

THE MEDIATING ROLE OF CAREER ADAPTABILITY ON THE RELATIONSHIP BETWEEN PSYCHOLOGICAL CAPITAL AND ACADEMICS' CAREER SUCCESS

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ABSTRACT

The success in academics' career need to be promoted through the increasing of academicians' career adaptability (CAA). Hence, this study aims to investigate the mediating effect of career adaptability (CAA) on the relationship between psychological capital (PsyCap) and academics' career success beside the antecedent role of PsyCap for both CAA and academics' career success. Further, this study adapted the quantitative approach which requires primary data that were collected from full-time university lecturers working in public universities Sudan. Out of the 250 self-administrated questionnaires, 209 were returned for final analysis. The obtained data was analyzed by using the SEM-Smart-PLS 3.2.7 software techniques. The results revealed that PsyCap resources were positively related to academics' career success directly and indirectly through the CAA resources as well. Interestingly, the result showed that academicians need to embrace CAA resources by giving more concern, control, curiosity, and confidence which help them to take the advantage of PsyCap resources towards achieving their success in career. Finally, the paper closed with implications and conclusion.

KEYWORDS: Academics' career success, psychological capital, positive psychology, and career adaptability.

1. INTRODUCTION

Universities play an effective role in developing the skills of academicians, students, workers, and society as a whole. Hence, the role of the universities are not only to produce an educated, skilled, and capable human resources for potential organizations, but also it is a repository of knowledge that feeding and promoting the human resources needs of the information in order for contributing to their own productivity, economic growth (Ng'ethe, 2012). This quite obvious in all growing countries as general, however, Sudan in particular. The public universities in Sudan were growing well which were increased from 5 public universities during the 1990s to 30 public universities in 2016 (MOHE, 2016). This increasing based on the expansion strategy that founded by the Government so-called "higher education revolution" which adopted the transformation of; a) the language from English into Arabic language (Arabicization), b) Islamization, and c) expands the number of universities (Kilase, 2013).

Unfortunately, the expansion of universities resulted in multiplying the number of enrolment which increased from 5,000 students in 1990s into 300,000 in 2006 (Gasim, 2010), besides the decreasing of academic staff in universities due to the inadequate salary, and a lack of funding for their project which in turn affected their publication and satisfaction (Zakaria & Abdalla, 2016). Taking collectively, this evidence indicates that academic staff feel is not successful enough in their academics' career due to the lack of support for their career development. This case can be explained by "psychological contract shift" in career development. Traditionally, the organization provides training, funding, and other facilities for employee's career development, whereas, nowadays employee need to depend on his/her self for career

development (Briscoe & Hall, 2006; Defilippi & Arthur, 1996). Therefore, the academic staff in Sudan have to adopt a contemporary approach of career development such as protean theory founded by Hall (1976) which induces academic staff to use their personal resources and values for achieving their career success (Hall, Yip, & Doiron, 2018). Thus, the aim of this study to enhance the academic staff personal resources (i.e., psychological capital, career adaptability, and Islamic work ethics) for achieving their career success depend on the assumptions of career construction and conservation of resource theory.

1.1 Research questions

1. What are the relationship of both psychological capital and career adaptability on academics' career success?
2. Is there any mediating effect of career adaptability on the relationship between psychological capital and academics' career success?

1.2 Research Objectives

1. To investigate the effect of both psychological capital and career adaptability for increasing the academics' career success in public universities in Sudan.
2. To discover the role of career adaptability as a mediator for explaining the relationship between psychological capital and academics' career success.

1.3 Research significance

Previous studies acknowledged the importance of career success in academia that driven by organization support. However, there is a lack of using psychological resources for enhancing the career success among university teachers more specifically in Sudan. Therefore, this study focused on finding new model that comprised from antecedents, mediator, and outcomes which can be proofed by investigation the mediating role of career adaptability between psychological capital and career success. Further, the study examines the antecedent role of psychological capital and career adaptability for elevating the academicians' career success.

2. THEORETICAL BACKGROUND

The theoretical perspective of this study is comprised of the important literature that pertaining to variables (academics' career success, psychological capital, career adaptability, and Islamic work ethics) that building the model of study in terms of definitions, methods, results, and knowledge gaps. Then, the authors are going to develop their hypotheses accordingly.

