS) developed by Parker and Chusmir (1992) focuses on both work and non-work activities, although emphasis is placed on non-organisational interests. In addition, the evaluation of such interests is from a personal perspective, that is, the focus is on success achieved according to personal evaluation. Although both these instruments measure subjective career success, the focus of each differs. This is in line with the findings by Heslin (2003), who states that individuals evaluate their career in terms of self-referent and other-referent criteria. Furthermore, it may be beneficial to utilise both instruments in a research project in order to obtain a holistic view on subjective career success.

Another reason to establish valid and reliable measuring instruments for such an important organisational construct as subjective career success is that it is required by law. Legislation in South Africa requires psychometric instruments to be proven valid and reliable to ensure that it is applied to all employees equally and fairly and to prevent unfair discrimination in the workplace (Employee Equity Act, No 55 of 1998). Only a few studies have been
conducted in South Africa on subjective career success, especially according to a quantitative design (Botha, 2011; Ditsela, 2012; Riordan & Louw-Potgieter, 2011).

Furthermore, the demographics of the country is characterised by a diverse workforce. This is exacerbated by the large number of skilled people that are emigrating; the uneven distribution of an over-supply of unskilled labour and an under-supply of skilled labour as well as employment equity legislation that forces organisations to compete severely for talent amongst employees of designated groups (Olckers & Du Plessis, 2012). In addition, Lockwood (2006) and Hausknecht, Rodda and Howard (2009) found that organisations perform better when their employees are satisfied with their jobs. Therefore it is imperative to have a greater understanding of how individuals experience subjective career success. To date also no studies were undertaken in South Africa to evaluate specifically the psychometric properties of subjective career success instruments, focusing on the PCSS and LSMS instruments.

In addition to establishing the validity of previous qualitative results, valid and reliable instruments are needed in order to determine which aspects predict the presence of subjective career success. This knowledge will enable researchers to determine specific relationships between various predictors and different dimensions of subjective career success (Zhou et al., 2012). Previous research indicated that the following variables are predictors of subjective career success: gender, language groups, marital status and age, work experience, social capital and hours worked, job tenure, accomplishment rating, work centrality and level of education (Judge, Higgins, Thorensen, & Barrick, 1995; Nabi, 1999; Ng, Eby, Sorensen, & Feldman, 2005; Park, 2010). Further predictors of subjective career success were shown to be: supervisor support, organisational resources, employment security and progression possibilities, training and development opportunities, and organisational support (Judge et al., 1995; Nabi, 1999; Ng et al., 2005). Ng et al. (2005) have categorised these predictors as demographical, human capital and organisational variables.

Although the South African Police Service had been investigated in previous studies (Faull, 2013; Joubert & Grobler, 2013; Young, Koortzen & Oosthuizen, 2012), the topic of subjective career success was not studied among employees of this organisation. According to Mostert and Rothmann (2006) employees of SAPS not only face organisational challenges, they are also working in a highly stressful environment, which is characterised by a high crime rate and limited resources. Furthermore, the SAPS is a diverse organisation consisting
of numerous ranks (ranging from constable to general) and core components (i.e. visible policing, detective services, crime intelligence, South African Police Service, SAPS, 2012). Given this scenario, it would be expected that promotions and career advancement would be the norm in this organisation. However this is not the case. A large number of police members have the perception of being discriminated against on the basis of certain demographical variables. Therefore they have the experience that they are not being considered for promotions or that needed resources are withheld from them (Newman, Masuku & Dlamini, 2006). This state of affairs initiated various lawsuits against the organisation, which included: Minister of Safety and Security v Coetzer and Others (2003); SAPU obo Lotter v SAPS (2002); Solidarity obo Barnard v SAPS (2010). In addition, the Labour Court has ruled that no promotions in accordance with its affirmative action plan could be implemented until all relevant lawsuits have been heard (South African Press Association, 4 March 2013). This implies that objective career success (i.e. promotional and salary increases) is not easily attainable. Therefore subjective career success may increase in importance (Judge et al., 1995). Thus, in order to assist the SAPS and its employees, a study on subjective career success and its predictors may shed light on ways to keep police members motivated and engaged in their careers as well as assist members with career planning.

Research purpose and objectives

In the light of the above discussion, the two main objectives of this study was 1) to determine the construct validity and reliability of the PCSS (scale developed by Gattiker & Larwood, 1986) and LSMS (scale developed by Parker & Chusmir, 1992), and 2) to determine the specific demographic, human capital and organisational variables that predict subjective career success among members of the South African Police Service.

This study contributes to the current literature through the quantitative measurement of subjective career success. Another contribution is determining the psychometric properties of existing career success instruments. On organisational level, the study provides information on what employees will consider to be important in their subjective experience of career success. These findings can be applied to adjust policies and practices accordingly. Individually, employees obtain a better understanding of what contributes to their subjective experiences, which help them take responsibility for their professional and personal goals.
**Literature review**

**Two subjective career success instruments**

Traditionally, career success primarily had been measured by using “objective” criteria such as promotions and salary increases (Arthur et al., 2005; Russo, Kelly & Deacon, 1991). However, the current work environment, characterised by globalisation, economic uncertainty and technological change (Savickas, 2000) implies a change in the focus of career success. Literature presently distinguishes two categories of career success, namely, objective and subjective career success (Judge et al., 1995; Nabi, 1999; Ng et al., 2005). Objective career success refers to “verifiable attainments” that the individual obtain during a career (Heslin, 2005a; Savickas, 2000), such as salary level and ascendancy in the hierarchical structure. In contrast, subjective career success does not depend on the achievement of outcomes endorsed by society. This form of success rather involves the individual’s personal, internal perspectives, evaluations and interpretations of success achieved during a career (Valcour & Ladge, 2008). Such success can be defined as the “the accomplishment of desirable work-related outcomes at any point in a person’s work experiences over time” (Arthur et al., 2005, p. 179) and “the positive material and psychological outcomes resulting from one’s work-related activities and experience” (Callanan & Greenhaus, 2006, p. 148). This implies that the individual will experience career success according to his/her own judgement based on personal standards (Gattiker & Larwood, 1986).

In accordance with the traditional definition of subjective career success (i.e. the accomplishment of work-related outcomes, Arthur et al., 2005) Gattiker and Larwood (1986) developed the Perceived Career Success Scale (PCSS). As was seen, this scale focused primarily on the individual’s experiences at and of work. In their instrument, subjective career success is measured in terms of five dimensions, namely, job, interpersonal, financial-, hierarchical and non-organisational success. These dimensions can be expounded as follows:

- **job success** – responsibility, performance at work, development opportunities, support from managers and feeling happy and dedicated to work;
- **interpersonal success** – enjoying the acceptance and respect of colleagues, supervisors’ confidence and receiving good work evaluations;
- **financial success** – earning a fair or higher income in comparison with others;
- **hierarchical success** – opportunities for promotion and achieving career goals;
life success – being happy in other areas of life, which are not work-related (Gattiker & Larwood, 1986).

In addition to this instrument, Parker and Chusmir (1992) developed the Life-success Measures Scale (LSMS). This was in contrast to the traditional definition of subjective career success, but in line with the modern approach, which means more emphasis is placed on the individual’s personal perspectives and interpretations of career success achieved regardless of society’s norms and standards (Valcour & Ladge, 2008). In this instrument greater focus is placed on aspects beyond the scope of work, which add to the individuals’ perception of success (Heslin, 2005b).

The LSMS measures subjective career success on six dimensions, namely: status/wealth, social contribution, family relationships, personal fulfilment, professional fulfilment and security. These dimensions are expounded as follows:

- **status/wealth** – public recognition, having a high income and influence;
- **security** – job-related security, long term stability, regular pay increases and good benefits (Parker & Chusmir, 1991);
- **social contribution** – active involvement in society, being useful and helpful;
- **family relationships** – being happily married and skilled at parenting;
- **professional fulfilment** – commitment to work and satisfaction derived from the organisation and position, enjoying the respect of colleagues and superiors;
- **personal fulfilment** – deriving personal meaning and happiness from non-work activities, having self-respect, inner peace and contentment.

Although differences are found between these instruments in terms of its definition and focus, certain dimensions also seem to share similarities. The PCSS’ dimension “Financial success” is similar to “Status/wealth” and “Security” of the LSMS; “Hierarchical success” (PCSS) is similar to “Professional fulfilment” (LSMS); “Non-organisational success” (PCSS) is similar to “Family relationships” and “Personal fulfilment” (LSMS). However “Job success” and “Interpersonal success” (PCSS) are unique to the instrument, and “Social contribution” is unique to the LSMS.

The reliability of an instrument refers to the consistency in which a construct is measured across time and under standardised circumstances. This implies that similar results should be obtained every time the instrument is administered. The validity of an instrument refers to how well it measures that what it claims to measure (Foxcroft & Roodt, 2009). Determining
the validity and reliability of the instruments developed by Gattiker and Larwood (1986) and Parker and Chusmir (1992) in a single new research project might give a holistic view on many aspects surrounding subjective career success. It would also be possible to compare these measures. Furthermore, it is not known how these instruments perform within the South African context. No information was available on the validity of the PCSS, however, its Cronbach’s alpha coefficients ranged from 0.65-0.83 (Bozionelos, 1996; Gattiker & Larwood, 1986). Factor analysis proved the six dimensions of the LSMS and Cronbach’s alpha coefficients were 0.67-0.87 (Parker & Chusmir, 1991; 1992).

Predictors of subjective career success

It is of importance that both the individual and the organisation understand what predicts subjective career success, in order to make the necessary adjustments that will ensure that employees experience the highest level of subjective career success (Eby et al., 2003; Zhou et al., 2013). According to Ng et al. (2005), the predictors of subjective career success can be categorised according to demographical, human capital and organisational variables. Demographical variables that predict the experience of subjective career success include gender, language groups, marital status and age (Judge et al., 1995; Nabi, 1999; Park, 2010). Human capital variables are job tenure, level of education and career planning (Judge et al., 1995; Ng et al., 2005; Park, 2010); organisational variables include training and development opportunities and perceived organisational support (Ballout, 2006; Chen, 2010; Park, 2010).

Cook, Brashier and Hughes (2011) found that married women experience lower levels of subjective career success due to their dual responsibilities and their exposure to gender discrimination (Oliver & Karim, 2012). However, Bradley, Brown and Dower (2009) and Maintier, Joulain and Le Floc’h (2011) found that women’s experience of career success manifests differently from men. Hofstede (2001) suggest that cultural groups (measured in this study in terms of language groups) differ in terms of their work values and therefore their perceived levels of subjective career success will also be different. According to Levinson, Darrow, Klein Levinson, & McKee (1978) and Fieldman (2002) there are different career stages each with its own needs and challenges. These stages are represented through different ages (i.e.18–35 years is early adulthood or career establishment; 36–50 years is mid-life or career achievement and 50+ years are late life). Judge et al. (1995) and Ng et al. (2005) found that the variables age and job tenure is related negatively to subjective career success. The reason postulated is that an individual may have set him-/herself goals that were not reached.
within the expected timeframe. Nabi (2003) however, found that long tenure at an organisation can predict higher levels of subjective career success; however, in that case the individual had to feel loyal towards the organisation.

