

The role of career competencies and proactive personality in early-career employee career adaptability

Employee
career
adaptability

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Abstract

Purpose – Employees with high career competencies are more successful in career development. However, it is unclear whether proactivity matters for early-career employees. Thus, this study aims to investigate the influence of career competencies and proactive personality on career adaptability and the moderating role of proactive personality in this relationship.

Design/methodology/approach – This study adopts a quantitative methodology, collecting data through online questionnaires from respondents ($n = 400$) who had less than five years of work experience in the UAE. A measurement model and hypotheses testing were conducted using AMOS software. Multigroup structural equation modelling was used to test the moderation model.

Findings – The results show a direct relationship between career competencies and career adaptability. However, a proactive personality is insignificantly related to career adaptability. Further, early-career employees with low proactive personality benefit from high career competencies.

Originality/value – This study offers contributions to the emerging understanding of career construction by emphasising the important role of career competencies for early-career employees who manifest a low proactive personality.

Keywords Career adaptability, Career competencies, Proactive personality, Early-career, Employees, United Arab Emirates

Paper type Research paper

1. Introduction

Fast-changing work climates and less stable career patterns are rapidly becoming normal in the contemporary job world. Scholars note that as job availability is further restricted, early-career employees must speedily develop and sustain their employment status (Otoo, 2019). Therefore, self-directed, individualised career paths have gained importance. Career resources (career adaptability and career competencies) and personal agency (proactive personality) are becoming more relevant for successful career development (Savickas, 2013).

Most recent studies in the field of career adaptability focus on predictors of career adaptability (Pan *et al.*, 2018; Safavi and Bouzari, 2019). However, few examine career resources such as knowledge, skills (de Guzman and Choi, 2013) and personality traits



(Parmentier *et al.*, 2019) to explain career adaptability resources which are important because career competencies and proactive personality are shown to be critical for career adaptability (Bocciardi *et al.*, 2017; Pan *et al.*, 2018; Zhu *et al.*, 2019). Based on the meta-data of career adaptability literature, Rudolph *et al.* (2017) conclude that more research is needed to investigate the role of career competencies and proactive personality in early-career employees.

Proactive personality is a tendency to take initiatives, changing one's environment (Bateman and Crant, 1993; Jiang, 2017; Pan *et al.*, 2018) where some people identify opportunities, act and persist for meaningful change (Waterwall, 2019). Cai *et al.* (2015) demonstrate that proactive personality may explain the dynamic between career competencies and career adaptability amongst young adults, however, researchers have seldom considered career competencies and personal agency as predictors of career adaptability. Future study is suggested to investigate the boundary condition of proactive personality and explore the person-situation interaction in career development (Meyers, 2019; Pan *et al.*, 2018). Additionally, studies have seldom tested the interactive effects of personal differences on work (Setti *et al.*, 2015). Therefore, limited studies consider the joint effect that career competencies and proactive personality have on career adaptability, as well as the boundary condition of proactive personality in determining the strength of the relationship between career competencies and career adaptability.

In this study, we propose a moderated model of proactive personality in which early-career employees' capability to develop career adaptability depends on their career competencies and proactive personality. This study contributes to the literature on career adaptability and development by filling two theoretical gaps. Firstly, we add to the scholarly debate on the predictors of early-career employees' career adaptability by examining the role of career competencies and proactive personality in achieving career development. Secondly, we extend previous literature on proactive personality by shedding light on whether and how negative/positive proactive personality relates to early-career employees' career competencies and career adaptability.

2. Literature review

2.1 Career competencies and career adaptability

Career adaptability refers to a psychosocial resource that enables individuals to successfully manage their career development (Savickas and Porfeli, 2012). It comprises four factors: concern about the future helps individuals look ahead and prepare sufficiently, control refers to taking responsibility for one's career by using self-discipline, curiosity represents an inquisitive attitude towards possible future selves and confidence refers to one's ability to actualise choices to implement one's life design. While much research has been conducted amongst high school students (de Guzman and Choi, 2013; Garcia *et al.*, 2019), university students (Cai *et al.*, 2015; Pan *et al.*, 2018) and mature workers (Bocciardi *et al.*, 2017), little is known about the career adaptability of early-career employees. Because career adaptability is crucial for early-career employees to plan for career development, career opportunity and career transition, early-career employees are an important group to study.

