Exploring Psychological Career Mechanisms for Enhancing

Employees' Self-Efficacious Career Adaptability

Melinde Coetzee

http://orcid.org/0000-0003-1154-4380

University of South Africa

coetzm1@unisa.ac.za

Abstract

The study extends contemporary research on adaptive career behaviour by exploring the

link between three under-researched psychological career-related attributes (career values,

career enablers and career harmonisers) that may potentially serve as mechanisms for

enhancing individuals' self-efficacious career adaptability (career confidence). Participants

(N = 248) were early and middle career stage individuals employed in an organisation

situated in Gauteng, South Africa. Analyses included regression-based moderated-

mediation procedures to assess conditional direct and indirect effects of the psychological

career constructs. The results indicated that although the career harmonisers did not have

a significant mediating effect, the conditional indirect effect of career enablers on career

confidence through career harmonisers increased when the score on career values was high.

Employees' career confidence may potentially be enhanced by means of well-developed

career enabling skills and positive psychosocial career attributes on the condition that they

have strong (well-crystallised) career values.

Keywords: career confidence; career enablers; career harmonisers; career values;

self-efficacious career adaptability

UNISA university of south africa person

Southern African Business Review https://upjournals.co.za/index.php/SABR Volume 22 | 2018 | #3843 | 20 pages https://doi.org/10.25159/1998-8125/3843 ISSN 1998-8125 (Online) © The Author(s)



Introduction

Contemporary career scholars highlight the importance of career adaptability in understanding adaptive career self-management behaviour in today's increasingly more uncertain career and occupational context (McMahon, Watson and Bimrose 2012; Savickas and Porfeli 2012). The turbulence of the job market and the instability of employment require individuals to demonstrate adaptive fitness (career adaptability) by taking proactive control of their career management in achieving career success (Fiori, Bollman and Rossier 2015; Guan et al. 2014; Savickas and Porfeli 2012). Career adaptability theory (Savickas and Porfeli 2012) highlights career confidence as an important attribute of self-efficacious adaptive career behaviour. Career confidence is seen to denote important career-related self-efficacy beliefs that manifest in proactive career adaptability (Hirschi, Herrmann and Keller 2015). Career inhibition (contrary to career confidence) occurs when individuals feel that they are unable to work through occupational difficulties which constrains their career self-management behaviour (McMahon et al. 2012).

Career confidence (self-efficacious career adaptability) denotes adaptive and transactional resources including the enactment of self-efficacious problem solving to overcome obstacles, the confident application of skills and abilities to efficiently perform tasks, and the drive to learn new skills as the individual works to implement career goals (Fiori et al. 2015; McMahon et al. 2012). Bandura (1997) views efficacy beliefs (the core belief that one has the power and capabilities to produce the desired effect by one's own actions) as the primary mechanism for activity (work/task) engagement and goal accomplishment. Previous research indicates positive links between career confidence (self-efficacious career adaptability) and extraverted behaviour; increased activity and career engagement (Nilforooshan and Salami 2016); positive work outcomes such as work engagement (Tladinyane and Van der Merwe 2016); professional identification, career variety, career adaptability and strategic competence (Guan et al. 2016); perceived internal and external marketability and low job and career insecurity (Spurk, Kauffeld, Meinecke and Ebner 2016); and career satisfaction and self-rated career performance (Zacher 2014). Despite the limited research on the psychological career mechanisms that positively influence individuals' self-efficacious career adaptability, initial research points to positive personality-based predictors of career confidence such as emotional intelligence (Coetzee and Harry 2014), proactivity and core selfevaluations including sense of worthiness, effectiveness and capability as a person (Hirschi et al. 2015).

Research indicates that individuals who demonstrate self-efficacious career adaptability are able to keep themselves motivated to obtain career goals and success despite adverse conditions and uncertainties. Such individuals also use a wide range of psychosocial career attributes and skills to cope with the pressure of career self-management when career paths are more blurred, and the challenges of more frequent career transitions and work traumas need to be faced (Fiori et al. 2015; Klehe, Zikic, Van Vianen and De Pater 2011; Nota and Rossier 2015). The present study extends contemporary research on adaptive career behaviour by exploring the link between three underresearched psychological career-related attributes (career values, career enablers and career harmonisers) that may potentially serve as mechanisms for enhancing individuals' self-efficacious career adaptability (career confidence). Research scholars point to the importance of especially uncovering the psychological and motivational regulatory mechanisms underlying the development of efficacy beliefs because of the effect that individuals' efficacy beliefs have on their affect, effort-task investment and engagement, motivation to persevere in the face of obstacles and resilience to adversity over the long term (Salanova, Llorens and Schaufeli 2011).