2.1 Academics' career success

Career success is defined as "the positive psychological or work-related outcomes or achievements one accumulates as a result of work experiences" (Seibert, Crant, & Kraimer, 1999, p. 417). And it's also described as the accumulated positive work and psychological outcomes stem from one's work experiences (Seibert & Kramer, 2001). Furthermore, career success is considered as positive career outcomes that related to a person's experiences over time. Accordingly, Arthur and others defined career success as "the accomplishment of desirable work-related outcomes at any point in a person's work experiences over time" (Arthur, Khapova, & Wilderom, 2005, p. 179). In line with this, scholars of career have operationalized career success as an objective (i.e., tangible) and subjective (i.e., intangible) indicators (Ballout, 2009). In general, objective success indicators are salary and promotion whereas subjective success indicators are job and career satisfaction. However, career success phenomenon is related to context of career (Abele, Spurk, & Volmer, 2011), which it operationalized depend on the nature of the career itself.

For example, a success of medical career should be measured by different means compared to academic career. This because the medical career success based on number of surgeries has been done by the doctor. While, the success in academic career depend upon the number of publications that done by academician. Hence, this study focuses on academics' career success which measured by pay, promotion, position, and publication (4Ps) as objective parameters whereas the subjective parameters are job and career satisfaction (Abu Said, Mohd Rasdi, Abu Samah, Silong, & Sulaiman, 2015). In contrast, the previous research focused on others context of career success such as students' career success (Ang, Hwa, & Ramayah, 2010), managers' career success (Heslen, 2005; Stumpf & Tymon, 2012), and career success in medicine (Kaderli, Muff, Stefenelli, & Businger, 2011; Sanders, Breland-Noble, King, & Cubic, 2010; Santos, 2016). Therefore, this study focuses on psychological personal resources (i.e., psychological capital, career adaptability, and

Islamic work ethics) as predictors for driving the academics' career success in Sudan. Yet, little is known about their experiences of career success in Sudanese universities.

2.2 Psychological capital and academics' career success

Psychological capital (PsyCap) is defined as the study and application of positive human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement at the workplace (F. Luthans, Youssef, & Avolio, 2007). Furthermore, PsyCap is a multidimensional core construct that integrates the essential personal resources are self-efficacy, optimism, hope, and resiliency which have a positive impact on performance improvement (F. Luthans et al., 2007). Previous studies showed the importance of PsyCap resources (self-efficacy, optimism, hope, and resiliency) in promoting the human competitive advantages (K. W. Luthans & Jensen, 2005) and improving both individual and organisational performance (Luthans, Luthans, & Luthans, 2004). Accordingly, PsyCap resources have a positive effect on individuals career success (B. Luthans, Luthans, & Jensen, 2012).

Therefore, the empirical evidence emphasised a positive relationship between PsyCap and positive work outcomes. Singhal and Rastogi (2018) studied the role of PsyCap with subjective well-being (SWB) and career commitment. The results demonstrated that PsyCap has a strong predictor of SWB and career commitment. In addition, SWB has found that partially mediated the relationship between PsyCap and career commitment (Singhal & Rastogi, 2018). In line with this, Ngo and his colleagues (2014) found that PsyCap's resources were related to career success among Chinese employees (Ngo, Foley, Ji, & Loi, 2014). In contrast, Karatepe and Karadas (2015) investigated the effect of PsyCap on job, career, and life satisfaction among hotel workers in Romania. The results suggest that optimism appears to be the best indicator of psychological capital, followed by resilience, self-efficacy and hope in order. Overall, the finding confirmed that workers who are high in psychological capital are more satisfied with their job, career, and life as well (Karatepe & Karadas, 2015). In support, Schulz et al. (2014) found that individuals who possess high levels of PsyCap resources is enjoying "higher levels of job satisfaction, commitment to their organisation, and most importantly are less likely to quit" (Schulz, Luthans, & Messersmith, 2014, p. 628). However, there are a few studies have been conducted using PsyCap as a driver for career success particularly in non-US populations (Idris & Manganaro, 2017). Hence, this study proposes PsyCap as main predictor for academics' career success.

H1: Psychological capital is positively related to academics' career success.

2.3 Career adaptability and Academics' career success

Due to the psychological contract shift for career development (Baruch & Hall, 2004; Defilippi & Arthur, 1996) which led employee to be more independent toward their career development or success by increasing their personal resources such as career adaptability and psychological resources. Career adaptability (CAA) as a psychosocial construct enhances employees' self-regulating strengths or capacities that help them to cope with current or anticipated occupational changes at workplace (Savickas & Porfeli, 2012; Tolentino, Garcia, Restubog, Bordia, & Tang, 2013). Further, career adaptability resources called adapt-abilities which adapt comes from the Latin meaning to fit or to join whereas abilities are concern, control, curiosity, and confidence (4Cs) (Savickas & Porfeli, 2012). Meaning that, individual needs to use his psychosocial resources (i.e., abilities) that concern, control, curiosity, and confidence for adapt a current/future change in his/her career. Wherein, first, concern is pointing out to the individual's future, second, control is about the individual responsibility for shaping him/herself with surrounding environment (i.e., person-environment fit), third, curiosity increases the individual thinking about him/herself in various situations and roles based on prior experiences and available information which generate his/her aspirations and, finally, build his/her confidence which helps him/her to transfer visualized choices into the real life at the workplace (Savickas & Porfeli, 2012).