2.2 Career construction theory

Career adaptability is embedded in career construction theory (CCT), which highlights the "readiness to cope with the predictable tasks... in the work role and with the unpredictable adjustments prompted by changes in work and working conditions" (Savickas, 1997, p. 254). CCT plays a central role in linking indicators of career adaptability (career competencies and proactive personality) to adaptive behaviour (career adaptability) (Ahmad *et al.*, 2019; Pan *et al.*, 2018). CCT

conceptualises career development as an action-oriented process during which individuals actively build a career. Furthermore, a proactive personality may increase early-career employees' career competencies allowing them to effectively adapt to complicated work environments (Savickas, 2013, 1997). The theory posits that personal agency (proactive personality) may better enable employees to control their career resources (career competencies) to meet demands imposed by dynamic work environments and navigate contextual opportunities and constraints (career adaptability). This framework proposes that successful career development is a continuous process of adaptation that results from person-environment integration (career adaptability). Here, a proactive personality becomes a boundary condition that frames how people construct their careers (Savickas, 2013; Savickas and Porfeli, 2012).

Given the need for individuals to actively construct their careers and effectively respond to opportunities and challenges, it is crucial to acquire career resources (Savickas and Porfeli, 2012). Career competencies have been identified as beneficial career resources for attaining early career development (Bocciardi *et al.*, 2017). For example, by developing career competencies, early-career employees manifest their personal qualities forming effective strategies to accomplish career goals (Akkermans *et al.*, 2013; Blokker *et al.*, 2019). In turn, these career resources help early-career employees navigate the contemporary world of work more efficiently (Ahmad *et al.*, 2019; Safavi and Bouzari, 2019).

2.3 Career competencies as a predictor of career adaptability

Career competencies refer to "knowledge, skills and abilities crucial to career development, which can be influenced by individual" (Akkermans *et al.*, 2013, p. 249) and comprise of three domains, namely, reflective, communicative and behavioural career competencies. Reflective career competencies refer to an individuals' awareness of their motivations, qualities, strengths and shortcomings. Communicative career competencies refer to effective communication that improves one's chances of career success by building networks and communicating personal knowledge, abilities and skills to the labour market. Behavioural career competencies are the ability to shape one's career by actively exploring the environment in terms of career opportunities and proactively planning and achieving career goals.

Early-career employees with better-developed career competencies will have a clearer idea about their motivations and qualities allowing them to fit into various roles (Savickas, 2013; 1997). Moreover, career competencies assist individuals to explore alternative possibilities in the labour market, controlling their careers to increase career adaptability (Bocciardi *et al.*, 2017; Savickas, 2013). Previous studies establish that career competencies are beneficial for early-career employees' career development (Blokker *et al.*, 2019) because reflective, communicative and behavioural career competencies lead to better adaptive behaviours (Potnuru *et al.*, 2019), success (Otoo, 2019) and add value to organisations (Ahmad *et al.*, 2019). Therefore, this investigation unearths insight into the relationship between career competencies and career adaptability at an early stage of employment. Based on the above findings, and in line with CCT, we hypothesise:

- H1. Early-career employees' (a) reflective, (b) communicative and (c) behavioural career competencies are positively related to career adaptability.

2.4 Proactive personality as a predictor of career adaptability

Proactive personality was conceptualised by Bateman and Crant (1993), who indicate that proactive individuals' are persistent and determined to attain their goals. This aligns with Lent and Brown (2019), who posit that personal agency exists at the intersection of CCT and

social cognitive career theory (SCCT), and is an adaptive mechanism of personal agency allowing early-career employees to build their career adaptability (Savickas, 2013). SCCT highlights the role of proactive career self-management in the career adaptation process (Rudolph *et al.*, 2017) viewing proactive personality as the individual capacity to intentionally improve rather than passively react (Bateman and Crant, 1993; Setti *et al.*, 2015).

Prior research shows that proactive individuals apply more effort to establish their careers, and thus are more likely to achieve better career goals (Abu Said *et al.*, 2015; Pan *et al.*, 2018; Setti *et al.*, 2015). Therefore, studies establish a relationship between proactive personality and career adaptability (Jiang, 2017; Pan *et al.*, 2018; Tolentino *et al.*, 2014). However, there is a need for studies focussing on early-career employees (Jiang, 2017) to understand how proactive personalities drive career adaptability early on to determine career success (Dossinger *et al.*, 2019). Therefore, this study proposes:

H2. Proactive personality is positively related to career adaptability.

2.5 Career competencies and career adaptability: the moderating role of proactive personality

Drawing from the juncture between SCCT and CCT, proactive people are more likely to engage in initiatives, manipulate the environment and pursue their goals (Lent and Brown, 2019). The theory of proactive personality suggests that the extent of a person's proactivity can influence their sensitivity and reactions to internal and external motivators and career outcomes (Siebert *et al.*, 2020). However, compared to career competencies, which appear to be dynamic, a proactive personality is more stable in career development theory. Here, the role of psychological states in shaping career development warrants further validation in future research (Jiang *et al.*, 2019; Waterwall, 2019). Although earlier studies suggest proactive personality as a moderator in the relationship between career competencies and career development (Setti *et al.*, 2015; Waterwall, 2019), limited research examines the boundary condition of proactive personality in the relationship between career adaptability and its predictors. Jiang *et al.* (2019) suggest these relationships depend on individual moderators such as self-perception and personality. For example, Cai *et al.* (2015) found that self-esteem has a stronger effect on career adaptability amongst university students with high levels of proactive personality as opposed to low levels of proactive personality. Potnuru *et al.* (2019) found that high proactive personality employees are more responsive to the workplace environment than low proactive personality employees. Bocciardi *et al.* (2017) argue that proactive individuals can reduce uncertainties more quickly as they are inclined to change, self-initiation and are future-focussed. Because high proactive individuals actively anticipate potential problems and initiate relevant actions, they may experience easier career adaptation (Meyers, 2019).