The constructs of career values, career harmonisers and career values are embedded in the psychological career resources framework of Coetzee (2014), which has been researched in relation to constructs such as career adaptability, job embeddedness and organisational commitment (Ferreira 2012), work engagement and organisational commitment foci (Tladinyane 2012), and subjective wellbeing, life and job satisfaction (Coetzee and Schreuder 2012). Exploring the link between individuals' psychological career resources (career values, career enablers, career harmonisers) and their self-efficacious career adaptability (i.e. career confidence) contributes to career adaptability theory by broadening understanding of the role of these career-related constructs in individuals' career development and career success in today's workplace. Previous research on career adaptability highlighted career confidence as an attribute of self-efficacious adaptive career behaviour, which is the focus of the present study. The study is therefore unique by highlighting career confidence as an important career adaptability resource and then, by adopting a moderated-mediation approach, exploring the role of career values in

explaining the link between individuals' career enablers and career confidence through their career harmonisers. This research focus is corroborated by previous research (Coetzee 2014) that indicated individuals' career harmonisers as significant mediators in the link between their career enablers and efficacious goal-driven behaviour.

Psychological Career Mechanisms: Career Values, Career Enablers and Career Harmonisers

The theoretical underpinnings of the concepts of career values, career enablers and career harmonisers are anchored in the contextual action theory (CAT) of career development postulated by Young, Valach and Demene (2005). CAT views individuals' careers as an intentional and goaldirected self-designing action system that is socially constructed through interactions between the individual and the environment in a particular socio-cultural system. The self-designing system is continually in flux as individuals and the environment re-design themselves through internal agentic self-regulatory mechanisms in an effort to adapt to the requirements of changing contexts (Coetzee 2014; Khapova, Arthur and Wilderom 2007). Agentic career behaviour points to employees' active engagement in self-directed career management behaviours which have increased in importance in today's career environment (Hirschi, Lee, Porfeli and Vondraeck 2013). Career values, career enablers and career harmonisers are seen as important agentic self-regulatory mechanisms that support goal-directed adaptive career behaviour in the career action system. These psychological career resources encapsulate intrinsic motivational needs and goals (i.e. the "why" motivation represented by career values) that are supported by the "how" motivation as represented by enabling career skills or competence (career enablers) and positive psychosocial career attributes (career harmonisers: Coetzee 2014).

Career Values

Career values represent individuals' intrinsic motivational goals (Coetzee 2014) and their evaluation of the desirability of different kinds of job attributes and work roles (Sortheix, Dietrich, Chow and Salmela-Aro 2013). Coetzee's (2014) notion of career values relates to the needs for autonomy (i.e. need to be the perceived source of one's own behaviour which is associated with authority/influence-based values) and competence (i.e. feelings of effectiveness in one's interactions with the social context which are linked to an ongoing need for further growth and

development). The intrinsic motivational needs (i.e. "why" motivation) underpinning career values are seen to direct and amplify attention, level of investment and progress towards the tasks involved in goal achievement (Sortheix et al. 2013). Although previous research on the link between career values and career confidence is lacking, preliminary findings point to positive links between well-differentiated career values and higher levels of subjective wellbeing, job embeddedness and career adaptability (Coetzee and Schreuder 2012; Ferreira 2012). Organisational support for employees' career values is also positively linked to increased psychological adjustment and higher levels of work performance (Baard, Deci and Ryan 2004).

Career Enablers

Career enablers serve as important transferable skills (practical/creative skills, and self-management and interpersonal relations skills) that provide the "how" motivation and help people succeed in the career within a particular socio-cultural context (Coetzee 2014). Practical intelligence and creative intelligence are seen to facilitate the implementation of viable career plans and options (Sternberg 2003) and are positively linked to perceiving one's work as meaningful (Coetzee and Schreuder 2012). Self-management and interpersonal relations skills further support individuals' need for relatedness (i.e. need to belong) (Deci and Ryan 1985; Sortheix et al. 2013). Although there is a gap in research on the link between career enablers and career confidence, previous research shows positive links between career enablers and job embeddedness which involves individuals' commitment to and active involvement in their careers, occupations and organisations (Tladinyane 2012). Research also indicates that transferable skills such as employability, teamwork, problem solving, and communication are positively related to career confidence in the career adaptability framework (De Guzman and Choi 2013).

Career Harmonisers

Individuals' career harmonisers represent a cluster of important positive psychosocial career attributes that support the agentic mechanisms that individuals employ to strengthen their sense of psychological career wellbeing (Coetzee 2014). Denoting the psychosocial attributes of self-esteem (sense of being capable and worthy in comparison with others), behavioural adaptability (capacity to act autonomously, proactively and courageously in the career self-designing action process), emotional literacy (ability to accept and express emotional

responses that facilitate career adaptive behaviours), and social connectivity (ability to connect with others and establishing mutually satisfying relations for the promotion of career goals), the career harmonisers act as promoters (i.e. "how" motivation) of flexibility and resilience in the career self-designing action system (Coetzee 2014). Although previous research on the link between career harmonisers and career confidence is generally lacking, research shows positive links between the career harmonisers and life satisfaction, job and career satisfaction, sense of happiness, and perceptions of meaningful work (Coetzee and Schreuder 2012), and job embeddedness (Ferreira 2012).