On the other hand, scholarly evidence emphasized that CAA is an important resource to overcome challenges across variety of complex situations by increasing employees' commitment, subjective well-being, and career satisfaction, academic and life satisfaction (Ginevra et al., 2018; Johnston, 2018; Schuesslbauer, Volmer, & Goritz, 2017) whereas it prevent employees of engaging in deviant behaviours such as turnover intention and actual turnover (Chan, Mai, Kuok, & Kong, 2016). Hence, this study proposed that CAA could play a crucial role in help academic staff for achieving their career success. This in line with career construction theory (CCT), which is conceptualized CAA as a self-regulatory resource and set of competencies that assist academicians to deal with current/future changes and challenges in their career, proactively manage their careers, and maintain and improve person-environment fit in the context of work and careers

(Savickas & Porfeli, 2012) in order to achieve person-environment fit which lead them to achieve subjective and objective career success (Savickas, 2013).

In support, empirical evidence ensured the association between CAA resource and career success. According to Haibo and his colleagues found that CAA has a positive impact on individual career success as well as organizational success in China (Haibo, Xiaoyu, Xiaoming, & Zhijin, 2018). Similarly, other scholars have confirmed the influence of CAA resources on career success (Guan, Zhou, Ye, Jiang, & Zhou, 2015; Xie, Xia, Xin, & Zhou, 2016; Xu, Liu, & Chen, 2017). However, CAA resource has a positive relationship with turnover intention whereas negatively related to employee loyalty (Ito & Brotheridge, 2005; Klehe, Zikic, Van Vianen, & De Pater, 2011). In contrast, the majority of studies showed that CAA resource is positively related to career success. Thus, we hypothesize that;

H2: Career adaptability is positively related to academics' career success.

2.4 Psychological capital and Career adaptability

PsyCap has been found to improve employees engagement, commitment, subjective well-being, and overall performance (Singhal & Rastogi, 2018; Yin, Wang, Huang, & Li, 2018). Similarly, PsyCap resources have more capability for driving individuals' adaptability in career. This because the resources of PsyCap (hope, self-efficacy, resilience, and optimism) are all turning the individuals state of mind into positive side. In support, the previous work has brought some evidences. For instance, Othman and colleagues (2018) have studied the effect of positive psychological traits on career adaptability among university students in Malaysia. The results showed that positive psychological traits has positive effect on their career adaptability (Othman, Kamal, Alias, Ismail, & Sahiq, 2018). In similar vein, Safavi and Bouzari (2019) have investigated the association between PsyCap and CAA among 193 frontline employees in five-star hotels in North Cyprus. The findings clearly proved that there is a significant relationship between psychological capital and career adaptability (Safavi & Bouzari, 2019). However, from female side, Coetzee and colleagues (2017) have investigated the effect of PsyCap resources on CAA among female's worker in Media company in South Africa. The findings stressed that PsyCap has a positive effect on CAA (Coetzee, Ferreira, & Shunmugum, 2017). Hence, this study proposed that PsyCap resources will predict CAA among academic staff in Sudan.

H3: Psychological capital is positively related to career adaptability.

2.5 A Mediation role of Career adaptability

According to career construction theory (CCT), employees need to continuously adjust to their social and work environment in order to achieve person-environment fit and in turn subjective and objective career success (Savickas, 2013). Accomplishing career tasks such as preparing for, starting, and participating in a work role as well as dealing effectively with work role demands, transitions, and disturbances are seen as instrumental with regard to meeting own and others' expectations regarding successful working lives and careers (Savickas, 1997). Within career construction theory, career adaptability is conceptualized as a self-regulatory resource and set of competencies that help employees deal with career changes and challenges, proactively manage their careers, and maintain and improve person-environment fit in the context of work and careers (Savickas & Porfeli, 2012). It has been described as a form of human capital that is accumulated over time (Zacher & Griffin, 2015).

based on educational, work, and training experiences, and includes "adapt-abilities" such as career concern, confidence, curiosity, and control (Savickas, 1997, 2013; Savickas & Porfeli, 2012). Recent research has operationalized career adaptability using behavioral indicators of these "adapt-abilities," such as "Looking for opportunities to grow as a person" and "Learning new skills" (Savickas & Porfeli, 2012). Several studies have shown that career adaptability is positively related to indicators of subjective career success. For instance, career adaptability predicted career satisfaction and self-rated career performance above and beyond the effects of Big Five personality traits and core self-evaluations (Zacher, 2014). Other studies found that career adaptability is positively related to employees' general and professional well-being (Zacher & Griffin, 2015).