However, for less proactive employees, career competencies would be critical. Their passivity may be persistent, resulting in a reluctance to actively engage in career adaptability. Therefore, they may rely more on other psychological drivers such as career competencies to facilitate the formation of career adaptability. For example, Jiang (2017) found that less proactive people are affected more by the relation between thriving and career adaptability. This theory suggests that proactive efforts may weaken the positive effects of career adaptability. Therefore, proactive personality has been confirmed to be an active boundary condition for the effects of individuals' attributes and factors associated with career development (Jiang, 2017; Meyers, 2019). Therefore, we suggest:

- H3. Proactive personality moderates the relationship between career competencies and career adaptability, such that this relationship is stronger when the proactive personality is low.

The conceptual model is shown in [Figure 1](#).

3. Methodology

3.1 Participants and procedures

From a total of 60,000 students who graduated from higher education institutions between 2015 and 2019 in Abu Dhabi, the United Arab Emirates (UAE) ([Khalej Times Abu Dhabi, 2020](#)), 1,000 early-career employees were randomly invited to participate in the study online. A total of 959 respondents answered the invitation, 413 participants (43.1%) answered the questionnaire, while 400 provided valid responses.

Early-career employees with less than five years of working experience after graduating high school or college were invited to participate. An informed consent form was included in the initial questionnaire section, declaring the voluntary, anonymous and confidential nature of the study involvement. No missing data were recorded in the final data. An online questionnaire was used as research argues for the strength of an online survey in its capacity to generate broad sample representation and it has been proven reliable ([Abu Said et al., 2015](#); [Blokker et al., 2019](#); [Bocciardi et al., 2017](#)).

[Krejcie and Morgan \(1970\)](#) suggest that 381 is an appropriate sample size from a population of 60,000. [Mol \(2017\)](#) agrees that double sampling improves response rates to online surveys and minimises bias due to non-response, as [Adam and Umbach \(2012\)](#) report that non-responses can seriously bias results, affecting the usefulness of the data and the reliability and external validity of the study.

During analysis, the data were first inspected for any outliers and missing data. In total, 12 cases of outliers were removed (all p 's < 0.001) through Mahalanobis distance. One respondent with no responses was excluded. The final sample ($n = 400$) consisted of 217 women (54.3%) and the mean age was 22.1 years ($SD = 1.3$, range 18–35). Most respondents had completed university education (55.7%), with an average of 3.0 years of job tenure ($SD = 1.0$). This study was a cross-sectional study where the three most common occupation areas were government (32.2%), oil and gas (21.2%) and aviation and airport services (11.2%).

3.2 Measures

The questionnaire was administered in Arabic. The English version of the career adaptability, career competencies and proactive personality scales have been found reliable and valid in multiple cross-cultural samples ([Akkermans et al., 2013](#); [Blokker et al., 2019](#); [Jiang, 2017](#); [Safavi and Bouzari, 2019](#)). However, none of these instruments were previously

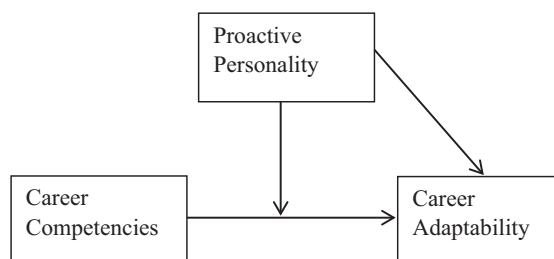


Figure 1.
Proposed research
model

validated in Arabic. Therefore, the original scales were translated into Arabic by a native Arabic speaker fluent in English using the back-translation method (McGorry, 2000). All items, scale answer options and instructions were provided in the Arabic language. Three expert professors who were highly familiar with this research participated in questionnaire item content validation. In total, 10 early-career employees participated in a pilot study to validate the Arabic-version questionnaire. The results confirmed that the questionnaire did not require any modification. Items were measured using a seven-point Likert-scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Career adaptability was measured using the global Career Adapt-Ability Scale (CAAS) (Savickas and Porfeli, 2012) which comprises four elements, namely, career concern, control, curiosity and confidence, whereby each consists six items. The respondents rated items from “(1) not strong” to “(7) strongest” to indicate the extent to which they had established 24 career-specific capabilities. The sampled items included: “preparing for the future” (concern), “sticking up for my beliefs” (control), “investigating options before making a choice” (curiosity) and “overcoming obstacles” (confidence). Cronbach’s alphas (α) for concern, control, curiosity, confidence and overall career adaptability were 0.79, 0.76, 0.79, 0.78 and 0.87, respectively, revealing the reliability and validity of the CAAS-Arabic version.