Associations among the Three Psychological Career Mechanisms and Career Confidence

Career confidence denotes goal-orientated career self-efficacy beliefs and active adaptive career self-management behaviour (Savickas and Porfeli 2012). Previous research shows that selfefficacy beliefs partially depend on a proactive disposition and may affect active career engagement (Hirschi et al. 2013). Although research on the link between individuals' career confidence (as an outcome of agentic adaptive career behaviour) and their career values (intrinsic motivational needs), career enablers (transferable career skills) and career harmonisers (positive psychosocial career attributes) are lacking, it stands to reason that the psychological career resources may be mechanisms for enhancing individuals' career confidence (self-efficacious career adaptability). Previous research also indicated that career harmonisers are important mediators to strengthen the link between individuals' career enablers and their confidence in engaging in goal driven career behaviour (Coetzee 2014). It was argued that the degree to which career enablers, through career harmonisers (i.e. "how" motivation), affect career confidence is dependent on the degree to which individuals hold strong career values (i.e. "why" motivation). This argument on the pivotal role of career values in enhancing employees' career confidence is based on the research literature suggesting that intrinsically motivated needs and self-concordant goals (i.e. goals that correspond to personal interests and values) increase the probability of active career engagement and goal attainment (Hirschi et al. 2013). Although an under-researched area in the career adaptability framework, the career literature views career values as an essential element of employees' career development because they provide the intrinsic motivation (i.e. "why" motivation) to accomplish a desirable goal (Sortheix et al. 2013). Merely having the "how" motivation by means of transferable career skills (career enablers) and positive psychosocial career

attributes (career harmonisers) might not be enough to prompt the enactment of self-efficacious adaptive career behaviour (career confidence) if one is lacking the intrinsic motivational needs and goals for authority/influence and growth and development (career values). The following research hypothesis was therefore formulated:

H1: The indirect effect of career enablers through career harmonisers on career confidence is moderated by career values such that stronger effects are associated with stronger career values.

Following a moderated-mediation approach, the current study is novel in that it explores how intrinsic motivational needs and goals (career values) influence the link between transferable career skills (career enablers) and the enactment of self-efficacious career behaviour (career confidence) through positive psychosocial career attributes (career harmonisers). The study makes an important contribution to contemporary career adaptability theory (Savickas and Porfeli 2012) because it will specify the role of three kinds of psychological career resources (career values, career enablers and career harmonisers) in explaining enactment self-efficacious adaptive career self-management behaviour in the work and occupational context. Figure 1 depicts the conceptual model of the research.

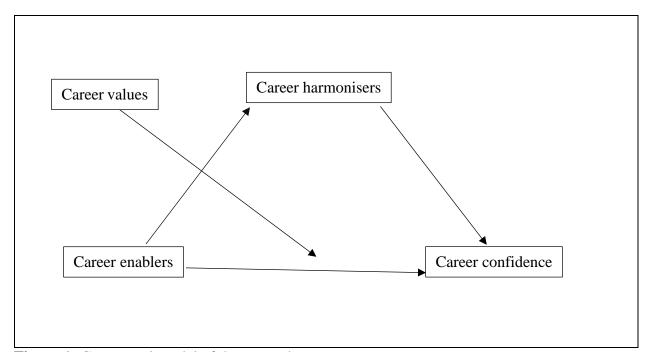


Figure 1: Conceptual model of the research

Method

Participants

Participants were a non-probability sample of N = 248 employees in an organisation situated in Gauteng, South Africa. The sample was more or less equally represented by people from white (Caucasian: 46%) and black (African, coloured, Indian: 54%) ethnic origin. In line with lifespan development (life stage theory: Super 1990), 63 percent of the sample was in the exploration/establishment phase of their careers (63%: <40 years) and 37 percent in the maintenance phase of their careers (>40 years). The sample was further represented by female (63%) and male (37%) employees who were mostly in management level positions (75%).

Procedure

The study utilised a cross-sectional, quantitative research design by collecting data through an online web survey at a specific point in time. Ethical clearance to conduct the study was obtained from the University's Research Ethics Committee. The management of the company granted permission for the research. Ethical considerations such as voluntary participation, informed consent, confidentiality and anonymity were adhered to.