Similarly, CAA resources can mediate the relationship between PsyCap and career outcomes such as academics' career success. For example, According to Safavi and Bouzari (2019) have confirmed that CAA resources have a significant mediating effect on the relationship between PsyCap and career competency among front lines employees in Cyprus. In Middle east, Ibrahim and Amari (2018) have studied the mediator role of CAA between the relationship of PsyCap and subjective career success among female academic staff in Saudi Arabia. The result showed that CAA was

partially mediating the relationship between PsyCap and subjective career success (Ibrahim & Amari, 2018). In similar vein, Chong and Leong (2017) have investigated the mediation role of CAA between antecedents of CAA and strategic career management for 307 graduates with work experience in US. The result stressed that CAA has a partial mediation effect on that relationship (Chong & Leong, 2017). Therefore, and based on above-mentioned evidence, we assume the existence of mediation effect of CAA between PsyCap and academics' career success.

H4: CAA will mediate the relationship between PsyCap and academics' career success.

3. METHODOLOGY

3.1 Sample and data collection

In order to achieve the purpose of this study, data were collected from 5 public universities in Sudan using a self-administered questionnaire. To calculate the sample size, we used the *G*power 3.1* (Erdfelder, FAul, Buchner, & Lang, 2009) software with the following setting: $f^2 = 0.15$ (medium), $\alpha = 0.05$, number of predictors = 2 and the power was set at 80% (Gefen, Rigdon, & Straub, 2011; Ringle, Da Silva, & Bido, 2014). The sample size required to test the model was 68, but this number tripled to 204 in order to have a good size effect. The data were collected by distributing 50 questionnaires to each of the 5 universities providing us with a total sample size of 250 which is a better representation of the population of interest. The questionnaire was divided into 3 sections; section (A) involves the information about career success, section (B) includes the information about PsyCap and PCO) and finally section (C) reflects the information about the demography. On the other hand, the questionnaire items have been adapted from different validated sources specially Q1 journals. Where in, four (4) items to measure OCS adapted from (Abu Said et al., 2015) whereas, five (5) items adapted from (Greenhaus, Parasuraman, & Wormley, 1990) for measuring SCS. In addition, twenty-four (24) items for measuring PsyCap validated by (Luthans et al., 2007), and finally PCO has twelve (12) items adapted from (Briscoe & Hall, 2006). The respondents were asked to indicate their agreement or disagreement on several statements using the five-point Likert scale ranging from 1=strongly disagree to 5=strongly agree.

3.2 Profile of respondents

The demographics of the respondents are specified in Table 1. Males (64.6%) outnumbered females (35.4%). A majority of the respondents possess a Master's degree (47.8%) and Ph.D. (45.0%). This is due to the requirement to be a lecturer in public universities in Sudan. Most of the respondents are located in Khartoum and Sudan University (31.6% and 29.2%) respectively. These are top two universities in Sudan and have more students compared with the other universities.

Table 1: Profile of Respondents

Profile		Frequency	Percentage
Gender	Male	135	64.6
	Female	74	35.4
Age	Less than 25	15	7.2
	25 - 35	81	38.8
	36 – 45	67	32.1
	More than 45	46	22.0
Marital status	Single	69	33.0
	Married	134	64.1
	Divorced	6	2.9
Level of Education	Bachelor's degree	14	6.7
	Master's degree	100	47.8
	PhD	94	45.0
	Other (specify)	1	.5
Experience	Less than 5 years	52	24.9
	5 - 10	58	27.8
	11 - 15	43	20.6
University	More than 15 years	56	26.8
	University of Khartoum	66	31.6
	Sudan University of Science and Technology	61	29.2
	University of Gezira	36	17.2
	Al-Neelain University	28	13.4
	Omdurman Islamic University	18	8.6

4. ANALYSIS AND RESULTS

For testing the model of this study, the Partial Least Squares (PLS) technique was used by applying the Smart-PLS 3.2.6 software (Ringle, Wende, & Becker, 2015). We followed the recommended two-stage analytical procedure as supported by both the reflective and formative constructs (Anderson & Gerbing, 1988; Ramayah, Lee, & In, 2011). Accordingly, we conducted the measurement model test (validity and reliability of constructs) followed by an examination of the structural model (testing the hypotheses) (Ramayah, Jasmine, Ahmad, Halim, & Rahman, 2017), testing the significance of the path coefficients and for the loadings a bootstrapping method (5000 resamples) was used (Hair, Hult, Ringle, & Sarstedt, 2017).