According to various researchers (Clark & Oswald, 1996; Ng et al., 2005; Wayne, Linden, Kraimer, & Graf, 1999) the level of education will influence subjective career success positively. In contrast, Zikic, Bonache and Cerdin (2010) found that the level of education can also be an impediment to career success. The established that highly qualified individuals often experience other obstacles that lower their subjective career success. Nabi (2003) found that individuals that engage in career planning strategies such as seeking exposure, networking and self-nomination (Lee, 2002; Ng et al., 2005), enjoy higher levels of subjective career success. On the other hand, Abele and Spurk (2008) found that highly qualified individuals can also experience lower levels of subjective career success, possibly because they set themselves unrealistically high goals and need a delayed period to achieve those goals. Both Ng et al. (2005) and Wayne et al. (1999), found a positive relationship between training and development opportunities, and subjective career success. Ballout (2005) and Chen (2010) found that perceived organisational support is a predictor of subjective career success.

**Subjective career success studies done in South Africa**

In South Africa, only few studies on subjective career success had been undertaken. These include the following: a study by Ditsela (2012) among members of the South African National Defence Force; Lemmer and de Villiers (2004) targeting professionals in both the public and private sectors; Riordan and Louw-Potgieter (2011) done among academic staff; Botha (2011) researching human resource practitioners. When a quantitative approach was used, different instruments were utilised. For example, the study by Riordan and Louw-Potgieter (2011) employed a combination of instruments developed by Kirchmeyers (2002) and Turban and Doherty (1994). Botha (2011) used the Career Success Orientation measure. Both these approaches obtained satisfactory validity and reliability, but they also measured subjective career success only in terms of a single dimension (Botha, 2011; Kirchmeyer, 2002; Turban & Doherty, 1994)
Theoretical framework

Subjective career success can be explained by using the contest-mobility and sponsored-mobility model of career success (Ng et al., 2005). According to this model, all employees participate in an open “contest” by using various strategies to attain credentials that are associated with a coveted status or sought after outcomes (Marshall, 1998; Turner, 1960). According to this model all are equal in this “contest”; therefore the “winners” are those who have the precise qualities needed for success. In light of this explanation, qualities such as job tenure, level of education, career planning and perceived organisational support should be related positively to subjective career success (Ng et al., 2005). However, according to the sponsored-mobility model employees only have access to a limited number of strategies (Marshall, 1998; Turner, 1960). As a result there is a dominant group, the “elite” who control results according to their desired outcomes (Marshall, 1998).

An employee’s status in this instance is not earned but rather given to him/her according to some predetermined criteria. No effort from the employee will affect the outcome, unless he/she is sponsored by the “elite” (Ng et al., 2005). This approach can be translated into interaction within organisations: those that are “sponsored” will have access to more resources, which in turn will influence their subjective career experience. Demographic variables are most likely to be sponsored in an organisation (De Vos et al., 2011; Ng et al., 2005; Wayne et al., 1999) as well as training and development opportunities (Ng et al., 2005).

Conclusion

Although previous research has found subjective career success to be a multi-dimensional construct, there exists limited quantitative research on this subject, especially in South Africa. This study aims to determine the validity and reliability of two existing multi-dimensional subjective career success instruments (PCSS and LSMS) as well as investigate demographical, human capital and organisational variables that may predict the experience of subjective career success, among members of the South African Police Service.
Research design

Research approach

A quantitative cross-sectional survey design was employed in this study. The cross-sectional survey design enables researchers to determine interrelationships between variables in the population under investigation (Struwig & Stead, 2001). This type of design entails the collection of data at a single point in time, from multiple cases, after which patterns of association can be determined when the data is examined (Bryman & Bell, 2003; Olsen & George, 2004).

Research method

Research participants

A convenience sample of employees \( (n=754) \) from within the SAPS in the Free State province was taken for this study. Employees from various SAPS ranks as well as clerical personnel in the SAPS were included in the sample. During the data collection a response rate of 75.5 % was obtained. Characteristics of the participants are given in Table 1 on the following page.

Table 1

*Characteristics of Participants \((N = 754)\)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>477</td>
<td>63.20</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>268</td>
<td>35.50</td>
</tr>
<tr>
<td></td>
<td>Missing values</td>
<td>10</td>
<td>1.30</td>
</tr>
<tr>
<td>Language groups</td>
<td>Western-Germanic</td>
<td>124</td>
<td>16.40</td>
</tr>
<tr>
<td></td>
<td>Sotho</td>
<td>472</td>
<td>62.50</td>
</tr>
<tr>
<td></td>
<td>Nguni</td>
<td>125</td>
<td>16.60</td>
</tr>
<tr>
<td></td>
<td>Venda/Tonga</td>
<td>29</td>
<td>3.80</td>
</tr>
<tr>
<td></td>
<td>Missing values</td>
<td>5</td>
<td>0.70</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>382</td>
<td>51.30</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>314</td>
<td>42.10</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>49</td>
<td>6.60</td>
</tr>
<tr>
<td>Item</td>
<td>Category</td>
<td>Frequency</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------</td>
<td>-----------</td>
<td>----------------</td>
</tr>
<tr>
<td>Age</td>
<td>18-25 years</td>
<td>40</td>
<td>5.30</td>
</tr>
<tr>
<td></td>
<td>26-35 years</td>
<td>383</td>
<td>50.70</td>
</tr>
<tr>
<td></td>
<td>36-45 years</td>
<td>249</td>
<td>33.00</td>
</tr>
<tr>
<td></td>
<td>46 and older</td>
<td>72</td>
<td>9.50</td>
</tr>
<tr>
<td></td>
<td>Missing values</td>
<td>11</td>
<td>1.50</td>
</tr>
<tr>
<td>Job tenure</td>
<td>Less than two years of experience</td>
<td>83</td>
<td>11.00</td>
</tr>
<tr>
<td></td>
<td>3-5 years of experience</td>
<td>178</td>
<td>23.60</td>
</tr>
<tr>
<td></td>
<td>6-10 years of experience</td>
<td>235</td>
<td>31.10</td>
</tr>
<tr>
<td></td>
<td>11-20 years of experience</td>
<td>124</td>
<td>16.40</td>
</tr>
<tr>
<td></td>
<td>21 years and more</td>
<td>14</td>
<td>1.90</td>
</tr>
<tr>
<td></td>
<td>Missing values</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of education</td>
<td>Less than Grade 12</td>
<td>59</td>
<td>7.80</td>
</tr>
<tr>
<td></td>
<td>Grade 12</td>
<td>407</td>
<td>53.90</td>
</tr>
<tr>
<td></td>
<td>Certificate</td>
<td>117</td>
<td>15.50</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>115</td>
<td>15.20</td>
</tr>
<tr>
<td></td>
<td>Degree and higher</td>
<td>46</td>
<td>6.10</td>
</tr>
<tr>
<td></td>
<td>Missing values</td>
<td>11</td>
<td>1.50</td>
</tr>
<tr>
<td>Training and development</td>
<td>None</td>
<td>30</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>1 to 4</td>
<td>319</td>
<td>42.30</td>
</tr>
<tr>
<td></td>
<td>5 to 9</td>
<td>215</td>
<td>28.50</td>
</tr>
<tr>
<td></td>
<td>10 and more</td>
<td>137</td>
<td>18.10</td>
</tr>
<tr>
<td></td>
<td>Missing values</td>
<td>53</td>
<td>7.00</td>
</tr>
<tr>
<td>SAPS salary level</td>
<td>Non-commissioned officers and clerical personnel</td>
<td>682</td>
<td>90.40</td>
</tr>
<tr>
<td></td>
<td>Commissioned officers</td>
<td>38</td>
<td>4.90</td>
</tr>
<tr>
<td></td>
<td>Missing values</td>
<td>34</td>
<td>4.50</td>
</tr>
</tbody>
</table>

According to Table 1, the majority of the participants were male (63.20%), belonged to the Sotho language group (62.50%), married (51.30%), and were between the ages of 26 and 35.
years (50.70%). Out of the sample, 31.10% of participants have been working for the SAPS for six to ten years, more than half of the participants have Grade 12 as their highest qualification (53.90%), 42.30% indicated that they have received between one and four training and development opportunities from the SAPS, whilst and the majority (90.40%) were either non-commissioned officers or clerical personnel.

**Measuring instruments:**

The following measuring instruments were utilised in the empirical study:

As was discussed previously, two instruments that measure subjective career success were used in this study, namely the Perceived Career Success instrument (PCSS) developed by Gattiker and Larwood (1986) and the Life-success Measures Scale (LSMS) of Parker and Chusmir (1992).

**PCSS:** Gattiker and Larwood (1986) developed this instrument that consists of five factors measuring perceived career success (with 23 items). These dimensions are: *job success* (eight items, e.g. “I am most happy when I am at work”), *interpersonal success* (four items, e.g. “I am getting good performance evaluations”), *financial success* (three items, e.g. “I am earning as much as I think my work is worth”), *hierarchical success* (four items, e.g. “I am pleased with the promotions I have received so far”) and *non-organisational success* (four items, e.g. “I am enjoying activities outside of work”). All the items were scored on a five point frequency-rating scale ranging from 1 (*disagree completely*) to 5 (*agree completely*). Cronbach’s alpha coefficients obtained for these factors during previous studies ranged between 0.65 and 0.79 (i.e. job success: 0.75; interpersonal success 0.79; financial success: 0.74; hierarchical success: 0.65; and non-organisational success: 0.71) (Gattiker & Larwood, 1986). In a study conducted by Bozionelos (1996) a Cronbach’s alpha coefficient of 0.83 was found for the construct of overall subjective career success.

**LSMS:** Parker and Chusmir (1992) developed this scale that measures success in the following six areas (with 42 items): *status/wealth* (eight items, e.g. “Getting others to do what I want”), *security* (five items, e.g. “Having economic security”), *social contribution* (eight items, e.g. “Being able to contribute to society”), *family relationships* (eight items, e.g. “Having a happy marriage”), *professional fulfilment* (five items, e.g. “Being satisfied with my profession”) and *personal fulfilment* (eight items, e.g. “Having personal satisfaction”) (Chusmir & Parker, 2001; Parker & Chusmir, 1991). Items were rated according to the
individual’s perception of success on a five-point scale, ranging from 1 (never important) to 5 (always important). The Cronbach’s alpha coefficients found in the development study ranged between 0.67 and 0.87 (i.e. status/wealth: 0.85; social contribution: 0.84; family relationships: 0.87; personal fulfilment: 0.82; professional fulfilment: 0.67 and security: 0.72) (Parker & Chusmir, 1992). Hon and Rensvold (2006) found the Cronbach’s alpha coefficients to be between 0.72-0.77.

Survey of perceived organisational support: The shortened version of this instrument, as developed by Eisenberger, Huntington, Hutchison, & Sowa (1986), were utilised in this study to measure individuals’ perception of the organisational support they receive. This instrument consists of 16 items of which seven are reversed (e.g. “The organisation fails to appreciate any extra effort from me”) and is measured on a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Previous studies indicated Cronbach’s alphas of between 0.93 and 0.97 (Eisenberger, Fasolo, & LaMastro, 1990; Eisenberger, Huntington, Hutchinson & Sowa, 1986; Shore & Tetric, 1991).

Career planning: This variable was measured by using the instrument developed by Gould (1979). It consists of six items of which three are reversed (e.g. “My career objectives are not clear”). These items were measured on a six-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). In previous studies Cronbach’s alpha coefficients ranged between 0.80 and 0.83 (Aryee & Debra, 1993, Ng et al., 2005, Park, 2010).

Biographical questionnaire: This was also administered to identify biographical characteristics of the sample in the study. Information was gathered on participants’ gender, age, language groups, marital status and salary level.