The 21-item career competencies questionnaire (CCQ), validated by previous studies (Akkermans *et al.*, 2013) was used to measure career competencies. Reflective career competencies (“I can clearly identify my work passions”, $\alpha = 0.74$), communicative career competencies (“I am able to approach the right people to help me with my career”, $\alpha = 0.74$) and behavioural career competencies (“I am able to explore my possibilities in the labour market”, $\alpha = 0.77$) were individually investigated using seven items. The overall Cronbach’s alpha of the CCQ-Arabic was 0.76.

Proactive personality was measured using four items from Bateman and Crant (1993), namely, “nothing is more exciting than seeing my ideas turn into reality”; “if I see something I don’t like, I fix it”; “I am always looking for better ways to do things” and “if I believe in an idea, no obstacle will prevent me from making it happen”. Consistent with earlier studies (Jiang, 2017), the 4-items were found to be valid and reliable for this study with Cronbach’s alpha measuring 0.88.

The control variables used to ensure study rigour were age (years); gender (1 = male, 2 = female); job tenure (years) and education level (1 = completed high school, 2 = university-level education). Earlier studies suggest demographic variables such as these are associated with career adaptability, career competencies and proactive personality (Blokker *et al.*, 2019; Garcia *et al.*, 2019; Jiang, 2017). The gender variable was controlled as men were found to have higher career adaptability than women (Zhu *et al.*, 2019). Meanwhile, the variables of age, education and job tenure may influence career-adjacent experience such as knowledge (Rudolph *et al.*, 2017).

4. Data analysis

The data analysis using SPSS 24.0 and AMOS 18.0 software was conducted in four stages. Firstly, we conducted common method bias (CMB) testing. Secondly, confirmatory factor analysis (CFA) was conducted to measure the factor structure of career adaptability. Thirdly, descriptive analyses using SPSS 24.0 and correlations were generated, and finally, our hypotheses were tested. CFA was used to evaluate convergent and discriminant validities of the variables’ factor structures. Besides, the indices for convergent validity assessment were computed accordingly, while the model fit was assessed using the chi-square statistic (χ^2), comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA) and standardised root mean square residual

(SRMR). The model fit is considered good if the fit indices values are well above cut-off values; CFI and TLI ≥ 0.90 to 0.95 (Bentler, 1990), RMSEA ≤ 0.08 and SRMR < 0.08 (Hu and Bentler, 1999).

Finally, a series of regression analyses using structural equation modelling (SEM) using AMOS 18.0 was performed for hypothesis testing as it allows comparison between models. Following Blokker *et al.* (2019) and Zhu *et al.* (2019), this study estimated the hypothesised moderated model by conducting a multilevel structural equation modelling analyses (MSEM). An MSEM is preferable as it provides highly precise estimations via a calculation of all effects in an analysis (Preacher *et al.*, 2016). Therefore, a baseline model was generated considering the direct effects of career competency and career adaptability in which the interaction was freely estimated, whereby it was assumed to be zero. As per Blokker *et al.* (2019) the total sample was divided into two groups according to participants' responses about their proactive personality. Next, a comparison of the baseline model to the moderated models was carried out using the following conditions: overall fit (measured as the CFI indicator); parsimony (measured by the ratio of χ^2 to the degree of freedom); the percentage of statistically significant model paths and the capacity in delineating the variance of the endogenous constructs (Preacher *et al.*, 2016). The Akaike Information Criterion (AIC) was additionally used for model fit comparison in which the proposed model showed a better fit (lowest AIC value) compared to other models (Vrieze, 2012).

5. Results

5.1 Common method bias testing

Following Steiger (1998), this study used CFA to evaluate any incidences of potential CMB. This procedure was also supported by Preacher *et al.* (2016), who suggests that CFA is the most sophisticated approach to identify potential CMB. The results indicated an inadequate fit to the data (χ^2 (741) = 7.71, CFI = 0.49, TLI = 0.46, RMSEA = 0.13, SRMR = 0.12), thus showing no effect on the results of this study.