4.1 Reflective measurement model analysis

There are two types of validity used for assessing a model’s measurements. They are convergent validity and discriminant validity.

4.1.1 Convergent Validity

The convergent validity of a model’s measurements is usually assessed by examining the loadings, average variance extracted (AVE) and the composite reliability (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014; Tehseen, Sajilan, Gadar, & Thurasamy, 2017). For our context, the loadings were almost equal to 0.7 and higher; the composite reliabilities (CR) were all higher than 0.7; and the AVE of all constructs were also higher than 0.5, as suggested in the literature (Table 2).

Table 2: Assessment of AVE, CR, Cronbach’s Alpha, and Rho_A

Second order	Frist order/ dimensions	Items	Factor Loadings	Cronbach's Alpha	rho_A	CR	AVE			
Psychological Capital	Hope	Ho1	0.75	0.776	0.781	0.856	0.599			
		Ho3	0.763							
		Ho4	0.737							
		Ho5	0.837							
		Se1	0.713							
	Self-efficacy	Se2	0.739	0.846	0.847	0.886	0.565			
		Se3	0.772							
		Se4	0.816							
		Se5	0.741							
		Se6	0.727							
		Re1	0.812					0.77	0.787	0.851
	Re2	0.817								
Re4	0.738									
Re5	0.698									
Optimism	Op3	0.77	0.803	0.803	0.871	0.629				
	Op4	0.803								
	Op5	0.83								
	Op6	0.768								
	Cnc1	0.657					0.874	0.88	0.906	0.617
	Cnc2	0.809								
Cnc3	0.763									
Cnc4	0.772									
Cnc5	0.865									
Cnc6	0.832									
Career Adaptability	Concern	Cnfd1	0.731	0.887	0.89	0.914	0.641			
		Cnfd2	0.839							
		Cnfd3	0.778							
		Cnfd4	0.863							
		Cnfd5	0.802							
		Cnfd6	0.783							
	Confidence	Cntr2	0.799	0.841	0.859	0.886	0.57			
		Cntr3	0.859							
		Cntr4	0.815							

Career Success	Curiosity	Cntr5	0.827				
		Cntr6	0.659				
		Cur2	0.774	0.85	0.862	0.89	0.575
		Cur3	0.827				
		Cur4	0.826				
		Cur5	0.773				
	Objective	Promotion	0.905	0.894	0.898	0.927	0.761
		Publication	0.816				
		Pay	0.82				
		Position	0.941				
		Subjective1	0.807	0.807	0.836	0.866	0.568
		Subjective2	0.826				
		Subjective4	0.841				
		Subjective5	0.722				

4.1.2 Discriminant Validity (DV)

According to Hair et al. (2017) and Ramayah et al. (2017), who have suggested the process of assessing the DV in PLS through using three steps (criteria) approach. That criteria comprised from examining the cross-loadings; Fornier-Lacker criterion; and HTMT. Thus, First, for evaluating the cross-loadings, the outer loading of an item should be greater on its respective latent variable than the item’s cross-loading on another latent variable. Table (3) shows that the outer loading of each indicator was greater on its respective latent variable than its cross-loading on another latent variable.