Research procedure and ethical considerations

Permission was obtained from the SAPS to conduct the research at police training colleges and stations in the Free State. The research project was evaluated and monitored by the appointed research committee of the SAPS. Three SAPS training colleges were visited (Boithuso, Phutaditjaba and Thabong) together with various stations (Vrede, Roadside, Koffiefontein, and Mafube). SAPS employees were asked to complete the pen-and-paper questionnaires. In the questionnaires an information letter was included. The letter explained the purpose of the survey, how the information will be dealt with (e.g. to be used only for research purposes), as well as the emphasis placed on the confidential, anonymous and
voluntary participation. Questionnaires were collected immediately after completion. As agreed with the research committee of the SAPS, the SAPS were presented with a copy of the results that were obtained in this study.

**Statistical analysis**

The collected data was analysed with the use of the SPSS and AMOS programmes (Arbuckle, 2010; IBM SPSS Statistics 22.0, 2013). Techniques that were employed include descriptive and inferential statistics. Descriptive statistics refer to the measurement of central tendency (e.g. mean) and of variance (e.g. standard deviation and variance) as well as kurtosis and skewness of the data. These techniques organise large amounts of quantitative data in order to get a summary of the tendencies that can be observed from the collected data (Heiman, 2004).

Confirmatory factor analysis (CFA) were done on the two instruments that measure subjective career success to determine whether the sample yields the same multidimensionality of the theoretical constructs as expected (Brown, 2006). Using the AMOS programme the “goodness of fit” was determined by statistically appraising the fit of a model to the covariance matrix. Various indices were computed to confirm the goodness of fit. These include the chi-square ($\chi^2$), the chi-square/degrees of freedom ($\chi^2$/df or CMIN/DF) values; also the Normed Fit Index (NFI), Incremental Fit Index (IFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI) and root mean square error of approximation (RMSEA). The NFI, IFI, TLI and CFI was used since the likelihood ratio chi square ($\chi^2$) is sensitive to sample size – i.e. the probability of rejecting a theoretical (hypothesised) model increases with sample size (Bentler, 1990). Acceptable fit of the model is indicated by non-significant $\chi^2$ values, values greater than 0.90 for NFI, IFI, TLI and CFI; also RMSEA values smaller than or equal to 0.08 (Browne & Cudeck, 1993) and $\chi^2$/df < 5.00 (Bentler & Bonett, 1980). The reliability of the theoretically identified constructs was determined by calculating Cronbach’s alpha coefficients ($\alpha$). It is considered to be acceptable when $\alpha > 0.70$ (George & Mallery, 2003; Nunnally & Bernstein, 1994).

Following construct validity, convergent validity was also established. The SPSS program (IBM SPSS Statistics 22.0, 2013) was used to assess convergent validity. Convergent validity was determined by examining the correlation of the coefficients between various dimensions of the two subjective career success instruments. Previous research indicated that correlation
coefficients should be 0.35 or more to indicate evidence for convergent validity (Hammill, Brown & Bryant, 1989).

By employing the SPSS programme, linear regression analyses were used to determine which variables were significant predictors of the two dimensions of subjective career success. These entail the following variables: demographic (i.e. gender, language groups, marital status and age), human capital (i.e. job tenure, level of education and career planning) and organisational variables (i.e. training and development opportunities and organisational support). Statistical significance was set at \( p \leq 0.05 \) and \( p \leq 0.01 \). When the variables (demographic, human capital and organisational) were entered into the linear regression analysis, to determine predictors of subjective career success, dummy variables were used. Dummy variables were developed for variables with two or more mutually exclusive categories. Dummy variables are artificial variables that are created when a variable has two or more distinct categories. This was done to ensure that the correct analysis for attribute variables were computed (Skrivanek, 2009).

In this study, the control group, or baseline, was created from the categories with the highest number of responses in each variable (Field, 2013). These control groups were created in order to determine differences between the groups, whilst all other explanatory variables were held constant (Skrivanek, 2009). The control groups or baselines for the demographical variables language groups, marital status and age were Sotho, Married and 26-35 years respectively. The baseline group for job tenure and level of education were 6-10 years of experience and Grade 12 respectively. The baseline group for training and development opportunities was 1-4 opportunities.

**Results**

**Construct validity of the two perceived subjective career success instruments**

The first objective of this study was to determine the construct validity of the two instruments to measure subjective career success that were utilised in this study (i.e. the PCSS and LSMS). This was achieved by employing CFA with the AMOS programme (Arbuckle, 2010).
CFA of the PCSS of Gattiker and Larwood (1986)

During the construct validity analyses, various models were tested by using CFA in AMOS. The first model that was tested was the original model as conceptualised and developed by Gattiker and Larwood (1986). This model hypothesised that subjective career success consists of five factors (i.e. job success, interpersonal success, financial success, hierarchical success and non-organisational success). All of these factors describe the different dimensions of the construct subjective career success (see appendix A for all the items of the original five-factor model). However, the initial model fit for this five-factor model was not satisfactory. This indicates that in the present study the data did not yield the same multi-dimensionality of the theoretical constructs as expected, thus indicating that no good fit could be established with this initial five-factor model ($\chi^2 = 2594.27 \ (N = 754)$, $\chi^2/df = 11.792$, NFI = 0.76, IFI = 0.78, TLI = 0.74, CFI = 0.77 and RMSEA = 0.12). According to the modification indices (MI) some items were problematic and therefore deleted. These items were those labelled GLJS3, GLJS5, GLJS7, GLJS8, GLHS4 and GLNS3. After the elimination of these items, the fit improved somewhat but was still not satisfactory. The adjusted five-factor model was tested again, but the modification indices showed that all the items on the hierarchical success dimension were still problematic. Therefore it was decided to eliminate this dimension altogether. Other problematic items on the other dimensions were also eliminated, based on the high MI’s (Steiger, 1990).

That led to the testing of a four-factor model (i.e. the initial five-factor model excluding hierarchical success and various problematic items on the other dimensions). The fit was $\chi^2 = 509.15 \ (N = 754)$, $\chi^2/df = 10.61$, NFI = 0.87, IFI = 0.88, TLI = 0.84, CFI = 0.88 and RMSEA = 0.11. Although the fit showed some improvement, the modification indices again indicated some problematic items, this time on the dimension of financial success. Since the financial dimension was only measured with three items, it was decided to delete the financial dimension altogether (Costello & Osborne, 2005). Thereafter only three dimensions remained and consequently a three-factor model was tested, consisting of job success, interpersonal success and non-organisational success. The results of this three-factor model are displayed in Table 2 (also see appendix A for the items of the final three-factor model).
Table 2

*Three-factor model of the Perceived Career Success Scale of Gattiker and Larwood (1986)*

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>$\chi^2$/df</th>
<th>NFI</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-factor model</td>
<td>306.32</td>
<td>12.76</td>
<td>0.91</td>
<td>0.91</td>
<td>0.87</td>
<td>0.91</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Although the results displayed in Table 2 indicate an unsatisfactory overall model fit, according to the modification indices this is the best model fit for the data. The $\chi^2$ value (306.32) was significant, but Bentler (1990) argues that this statistic is sensitive to sample size, which increases the probability of wrongfully rejecting the correct model fit (i.e. Type I error). In addition, the values of $\chi^2$/df (12.76) and RMSEA (0.13) were above the acceptable levels of 5.00 and 0.08 respectively (Bentler & Bonett, 1980). To reduce the likelihood of making a Type I error, NFI, IFI, TLI and CFI were used to determine the model’s fit. The NFI (0.91), IFI (0.91) and CFI (0.91) values were all above 0.90, which indicated a good fit. However, the TLI (0.87) was below the 0.90 acceptable level (Bentler & Bonett, 1980; Byrne, 2010; Browne & Cudeck, 1993).

Following the CFA of the Perceived subjective Career Success instrument (PCSS) of Gattiker and Larwood (1986), similar CFA was done for the Life-success Measure Scale (LSMS) of Parker and Chusmir (1992).

**CFA of the LSMS of Parker and Chusmir (1992)**

Similar to the aforementioned CFA, the first model tested for the LSMS was the original model as conceptualised and developed by Parker and Chusmir (1992). This was a six-factor model with the following dimensions of subjective career success: status/wealth, security, social contribution, family relationships, professional fulfilment and personal fulfilment. Similar to the results of the Gattiker and Larwood instrument, the initial data did not yield the same multi-dimensionality of the initial theoretical constructs, as expected. According to the modification indices (MI) some items were problematic and therefore deleted (e.g. the items labelled PCFR1, PCFR2, PCFR3, PCFR4, PCSC1, PCSC2, PCSC6, PCSC7, PCSW1, PCSW2, PCSW3, PCSW4, PCPF1, PCPF3, PCPF4, PCPF7, PCSE4 & PCSE5, see Appendix A for all the items of the original six-factor model). A better fit was achieved after the elimination of these items ($\chi^2 = 847.35$ (N = 754), $\chi^2$/df = 4.37, NFI = 0.86, IFI = 0.89, TLI = 0.86, CFI = 0.89 and RMSEA = 0.07). Although the fit had improved, it was still not
satisfactory. On closer examination of the Cronbach’s alpha coefficients for these dimensions, it became apparent that the status/wealth dimension’s reliability was low; $\alpha = 0.60$. Subsequently it was decided to delete this factor. Thereafter a new five-factor model (i.e. the initial six-factor model excluding the status/wealth dimension) was tested with the following results: $\chi^2 = 482.64$ $(N = 754)$, $\chi^2$/df = 4.43, NFI = 0.90, IFI = 0.92, TLI = 0.90, CFI = 0.92 and RMSEA = 0.07.

When inspecting the descriptive statistics of the remaining dimensions, it was observed that the skewness and kurtosis of the family relationships factor was very high (Bai & Ng, 2005). Therefore it was decided also to delete this dimension altogether (DeCarlo, 1997). Consequently, a last model was tested with the four remaining dimensions (i.e. security, social contribution, professional fulfilment, personal fulfilment). The goodness of fit for this four-factor model was better and satisfactory. The results are displayed in Table 3 on the following page (also see appendix A for the items of the final four-factor model).

Table 3

Four-factor model of Life-success Measures Scale of Parker and Chusmir (1992)

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>$\chi^2$/df</th>
<th>NFI</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four-factor model</td>
<td>306.83</td>
<td>4.32</td>
<td>0.92</td>
<td>0.94</td>
<td>0.92</td>
<td>0.94</td>
<td>0.07</td>
</tr>
</tbody>
</table>

As indicated in Table 3 this model fitted the data the best, seeing that the NFI (0.92), IFI (0.94), TLI (0.92) and CFI (0.94) values were all above 0.90, the value of $\chi^2$/df was below the acceptable level of 5.00 (Bentler & Bonet, 1980; Byrne, 2010) and the RMSEA (0.07) portrayed a reasonable fit (between 0.05-0.08) (Cudeck & Browne, 1993). The results in this study suggest that the LSMS is therefore a four-factor model consisting of security, social contribution, professional fulfilment and personal fulfilment.