5.2 Confirmatory factor analyses and measurement model

Table 1 shows the mean, standard deviations and factor loadings of the 24-items of career adaptability. We first conducted a CFA in which items were loaded into their respective career adaptability dimensions. The dimension factors were loaded on a higher-order career adaptability factor. The average of the factor loadings of the 24 items was 0.78, ranging from 0.67 to 0.86. The average variance extracted (AVEs ≥ 0.05) and composite reliability (CRs ≥ 0.70) were acceptable (Hair *et al.*, 2010). The higher-order model (χ^2 (283) = 1.18, CFI = 0.96, TLI = 0.96, RMSEA = 0.04, SRMR = 0.04) and the four-factor model (χ^2 (244) = 2.19, CFI = 0.94, TLI = 0.93, RMSEA = 0.06, SRMR = 0.05) were acceptable. A one-order model with all 24 items loading on a single factor fit the data significantly but was the least acceptable (χ^2 (250) = 6.48, CFI = 0.73, TLI = 0.71, RMSEA = 0.12, SRMR = 0.09). Overall, these findings were consistent with Savickas and Porfeli (2012) showing career adaptability as a reflective model.

As expected, the three-factor model showed a good fit to the data (χ^2 (836) = 1.85, CFI = 0.93, TLI = 0.92, RMSEA = 0.05, SRMR = 0.06). All factor loadings and average variance extracted (AVE) were found well above 0.50 (Hair *et al.*, 2010). Factor loadings ranging from 0.60 to 0.93 were considered significant to their respective latent constructs (all p 's < 0.05), while the AVE values were between 0.51 and 0.77. These results justify examining these three variables as a formative model. Table 2 shows the model comparison.

Table 1.
Mean, standard
deviations and
psychometric
properties of the 24-
items of the CAAS-
Arabic form (*n* = 400)

Construct	Item (first-order indicators)	Mean	SD	Loadings	AVE	CA	CR
Concern	القلق				0.633	0.794	0.912
CA1	التفكير كيف سيكون مستقبلي	5.59	1.441	0.802			
CA2	إدراك أن اختيارات اليوم تشكل مستقبلي	5.61	1.343	0.821			
CA3	الإعداد للمستقبل	5.63	1.289	0.861			
CA4	أصبح واعيا بالخيارات التعليمية والمهنية التي يجب أن اتخذها	5.56	1.271	0.780			
CA5	التخطيط لكيفية تحقيق أهدافي	5.56	1.279	0.789			
CA6	قلق بخصوص سيرتي المهنية	5.71	1.285	0.712			
Control	التحكم				0.573	0.755	0.889
CA7	أبقى متفانلا	5.37	1.302	0.671			
CA8	اتخذ قرارات بنفسي	5.59	1.258	0.787			
CA9	أتحمل مسؤولية تصرفاتي	5.79	1.234	0.780			
CA10	التزم بمعتقداتي	5.72	1.210	0.787			
CA11	أعتمد على نفسي	5.75	1.174	0.797			
CA12	أعمل ما هو صحيح لنفسي	5.81	1.242	0.713			
Curiosity	حب الاستطلاع				0.634	0.794	0.912
CA13	أستكشف محيطي	5.47	1.229	0.734			
CA14	البحث عن فرص للنمو كشخص	5.70	1.220	0.843			
CA15	استقصاء الخيارات قبل الاختيار	5.64	1.267	0.829			
CA16	ملاحظة مختلف الطرق لعمل الأشياء	5.57	1.231	0.853			
CA17	أتقصى بعمق الأسئلة التي لدي	5.47	1.278	0.765			
CA18	أستطلع عن الفرص الجديدة	5.55	1.263	0.743			
Confidence	الثقة				0.611	0.780	0.904
CA19	أداء المهام بكفاءة	5.70	1.226	0.805			
CA20	الاهتمام بعمل الأشياء بشكل جيد	5.82	1.224	0.820			
CA21	تعلم مهارات جديدة	5.81	1.235	0.805			
CA22	إعداد نفسي إلى قدراتي	5.85	1.251	0.814			
CA23	تجاوز العوائق	5.71	1.210	0.729			
CA24	حل المشاكل	5.80	1.271	0.711			
Construct	Construct (second-order indicators)				0.764	0.873	0.928
Career adaptability							
1.	Concern	5.63	1.096	0.868			
2.	Control	5.67	0.990	0.899			
3.	Curiosity	5.57	1.039	0.810			
4.	Confidence	5.78	1.022	0.915			

5.3 Descriptive statistics and correlations

Table 3 displays the results of correlations and descriptive statistics. Most variables were found to be positively and significantly correlated. In line with Pan *et al.* (2018), gender, education and job tenure were insignificantly correlated to career adaptability. Correlation analysis in this study found gender to be insignificantly correlated to all variables, while age