Measuring Instruments

Self-Efficacious Career Adaptability (Career Confidence)

The career confidence subscale of the Career Adapt-Abilities Scale (CAAS) developed by Savickas and Porfeli (2012) was utilised to measure participants' self-efficacious career adaptability. The career confidence subscale consists of six items (e.g.: "Learning new skills"/ "Overcoming obstacles/Working up to my ability") measured on a five-point Likert-type scale (1 = not strong; 5 = strongest). The CAAS has empirical evidence of construct validity and internal consistency reliability (Savickas and Porfeli 2012). The internal consistency reliability coefficient for the career confidence subscale in the present study was .90 (high).

Psychological Career Mechanisms: Career Values, Career Enablers and Career Harmonisers

The psychological career resources inventory (PCRI) developed by Coetzee (2008) was utilised to
measure participants' self-evaluations of their career values, career enablers and career
harmonisers: The career values subscale comprises eight items (e.g. "I like to engage in further

growth and learning opportunities"/"I like to have the power to make important things happen"); the career enablers subscale comprises eight items (e.g. "I am good at putting my ideas into practical plans and making it work for me"/"I make the most of my good qualities to achieve success in what I do"); and the career harmonisers subscale comprises 21 items (e.g. "I have the courage to handle my misfortunes and failures"/"I find it easy to connect with others"/ "I express my feelings and/or needs to my close friends"/"It is easy for me to adapt to new things and situations in my life"). Responses are measured on a six-point Likert type scale (1 = strongly disagree; 6 = strongly agree). The PCRI has empirical evidence of construct validity and internal consistency reliability (Coetzee 2014). The internal consistency reliability coefficients for the three PCRI subscales in the present study ranged between .79 and .91 (high).

Control Variables

Previous research (Coetzee 2008; Ferreira 2012) indicated differences among black and white people, age groups and males and females regarding their career confidence and psychological career resources (career enablers, career harmonisers and career values). A biographical questionnaire was therefore included to obtain the ethnicity, gender and age of the participants. Research generally supports the inclusion of biographical variables as control variables in regression analysis to ensure that observed relationships between construct variables are not spurious. Social sciences generally regard biographical variables as potential confounders of the relationship between construct variables (Salkind 2010). In line with statistical protocols, the biographical variables were dummy coded (i.e. white = 0; black = 1; <40 years = 0; >40 years = 1; male = 0; female = 1) in order to be able to calculate estimates for codes 1 and compare the results relative to codes 0. This approach limited potential bias concerns and ensured that the biographical variables as potential confounders could not vary between the groups and that the observed relationships between the construct variables were independent of the biographical variables (Salkind 2010).

Statistical Analysis

Descriptive statistics included calculations of means, standard deviations, Cronbach's alpha coefficient (cut-off threshold [Hair et al. 2010]: >.70) and zero-order correlations (Cut-off threshold [Cohen et al. 2003]: $p \le .05$ at 95% confidence level; $r \ge .10$ to $r \le .29$: small practical

effect; $r \ge .30$ to $r \le .49$: moderate practical effect; $r \ge .50$: large practical effect). Concerns about multicollinearity were probed at $r \ge .80$ (Hair et al., 2010). In order to determine the factors that contribute to career confidence, regression-based moderated mediation analysis using the SPSS procedure developed by Hayes (2013) was performed. In line with the guidelines provided by Wu and Zumbo (2008), the moderated mediation model hypothesised that the strength and direction of the mediation effect (i.e. career harmonisers) which produced the effect of the independent variable (i.e. career enablers) on the dependent variable (career confidence) depends (is conditional) on the level (value) of the moderator (career values).

First, a simple mediation model was tested to establish the meditational pathway from career enablers to career harmonisers to career confidence. Second, a moderated mediation model was tested by integrating the proposed moderator variable (career values) into the model. Regression analysis was performed to establish whether the path from career enablers to career confidence through career harmonisers (mediator) is moderated by different levels of career values. The interaction effect between career enablers and career values was tested in the moderated-mediation model. Since the cross-sectional nature of the research design does not allow for casual inferences from the data analyses (Wu and Zumbo 2008), the focus was therefore placed on exploring the magnitude of the direct, indirect and interaction effects between the variables. As suggested by Aiken and West (1991), all continuous variables were mean centred prior to the analyses to reduce multicollinearity between main and interaction effects. The more reliable bootstrapping bias-corrected 95% lower level and upper level confidence intervals (LLCI; ULCI) not including zero (Shrout and Bolger 2002) was used as guideline to interpret the significance of the main and interaction effects and the conditional indirect effects at different values of the moderator variable.

Results

Testing Divergent Validity

Preliminary statistical analysis involved testing for divergent validity between the scale constructs. A confirmatory factor analysis (CFA) revealed adequate model fit of the measurement model (including the constructs of career enablers, career harmonisers, career values and career confidence), indicating acceptable divergent validity: chi-square/diff = 1.62;

p = .001; SRMR = .06; RMSEA = .05; CFI = .91 and NNI = .90. A one-factor CFA solution showed a poor fit of the data: chi-square/dif = 1.98; p = .001; SRMR = .08; RMSEA = .07; CFI = .85 and NNI = .84.