Following the construct validity it was also decided to determine the convergent validity of the two instruments, to establish how these instruments correlate with one another. The results are displayed in Table 4 on the following page.
Table 4

*Correlation coefficients between dimensions of the Perceived Career Success Scale and the Life-success Measure Scale (n = 754)*

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The three factors of Perceived Subjective Career Success</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Job success</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Interpersonal success</td>
<td>0.69***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Non-organisational Success</td>
<td>0.60***</td>
<td>0.59**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>The four factors of the Life-success Measure Scale</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Security</td>
<td>0.18*</td>
<td>0.16*</td>
<td>0.17*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Social contribution</td>
<td>0.23*</td>
<td>0.24*</td>
<td>0.30**</td>
<td>0.38**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Professional fulfilment</td>
<td>0.34**</td>
<td>0.34**</td>
<td>0.27*</td>
<td>0.57***</td>
<td>0.62**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Personal fulfilment</td>
<td>0.21*</td>
<td>0.22*</td>
<td>0.35**</td>
<td>0.47**</td>
<td>0.47*</td>
<td>0.53**</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significant (p < 0.01); *Practical significance r > 0.30 (medium effect); **Practical significance r > 0.50 (large effect)

The correlations marked in bold typeface are indicative of convergent validity.
As displayed in Table 4, the three dimensions of the PCSS of Gattiker and Larwood (1986) correlated well with each other (ranged between 0.59 and 0.69). These high correlations between the dimensions were expected and acceptable since it measures the overall construct, subjective career success, but it was not too high, with no indication of multi-collinearity (Freund, Wilson & Sa, 2006). Likewise, the four dimensions of the LSMS of Parker and Cushmir (1992) also correlated well with each other (ranged between 0.38 and 0.62), also with correlations which were not too high, indicating no multi-collinearity (Freund et al., 2006).

When inspecting the correlations between the various dimensions of the two instruments with one another, Table 4 indicates that significant correlations were found between professional fulfilment and both job success (0.34) interpersonal success (0.34). These correlations are practically significant with a medium effect. In addition, personal fulfilment also correlated significantly with non-organisational success (0.35) and practically with medium effect. This is very close to the guidelines set out by Hammill et al. (1989), who content that convergent validity is established when the correlation coefficient is 0.35 or higher.

Following the construct and convergent validity of the two subjective career success instruments, the descriptive statistical analysis was done. The mean, standard deviation, skewness and kurtosis, as well as the alpha coefficients are displayed in Table 5 below.

Table 5

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensions of PCSS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job success</td>
<td>3.78</td>
<td>1.03</td>
<td>-0.85</td>
<td>0.02</td>
<td>0.81</td>
</tr>
<tr>
<td>Interpersonal success</td>
<td>3.65</td>
<td>0.94</td>
<td>-0.70</td>
<td>0.31</td>
<td>0.77</td>
</tr>
<tr>
<td>Non-organisational success</td>
<td>4.00</td>
<td>0.98</td>
<td>-1.34</td>
<td>1.47</td>
<td>0.74</td>
</tr>
</tbody>
</table>
Table 5 (continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensions of LSMS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>3.98</td>
<td>0.94</td>
<td>-0.89</td>
<td>0.13</td>
<td>0.79</td>
</tr>
<tr>
<td>Social contribution</td>
<td>4.28</td>
<td>0.69</td>
<td>-0.098</td>
<td>0.83</td>
<td>0.78</td>
</tr>
<tr>
<td>Professional fulfilment</td>
<td>4.25</td>
<td>0.71</td>
<td>-1.02*</td>
<td>0.86</td>
<td>0.71</td>
</tr>
<tr>
<td>Personal fulfilment</td>
<td>4.48</td>
<td>0.72</td>
<td>-1.75*</td>
<td>3.25*</td>
<td>0.76</td>
</tr>
</tbody>
</table>

*High skewness and kurtosis

Acceptable Cronbach’s alpha coefficients were obtained for all the dimensions when compared to the guideline of $\alpha \geq 0.70$ (George & Mallery, 2003; Nunnally & Bernstein, 1994), therefore all the dimensions are reliable. Furthermore, all the scores of the measuring instruments were distributed normally, except for the dimension of non-organisational success of Gattiker and Larwood (1986), and the two dimensions, professional fulfilment and personal fulfilment of Parker and Chusmir (1992), which displayed high skewness and kurtosis.

Following the validity, reliability and descriptive statistics, inferential statistics were calculated, in order to reach the second objective. This objective was to determine which demographic, human capital and organisational variables predict subjective career success.

**Predictors for the two subjective career success instruments**

In accordance with the overall second objective of this study, linear regression analyses were performed to determine which variables significantly predict the dimensions of the two instruments measuring subjective career success. The variables are: demographic (i.e. gender, language groups, marital status and age), human capital (i.e. job tenure, level of education and career planning) and organisational variables (i.e. training and development opportunities and perceived organisational support). Respectively, three linear regression analyses were performed with the demographic, human capital and organisational variables as independent variables. This was done first with the dimensions of the PCSS of Gattiker and Larwood (1986) as the dependent variables and thereafter with the dimensions of the LSMS of Parker and Chusmir (1992) as dependent variables.
Demographic predictors of subjective career success

Guided by the literature (Judge et al., 1995; Nabi, 1999; Park, 2010), various demographic variables with the use of dummy variables (for language groups, marital status and age) were entered as predictors for the three dimensions of perceived subjective career success of Gattiker and Larwood (1986). The results are summarised in Table 6 below.

Table 6

Linear Regression Analyses with demographic variables as independent variables and the dimensions of PCSS (Gattiker & Larwood, 1986) as dependent variables

<table>
<thead>
<tr>
<th></th>
<th>Job success</th>
<th>Interpersonal success</th>
<th>Non-organisational success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.24</td>
<td>0.07*</td>
<td>0.02</td>
</tr>
<tr>
<td>Language group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sotho vs. Western-Germanic</td>
<td>-0.03</td>
<td>0.05</td>
<td>0.08*</td>
</tr>
<tr>
<td>Sotho vs. Nguni</td>
<td>-0.01</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>Sotho vs. Venda-Tonga</td>
<td>0.02</td>
<td>0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married vs. single</td>
<td>0.03</td>
<td>0.00</td>
<td>-0.01</td>
</tr>
<tr>
<td>Married vs. other</td>
<td>-0.02</td>
<td>-0.03</td>
<td>-0.00</td>
</tr>
</tbody>
</table>
Table 6 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Job success</th>
<th>Interpersonal success</th>
<th>Non-organisational success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-35 years vs. 18-25 years</td>
<td>0.09*</td>
<td>0.08*</td>
<td>0.08*</td>
</tr>
<tr>
<td>26-35 years vs. 36-45 years</td>
<td>-0.06</td>
<td>-0.09*</td>
<td>-0.06</td>
</tr>
<tr>
<td>26-35 years vs. 46 years and older</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.10*</td>
</tr>
<tr>
<td>Model R²</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
</tr>
</tbody>
</table>

* Statistically significant (p < 0.05); ** Statistically significant (p < 0.01) “Baseline groups” were: Sotho; Married; 26-35 years; β: standardised coefficients

As summarised in Table 6, for the job success dimension as dependant variable, the demographical variables produced a statistical significant model ($F_{(1,630)} = 1.63; \rho = 0.10$), accounting for 2% of the variance. More specifically, the results indicated that 26-35 years vs. 18-25 years was a statistically significant predictor ($\beta = -0.09; \rho \leq 0.05$). Regarding the dimension interpersonal success as dependent variable, a statistical significant model was found ($F_{(2,197)} = 2.20; \rho = 0.21$), which explained 3% of the variance. More specifically the following were found to be statistically significant predictors: gender ($\beta = 0.78; \rho \leq 0.05$) and 26-35 years vs. 18-25 years ($\beta = 0.08; \rho \leq 0.05$), as well as 26-35 years vs. 36-45 years ($\beta = -0.09; \rho \leq 0.05$). Lastly, for the dimension non-organisational success as dependant variable, a statistical significant model was found ($F_{(2,065)} = 2.07; \rho = 0.03$), which explained 3% of the variance. More specifically, Sotho vs. Western-Germanic ($\beta = 0.08; \rho \leq 0.05$) were a significant predictor, as well as 26-35 years vs. 18-25 years ($\beta = 0.08; \rho \leq 0.05$) and 26-35 years vs. 46 years and older ($\beta = -0.10; \rho \leq 0.05$).

Similar regression analyses were also performed with the four dimensions of the LSMS as dependent variables. The results are displayed in Table 7 below.
Table 7

Linear Regression Analyses with demographic variables as independent variables and the dimensions of the LSMS (Parker & Chusmir, 1992) as dependent variables

<table>
<thead>
<tr>
<th></th>
<th>Security</th>
<th>Social contribution</th>
<th>Professional fulfilment</th>
<th>Personal fulfilment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.14*</td>
<td>0.04</td>
<td>0.12*</td>
<td>0.09*</td>
</tr>
<tr>
<td>Language group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sotho vs. Western-Germanic</td>
<td>0.05</td>
<td>-0.05</td>
<td>0.03</td>
<td>0.09*</td>
</tr>
<tr>
<td>Sotho vs. Nguni</td>
<td>0.03</td>
<td>0.03</td>
<td>0.07</td>
<td>0.03</td>
</tr>
<tr>
<td>Sotho vs. Venda-Tonga</td>
<td>0.05</td>
<td>-0.01</td>
<td>0.05</td>
<td>0.04</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married vs. single</td>
<td>0.00</td>
<td>0.06</td>
<td>0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td>Married vs. other</td>
<td>-0.05</td>
<td>-0.95*</td>
<td>-0.10*</td>
<td>-0.04</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26–35 years vs. 18–25 years</td>
<td>-0.03</td>
<td>0.00</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>26–35 years vs. 36–45 years</td>
<td>0.03</td>
<td>-0.04</td>
<td>0.01</td>
<td>-0.02</td>
</tr>
<tr>
<td>26-35 years vs. 46 years and older</td>
<td>-0.03</td>
<td>-0.02</td>
<td>-0.06</td>
<td>-0.11*</td>
</tr>
</tbody>
</table>
As summarised in Table 7, for the security dimension as dependant variable, the demographic variables produced a statistical significant model \( F(2,455) = 2.46; \rho = 0.01 \), accounting for 3% of the variance. More specifically, the results indicated that the dimension gender was a statistically significant predictor \( (\beta = 0.14; \rho \leq 0.05) \). Regarding the dimension social contribution as dependent variable, a statistical significant model was found \( F(2,412) = 2.41; \rho = 0.01 \), which explained 3% of the variance. More specifically the dimension married vs. other \( (\beta = -0.10; \rho \leq 0.05) \) was statistically significant. For the dimension professional fulfilment, a statistical significant model was found \( F(3,257) = 3.26; \rho = 0.00 \) which explained 4% of the variance. Gender was statistically significant \( (\beta = 0.00; \rho \leq 0.05) \), as well as married vs. other \( (\beta = -0.10; \rho \leq 0.05) \). Lastly, for the dimension personal fulfilment as a dependant variable, a statistical significant model was found \( F(2,535) = 2.54; \rho = 0.01 \), which explained 3% of the variance. More specifically Sotho vs. Western-Germanic \( (\beta = -0.09; \rho \leq 0.05) \) was statistically significant as well as 26-35 years vs. 46 years and older \( (\beta = -0.11; \rho \leq 0.05) \).

**Human capital predictors for subjective career success**

Guided by the literature (Judge et al., 1995; Ng et al., 2005; Park, 2010), job tenure, education level and career planning were entered as human capital predictors for the three dimensions of PCSS of Gattiker and Larwood (1986). This was done with the use of dummy variables for job tenure and education level. The results are summarised in Table 8 below.