Table 2.
Model comparison

Models	χ^2 (df)	CFI	TLI	RMSEA	SRMR
<i>Career adaptability</i>					
Higher-order model	1.18	0.96	0.96	0.04	0.04
Four-factor model	2.19	0.94	0.93	0.06	0.05
One-order model	6.48	0.73	0.71	0.12	0.09
<i>Research model (career competencies, proactive personality and career adaptability)</i>					
One-factor model	7.71	0.49	0.46	0.13	0.12
Three-factor model	1.85	0.93	0.92	0.05	0.06

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender	1.54	0.50	1											
2. Age	1.54	1.27	0.10*	1										
3. Education	3.03	1.02	0.02	0.04	1									
4. Job tenure	1.44	0.50	0.02	0.02	0.84**	1								
5. Communicative career competencies	6.37	0.70	0.03	0.08	0.12*	0.07	1							
6. Reflective career competencies	6.28	0.76	0.01	0.17*	-0.04	0.10	0.68**	1						
7. Behavioural career competencies	6.21	0.81	0.07	0.09	0.09	0.03	0.54**	0.49**	1					
8. Proactive personality	4.33	2.25	0.04	-0.14*	0.11*	0.11*	0.13*	-0.07	0.09	1				
9. Career adaptability: concern	6.43	0.63	0.02	0.07	0.08	0.06	0.60**	0.71**	0.46**	0.04	1			
10. Career adaptability: control	6.38	0.64	0.08	0.16*	10.02	-0.06	0.62**	0.73**	0.47**	-0.02	0.78**	1		
11. Career adaptability: curiosity	6.36	0.71	0.09	0.12*	0.03	0.03	0.56**	0.70**	0.51**	-0.08	0.65**	0.58**	1	
12. Career adaptability: confidence	6.37	0.78	0.07	0.15*	0.03	-0.03	0.45**	0.60**	0.31**	-0.12*	0.61**	0.57**	0.55**	1

Notes: $n = 400$; * $p < 0.05$; ** $p < 0.001$

Table 3.
Result of correlations
and descriptive
statistics

was positively correlated to career adaptability control ($r = 0.16, p < 0.05$), curiosity ($r = 0.12, p < 0.05$) and confidence ($r = 0.15, p < 0.05$). However, age was negatively correlated to proactive personality ($r = -0.14, p < 0.05$) and positively correlated to education ($r = 0.11, p < 0.05$) and job tenure ($r = 0.11, p < 0.05$). For this reason, gender and age were not considered as control variables in subsequent analyses.

5.4 Hypothesis testing

Model 1 (Table 4) shows that education and job tenure do not significantly affect career adaptability. In line with Model 2 and Model 3 (H1), career competencies ($\beta = 0.75, p < 0.001$) ($R^2 = 0.55$) and reflective ($\beta = 0.49, p < 0.001$), behavioural ($\beta = 0.22, p < 0.001$) and communication ($\beta = 0.23, p < 0.001$) competencies positively predicted career adaptability ($R^2 = 0.57$), supporting H1. Model 4 (H2) shows that proactive personality did not significantly predict career adaptability ($\beta = 0.07, p > 0.05$), refuting H2 ($\Delta R^2 = 0.01$). The direct path linking career competencies and career adaptability showed a good fit to the data ($\chi^2(857) = 1.63$, CFI = 0.95, TLI = 0.94, RMSEA = 0.04, SRMR = 0.05, AIC = 1,407.67).

To follow cautious interpretation, variance inflation factors (VIFs) were assessed to predict the degree to which the standard error of a regression coefficient for a given predictor was inflated. This occurs due to correlations between a predictor and other predictors included in the analysis (O'Brien, 2007). The square root of VIF is indicative of the degree to which the standard error of the regression coefficient increases in correlation to unrelated predictors (Cohen *et al.*, 2003). The rule of thumb states that VIFs as low as 4 or higher than 10 indicate serious multicollinearity (Cohen *et al.*, 2003; O'Brien, 2007). In the current model, the four career adaptability dimensions generated VIFs ranging from 1.74 (control) to 2.44 (concern). Therefore, multicollinearity is not an issue for this study.

The next step required an MSEM model estimation. Scholars claim that MSEM plays an important role in studying partial measurement invariance and tests for moderation effects (Parmentier *et al.*, 2019). Following Garcia *et al.* (2019) and Blokker *et al.* (2019), the total sample was differentiated into two groups according to arithmetic mean ($\pm$ SD, Mean, $p < 0.05$) under the moderating variable of proactive personality. The first group (those with low proactive personalities) comprised 206 cases (Mean = ≤ 3.49), whereas the second group (those with high proactive personalities) comprised 194 cases (Mean = ≥ 3.50).

A multi-sample analysis reveals the influence of the differences established between the coefficients of both models. Firstly, we follow Vandenberg and Lance's (2000) suggestion for establishing a freely estimated baseline model by not imposing a constraint on the direct path linking proactive personality and career adaptability. Secondly, the moderating role of proactive personality was estimated by adding a constraint to the direct path between career competencies and career adaptability. It depicts the outcomes of a multi-sample analysis between early-career employees with either low or high proactive personalities. Then, the interaction terms were added using a measurement invariance between the low and high proactive personality.