The means, standard deviations and zero-order intercorrelations among the variables are presented in Table 1. An examination of the correlations showed that all the career variables were positively and significantly related (range: $r \ge .40$ to $r \le .69$; moderate to large practical effect; $p \le .001$). The correlations were also below the threshold value for concerns about multicollinearity ($r \le .80$).

Table 1: Descriptive statistics: Means, standard deviations, Cronbach's alpha coefficients and zero-order correlations

		Mean	SD	α	1	2	3	4	5	6	7
1	Ethnicity	.46	.50								
2	Gender	.54	.79								
3	Age	.63	.49								
4	Career confidence	3.94	.73	.90	06	.03	.05	-			
5	Career enablers	4.94	.70	.84	11	.01	07	.58***	-		
6	Career values	4.67	.83	.79	08	01	22***	.47***	.62***	-	
7	Career harmonisers	4.66	.69	.91	18***	.08	.07	.69***	.56***	.40***	-

Note: N = 248. *** $p \le .001$. ** $p \le .01$. * $p \le .05$.

Testing Mediating Effects

Next, as shown in Table 2, the regression model was significant: Model (career confidence regressed on career enablers, career harmonisers and career values) explained 40 per cent (large practical effect) of the variance in career confidence (F = 18.66; p = .000; $R^2 = .40$). Table 2 shows that (1) the pathway from career enablers (independent variable) to the dependent variable career confidence was positive and significant ($\beta = .52$; t = 5.62; p = .000; LLCI: .34; ULCI: .70); (2) the pathway from career enablers (independent variable) to the mediating variable career harmonisers was significant and positive ($\beta = .50$; t = 6.78; p = .000; LLCI: .36; ULCI: .65); and (3) that when controlling for career enablers, the pathway from the mediating variable career

harmonisers to the dependent variable career confidence was significant and positive (β = .23; t = 2.72; p = .01; LLCI: .06; ULCI: .40). However, the effect of career enablers on career confidence when controlling for career harmonisers (indirect effect) was not significant: β = .02; LLCI: -.003; ULCI: .06. The results suggest that career harmonisers did not have a significant mediating effect on the relation between career enablers and career confidence.

Table 2: Regression coefficients, standard errors, significance tests for the regression model and indirect mediation effect of career harmonisers

				95% Bootstrap bias-corrected	
	В	SE	t	LLCI	ULCI
Model: Career confidence					
constant	2.76	.40	6.82***	1.96	3.56
Career harmonisers	.23	.09	2.72**	.06	.40
Career enablers	.52	.09	5.62***	.34	.70
Career values	.03	.07	.39	10	.15
Interaction term:	.13	.06	2.15*	.01	.24
Career enablers x career values					
Control variables	•	•			
Ethnicity	.06	.07	.77	09	.21
Gender	.003	.08	.04	15	.16
Age	.06	.05	1.22	04	.15
Model info	·				
Fp	18.66***				
R ²	.40				
Indirect effect	·				•
Career harmonisers	.02	.02	-	003	.06

Note: N = 248. *** $p \le .001$. ** $p \le .01$. * $p \le .05$.

Testing Moderated Mediation Effects

Table 3 shows the results of the moderated mediation model. It was hypothesized that (H1) the effects of (a) career enablers and (b) career harmonisers on career confidence are moderated by career values such that stronger effects are associated with stronger career values. In other words, it was assumed that the magnitude and strength of the effect of the career enablers on career confidence through the career harmonisers would depend (conditional indirect effect) in turn on

the levels of career values. The conditional direct and indirect effects were analysed when the scores of career values were the sample mean and \pm 1 SD. The mean of career values was zero because the score was mean centred. Table 3 reveals that all three of the conditional direct effects and conditional indirect effects were significantly positive as supported by the bias-corrected bootstrap lower level and upper level confidence intervals (LLCI and ULCI) not including zero in the values range. The results indicated that the conditional direct effect of career enablers on career confidence increased when the score on career values was high. Similarly, as illustrated in Figure 2, the conditional indirect effect of career enablers on career confidence through career harmonisers increased when the score on career values was high.

Table 3: Conditional direct and indirect effects at the values of the moderator (career values)

					95% Bootstrap			
					bias-corrected			
	Values of	В	SE	t	LLCI	ULCI		
	moderator							
Conditional direct effect of career enablers on career confidence at value of moderator								
(career values)								
-1SD	81	.41	.09	4.37***	.23	.60		
Mean	.00	.52	.09	5.62***	.34	.69		
+1SD	.81	.62	.11	5.54***	.40	.84		
Conditional indirect effect of career enablers on career confidence through career								
harmonisers at values of moderator (career values)								
-1SD	81	.10	.03	-	.04	.19		
Mean	.00	.12	.04	-	.04	.21		
+1SD	.81	.13	.05	-	.05	.24		

Note: N = 248. * $p \le .05$. Bootstrap sample size = 1000. LLCI: Lower level confidence interval. ULCI: Upper level confidence interval.