Table 3: Show items’ cross-loading

	Concern	Confidence	Control	Curiosity	Hope	Optimism	Resilience	Efficacy	SCS	OCS
Cnc1	0.657	0.446	0.381	0.489	0.413	0.559	0.448	0.413	0.284	0.012
Cnc2	0.809	0.492	0.485	0.586	0.476	0.443	0.401	0.493	0.211	0.106
Cnc3	0.763	0.496	0.432	0.536	0.382	0.312	0.32	0.376	0.21	0.155
Cnc4	0.772	0.564	0.525	0.526	0.409	0.307	0.464	0.406	0.319	0.109
Cnc5	0.865	0.588	0.586	0.568	0.439	0.396	0.445	0.424	0.18	0.018
Cnc6	0.832	0.52	0.548	0.555	0.373	0.494	0.401	0.447	0.195	0.017
Cnfd1	0.476	0.731	0.553	0.479	0.45	0.334	0.414	0.455	0.259	0.093
Cnfd2	0.519	0.839	0.54	0.582	0.478	0.443	0.431	0.461	0.204	0.056
Cnfd3	0.533	0.778	0.478	0.602	0.45	0.453	0.373	0.411	0.198	0.049
Cnfd4	0.58	0.863	0.581	0.667	0.595	0.459	0.472	0.499	0.26	0.1
Cnfd5	0.554	0.802	0.541	0.598	0.529	0.393	0.513	0.403	0.226	0.079
Cnfd6	0.508	0.783	0.538	0.603	0.539	0.504	0.48	0.495	0.223	0.09
Cntr2	0.476	0.489	0.799	0.475	0.348	0.345	0.45	0.358	0.233	0.129
Cntr3	0.535	0.58	0.859	0.589	0.439	0.392	0.48	0.435	0.181	0.098
Cntr4	0.55	0.519	0.815	0.524	0.366	0.425	0.361	0.364	0.045	0.076
Cntr5	0.485	0.568	0.827	0.518	0.379	0.329	0.401	0.414	0.095	0.08
Cntr6	0.365	0.462	0.659	0.437	0.309	0.283	0.354	0.25	0.057	0.07
Cur1	0.436	0.51	0.309	0.636	0.396	0.372	0.381	0.324	0.153	0.004
Cur2	0.614	0.539	0.476	0.774	0.422	0.404	0.361	0.441	0.138	-0.04
Cur3	0.6	0.63	0.574	0.827	0.464	0.398	0.518	0.429	0.179	0.003
Cur4	0.573	0.632	0.576	0.826	0.462	0.369	0.488	0.454	0.138	-

										0.006
										-
Cur5	0.481	0.599	0.55	0.773	0.426	0.358	0.468	0.397	-0.019	0.092
										-
Cur6	0.415	0.418	0.401	0.695	0.293	0.369	0.309	0.356	0.12	0.103
Ho1	0.384	0.54	0.355	0.417	0.756	0.271	0.465	0.523	0.234	0.115
										-
Ho3	0.335	0.423	0.328	0.381	0.763	0.385	0.458	0.421	0.219	0.047
Ho4	0.427	0.445	0.341	0.401	0.737	0.342	0.476	0.462	0.313	0.151
Ho5	0.479	0.553	0.424	0.484	0.837	0.478	0.504	0.522	0.298	0.006
										-
Op3	0.446	0.503	0.502	0.443	0.428	0.77	0.311	0.422	0.219	0.009
Op4	0.463	0.418	0.45	0.431	0.322	0.804	0.27	0.397	0.202	-0.14
										-
Op5	0.356	0.392	0.34	0.345	0.378	0.829	0.294	0.366	0.351	0.018
										-
Op6	0.406	0.393	0.322	0.353	0.392	0.767	0.308	0.375	0.319	0.055
Re1	0.417	0.447	0.406	0.423	0.485	0.302	0.812	0.414	0.308	0.148
Re2	0.515	0.503	0.492	0.551	0.581	0.31	0.817	0.484	0.219	0.047
										-
Re4	0.374	0.405	0.362	0.385	0.431	0.39	0.738	0.294	0.226	0.013
Re5	0.261	0.339	0.33	0.33	0.357	0.109	0.699	0.261	0.238	0.265
Se1	0.384	0.493	0.397	0.418	0.496	0.298	0.409	0.713	0.282	0.054
Se2	0.353	0.398	0.311	0.342	0.519	0.423	0.396	0.738	0.34	0.103
Se3	0.373	0.418	0.299	0.388	0.472	0.415	0.303	0.772	0.31	0.024
Se4	0.44	0.484	0.382	0.423	0.498	0.359	0.378	0.816	0.281	0.062
Se5	0.422	0.382	0.405	0.396	0.387	0.319	0.339	0.741	0.273	0.02
Se6	0.479	0.38	0.374	0.431	0.433	0.401	0.366	0.727	0.261	0.093
Subjective1	0.283	0.277	0.203	0.175	0.307	0.356	0.221	0.251	0.81	0.174
Subjective2	0.253	0.209	0.131	0.09	0.308	0.329	0.191	0.336	0.827	0.153
Subjective4	0.173	0.186	0.147	0.039	0.215	0.191	0.31	0.294	0.84	0.136
Subjective5	0.232	0.249	0.189	0.211	0.275	0.215	0.325	0.382	0.72	0.038
Position	-0.017	0.113	0.128	-0.02	0.066	-0.039	0.129	0.065	0.148	0.941
Promotion	-0.049	0.051	0.084	-0.042	0.039	-0.115	0.089	0.071	0.12	0.904
Publication	0.035	0.073	0.162	-0.016	0.041	0.018	0.116	0.114	0.153	0.817
Salary	-0.07	0.029	-0.014	-0.101	0.102	-0.102	0.123	0.03	0.145	0.82

Next, in order to assess for discriminant validity, the Fornell-Larcker criterion is applied where the square root of AVE of each latent variable should be greater than its correlation with another latent variable. By applying this approach, we found that the square root of AVE of each of the latent variables was greater than its correlation with another latent variable. The outcome is shown in the table (4).