Table 5 shows that the MSEM models revealed a good fit to the data. The unconstrained low proactive personality model path ($\beta = 0.91, t = 7.19, p < 0.001$) and constrained low proactive personality model path are significant ($\beta = 0.96, t = 7.97, p < 0.001$), with a variance of 86% in career adaptability. The comparison between unconstrained and constrained models showed that low proactive personality moderated the relationship between career competencies and career adaptability ($\Delta\chi^2(\Delta df) = 15.60/4; \Delta AIC = 7.6$).

The unconstrained ($\beta = 0.90, t = 7.18, p < 0.001$) and constrained ($\beta = 0.93, t = 7.25, p < 0.001$) high proactive personality model paths were significant with variances of 85% and 86% in career adaptability, respectively. The comparison shows that high proactive

personality insignificantly moderated the relation between career competencies and career adaptability ($\Delta\chi^2$ (Δdf) = 3.54/4; ΔAIC = -4.46). The simple slope analyses depicted in Figure 2 shows that proactive personality fully moderated the relationship between career competencies and career adaptability. Therefore, *H3* is supported.

6. Conclusions and research implications

This study uses a sample of Arab early-career employees to examine the relationship between career competencies, proactive personality and career adaptability. Proactive personality was found to moderate the positive relationship between career competencies and career adaptability, with this relationship being stronger amongst employees with less proactive personalities. However, proactive personality insignificantly affected career adaptability. These results carry important theoretical implications and contribute to the literature in several ways.

Table 4.
Result of hierarchical
regression analyses
predicting career
competencies,
proactive personality
and career
adaptability

Hypotheses Models	Model 1	Hypothesis 1 Model 2 Model 3		Hypothesis 2 Model 4
Education	0.103	0.081	0.070	0.101
Job tenure	0.099	0.086	0.111	0.089
Career competencies		0.745**		
Reflective competency			0.486**	
Behavioural competency			0.217**	
Communication competency			0.229**	
Proactive personality				0.076
R^2	0.003	0.548	0.571	0.009
ΔR^2	0.003	0.544	0.568	0.006
F	0.667	159.896	104.891	1.202
Result		Supported		Not supported

Notes: n = 400; Standardised regression coefficient (β) are shown; * p < 0.05; ** p < 0.001

Table 5.
Result of
multisample analysis
of proactive
personality

	Low proactive personality		High proactive personality	
	Constraint	Unconstraint	Constraint	Unconstraint
Education	0.046	0.046	0.084	0.084
Job tenure	0.062	0.062	0.093	0.093
Direct effect	0.92**	0.91**	0.93**	0.90**
χ^2 (df)	1.72 (717)	1.73 (721)	1.63 (717)	1.62 (721)
CFI	0.92	0.92	0.83	0.83
TLI	0.91	0.91	0.82	0.82
RMSEA	0.06	0.06	0.06	0.06
SRMR	0.08	0.07	0.08	0.08
AIC	1436.89	1444.49	1371.52	1367.06
$\Delta\chi^2$ (df)		15.60 (4)		3.54 (4)
ΔAIC		7.6		-4.46
Result		Supported		

Notes: n = 400; Standardised regression coefficient (β) are shown; * p < 0.05; ** p < 0.001