<table>
<thead>
<tr>
<th></th>
<th>Security</th>
<th>Social contribution</th>
<th>Professional fulfilment</th>
<th>Personal fulfilment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model R²</td>
<td>0.03</td>
<td>0.03</td>
<td>0.04</td>
<td>0.03</td>
</tr>
</tbody>
</table>

* Statistically significant \( (\rho < 0.05) \); ** Statistically significant \( (\rho < 0.01) \); “Baseline groups” were: Sotho; Married; 26-35 years; \( \beta \): standardised coefficients.
Table 8

*Linear Regression Analyses with human capital variables as independent variables and the dimensions of PCSS (Gattiker & Larwood, 1986) as dependent variables*

<table>
<thead>
<tr>
<th></th>
<th>Job success</th>
<th>Interpersonal success</th>
<th>Non-organisational success</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job tenure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10 years vs. 2 years or less</td>
<td>-0.01</td>
<td>0.00</td>
<td>-0.01</td>
</tr>
<tr>
<td>6-10 years vs. 3-5 years</td>
<td>-0.03</td>
<td>0.04</td>
<td>0.01</td>
</tr>
<tr>
<td>6-10 years vs. 21 years and more</td>
<td>-0.05</td>
<td>-0.05</td>
<td>-0.03</td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 12 vs. less than</td>
<td>-0.02</td>
<td>-0.03</td>
<td>-0.09*</td>
</tr>
<tr>
<td>Grade 12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 12 vs. Certificate</td>
<td>0.07</td>
<td>0.03</td>
<td>0.07</td>
</tr>
<tr>
<td>Grade 12 vs. Diploma</td>
<td>-0.03</td>
<td>-0.08*</td>
<td>-0.03</td>
</tr>
<tr>
<td>Grade 12 vs. Degree</td>
<td>0.10</td>
<td>-0.01</td>
<td>0.06</td>
</tr>
<tr>
<td>Career planning</td>
<td>-0.12**</td>
<td>0.14**</td>
<td>0.10**</td>
</tr>
<tr>
<td>Model R²</td>
<td>0.03</td>
<td>0.04</td>
<td>0.04</td>
</tr>
</tbody>
</table>

* Statistically significant (p < 0.05); ** Statistically significant (p < 0.01); “Baseline groups” were: 6-10 years of experience; Grade 12; β: standardised coefficients

As summarised in Table 8, for the dimension job success as dependent variable, the human capital variables produced a statistical significant model \(F_{(2,459)} = 2.46; \rho = 0.01\), accounting for 3% of the variance. More specifically, the results indicated that career planning was a statistically significant predictor \((\beta = -0.12; \rho \leq 0.01)\). Regarding the dimension interpersonal success as dependent variable, a statistical significant model was found \(F_{(3,544)} = 3.54; \rho = 0.00\), which explained 4% of the variance. More specifically, Grade 12 vs. Diploma \((\beta = -0.12**\).
0.08; \( \rho \leq 0.05 \) were found to be statistically significant predictors, as well as career planning (\( \beta = 0.14; \rho \leq 0.01 \)). Lastly, for the dimension *non-organisational success* as a dependent variable, a statistical significant model was found (\( F_{(2,924)} = 2.92; \rho = 0.00 \)), which explained 4% of the variance. More specifically, Grade 12 vs. less than Grade 12 were found to be statistically significant (\( \beta = -0.09; \rho \leq 0.05 \)) as well as career planning (\( \beta = 0.10; \rho \leq 0.01 \)).

Similar regression analyses were also performed with the four dimensions of the LSMS of (Parker & Chusmir, 1992) as dependent variables. The results are displayed in Table 9 below.

Table 9

*Linear Regression Analyses with the human capital variables as independent variables and dimensions of LSMS (Parker & Chusmir, 1992) as dependent variables*

<table>
<thead>
<tr>
<th>Job tenure</th>
<th>Security</th>
<th>Social contribution</th>
<th>Professional fulfilment</th>
<th>Personal fulfilment</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-10 years vs. 2 years or less</td>
<td>0.04</td>
<td>0.01</td>
<td>0.03</td>
<td>0.00</td>
</tr>
<tr>
<td>6-10 years vs. 3-5 years</td>
<td>p with 0.01</td>
<td>0.01</td>
<td>-0.02</td>
<td>-0.03</td>
</tr>
<tr>
<td>6-10 years vs. 11-20 years</td>
<td>0.05</td>
<td>-0.04</td>
<td>-0.03</td>
<td>0.01</td>
</tr>
<tr>
<td>6-10 years vs. 21 years and more</td>
<td>0.00</td>
<td>-0.05</td>
<td>-0.06</td>
<td>-0.07</td>
</tr>
</tbody>
</table>
Table 9 (continued)

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Security</th>
<th>Social contribution</th>
<th>Professional fulfilment</th>
<th>Personal fulfilment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 12 vs. less than</td>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.07</td>
</tr>
<tr>
<td>Grade 12 vs. Certificate</td>
<td>0.04</td>
<td>-0.02</td>
<td>-0.01</td>
<td>0.03</td>
</tr>
<tr>
<td>Grade 12 vs. Diploma</td>
<td>0.01</td>
<td>-0.01</td>
<td>-0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>Grade 12 vs. Degree</td>
<td>0.11*</td>
<td>0.04</td>
<td>0.03</td>
<td>0.06</td>
</tr>
<tr>
<td>Career planning</td>
<td>0.11*</td>
<td>0.25*</td>
<td>0.26*</td>
<td>0.21*</td>
</tr>
<tr>
<td>Model $R^2$</td>
<td>0.03</td>
<td>0.08</td>
<td>0.08</td>
<td>0.07</td>
</tr>
</tbody>
</table>

* Statistically significant ($p < 0.05$); ** Statistically significant ($p < 0.01$); “Baseline groups” were: 6-10 years of experience; Grade 12; β: standardised coefficients

As summarised in Table 9, for the security dimension as dependant variable, human capital variables produced a statistical significant model ($F_{(2,643)} = 2.64; \rho = 0.01$), accounting for 3% of the variance. More specifically, Grade 12 vs. Degree was a statistically significant predictor ($\beta = 0.11; \rho \leq 0.05$), as well as career planning ($\beta = 0.11; \rho \leq 0.05$). Regarding the dimension social contribution as dependent variable, a statistical significant model was found ($F_{(6,990)} = 6.99; \rho = 0.00$), which explained 8% of the variance. More specifically, career planning ($\beta = 0.25; \rho \leq 0.05$) was a statistically significant predictor. The statistical significant model for the dimension professional fulfilment as dependent variable ($F_{(7,374)} = 7.37; \rho = 0.00$) explained 8% of the variance. More specifically, career planning was found to be a statistically significant predictor ($\beta = 0.26; \rho \leq 0.05$). Lastly, for the dimension personal fulfilment as dependent variable, a statistical significant model was found ($F_{(5,806)} = 5.81; \rho = 0.00$), which explained 7% of the variance. More specifically, Grade 12 vs. less than grade 12 ($\beta = -0.07; \rho \leq 0.05$) was found to be statistically significant, as well as career planning ($\beta = 0.210; \rho \leq 0.05$).
Organisational predictors for subjective career success

As guided by the literature (Ballout, 2006; Chen, 2010; Nabi, 1999; Ng et al., 2005; Park, 2010), various organisational variables were entered as predictors for the three dimensions of the PCSS of Gattiker and Larwood (1986). These variables are: perceived organisational support and training and development opportunities. The variables were entered with the use of dummy variables for training and development opportunities. The results are summarised in Table 10 on the following page.

Table 10

Linear Regression Analyses with the organisational variables as independent variables and the dimensions of PCSS (Gattiker & Larwood, 1986) as dependent variables

<table>
<thead>
<tr>
<th>Training and development opportunities</th>
<th>Job success</th>
<th>Interpersonal success</th>
<th>Non-organisational success</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4 vs. none</td>
<td>0.07</td>
<td>0.05</td>
<td>0.08*</td>
</tr>
<tr>
<td>1-4 vs. 5-9</td>
<td>0.01</td>
<td>-0.04</td>
<td>-0.02</td>
</tr>
<tr>
<td>1-4 vs. 10 and more</td>
<td>0.00</td>
<td>-0.04</td>
<td>0.00</td>
</tr>
<tr>
<td>Organisational support</td>
<td>0.07</td>
<td>0.10**</td>
<td>-0.07</td>
</tr>
<tr>
<td>Model R²</td>
<td>0.01</td>
<td>0.02</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* Statistically significant (p < 0.05); ** Statistically significant (p < 0.01); “Baseline group” was: 1-4; β: standardised coefficients

As summarised in Table 10, for the dimension job success as dependent variable, organisational variables produced a statistical significant model ($F_{(2,114)} = 2.11; \rho = 0.08$), accounting for 1% of the variance. Regarding the dimension interpersonal success as dependent variable, a statistical significant model was found ($F_{(2,971)} = 2.97; \rho = 0.02$), which explained 2% of the variance. More specifically, organisational support ($\beta = 0.10; \rho \leq 0.01$) was found to be a statistically significant predictor. Lastly, for the dimension non-
organisational success as dependent variable, a statistical significant model was found \( (F_{(2.179)} = 2.53; \rho = 0.07) \), which explained 1% of the variance. More specifically, 1-4 vs. none training and development opportunities was found to be a statistically significant predictor \( (\beta = 0.08; \rho \leq 0.05) \).

Similar regression analyses were also performed with the four dimensions of the LSMS (Parker & Chusmir, 1992) as dependent variables. The results are displayed in Table 11 on the following page.

Table 11

*Linear Regression Analyses with the organisational variables as independent variables and the dimensions of LSMS (Parker & Chusmir, 1992) as dependent variables*

<table>
<thead>
<tr>
<th></th>
<th>Security</th>
<th>Social contribution</th>
<th>Professional fulfilment</th>
<th>Personal fulfilment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training and development opportunities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-4 vs. none</td>
<td>-0.00</td>
<td>-0.00</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>1-4 vs. 5-9</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.03</td>
<td>-0.01</td>
</tr>
<tr>
<td>1-4 vs. 10 and more</td>
<td>0.03</td>
<td>-0.02</td>
<td>-0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>Organisational support</td>
<td>0.13*</td>
<td>0.23*</td>
<td>0.31*</td>
<td>0.10*</td>
</tr>
<tr>
<td>Model R²</td>
<td>0.02</td>
<td>0.05</td>
<td>0.10</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* Statistically significant \( (p < 0.05) \); ** Statistically significant \( (p < 0.01) \); “Baseline group” was: 1-4; \( \beta \): standardised coefficients

As summarised in Table 11, for the dimension security as dependant variable, organisational variables produced a statistical significant model \( (F_{(2.910)} = 2.91; \rho = 0.02) \), accounting for 2% of the variance. More specifically, organisational support was found to be a statistically significant predictor \( (\beta = 0.25; \rho \leq 0.05) \). Regarding the dimension social contribution as dependent variable, a statistical significant model was found \( (F_{(9.695)} = 9.70; \rho = 0.00) \), which
explained 5% of the variance. More specifically, organisational support (β = 0.29; ρ ≤ 0.05) was found to be statistically significant. A statistical significant model for the dimension **professional fulfilment** as dependent variable was found (F_{(18,594)} = 18.59; ρ = 0.00) which explained 10% of the variance. More specifically organisational support was found to be a statistically significant predictor (β = 0.31; ρ ≤ 0.05). Lastly, the dimension for **personal fulfilment** as dependent variable a statistical significant model was found (F_{(1,927)} = 1.93; ρ = 0.10) which explained 1% of the variance. More specifically, organisational support (β = 0.10; ρ ≤ 0.05) was found to be a statistically significant predictor.

**Discussion**

Limited quantitative research is available on the multi-dimensionality of subjective career success. There is also no consistency in the use of quantitative instruments to measure subjective career success on multiple dimensions (Zhou et al., 2012). The objective of this study was to determine the validity and reliability of two existing instruments for subjective career success that measure the construct on various dimensions. In addition, several predictors for subjective career success were investigated. The present study was conducted as an answer to the call for more quantitative studies that measure subjective career success on multiple dimensions (Dries et al., 2008; Heslin, 2005a; Zhou, et al., 2012).