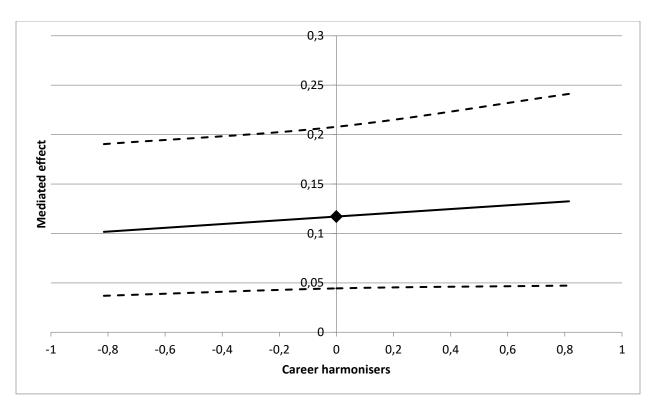


Figure 2: Graphical illustration of conditional indirect effect of career enablers on career confidence through career harmonisers at values of moderator (career values)

Discussion

The results contributed new insights on the dynamic relation among the psychological career mechanisms of career enablers, career harmonisers and career values and the career adaptability construct of career confidence in the self-designing career action system. As such, the study makes an important contribution to contemporary career adaptability theory (Savickas and Porfeli 2012). The study adopted a moderated-mediation approach to explore the conditional and indirect effects of the three psychological career mechanisms (career values, career enablers and career harmonisers) on participants' self-efficacious career adaptability (career confidence). It was assumed that the effects of (a) career enablers and (b) career harmonisers on career confidence are moderated by career values such that stronger effects are associated with stronger career values. The results indicated that although the career harmonisers did not have a significant mediating effect, the conditional indirect effect of career enablers on career confidence through career harmonisers increased when the score on career values was high. By highlighting the significant

positive role of career values in enhancing career confidence, the study adds new insights to the sparse research literature on career values in the contemporary career adaptability framework.

Career values express a motivational goal (Schwartz 1992) and allude to the participants' intrinsic needs and goals for work that provides them with the authority and influence to function autonomously and work that provide further growth and development opportunities (increased competence: Coetzee 2014). The results corroborate previous research on the role of intrinsic motivational needs and goals in directing and amplifying the level of attention and investment individuals are willing to expend in the pursuit of goals (Sortheix et al. 2013). The current study showed that the development of strong career values might provide the intrinsic motivation for actively engaging in self-efficacious adaptive career behaviour, that is, active problem solving, skills utilisation and new skills learning in overcoming obstacles, performing tasks and implementing career goals (Fiori et al. 2015; McMahon et al. 2012). Although enabling career skills and positive psychosocial career attributes also provided an explanation of the participants' higher levels of career confidence, their effects on career confidence were dependent on the strength of the participants' career values. Participants with strong career values also had higher career enablers and higher career confidence than those with less strong career values. Low scores on career values were associated with low career enablers and low career confidence. These findings could be attributed to strong intrinsic career values denoting a sense of ownership of one's behaviour and the likelihood to experience increasing amounts of fulfilment from the opportunities one undertakes due to well-crystallised intrinsically motivating self-concordant goals, interests and learning possibilities (Sortheix et al. 2013). Previous research also indicates a link between career enablers and career and occupation commitment and involvement (Tladinyane 2012) which could explain the positive link between high career enablers and high career confidence. The findings suggest in line with previous research that the development of strong career values is pivotal in employees' career development (Sortheix et al. 2013) and for enhancing self-efficacious active adaptive career self-management behaviours in the contemporary workplace.

Some of the limitations that should be considered in the interpretation of the findings include the cross-sectional quantitative research design, which limits the generalisation of the results to other occupational contexts in other countries. Cause-effect relations between the variables could also

not be established due to the correlational design. The study also relied on self-report measures that raise the question about common method bias. Future longitudinal research designs in various occupational contexts are recommended to be able to investigate cause-effect relations, and whether intrinsic career values are sustained over a long period of time over the life span of the employee. Future studies should also consider the relationship between other types of career values and career-related constructs.