Table 4: Fornell-Larcker Criterion

	Concern	Confidence	Control	Curiosity	Efficacy	Hope	OCS	Optimism	Resilience	SCS
Concern	0.786									
Confidence	0.661	0.801								
Control	0.632	0.673	0.755							
Curiosity	0.692	0.738	0.645	0.758						
Efficacy	0.542	0.567	0.479	0.531	0.752					
Hope	0.528	0.635	0.47	0.546	0.624	0.774				
OCS	-0.029	0.078	0.105	-0.05	0.08	0.071	0.872			
Optimism	0.527	0.54	0.511	0.497	0.492	0.481	-0.068	0.793		
Resilience	0.525	0.559	0.525	0.561	0.486	0.615	0.131	0.374	0.768	
SCS	0.293	0.285	0.207	0.155	0.388	0.344	0.162	0.344	0.321	0.8

Finally, according to Henseler (2017) and Henseler, Ringle, and Sarstedt (2015), who recommended the utilization of Heterotrait-Monotrait ratio (HTMT) as an additional technique for assessing the discriminant validity. While, that technique of (HTMT) detects the estimation of the true correlation between two latent variables (Ramayah et al., 2017). A threshold value of 0.90 had been suggested for the HTMT (Henseler et al., 2015). If the result is above 0.90, this shows a lack of discriminant validity. However, for this study, according to the Table (5) shows that the HTMT criterion was complied with threshold criterion which all the shown values were less than 0.90.

Table 5: HTMT Criterion

	Concern	Confidence	Control	Curiosity	Efficacy	Hope	OCS	Optimism	Resilience	SCS
Concern										
Confidence	0.75									
Control	0.738	0.783								
Curiosity	0.799	0.843	0.751							
Efficacy	0.635	0.655	0.571	0.625						
Hope	0.641	0.762	0.579	0.666	0.767					
OCS	0.117	0.11	0.133	0.083	0.097	0.136				
Optimism	0.638	0.637	0.641	0.605	0.595	0.603	0.109			
Resilience	0.624	0.666	0.646	0.673	0.585	0.781	0.188	0.459		
SCS	0.354	0.34	0.285	0.22	0.476	0.435	0.184	0.423	0.416	

5. FORMATIVE MEASUREMENT MODEL ANALYSIS

PLS's scholars have suggested procedures for assessing the formative measurement model in terms of the discriminant and convergent validity evaluation (Hair et al., 2017; Hair et al., 2014; Ramayah et al., 2017). First, we ran the Smart-PLS Algorithm in order to know about the collinearity issues. Next, the inner Variance Inflation Factor (VIF) values were assessed. After that, Bootstrapping was performed to get the weights' value and t-values for each item in order to know whether the weights were significant <0.05 or not. Table (6) shows the significance level of all the reflective-formative measurements throughout because of the t-value >1.96 and sig value <0.000. The results indicated that there was no problem of collinearity issues with the reflective-formative construct because of the threshold value <5 (Hair et al., 2014). This means that the indicators of career success were not correlated.

Table 6: Assessing Weights, VIF Values and t-values

Second order construct	First order/ dimensions	Items	Measure	Weights	VIF	t-value weights	p-value Sig
Career Success	Objective	Promotion	Formative	0.185	3.558	***5.169	0.000
		Publications		0.181	2.018	***5.643	0.000
		Pay		0.176	2.167	***5.281	0.000
	Subjective	Position		0.203	4.893	***5.646	0.000
		Subjective1		0.216	1.786	***8.089	0.000
		Subjective2		0.217	1.986	***7.531	0.000
		Subjective4		0.212	2.12	***7.357	0.000
		Subjective5		0.18	1.607	***5.059	0.000

Note: Critical t values ***2.57 (significance level= 1%)

5.1 Structural Model Assessment

For evaluating the structural model of this study, we applied the calculated to the total score of the formative and reflective items (Ramayah et al., 2017) in order to get an appropriate result after running bootstrapping for the path coefficient. Specifically, we analysed the path coefficient (Hair et al., 2017), R² (Cohen, 1989) (Ramayah et al., 2018), and Q² (Hair et al., 2017) (see table 7 and figure 2) to test the hypotheses constructed for this study. Table (7) shows that hypotheses 2, 3 and 4 are supported because of the t-value > 1.96 and P<0.01. However, hypothesis 1 is not supported because of the t-value <1.96 and P>0.05. When interpreted, this means that PCO has no significant effect on the career success of academics while PCO has a positive effect on PsyCap. Interestingly, the PsyCap also plays a significant positive mediator on the relationship between PCO and career success (see discussion part).

