Exploring the Links Between Employee Resilience and Career Satisfaction: The Roles of Job Crafting and STARA Awareness

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Abstract

In a dynamic business environment where challenges are inevitable, the success of an organization depends on the resilience demonstrated by its employees. Prior studies provide valuable information on employee resilience and its outcomes; however, there is limited knowledge of how employee resilience influences career outcomes. Drawing on Job Demands-Resources Theory, this study explores the mediating effect of job crafting on the relationship between employee resilience and career satisfaction. Also, this study examines whether smart technology, artificial intelligence, robotics, and algorithms (STARA) awareness moderates the relationship between those variables. The study sample consists of 321 individuals employed in white-collar positions within various enterprises in Turkey. Structural equation modeling was used to test the research hypotheses. The findings indicate that job crafting significantly mediates the relationship between employee resilience and career satisfaction. Additionally, STARA awareness moderates the relationship between employee resilience and job crafting, whereas there is no conditional indirect effect between employee resilience and career satisfaction. This study presents practical implications for white-collar workers' career attitudes in business environments characterized by increased digitalization.

***Keywords:** Employee Resilience; Job crafting; Career Satisfaction; STARA Awareness.*

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1. INTRODUCTION

Resilience refers to the capacity to withstand and overcome difficulties and adversities, encompassing the ability to adapt to and cope with unfavorable circumstances. Demonstrating this capacity may restore or shift equilibrium following encounters with adverse circumstances and events. Resilience is widely acknowledged as an essential feature that exhibits a strong association with the competitive advantage of socio-ecological systems at the individual, organizational, and national levels (Walker et al., 2004). The concept of resilience has been the subject of extensive research across several academic fields, such as industrial psychology, human resources management, and organizational behavior (Gerçek & Yılmaz Börekçi, 2021). Employee resilience, which pertains to the ability of individuals to successfully cope with and adjust to unanticipated negative circumstances in the workplace, has emerged as a critical factor in achieving organizational effectiveness (Bardoel et al., 2014). In addition, the resilience of employees is of great significance in influencing the course of their careers, as it provides them with the ability to effectively navigate obstacles and adapt to the constantly increasing demands they face within the work environment.

In recent decades, there has been a significant transformation in the employment field due to delayering, restructuring of organizations, and financial globalization. The literature on careers has experienced a shift in focus throughout time, transitioning from traditional hierarchical career paradigms to more contemporary concepts known as *"new"* careers, which are characterized by their non-linear nature and lack of boundaries (Briscoe & Hall, 2006). Employees who can handle challenging work environments and achieve career satisfaction might be viewed as resilient from a career standpoint. Effectively recovering from adversity allows employees to navigate and endure unfavorable circumstances, such as adverse career occurrences. Recent research findings indicate a significant and noteworthy correlation between resilience and career satisfaction (Srivastava & Madan, 2020).

Certain employee habits are of utmost importance to effectively adapt to and navigate through changes, particularly during a time when human resources are increasingly precious. The strategies employed by workers to navigate and adapt to changes possess the capacity to foster effective change initiatives within firms comprehensively. Furthermore, the use of these strategies has the potential to facilitate a constructive adaptation to organizational change, thereby enhancing employees' overall job satisfaction and well-being (Petrou, 2013). Job crafting, known as behavior, involves employees choosing to abstain from certain tasks when they sense a lack of compatibility between their job and their work environment (Tims et al., 2022). Job crafting, as initially defined by Wrzesniewski and Dutton (2001), pertains to the proactive efforts of workers to reframe and reshape their jobs without external influence. Employee resilience and job crafting have close connections since the capacity to overcome challenges frequently creates a proactive attitude that allows people to modify and maximize their jobs within an organization (Van Wingerden & Poell, 2019). According to Vogt et al.'s (2016) study, individuals who deliberately build a creative and demanding work setting for themselves might

experience benefits including resilience. Also, there is evidence that job crafting promotes resilience during a crisis (Sahay et al., 2022).