Overall, the results of the study suggest that employees' career confidence (self-efficacious career adaptability) may potentially be enhanced by well-developed career enabling skills and positive psychosocial career attributes on the condition that they have strong (well-crystallised) career values. The study results also seem to imply that employees' proactive adaptive career self-management behaviour can be successfully strengthened by the synergetic effect between psychological career mechanisms (career values, career enablers and career harmonisers) and career confidence (self-efficacious career adaptability). Career assessments and career discussions on intrinsic career needs, goals and interests are important mechanisms for helping employees to gain clarity on their motivation for engaging in important self-directed adaptive career behaviour for greater career satisfaction in the contemporary career environment. Acknowledging the role of strong career values in enhancing employees' career confidence may help managers and practitioners to establish career development support practices for heightening employees' career self-management and sense of career success in the world of work.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) declared that no financial support was involved in conducting the research.

References

- Aiken, L. S. and West, S. G. 1991. Multiple Regression: Testing and Interpreting Interactions. Newbury Park: Sage.
- Baard, P. P., Deci, E. L., and Ryan, R. M. 2004. "Intrinsic Need Satisfaction: A Motivational Basis of Performance and Well-Being in Two Work Settings." *Journal of Applied Social Psychology* 34 (10): 2045–2068. https://doi.org/10.1111/j.1559-1816.2004.tb02690.x.
- Bandura, A. 1997. Self-Efficacy: The Exercise of Control. New York: Freeman.
- Coetzee, M. 2008. "Psychological Career Resources of Working Adults: A South African Survey." South African Journal of Industrial Psychology 34 (2): 32–41. https://doi.org/10.4102/sajip.v34i2.491.
- Coetzee, M. 2014. "A Psychological Career Resources Framework for Contemporary Career Development." In *Psycho-Social Career Meta-Capacities: Dynamics of Contemporary Career Development*, edited by M. Coetzee, 87–122. Dordrecht: Springer International. https://doi.org/10.1007/978-3-319-00645-1_6.
- Coetzee, M. and Harry, N. 2014. "Emotional Intelligence as A Predictor of Employees' Career Adaptability." *Journal of Vocational Behavior* 84 (1): 90–97. https://doi.org/10.1016/j.jvb.2013.09.001.
- Coetzee, M. and Schreuder, A. M. G. 2012. "Subjective Work Experiences, Career Orientations, and Psychological Career Resources of Working Adults." *South African Journal of Higher Education* 26 (2): 813–828.
- Cohen, J., Cohen, P., West, S. G., and Aiken, L. S. 2003. *Applied Multiple Regression/correlation Analysis for the Behavioral Sciences*. 3rd ed. Mahwah: Erlbaum.
- Deci, E. L. and Ryan, R. M. 1985. *Intrinsic Motivation and Self-Determination in Human Behavior*. In a building, the space between the real ceiling and the dropped ceiling, which is often used as an air duct for heating and air conditioning. It is also filled with electrical, telephone and network wires. See plenum cable. New York: Plenum. https://doi.org/10.1007/978-1-4899-2271-7.
- De Guzman, A. B. and Choi, K. O. 2013. "The Relations of Employability Skills to Career Adaptability Among Technical School Students." *Journal of Vocational Behavior* 82: 199–207. https://doi.org/10.1016/j.jvb.2013.01.009.
- Ferreira, N. 2012. "Constructing a Psychological Profile for Staff Retention." PhD diss., University of South Africa.

- Fiori, M., Bollman, G., and Rossier, J. 2015. "Exploring the Path Through Which Career Adaptability Increases Job Satisfaction and Lowers Job Stress: The Role of Affect." *Journal of Vocational Behavior* 91: 113–121. https://doi.org/10.1016/j.jvb.2015.08.010.
- Guan, Y., Yang, W., Zhou, X., Tian, Z., and Eves, A. 2016. "Predicting Chinese Human Resource Managers' Strategic Competence: Roles of Identity, Career Variety, Organizational Support and Career Adaptability." *Journal of Vocational Behavior* 92: 116–124. https://doi.org/10.1016/j.jvb.2015.11.012.
- Hair, J., Black, W., Babin, B., and Anderson, R. 2010. *Multivariate Data Analysis*. Englewood Cliffs: Pearson Education.
- Hayes, A. F. 2013. Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York: The Guilford Press.
- Hamtiaux, A., Houssemand, C., and Vrignaud, P. 2013. "Individual and Career Adaptability: Comparing Models and Measures." *Journal of Vocational Behavior* 83 (2): 130–141. https://doi.org/10.1016/j.jvb.2013.03.006.
- Hirschi, A., Lee, B., Porfeli, E. J., and Vondraeck, F. W. 2013. "Proactive Motivation and Engagement in Career Behaviors: Investigating Direct, Mediated, and Moderated Effects." *Journal of Vocational Behavior* 83 (1): 31–40. https://doi.org/10.1016/j.jvb.2013.02.003.
- Hirschi, A., Herrmann, A., and Keller, A. C. 2015. "Career Adaptivity, Adaptability, and Adapting: A Conceptual and Empirical Investigation." *Journal of Vocational Behavior*, 87: 1–10. https://doi.org/10.1016/j.jvb.2014.11.008.
- Khapova, S. N., Arthur, M. B., and Wilderom, C. P. M. 2007. "The subjective career in the knowledge economy." In *Handbook of Career Studies*, edited by H. Gunz and M. Peiperl, 114–130. London: Sage. https://doi.org/10.4135/9781412976107.n7.
- Klehe, U., Zikic, J., Van Vianen, A. E. M., and De Pater, I. E. 2011. "Career Adaptability, Turnover and Loyalty During Organizational Downsizing." *Journal of Vocational Behavior* 79 (1): 217–229. https://doi.org/10.1016/j.jvb.2011.01.004.
- McMahon, M., Watson, M., and Bimrose, J. 2012. "Career Adaptability: A Qualitative Understanding from the Stories of Older Women." *Journal of Vocational Behavior*, 80 (3): 762–768. https://doi.org/10.1016/j.jvb.2012.01.016.
- Nilforooshan, P. and Salimi, S. 2016. "Career Adaptability as Mediator Between Personality and Career Engagement." *Journal of Vocational Behavior* 94: 1–10. https://doi.org/10.1016/j.jvb.2016.02.010.
- Nota, I. and Rossier, J., eds. 2015. Handbook of Life Design: From Practice to Theory and From Theory to Practice. Göttingen: Hogrefe.