However, as the present study was the first in its nature on subjective career success in South Africa, the results were illuminating and contribute to South African research and literature on subjective career success. Aligned to the first objective of this study and somewhat unexpected, when investigating the validity of the two subjective career success instruments, neither of the instruments yielded the same multi-dimensionality as expected or was found in the literature (Gattiker & Larwood, 1986; Parker & Chusmir, 1992). Results found in this study suggested that the PCSS of Gattiker and Larwood (1986) can only measure three dimensions of subjective career success (i.e. job success, interpersonal success and non-organisational success). Even though these three dimensions showed good reliability and convergent validity with the LSMS instrument (of Parker & Chusmir, 1986), the construct validity remains problematic. During the construct validity analyses of this instrument, the modification indices showed that no better model could have been obtained. Given the significant $\chi^2$ value, the high value of $\chi^2$/df and the high RMSEA value (Bentler and Bonett, 1980), the model should have been rejected. Nevertheless, it was decided to keep the model because of its acceptable Cronbach’s alpha coefficients (ranges between 0.74-0.81).
Interestingly, the LSMS did also not yield the multi-dimensionality as indicated in the literature. Results suggest that subjective career success is a four-dimensional construct (i.e. security, social contribution, professional fulfilment and personal fulfilment). Although not containing six dimensions, this four-dimensional model fitted the data best and showed acceptable levels of validity and reliability. The dimensions *status/wealth* and *family relationships* were excluded for different reasons. *Status/wealth* did not yield a satisfactory Cronbach’s alpha ($\alpha = 0.60$), that is below the acceptable level of $\alpha \geq 0.70$ (George & Mallery, 2003; Nunnally & Bernstein, 1994). This indicates that this dimension is not measuring consistently that which it is supposed to measure (Foxcroft & Roodt, 2009). The skewness and kurtosis of *family relationships* were higher than the acceptable levels and were therefore deleted as well. This implies that the assumption of normal distributed data was violated (DeCarlo, 1997).

It was, however, established by means of convergent validity, that job success and interpersonal success (PCSS) correlate well with professional fulfilment (LSMS); also that non-organisational success (PCSS) correlates well with personal success (LSMS). This suggests that the instruments correspond to each other. A reason for these relationships is that the operational definitions of these dimensions are in agreement. For example, *professional fulfilment* means having the respect of superiors and colleagues and being committed to the work and the organisation (Parker & Chusmir, 1992). *Job success* relates to the support available from managers, being happy and dedicated to work and interpersonal success refers to the acceptance and respect of colleagues and enjoying the confidence of supervisors (Gattiker & Larwood, 1986). *Personal fulfilment* means being content and gaining personal meaning and enjoyment from non-work related activities (Parker & Chusmir, 1992). *Non-organisational success* indicates being happy in non-work related areas in life (Gattiker & Larwood, 1986).

Although the dimensions of the respective instruments did correlate, the correlation coefficients were not high, indicating no multi-collinearity (Freund *et al.*, 2006). This result was expected, seeing that both instruments measure the same overall construct, namely subjective career success.

Predictors of subjective career success were also investigated, the second objective of this study. These included demographical (i.e. gender, language groups, marital status and age), human capital (i.e. job tenure, level of education and career planning) and organisational
variables (i.e. training and development opportunities and perceived organisational support). Each of these variables was investigated separately against the dimensions of the PCSS and LSMS.

Once again illuminating results were obtained. A statistical model was found for demographic variables predicting subjective career success for both the PCSS and LSMS. More specifically, gender was found to be a significant predictor for some of the dimensions of the PCSS (i.e. interpersonal success) and the LSMS (i.e. security, professional fulfilment and personal fulfilment). This is in line with findings by Oliver and Karim (2012) as well as Stumpf and Tymon (2012), who found that gender is a predictor of subjective career success. However, in the present study, gender was only a significant predictor to some of the dimensions of subjective career success (interpersonal success, security, professional fulfilment and personal fulfilment).

Language groups were also found to be a predictor of subjective career success. The Sotho group (the baseline) showed significantly higher non-organisational success (PCSS) and personal fulfilment (LSMS) than the Western-Germanic group. Traavik and Richardson (2010) found that language competency is highly correlated to overall subjective career success. The present research differentiates between different dimensions of subjective career success. It is therefore possible that due to the nature of work in SAPS (e.g. mainly English, a Western-Germanic language) that those with lower levels of this language competency could experience higher levels of non-organisational success and personal fulfilment, that is: outside their places of work, where they are able to speak their home language.

Results from this study indicated that marital status is a predictor of subjective career success. The group Other (i.e. divorced or widowed) indicated significantly lower levels of social contribution and professional fulfilment (LSMS) than the married group. Ng et al. (2005) and Pfeffer and Ross (1982) found that being married (baseline group) is considered to be more stable and reliable. This is in accordance to the sponsorship-mobility theory that those who have a quality valued by the “elite”, it will also be “sponsored” by them. In this instance being divorced or widowed will not elicit sponsorship. Therefore this status will incur less subjective career success, and as found in the present study, particularly with regard to social contribution and professional fulfilment.
Another predictor, age, was found for subjective career success. The age group 18-25 years had significantly higher levels of job success, interpersonal success and non-organisational success (PCSS) than the group 26-35 years (baseline group). In contrast, the ages 36-45 years, as well as 46 years and older, showed significantly lower experiences of interpersonal success and non-organisational success (PCSS) and personal fulfilment (LSMS) respectively than the age group of 26-35 years. This is in accordance with previous research (Judge, et al., 1995). The ages represent different career stages (Levinson, et al., 1978). A possible explanation for these results may be that the needs and challenges required during these stages are (or are not) met accordingly, which results in higher (or lower) levels of subjective career success.

A statistical model for the human capital variables was found to predict subjective career success. More specifically, those participants with a qualification less than Grade 12 (baseline group) experienced significantly lower levels of non-organisational success (PCSS); and those with a qualification equivalent to a diploma’s interpersonal success (PCSS) scored also significantly lower than those who only had Grade 12. In contrast, those with a degree experienced significantly higher levels of security (LSMS) than those with Grade 12. This is in agreement with findings by Ng et al. (2005), Traavik and Richardson (2010) and Wayne et al. (1999) who found the level of education to be positively related to subjective career success. That means that the higher the individual is qualified, the higher the experiences of subjective career success will be, especially regarding security. Conversely, the lower the qualification level, the greater the chances are of not experiencing non-organisational success and interpersonal success.

An insightful finding was that career planning was a significant predictor across all dimensions for both the PCSS and LSMS. Those participants who were actively taking part in career planning activities experienced significantly less job success, but more interpersonal and non-organisational success (PCSS). In addition, they also experienced significantly higher levels of security, social contribution, professional and personal fulfilment (LSMS) than those that did not engage in career planning activities. The findings on experiences with higher levels of subjective career success were aligned with findings by Lee (2002) and Ng et al. (2005). However, it is unknown why career planning has a negative relationship with job success.
A statistical model for organisational variables was found, which predicted subjective career success. More specifically, the participants who did not have any training and developmental opportunities experienced significantly higher levels of non-organisational success than those who enjoyed 1-4 opportunities (baseline group). This finding is in contrast to that of Ng et al. (2005) and Wayne et al. (1999), who found that training and developmental opportunities are related positively to subjective career success. A possible reason for this is that individuals who realises that the organisation will not invest into them, find their satisfaction in activities outside their work; or conversely, they are so happily immersed in non-work activities that training and development at work is of little concern to them. However, perceived organisational support was a significant predictor in interpersonal success (PCSS), as well as security, social contribution, professional and personal fulfilment (LSMS). This finding was in agreement with Ballout (2005) and Chen (2010) – those enjoying a higher perceived organisational support will also experience higher levels of subjective career success.

**Limitations**

There were several limitations in this study that need to be mentioned. The first is that a cross-sectional design was used and the data was obtained at only one point in time (Olsen & George, 2004). Therefore, causal relationships could not be established between the variables. A longitudinal design may have demonstrated stronger causal relations and conclusions. Another limitation is that self-reported questionnaires were used to obtain data for this research. This may lead to “common-method” variance (Oosthuizen, 2005). The population were also extremely homogenous, consisting mainly of young, Sotho-speaking non-commissioned officers and clerical personnel. These employees represent the lower levels in the organisation. It is possible that this lack of proper representation influenced the results.

**Recommendations**

Notwithstanding these limitations, various recommendations can be made. It is evident from this study that more research is needed in quantitative studies on subjective career success, particularly in the South African context with its profile of a diverse working population. Results from this study showed that due to the unsatisfactory psychometric properties of the PCSS, further exploration is needed with this instrument regarding its psychometric properties. The LSMS may, however, be a more valuable instrument in future studies on
subjective career success in South Africa. It may be recommended that similar studies be undertaken among a different population and work environment in South Africa in order to compare results. An example of a different population could be the higher ranks of the SAPS, or women officials compared to their men counterparts. As was seen, acceptable results were found for the LSMS instrument and the PCSS was problematic in terms of its validity. Nevertheless, the results in this study may indicate that subjective career success is conceptualised differently within the South African context. Results from previous South African qualitative studies (e.g. Visagie, 2012) may guide future projects that attempt to develop comprehensive quantitative instruments.

Human capital and organisational variables explained the most variance. Thus the recommendation is that more research should be done on these variables in studies on subjective career success. It is also possible that other variables, which had not been investigated in the present study, may significantly predict levels of subjective career success. Therefore continued research is needed to determine such variables. Possible examples could be personality preferences, organisational loyalty, work-life balance and motivation.

Acknowledgements

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CHAPTER 3
CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter consists of conclusions drawn from the literature review and the empirical study in accordance with the specific objectives. The limitations of this research are discussed, followed by recommendations for the organisation. In addition, recommendations and suggestions are made for future research.

3.1 CONCLUSIONS

The focus of career success has changed over the last decade; individuals pay more attention to their own career achievements than on the collective achievements of the organisation for which they are working (Eby, Butts, & Lockwood, 2003), indicating a greater shift towards subjective career success. Although various prior qualitative research efforts have found that subjective career success is a multi-dimensional construct (Arthur, Khapova & Wilderdom, 2005; Dries, Pepermans & Carlier, 2008; Visagie, 2012; Zhou, Sun, Guan, Li & Pan, 2012), most quantitative studies utilise a one-dimensional instrument in their studies (e.g. Botha, 2011; Kirchmeyers, 2002; Riordan & Louw-Potgieter, 2011; Turban & Doherty, 1994).

The first objective of this study was to determine the validity and reliability of two multi-dimensional instruments measuring subjective career success in the South African context. Neither instruments that was investigated yielded the same multi-dimensionality as was indicated in the literature (Gattiker & Larwood, 1986; Parker & Chusmir, 1992). Results indicated that the PCSS have three dimensions (i.e. job success, interpersonal success and non-organisational success). These dimensions were found to be reliable, but their validity turned out to be problematic. This result was somewhat surprising, but as this was an exploratory study, such results could be expected (Edmundson & Mcmanus, 2007).

A possible reason for this finding could be the conceptual differences between “job” success and “career” success ( “job” refers to responsibilities and duties related to the place of employment; “career” denotes an occupation undertaken for a significant period of time, Soanes & Stevenson, 2009). Career success implies that an individual is successful over an extended period. The majority of respondents were young (26-35 years old), suggesting that their “jobs” have not yet turned into “careers”. Furthermore, as most respondents were non-commissioned officers and clerical personnel (representing the lower levels within the organisational hierarchy), few opportunities for advancement had been available. However,
the dimensions of the PCSS correlated well with those of the LSMS (i.e. job success and interpersonal success correlated with professional fulfilment; non-organisational success correlated with personal success). A reason could be that the main focus is on work-related outcomes (e.g. Arthur et al., 2005), with the exclusion of activities and roles outside the work domain. It is possible that the essence of what is considered to be subjective career success has changed, with a greater focus on non-work activities, since the development of the PCSS.