The rapid advancement of "*smart technology, artificial intelligence, robotics, and algorithms*" (STARA) has played a pivotal role in the digital era. Numerous firms have embraced STARA technology in their operations to align themselves with the current trend, owing to the advantages of enhanced efficiency, cost reduction, distinctiveness, improved customer experience, and ultimately, enhanced overall performance (Ding, 2021). STARA possesses the potential to jeopardize an individual's comprehensive professional growth and introduce additional obstacles in the pursuit of personal fulfillment. STARA may present a challenge to individuals' sense of control since the external environment can impact employees' views of achieving their career objectives. This will probably exert a detrimental impact on one's level of career satisfaction (Brougham & Haar, 2018). Individuals who are aware of STARA technologies and how they might improve work procedures, skills, and well-being are more likely to actively interact with and exploit these tools to strengthen their resilience and job happiness. Therefore, we also tested the potential moderating function of STARA awareness in the relationship between employee resilience, job crafting, and career satisfaction.

Drawing upon the Job Demands-Resources (JD-R) theory, we posit that job crafting might serve as an intermediary mechanism, wherein employee resilience functions as an individual resource. Employees who possess resilience, coping skills, and flexibility are more inclined to actively craft their jobs. Through the process of job crafting, individuals can modify their job demands in a way that aligns with their strengths and preferences. This strategic adjustment allows them to reduce the adverse effects of stressors while simultaneously maximizing the positive impact of available resources. As a result, their overall career satisfaction could be enhanced. Thus, this research points out the significance of job crafting as a mechanism within the JD-R framework, whereby employee resilience results in improved career outcomes, particularly career satisfaction. The moderating effect of STARA awareness on the relationship between employee resilience and job crafting and the moderated-mediating effect of STARA awareness was tested. Through examination of mediation and moderation, valuable insights may be obtained on the role of job crafting in mediating the relationship between employee resilience and career satisfaction. Additionally, this approach allows for the identification of circumstances that can either strengthen or weaken the strength of this relationship. Studying both job crafting and STARA awareness represents the multifaceted nature of contemporary workplaces. The comprehensive methodology utilized in our research offers valuable insights for organizations seeking to assist employees in job crafting and maximizing technology utilization.

2. THEORETICAL BACKGROUND AND HYPOTHESES

2.1. Employee Resilience and Career Satisfaction

Globalization, with the advent of the information age and the network economy, has significantly increased the degree of contact among various players within the business environment, resulting in a highly interconnected system (Duchek, 2020). Consequently, the presence of negativity within an external environmental variable exerts a cascading influence on other entities. Carmeli et al. (2013) claim that resilience is a two-dimensional trait that includes the ability to cope with problems and change in response to them. Resilience capability refers to the capacity to generate or maintain cognitive, emotional, relational, or functional resources that facilitate organizational learning and adaptation in response to unforeseen events. According to Vogus and Sutcliffe (2007), this capacity is based on procedures, structures, and practices that assist businesses in enhancing organizational competence, increasing productivity, and expanding and developing novel competencies. Organizations acquire the capacity to endure and maintain their operations by acquiring the skills necessary to effectively manage adverse circumstances they confront. Thus, building employee resilience is essential for successful adaptation to and reaction to environmental changes (Wang et al., 2014).

Researchers have proposed many conceptualizations of individual resilience, including its characterization as a fixed personality characteristic, a changeable ability that may be developed through time, or a dynamic process. Resilience, as conceptualized by the trait viewpoint, is understood as a distinct and enduring personal attribute or a collection of many personal qualities. This suggests that individuals who possess resilience are often better at surviving and overcoming adversity and failures compared to those who lack resilience (Shin et al., 2012). Employee resilience is defined as "*the capacity of employees to utilize resources to continually adapt and flourish at work, even when faced with challenging circumstances*" (Kuntz et al., 2016). Previous research has demonstrated that employee resilience influences certain employee attitudes and behaviors. Employee resilience has been determined to have a positive relationship with organizational commitment (Shin et al., 2012), job satisfaction (Meneghel et al., 2016), organizational citizenship behavior (Toor & Ofori, 2010), employee performance and effectiveness (Luthans et al., 2011), job happiness and well-being (Wilson and Ferch, 2005). From the perspective of the JD-R Theory which suggests that within every organization each job has its demands and resources, demands can operate as stressors, whereas resources refer to aspects that contribute to the well-being of employees (Bakker et al., 2023). Resilience functions as an intrinsic asset that can mitigate the effects of work pressures on employees' emotional and psychological well-being. Thus, resilient employees can perceive challenges as opportunities for growth and development, leading to greater mastery over their careers and increased career satisfaction.