5.2 Results

Table 7: Showing the hypothesis's bootstrapping (5000) results

Hypothesis	Relationship	Std. Beta	Std. Error	t-value	Confidence Interval		Decision
					LL	UL	
H1	PsyCap -> CS	0.565	0.095	5.950***	0.408	0.713	Supported
H2	CAA -> CS	0.274	0.078	3.516***	0.143	0.385	Supported
H3	PsyCap -> CAA	0.773	0.048	16.261***	0.684	0.841	Supported
H4	PsyCap -> CAA -> CS (mediator)	0.212	0.067	3.139**	0.104	0.316	Supported

*Note: **p<0.001, *p value <0.05

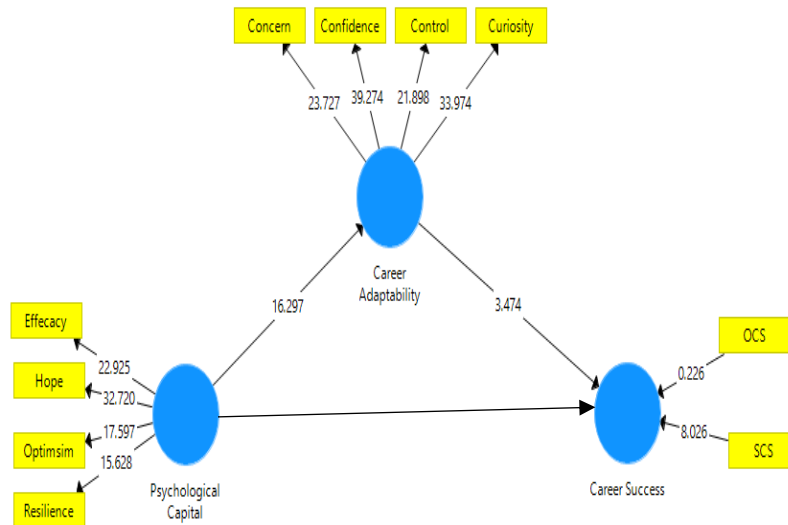


Figure 1: Showing the mediating effect of CAA among PsyCap and CS

6. DISCUSSION AND CONCLUSION

6.1 Discussion

This study has investigated the mediating effect of career adaptability on the relationship between psychological capital and career success of academicians in public universities in Sudan. Firstly, the result showed that psychological capital resources has a positive effect on academics' career success. This result in line with the previous studies such as Ngo et al. (2014), Karatepe and Karadas (2015), and Schulz et al. (2014) who have found that psychological capital resources was positively related to positive work outcomes (e.g., job and life satisfaction, organizational commitment, OCB, and career success). Secondly, this study confirmed that career adaptability has a direct and indirect relationship with academics' career success. That result supported many prior works such as Haibo et al. (2018), Guan et al. (2015), and Xie et al. (2016) who concluded that career adaptability has a positive effect on career success. In addition, the results stressed that the significant mediator role of career adaptability between psychological capital and career success. This finding matched with the previous scholarly work as Safavi and Bouzari (2019) and Ibrahim and Amari (2018) who found that career adaptability mediated the relationship between psychological capital and positive work outcomes. However, this study focused on finding new ways for increasing the academicians' psychological resources through involving the role of career adaptability in the equation of achieving career success.

6.2 Conclusion and recommendations

Initially, the study assisted the academicians for using their psychological resources in order for achieving their career success. Hence, the authors have suggested that career adaptability as mediator in order to open new ways for academicians toward their career success. Then after testing, the results confirmed that career adaptability has a mediation effect on the relationship between psychological capital and career success. So, this finding is very important for university leaders which help them to understand the necessity of fostering academicians' personal psychological resources for increasing their level of success at workplace which in turn will be reflected on the overall organizational performance.

6.3 Limitation and future research

Like other studies, this study focused on career success for academicians who working in public universities in Sudan. However, this field need to be expanded by replicating this study in different context and culture in order to give a robust evidence for decision-makers. Other limitations such as number sample and theory. So, the future studies should try to apply goal setting theory for dealing with career success with large numbers of sample for generating broader insights for coming generations.

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