In contrast to the PCSS, four dimensions of the LSMS were found to be valid and reliable. These dimensions are: security, social contribution, professional fulfilment and personal fulfilment (developed by Parker & Chusmir, 1992). This confirms that subjective career success is indeed a multi-dimensional construct (Arthur et al., 2005; Dries et al., 2008; Visagie, 2012; Zhou et al., 2012). A possible reason for this finding could be that the LSMS has a greater focus on non-work activities that substantially may influence the individual’s level of subjective career success (e.g. Valcour & Ladge, 2008).

Although the LSMS were found to be valid and reliable, two of the original dimensions were problematic and were excluded from the study. These dimensions were family relationships and status/wealth. A possible reason for the results on family relationships could be that although the majority of participants are married, the respondents do not consider the condition of their family life to be a contributing factor to their experience of subjective career success. Another reason could be that as most respondents are still young, their roles in their families have not yet been established enough to determine whether they are successful or not.

Status/wealth was strongly related to the criteria for objective career success (e.g. Heslin, 2005; Russo, Kelly & Deacon, 1991; Savickas, 2000). It is therefore possible that the respondents were able to distinguish subjective from objective career success. Another reason could be that with the majority of respondents representative of the lower hierarchical levels in the organisation, status was not yet of great relevance to them.

The second objective of the present study was to determine the predictors for subjective career success. The predictors were divided into three categories: demographic variables (gender, language groups, marital status and age), human capital variables (job tenure, level of education and career planning) and organisational variables (training and development opportunities and perceived organisational support). Although some predictive value was evident from all three categories, the human capital (career planning) and organisational
variables (training and development opportunities; perceived organisational support) explained the most variance in the experience of subjective career success. A possible reason for this finding could be that in previous studies, subjective career success was measured as a one-dimensional construct, but in the present study it was measured as a multi-dimensional construct.

Dummy variables were created for variables with two or more mutually exclusive categories, in order to ensure that the analysis was computed correctly (Skrivanek, 2009). The demographic variables (gender, language groups, marital status and age, with baseline groups Sotho, Married and 26-35 years respectively) were found to be predictors of subjective career success. The results in the investigation on gender indicated that gender is a significant predictor of interpersonal success (PCSS); gender also predicts security, professional fulfilment and personal fulfilment (LSMS). This is in agreement with results from Stumpf and Tymon (2012), as well as Oliver and Karim (2012). However, the fact must be kept in mind that gender was only significant on some of the dimensions of subjective career success. Furthermore, results showed that the Sotho language group experiences more non-organisational success (PCSS) and personal fulfilment (LSMS) than the Western-Germanic group. According to Traavik and Richardson (2010), language competency is correlated to subjective career success as a singular construct. As this study distinguishes between various dimensions, it is possible that due to the official language of the SAPS (English, a Western-Germanic language) those from different language groups (i.e. Sotho) experience higher levels of non-organisational success and personal fulfilment. This experience relates to subjective career success outside their work environment, where it is possible to communicate in a home language.

Marital status was also found to be a predictor of subjective career success. More specifically, the group Other (i.e. divorced or widowed) showed significantly lower levels of social contribution and professional fulfilment (LSMS) than the married group (baseline). This is in agreement with findings by Ng et al. (2005), as well as Pfeffer and Ross (1982) who indicate that married employees are more stable and reliable than others.

Age was pointed out as another predictor of subjective career success. More specifically, the group 18-25 years experienced significantly higher levels of job success, interpersonal success and non-organisational success (PCSS) than those aged 26-35 years (baseline). However, those aged 36-45 years showed significantly lower levels of interpersonal success.
and the group 46 years and older also showed lower levels of non-organisational success (PCSS) and personal fulfilment (LSMS) in comparison with the 26-35 year old participants. According to Judge, Cable, Boudreau and Bretz (1995) and Levinson, Darrow, Klein, Levinson and McKee, (1978) this trend could be expected as employee’s needs change with time.

Human capital variables (education level and career planning) were predictors of subjective career success. More specifically, those participants who had a qualification less than Grade 12 (baseline) had significantly lower levels of non-organisational success (PCSS). Also, those with the equivalent of a diploma also experienced lower levels of interpersonal success (PCSS) than those with Grade 12. However, the participants who had a degree showed significantly higher levels of security (LSMS) than those with Grade 12. According to Ng et al. (2005), Traavik and Richardson (2010) and Wayne, Linden, Kraimer and Graf (1999), there is a positive relationship between level of education and subjective career success. This implies that the higher an individual is qualified, the higher levels of subjective career success will be and vice versa.

The results on career planning indicated that this variable explained the largest percentage of variance on all the different dimensions of subjective career success. These findings are in accordance with results obtained by Lee (2002) and Ng, Eby, Sorensen and Feldman (2005). Individuals who engage actively in career enhancing activities, such as self-nomination and networking activities, experience higher levels of subjective career success.

The organisational variables, training and development opportunities, and perceived organisation support, also seemed to be significant predictors of subjective career success. More specifically, those who did not have any training and development opportunities, seemed to experience higher levels of non-organisational success (PCSS), compared to those participants who have had attended between 1-4 training and development opportunities (baseline). This is in contrast to findings by Ng et al. (2005) and Wayne et al. (1999), who found that employees will experience higher levels of subjective career success will be when more training and development opportunities are available to them.

Furthermore, perceived organisational support proved to be a significant predictor for interpersonal success (PCSS). This was also the case with security, social contribution, professional and personal fulfilment (LSMS). These results are in line with findings by Ballout (2005) and Chen (2010) and indicate that those employees who experience with
higher perceived organisational support also tend to experience higher levels of subjective career success.

3.2 LIMITATIONS

Several limitations in this research must be pointed out. The first limitation was the use of a cross-sectional design. As a result of this design, no causal inferences could be drawn among the variables, and no causal relationships could be established or interpreted (Thisted, 2006). A longitudinal design should be utilised to validate these findings (Montgomery, Peeters, Schaufeli & Den Ouden, 2003).

The second limitation was that self-reported questionnaires were used to obtain data for this research. This practice may lead to “common-method” variance, as the use of one method of data-collection can increase the likelihood of associations being insignificant or false (Oosthuizen, 2005). However, previous research has found that common method variance is not problematic when interactions are found between variables (Semmer, Zapf & Grief, 1996; Spector, 1992). Individuals are considered to be the most important source who can report accurately on their work environment (Frese & Zapf, 1999).

The third limitation was the inclusion of two instruments to measure subjective career success. The Life-success Measure Scale (henceforth LSMS) of Parker and Chusmir (1992) were directly followed by the Perceived Career Success Scale (henceforth PCSS) of Gattiker and Larwood (1986) in the questionnaire booklet. Seeing that both instruments measure subjective career success, the items may seem related to participants, giving them a sensation that they repeatedly are answering the same questions, which possibly caused random responses. This could also be one of the reasons for the unexpected results obtained regarding the validity of the PCSS.

The fourth limitation was the use of a convenience sampling technique that resulted in a homogenous group of employees. The majority of the data was obtained at training colleges in the Free State and the sample consisted mainly of young, Sotho-speaking, non-commissioned officers and clerical personnel. These employees represent the lower levels in the organisation. It may be that this lack of proper representation of the employees working in the SAPS influenced the results. Added to this factor, there could also have been a common unknown variable present at this group that influenced the results (e.g. participants who were biased because the questionnaire was only available in English, seeing that the majority of the
participants were in fact Sotho speaking). Different results may be obtained from a more representative sample of SAPS employees. Therefore, these results should be interpreted with caution when considering the generalisation to employees from within the SAPS and from other language groups or other provinces.

The fifth limitation of this research is the results obtained for the psychometric properties (specifically the validity) of the PCSS instrument of Gattiker and Larwood (1986). Although the dimensions were proved reliable and indicated evidence of convergent validity with the LSMS instrument, the construct validity remained problematic. A possible explanation for these results may be possible conceptual differences between job success and career success. According to the Oxford English Dictionary (Soanes & Stevenson, 2009) a “job” relates to “a paid position of regular employment” as well as to specific responsibilities and duties (p. 765). Job success would then imply that an individual is successful in executing his/her duties and responsibilities at his/her place of employment. In contrast, a “career” refers to “an occupation undertaken for a significant period in a person’s life, usually with opportunities for progress” (p. 213). Career success would then imply that the individual, over an extended period, be successful in his/her occupation. As the majority of respondents were in the 26-35 years age group (early career stage, Levinson, et al., 1978; Schreuder & Coetzee, 2009), their “jobs” have not turned into “careers” yet. In addition, most respondents were non-commissioned officers and clerical personnel. This is representative of the lower levels within the organisation and these individuals did not have many or any opportunities for advancement yet. According to Fieldman (2002) and Scandura (2002) this stage is characterised by establishing identity in an occupation as well as finding one’s place in and contributing to society. This is in different than the middle career stage where individuals have a strong sense of identity established (Levinson et al., 1978). In this stage respondents would have been able to determine whether they had obtained subjective career success or not.

A final limitation was the low percentage of variance explained for all the dependent variables with respect to the independent variables in the linear regression analyses of the study. Although all the variables used in this study were previously found to be strong predictors of subjective career success (Ballout, 2006; Chen, 2010; Judge, et al., 1995; Nabi, 1999; Ng, Eby, Sorensen, & Feldman, 2005; Park 2010), this was not the case in the present study. A possible reason could be that in previous studies, subjective career success was
measured as a one dimensional construct. However, the multi-dimensionality of this study may have influenced the predictive value of variables that were previously known to influence the level of subjective career success which individuals experienced. More research is therefore needed on the predictors of subjective career success as a multi-dimensional construct.

3.3 RECOMMENDATIONS

Notwithstanding the above mentioned limitations, various recommendations can be made. Recommendations are made for the organisation and for future research.

3.3.1 Recommendations for the organisation (SAPS)

It is crucial for organisations to realise that subjective career success is indeed a multi-dimensional construct. The LSMS (Parker & Chusmir, 1992) can be used with confidence in an organisation to measure security, social contribution, professional and personal fulfilment – all dimensions of subjective career success. By using this instrument organisations are not only able to measure subjective career success validly and reliably, it is also possible for them to distinguish between different dimensions of subjective career success. This knowledge can be applied in the implementation or adjustment of policies, which could enable their employees to experience higher levels of subjective career success. This instrument (LSMS) can also help human resource managers and employee’s health and wellness functionaries to address specific concerns on subjective career success. However, the use of the PCSS as instrument is not recommended, seeing that further exploration is needed on its psychometric properties.

From this research it was evident that educational level, career planning, training and development opportunities and perceived organisational support were significant predictors for subjective career success.

In terms of educational level, the organisation can implement programmes for those employees who do not have a Grade 12 qualification. An apt example is the Adult Basic Education Programme, which is aligned with the government’s campaign to ensure education for all South Africans (Adult Basic Education and Training Act, No 52 of 2000). Such a programme will enable the members of the SAPS to obtain higher qualifications. These may in turn improve the possibility that they may experience subjective career success (Wayne, et
al., 1999). As the SAPS is a service-delivery organisation, it can also, in conjunction with the relevant Sector Education and Training Authority (SETA), provide opportunities for its employees to be trained in relevant skills for the organisation. Furthermore, the SAPS can implement incentive strategies that will encourage employees to study further on their own. Examples of such incentives could be better promotional opportunities or monetary rewards when they complete the course and achieve qualifications at certain NQF levels.