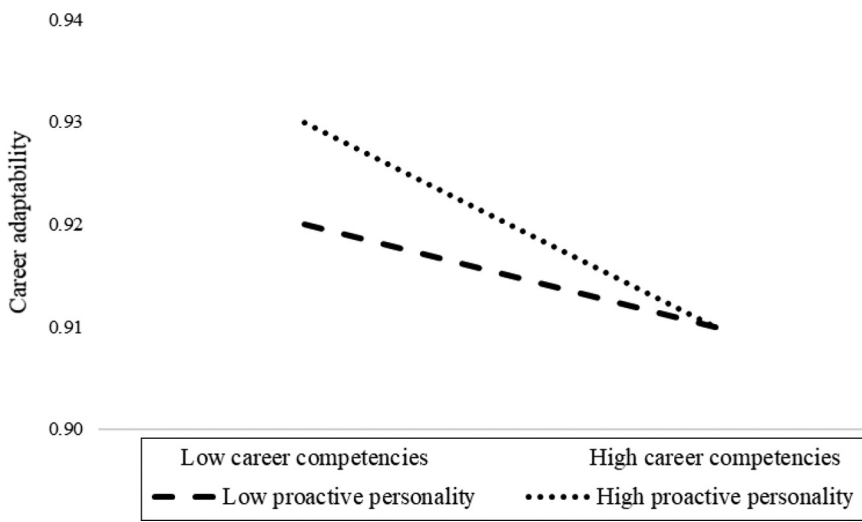


Figure 2.
Interaction between
career competencies
and career
adaptability

Firstly, it contributes to the body of knowledge on the predictors of career adaptability by revealing that early-career employees with established career competencies are more likely to have low proactive personalities. Thus, in line with previous studies (Blokker *et al.*, 2019; Bocciardi *et al.*, 2017; Savickas, 2013), we observe a positive relationship between career competencies and career adaptability to understand further which career competencies might improve career adaptability amongst early-career employees (*H1*). Our finding in *H2* follows recent research where weaker proactive personality orientation towards career adaptability (Bauer *et al.*, 2019). Our argument aligns with the theory of proactive personality where proactive personality is a successful boundary condition impacting the strength of the relationship between career competencies and career adaptability for early-career employees, thus affecting career development (Jiang *et al.*, 2019). This follows suggestions that a higher proactive personality potentially results in higher learning orientation (Pan *et al.*, 2018). Here, highly proactive employees may initiate change and are intrinsically motivated to develop adaptability resources for coping with challenges in career development processes (Tolentino *et al.*, 2014). Thus, compared to low proactive people, high proactive people may not strongly depend on other psychological motivators.

Furthermore, although a high proactive personality was anticipated to moderate between career competencies and career adaptability, the results reveal that even low proactive personality was a significant moderator in the current model (*H3*), with findings by Waterwall (2019). Additionally, the proactive personality/career adaptability relation may be formed by individual agency and less affected by contextual elements. This follows CCT's notion that early-career employees may enforce less-tangible personal meanings and embed these elements into their work-life (Savickas, 2013). Thus, following the suggestion for contextualised approaches for career research (Bauer *et al.*, 2019; Blokker *et al.*, 2019), we extend empirical work on CCT by including career resources (career competencies) and personal agency (proactive personality) in a model of early-career employees, contributing to the personal agency perspective and theory of proactive personality. Early-career employees who possess a low proactive personality and a high level of career competencies can overcome situational challenges. Therefore, early-career employees who feel secure and

satisfied with their careers may be less likely to change jobs. As per [Bauer et al. \(2019\)](#), volatility in the labour force, high youth unemployment rates and the saturation of employment in the UAE may explain this condition. Consequently, we show that proactive personality is an important component in early-career employee career adaptability and career competencies. This study highlights the need for future assessment of the interplay between career resources and agency perspective.

6.1 Managerial implications

Our results have practical implications for early-career employees, HR managers and career counsellors. Firstly, this research reveals career competencies are career resources positively related to career adaptability. Therefore, early-career employees who invest in career competencies are more likely to achieve long-term career success. This study confirms that proactive personality influences the strength of the career competencies and career adaptability relationship. As a new predictor, career competencies enact different effects on career adaptability between high and low proactive groups. This finding suggests that although career competencies increase career adaptability, this tendency may be weakened by employees' proactive efforts. The introduction of career competencies into career adaptability research initiates an important starting point from which to empirically integrate career competencies into the career development process, potentially sparking future theories and models on career exploration. To a certain extent, we have integrated the theory of proactive personality ([Bateman and Crant, 1993](#)), the SCCT ([Lent and Brown, 2019](#)) and the CCT ([Savickas, 1997](#)) to explain the process of developing career adaptability resources.

Besides, employers may use these research outcomes in developing career adaptability amongst early-career employees. Interventions such as training, counselling programmes and talent-management practices can empower early-career employees and drive career growth ([Setti et al., 2015](#)). Integrating the moderation of proactive personality in the career competencies/career adaptability relationship offers useful insights regarding the complex interplay of one's predisposition, psychological state and career-relevant psychosocial resources that may directly support moving towards a better fit between employee capabilities and jobs ([Ahmad et al., 2019](#); [Meyers, 2019](#)).

6.2 Limitations and future recommendations

Several limitations exist in this study. Firstly, a cross-sectional design was used meaning that assumptions of causality are non-derivable from the outcomes. As career competencies and proactive personality are conceptually linked to career adaptability, reciprocal correlations are potentially present. This may cause a proactive personality to enhance the construction of career adaptability, thus driving the context as a novel input for career competencies ([Safavi and Bouzari, 2019](#)). Hence, the study outcomes should be supported by works that use a longitudinal design.

Secondly, this study used aggregated scores for assessing the role of proactive personality in early-career employee career adaptability. It is worth noting that proactive personality theory was introduced decades ago, and scholars have recently expanded the concept and construct measurement ([Strauss et al., 2017](#)). It was unclear whether proactive behaviour is required to alter the career construction process. Thus, future research is recommended to investigate the concept of proactivity further to measure the effect of personality and behaviour on career outcomes.

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