Career satisfaction which has been a concept of significant focus to career researchers is defined as "*satisfaction with one's career as a whole and job satisfaction as overall satisfaction with one's present job*" (Lounsbury et al., 2003:292). Career satisfaction is a state of cognitive and emotional

contentment that indicates a positive level of adjustment in one's job. Satisfaction among individuals is derived from the attainment of professional success, the advancement made in fulfilling overarching career objectives, as well as the accomplishment of goals about income, skills enhancement, and career progression (Greenhaus et al., 1990). Prior studies provide evidence of the significant effect of employee resilience on career satisfaction (Wei & Taormina, 2014). Additionally, Lyons et al. (2015) state that resilience positively affects career satisfaction. Hence, the ability to demonstrate resilience in the face of work-related challenges and adversities is likely to foster a sense of determination in achieving career goals, ultimately, this will result in a sense of fulfillment in one's career. Therefore, we propose the following hypothesis:

H1: Employee resilience positively affects career satisfaction.

2.2. Employee Resilience and Job Crafting

Job crafting was initially proposed by Wrzesniewski and Dutton (2001, p. 179) as *"the physical and cognitive changes individuals make in the task or relational boundaries of their work."* Job crafting is an interval variable between commitment and performance based on the JD-R Theory (Demerouti & Bakker, 2011). There are four forms to define work characteristics by using the difference between job demands and job resources: *"increased structural job; increased social job resources; increasing challenging job demands; and decreasing hindering job demands"* (Tims et al., 2012). Rudolph et al. (2017) provided a meta-analysis research that examined the antecedents of job crafting, with a particular focus on individual characteristics like personality traits and self-organization abilities. Additional factors that might influence outcomes are work characteristics and demographic traits. Employee resilience, as an individual capacity that can affect working skills, can serve as an important determinant in this context. According to Hartmann et al., (2020), many components of employee resilience encompass a range of abilities, including self-reliance, internal control focus, emotional intelligence, and empathy. These skills may contribute to individuals redefining their jobs. Several studies have indicated that self-sufficiency serves as an antecedent to job crafting (Kim et al., 2018; Tims et al., 2014). Lazazzara et al. (2020) argue that the act of job crafting may be seen as including two distinct aspects. These are proactive strategies that employees may take to enhance their job performance, as well as reactive strategies to effectively manage the pressures arising from organizational change. Employee resilience can affect job crafting positively, as it represents both the acquisition of new resources to improve performance and the ability to cope with change and challenges. On the other hand, resilience varies in individuals depending on different circumstances and different reactions. This indicates that resilience has a non-stable nature (Henley, 2010). More clearly, crisis-specific responses are situation-unique, as each crisis may have its characteristics. From this perspective, employee resilience may promote job crafting. Thus, we hypothesize:

H2: Employee resilience positively affects job crafting.