- Salanova, M., Llorens, S., and Schaufeli, W. B. 2011. "Yes, I can, I feel good, and I just do it!" On Gain Cycles and Spirals of Efficacy Beliefs, Affect, and Engagement." *Applied Psychology: An International Review* 60 (2): 255–285. https://doi.org/10.1111/j.1464-0597.2010.00435.x.
- Salkind, N. J. 2010. *Encyclopedia of Research Design*. Thousand Oaks: Sage. https://doi.org/10.4135/9781412961288.
- Savickas, M. L. and Porfeli, E. J. 2012. "Career Adapt-Abilities Scale: Construction, Reliability, and Measurement Equivalence Across 13 Countries." *Journal of Vocational Behavior* 80 (3): 661–667. https://doi.org/10.1016/j.jvb.2012.01.011.
- Schwartz, S. H. 1992. "Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries." In *Advances in Experimental Social Psychology*, edited by M. P. Zanna, 1–65. San Diego: Academic Press. https://doi.org/10.1016/S0065-2601(08)60281-6.
- Shrout, P. E. and Bolger, N. 2002. "Mediation in Experimental and Nonexperimental Studies: New Procedures and Recommendations." *Psychological Methods* 7 (4): 422–445. https://doi.org/10.1037/1082-989X.7.4.422.
- Sortheix, F. M., Dietrich, J., Chow, A., and Salmela-Aro, K. 2013. "The Role of Career Values for Work Engagement During the Transition to Working Life." *Journal of Vocational Behavior* 83 (3): 466–475. https://doi.org/10.1016/j.jvb.2013.07.003.
- Spurk, D., Kaffeld, S., Meinecke, A. L., and Ebner, K. 2016. "Why Do Adaptable People Feel Less Insecure? Indirect Effects of Career Adaptability on Job and Career Insecurity Via Two Types of Perceived Marketability." *Journal of Career Assessment* 24 (2): 289–306. https://doi.org/10.1177/1069072715580415.
- Sternberg, R. J. 2003. "Implications of the Theory of Successful Intelligence for Career Choice and Development." *Journal of Career Assessment* 11 (2): 136–152. https://doi.org/10.1177/1069072703011002002.
- Tladinyane, R. T. 2012. "Psychological Career Resources, Work Engagement and Organisational Commitment: A Psychological Profile for Staff Retention." PhD diss., University of South Africa.
- Tladinyane, R. T. and Van der Merwe, M. 2016. "Career Adaptability and Employee Engagement of Adults Employed in An Insurance Company: An Exploratory Study." *South African Journal of Human Resource Management* 14 (1). http://dx.doi.org/10.4102/sajhrm.v14i1.752.
- Wu, A. D. and Zumbo, B. D. 2008. "Understanding and Using Mediators and Moderators." *Social Indicators Research* 87: 367–392. https://doi.org/10.1007/s11205-007-9143-1.

- Young, R. A., Valach, L., and Domene, J. F. 2005. "The Action-Project Method in Counseling Psychology." *Journal of Counseling Psychology* 52 (2): 215–223. https://doi.org/10.1037/0022-0167.52.2.215.
- Zacher, H. 2014. "Career Adaptability Predicts Subjective Career Success Above and Beyond Personality Traits and Core Self-Evaluations." *Journal of Vocational Behavior* 84: 21–30. https://doi.org/10.1016/j.jvb.2013.10.002.