Concerning career planning, it was evident that this type of planning does contribute significantly more to the experience of subjective career success, in comparison with other variables. Therefore it is suggested that the organisation ensure that all its employees, when entering the organisation, have a discussion on career paths with the relevant supervisors and human resource managers. This would help determine the options available to them as employees. Career options can be divided into career clusters, which contain several career paths. Also the skills and abilities needed to reach the desired goals in a career could be included in the task agreement. Regular performance assessments could be held to determine whether the employee is making the required progress and if not, remedial strategies could be implemented, or the desired career could be re-evaluated.

Focusing on training and development opportunities, the organisation could ensure that its programmes are first of all aligned with its overall strategy and business drive. Thereafter it could ensure that the programmes that are presented are relevant to the skills and abilities needed by its employees to perform their tasks optimally and professionally.

Organisational support is another predictor that the organisation can utilise in order to increase levels of subjective career success. The SAPS could try to ensure that supportive and congenial relationships between supervisors and subordinates, as well as among colleagues, are established and maintained. This can be achieved through focused leadership and mentoring programmes, as well as by team building and inter-group activities.

3.3.2 Recommendations for future research

The following recommendations are made for future research. Firstly, more studies are needed to explore the psychometric properties of the PCSS in greater detail, especially within the South African context. The dimensions of the PCSS appear to make sense from a theoretical perspective (meaning that the dimensions and items are in agreement with the operationalised definitions). However, it is possible that the items of these dimensions may
require adjustment. The original instrument consists of 23 items, on average 4 items per dimension. More items, which measure these dimensions more accurately, may rectify this impediment (Agarval, 2011; Kim & Mueller, 1981).

Secondly, more research on the LSMS is also recommended. Although it was found to be a valid and reliable instrument when used on members of the SAPS in the Free State, the results could not be generalised to the organisation as a whole or to different populations. Therefore studies on a national level and or among other industries and occupations are advisable. This could entail employees working in the private sector or in other government departments. Each organisation and occupation has its own advantages, disadvantages, challenges and rewards that may influence the level of subjective career success experienced (Ditsela, 2012; Visagie, 2012). In addition, other samples may yield different results; it is possible that dimensions found to be problematic in this study could actually turn out to be sound and satisfactory in other studies.

Thirdly, the sample of this study was homogenous in terms of organisational level. Most of the participants were from the lower levels in the organisation, namely constables and clerks. It is recommended that subjective career success be investigated among higher organisational levels, especially middle and senior management levels, as it is possible that higher levels in the organisation (or higher ranks) experience subjective career success differently (Visagie, 2012).

Fourthly, the use of a longitudinal research design is recommended. Longitudinal designs are utilised to determine change on the same variables over a period of time (Ployhart & Vandenberg, 2010). Results obtained from such longitudinal research may be used to validate the findings of this study and to determine whether the relationships hold true over time.

In addition, more research is needed to determine the predictors of subjective career success, especially regarding the different dimensions of such subjective success. The majority of the literature refers to predictors of subjective career success as a one dimensional construct. Therefore the possibility exists that more salient variables may yet be unknown, which can be used to predict the different dimensions of subjective career success. Examples may be family size (Peluchette & Jeanquart, 2000), hours worked, willingness to transfer, social capital, supervisor support and organisational resources (Ng et al., 2005). According to this study, demographical variables should be controlled for future studies. On the other hand,
human capital (i.e. career planning) and organisational variables (i.e. training and development opportunities & perceived organisational support) were shown to have a strong predicting value, which may warrant further investigation.

Finally, the present study confirmed that subjective career success is a multi-dimensional construct, which is in agreement with previous qualitative findings (e.g. Dries et al., 2008, Visagie, 2012; Zhou et al., 2012). Future research should be guided by these findings when developing comprehensive quantitative multi-dimensional instruments for the South African context.

Overall, more research is needed in studies on quantitative subjective career success, especially within the South African context with its diverse working population. The understanding, measuring and improving of this important organisational construct may help organisations to obtain and maintain its competitive advantage in terms of developing its own human capital.
REFERENCES


APPENDIX A

LIST OF ITEMS OF SUBJECTIVE CAREER SUCCESS SCALES

Table A1

List of items of Perceived Career Success Scale (Gattiker & Larwood, 1986)

<table>
<thead>
<tr>
<th>Original items of PCSS</th>
<th>Remaining items after CFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am receiving positive feedback about my performance from all quarters</td>
<td>I am receiving positive feedback about my performance from all quarters</td>
</tr>
<tr>
<td>I am offered opportunities for further education by my employer</td>
<td>I am fully backed by management in my work</td>
</tr>
<tr>
<td>I am having enough responsibility on my job</td>
<td>I am happiest when I am at work</td>
</tr>
<tr>
<td>I am fully backed by management in my work</td>
<td></td>
</tr>
<tr>
<td>I am in a job which offers me the chance to learn new skills</td>
<td></td>
</tr>
<tr>
<td>I am most happy when I am at work</td>
<td></td>
</tr>
<tr>
<td>I am dedicated to my work</td>
<td></td>
</tr>
<tr>
<td>I am in a position to do mostly work which I really like</td>
<td></td>
</tr>
<tr>
<td>I am happy with my private life</td>
<td></td>
</tr>
<tr>
<td>I am enjoying my non-work activities</td>
<td></td>
</tr>
<tr>
<td>I am satisfied with my life overall</td>
<td></td>
</tr>
<tr>
<td>I am dedicated to my work</td>
<td></td>
</tr>
</tbody>
</table>

Interpersonal success

| I am respected by my peers | I am getting good performance evaluations |
| I am getting good performance evaluations | I am accepted by my peers |
| I am accepted by my peers | I am having my superior’s confidence |

Non-organisational success

| I am happy with my private life | I am happy with my private life |
| I am enjoying my non-work activities | I am enjoying my activities outside of work |
| I am satisfied with my life overall | I am satisfied with my life overall |
| I am dedicated to my work |                                                                 |
Table A1 (continued)

<table>
<thead>
<tr>
<th>Original items of PCSS</th>
<th>Remaining items after CFA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hierarchical success</strong></td>
<td></td>
</tr>
<tr>
<td>I am pleased with the promotions I have received so far</td>
<td></td>
</tr>
<tr>
<td>I am reaching my career goals within the time frame I set for myself</td>
<td></td>
</tr>
<tr>
<td>I am going to reach all of my career goals</td>
<td></td>
</tr>
<tr>
<td>I am in a job which offers promotional opportunities</td>
<td></td>
</tr>
<tr>
<td><strong>Financial success</strong></td>
<td></td>
</tr>
<tr>
<td>I am receiving fair compensation compared to my peers</td>
<td></td>
</tr>
<tr>
<td>I am drawing a high income compared to my peers</td>
<td></td>
</tr>
<tr>
<td>I am earning as much as I think my work is worth</td>
<td></td>
</tr>
</tbody>
</table>

Table A2

*List of items of Life-success Measures Scale (Parker & Chusmir, 1992)*

<table>
<thead>
<tr>
<th>Original items</th>
<th>Remaining items after CFA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Security</strong></td>
<td></td>
</tr>
<tr>
<td>Having economic security</td>
<td>Having economic security</td>
</tr>
<tr>
<td>Having good job benefits</td>
<td>Having good job benefits</td>
</tr>
<tr>
<td>Having high income and the resulting benefits</td>
<td>Having a high income and the resulting benefits</td>
</tr>
<tr>
<td>Having long-term job security</td>
<td></td>
</tr>
<tr>
<td>Earning regular salary increases</td>
<td></td>
</tr>
</tbody>
</table>
Table A2 (continued)

<table>
<thead>
<tr>
<th>Original items</th>
<th>Remaining items after CFA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social contribution</strong></td>
<td></td>
</tr>
<tr>
<td>Being able to give help, assistance, advice and</td>
<td>Making or doing things that is useful to society</td>
</tr>
<tr>
<td>support to others</td>
<td></td>
</tr>
<tr>
<td>Making or doing things that is useful to society</td>
<td>Contributing to society</td>
</tr>
<tr>
<td>Contributing to society</td>
<td>Improving the well-being of the workforce</td>
</tr>
<tr>
<td>Improving the well-being of the workforce</td>
<td></td>
</tr>
<tr>
<td>Having the resources to help others</td>
<td></td>
</tr>
<tr>
<td>Being able to make a difference in something</td>
<td></td>
</tr>
<tr>
<td>Helping others to achieve</td>
<td></td>
</tr>
<tr>
<td>Making a contribution to society</td>
<td></td>
</tr>
<tr>
<td><strong>Professional fulfilment</strong></td>
<td></td>
</tr>
<tr>
<td>Being committed to my organisation</td>
<td>Being accepted at work</td>
</tr>
<tr>
<td>Being accepted at work</td>
<td>Getting good performance evaluations</td>
</tr>
<tr>
<td>Getting good performance evaluations</td>
<td>Having the confidence of my boss</td>
</tr>
<tr>
<td>Having the confidence of my boss</td>
<td>Being satisfied with my profession</td>
</tr>
<tr>
<td>Being satisfied with my job</td>
<td></td>
</tr>
<tr>
<td><strong>Personal fulfilment</strong></td>
<td></td>
</tr>
<tr>
<td>Having inner peace and contentment</td>
<td>Being happy with my private life</td>
</tr>
<tr>
<td>Enjoying my non-work activities</td>
<td>Having personal satisfaction</td>
</tr>
<tr>
<td>Having a sense of personal worth</td>
<td>Having personal happiness</td>
</tr>
<tr>
<td>Having opportunities for personal creativity</td>
<td></td>
</tr>
<tr>
<td>Being happy with my private life</td>
<td></td>
</tr>
<tr>
<td>Having personal satisfaction</td>
<td></td>
</tr>
<tr>
<td>Having self-respect</td>
<td></td>
</tr>
<tr>
<td>Having personal happiness</td>
<td></td>
</tr>
</tbody>
</table>

87
<table>
<thead>
<tr>
<th>Original items</th>
<th>Remaining items after CFA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family relationships</strong></td>
<td></td>
</tr>
<tr>
<td>Having a happy marriage</td>
<td></td>
</tr>
<tr>
<td>Being a good parent</td>
<td></td>
</tr>
<tr>
<td>Having a rewarding family life</td>
<td></td>
</tr>
<tr>
<td>Raising children to be independent adults</td>
<td></td>
</tr>
<tr>
<td>Having children</td>
<td></td>
</tr>
<tr>
<td>Having children who are successful</td>
<td></td>
</tr>
<tr>
<td>emotionally and professionally</td>
<td></td>
</tr>
<tr>
<td>Having a stable marriage</td>
<td></td>
</tr>
<tr>
<td>Being able to provide quality education to my children</td>
<td></td>
</tr>
<tr>
<td><strong>Status/wealth</strong></td>
<td></td>
</tr>
<tr>
<td>Getting others to do what I want</td>
<td></td>
</tr>
<tr>
<td>Having a job that pays more than peers earn</td>
<td></td>
</tr>
<tr>
<td>Having people work for me</td>
<td></td>
</tr>
<tr>
<td>Being competent</td>
<td></td>
</tr>
<tr>
<td>Having public recognition</td>
<td></td>
</tr>
<tr>
<td>Having influence over others</td>
<td></td>
</tr>
<tr>
<td>Being in a high status occupation</td>
<td></td>
</tr>
<tr>
<td>Having money to buy or do anything</td>
<td></td>
</tr>
</tbody>
</table>