2.3. The mediating Role of Job Crafting

According to JD-R Theory, job crafting enables workers to adapt to changes in their workplaces more skillfully. According to Lichtenthaler and Fischbach (2018), employees who can effectively manage job demands and resources are more likely to experience increased motivation, improved health, and enhanced performance outcomes. The concept of job crafting is widely recognized as having a positive impact on several aspects of the work environment, including job satisfaction, devotion, job performance, and contextual performance (Rudolph et al., 2017). Job crafting is an important variable concerning the satisfaction individuals derive from their careers. It is due to the likelihood that engaging in job crafting activities would improve the alignment between an individual and their job, therefore fulfilling their career-related requirements and subsequently augmenting their overall career satisfaction (Dubbelt et al., 2019). Kundi et al. (2021) proposed that individuals who possess more flexible career attitudes are inclined to exhibit job crafting behavior, which in turn contributes to the increase in career satisfaction. Also, Kim and Beehr (2018) showed that job crafting directly affects career satisfaction. Moreover, task crafting enables employees to modify their job duties in response to the evolution of their interests, abilities, and ambitions as well as unexpected changes. The capacity to adjust to evolving conditions fosters a perception of flexibility and control in shaping one's career path, hence resulting in heightened levels of job career satisfaction (McKevitt et al., 2022). Thus, we hypothesize:

H3: Job crafting positively affects career satisfaction.

Job crafting was considered as a mediator variable in prior studies with resilience as an outcome (Hur et al., 2023; Kwon et al., 2019). Employee resilience is related to increased autonomy, person-job fit, enhanced relational sources, and capacity to adapt (Bardoel et al., 2014). Given that job crafting may occur in settings where employees have a larger sense of autonomy and are provided with opportunities to interact with others to acquire relational assets (Rudolph et al., 2017), employee resilience may increase the possibility of job crafting. Furthermore, research has indicated that job crafting has a significant role in determining career satisfaction since it has the potential to enhance the alignment between a person and their job (Dubbelt et al., 2019). Resilient employees may proactively alter their job responsibilities and activities to better correspond with their preferences, abilities, and long-term career objectives through job crafting, which may strengthen the link between employee resilience and career satisfaction. Through this process, they may make the most of their resources, reduce stress, and increase engagement, all of which eventually result in improved levels of career satisfaction. Thus, we hypothesize:

H4: Job crafting mediates the relationship between employee resilience and career satisfaction.

2.4. The Moderator Role of STARA Awareness

The Fourth Industrial Revolution has been driven by the progress made in smart technology, artificial intelligence, robotics, and algorithms (STARA) (Brougham & Haar, 2018; Ding, 2021). This

has resulted in a significant and far-reaching change in several aspects of daily life. Smart technology plays a substantial part in contemporary digital work settings. Organizations allocate significant resources towards technological advancements, and the level of employee knowledge and effective exploitation of these tools may significantly impact their career achievements. The recognition of the role of smart technology awareness as a driving force may guide companies in their efforts to foster technology literacy and empower employees to effectively utilize technology for their benefit. SMART technologies, sometimes known as *"technological disruptions,"* have the potential to hinder employees' ability to properly accomplish their tasks. For example, these disruptions have the potential to impact all aspects of one's career, including career planning, career satisfaction, and career success (Brougham & Haar, 2023). Theoretically, career development is influenced by the ability of employees to adapt to the specific contextual conditions in which they work (Savickas et al., 2009). Thus, STARA awareness is a key factor to consider in the study as it serves as a contextual element that may impact the extent of the relationship between employee resilience and career satisfaction. In the modern era, which is characterized by the growing integration of technology in the workplace, the level of employees' knowledge and skill with smart technology has the potential to impact their utilization of resilience strategies.

The concept of STARA awareness relates to the proactive recognition by workers of the possibility of technological advancements leading to the displacement of their jobs (Oosthuizen, 2022). The existing body of literature has examined employees' views of STARA and its possible impact on their career, emotional well-being, psychological well-being, and placement of job prospects. According to Lestari and Djastuti (2020), projections suggest a significant quantity of occupations that will potentially undergo automation in the foreseeable future. Additionally, some prior studies have mainly shown STARA awareness in a very unfavorable manner, linking it to many adverse outcomes like reduced organizational commitment, heightened cynicism, sadness, and intentions to leave the company (Brougham and Haar, 2018). The research done by Lingmont and Alexiou (2020) demonstrated a notable correlation between individuals' understanding of STARA and their perception of job insecurity. Nevertheless, as stated by Oosthuizen (2022), STARA presents potential opportunities for developing innovative professional roles and acquiring highly desirable digital-era competencies. Regarding the current research, it has been postulated that STARA functions as a moderator in the association between study variables. Thus, we hypothesize that,

H5: STARA Awareness moderates the relationship between employee resilience and job crafting, such that the relationship between employee resilience and job crafting is stronger among employees with greater levels of STARA awareness.

Since previous studies linked STARA awareness to career satisfaction (Brougham & Haar, 2023), this study aims to investigate not only the presence of the moderating role of STARA awareness

but also the potential moderating-mediating role of STARA awareness on the indirect effect of job crafting on the link between employee resilience and career satisfaction. So, we hypothesize that,

H6: STARA Awareness moderates the indirect effect of job crafting on the relationship between employee resilience and career satisfaction, such that the indirect effect on the relationship between employee resilience and career satisfaction is stronger among employees with greater levels of STARA awareness.

Overall, our conceptual research model is represented in Figure 1.

Figure 1. Conceptual Research Model
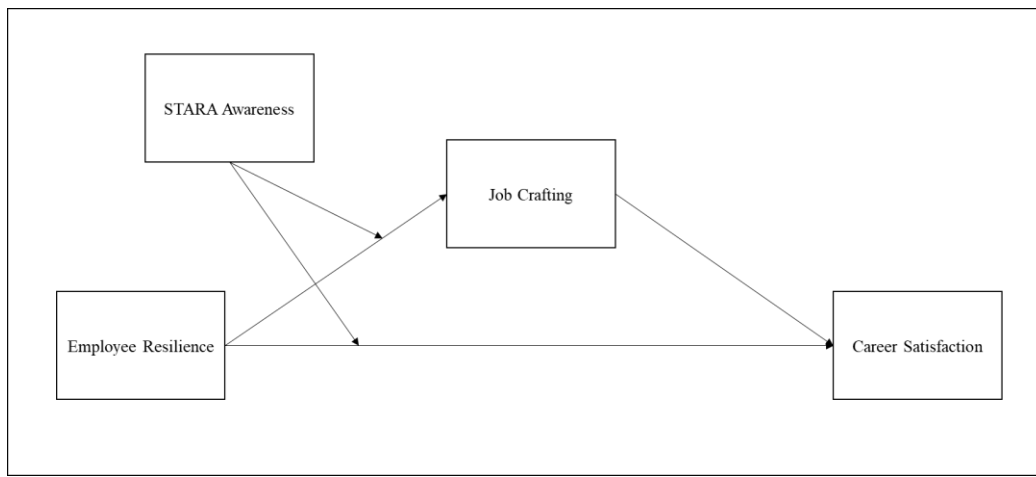
Source: Figure by the authors

3. RESEARCH METHODOLOGY

The model fit of the research variables was assessed using SPSS AMOS. The hypotheses were examined by the application of structural equation modeling (SEM) after the establishment of the measurement model for the sample. This study presents the reported values of the calculated standardized path coefficients and fit statistics. The evaluation of the structural model fit was conducted using statistical measures, such as $\chi2$ statistic, normed chi-square ($\chi2/df$) root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), and comparative fit index (CFI). The serial multiple mediation study employed bootstrapping with 5000 iterations (Williams & MacKinnon, 2008), a widely recognized and effective method for assessing indirect effects. Also, PROCESS Macro for SPSS was used for testing the moderator effects.

3.1. Participants

The present study uses a cross-sectional research design to gather data at a single point in time, employing self-report questionnaires as the primary method of data collection from participants. In total, 321 white-collar employees from various enterprises completed the survey forms. The participants were given a questionnaire containing the measuring instruments employed in the present study. Data collection was facilitated by the utilization of online forms via Google Forms. After reading the

summary of the study in the first segment, participants were guaranteed anonymity. The participants were requested to engage in the survey only voluntarily. The present work has obtained ethical approval from the host institution and adheres to the institutional guidelines for ethics and publishing. Regarding gender, 193 (60.1%) of them were female and 128 (39.9%) were male. In terms of the age of the participants, 59 (18.4%) of them were between 18 and 23; 92 (28.7%) of them were between 24 and 29; 69 (21.5%) of them were between 30 and 35; 32 (10%) of them were between 36 and 41; 33 (10.3%) of them were between 42 and 47; and 36 (11.2%) of them were 48 and above.

3.2. Measures

All variables were measured on a scale between 1 (Strongly disagree) and 5 (Strongly Agree).

Employee resilience. The 9-item "Employee Resilience Scale" developed by Näswall et al. (2019) measured employee resilience. A sample item is *"I resolve crises competently at work."* The inter-reliability coefficient of the scale was 0.90 in the original study.

Job crafting. The 21-item "Job Crafting Scale" developed by Tims et al. (2012) measured job crafting. A sample item is *"I decide on my own how I do things."* The inter-reliability coefficient of the scale was 0.82 in the original study.

STARA awareness. STARA Awareness was measured with a 4-item "STARA Awareness Scale" developed by Brougham and Haar (2018). A sample item is "*I think my job could be replaced by STARA.*" The inter-reliability coefficient of the scale was 0.85 in the original study.

Career satisfaction. Career satisfaction was measured with a 5-item "Career Satisfaction Scale" developed by Greenhaus et al. (1990). A sample item is "*I am satisfied with the success I have achieved in my career.*" The inter-reliability coefficient of the scale was 0.88 in the original study.

4. RESULTS

4.1. Descriptive Statistics

The descriptive statistics including the means, standard deviations, bivariate correlations between the study variables, and Cronbach's alphas of the scales are shown in Table 1. All of the study constructs were significantly positive, and the correlations were above the threshold of 0.01. As seen in Table 1, employee resilience is positively related to job crafting (r=.67, p < .01) and career satisfaction (r = .44, p < .01). Job crafting has a significant positive relationship with career satisfaction (r =.54; p < .01). On the other hand, the variables are not statistically related to STARA. As seen in Table 1, composite reliability values of the scales are .90; .90; .91; and .91 respectively, which means reliability levels are higher than .70, therefore acceptable (Hair, 2009). According to Hair (2009), data is seen to exhibit normality when its skewness falls within the range of -2 to +2, and its kurtosis falls within the range of -7 to +7. The average values of the scales, namely 0.52, 0.51, 0.66, and 0.67, respectively,

demonstrate that they are above the acceptable threshold of 0.50 established by Fornell and Larcker (1981).

Table 1. Descriptives

Variables	Mean	SD	1	2	3	CR	AVE	Skewness	Kurtosis
1. Employee Resilience	4.23	.04				.90	.52	-1.39	2.12
2. Job Crafting	4.01	.04	.67**			.90	.51	-.76	.76
3. Career satisfaction	3.72	.05	.44**	.54**		.91	.66	-.46	-.24
4. STARA	2.27	.06	-.10	-.01	-.05	.91	.67	.72	-.40

Note. N= 321. CR: Composite Reliability, AVE: Average Variance Extracted **$p < .01$

Source: Table by the Authors

4.2. Testing the Mediating Role of Job Crafting

Before estimating the structural model, a measurement model was developed using the SPSS AMOS 21.0 software and the maximum likelihood technique using confirmatory factor analysis (CFA). To assess the distinctiveness of the research variables, four separate confirmatory factor analyses (CFAs) were conducted, as outlined by Bagozzi and Edwards (1998). The adequacy of the model was evaluated using many statistical measures, including the $\chi 2$ statistic, normed chi-square ($\chi 2/df$), RMSEA, SRMR, and CFI. According to Browne and Cudeck (1992), a value below .05 is indicative of a favorable fit for both RMSEA and SRMR. In addition, Hu and Bentler (1999) suggest that a value of .90 or above is considered appropriate for CFI.

Table 2. CFA Results for the Measurement Models

Model	$\chi 2$	df	$\chi 2/df$	p	RMSEA	SRMR	CFI
1. Four-factor model	751.455	311	2.416	.000	.06	.06	.93
3. Three-factor model	1150.515	321	4.939	.000	.11	.08	.81
2. Two-factor model[a]	2880.079	323	8.917	.000	.16	.20	.60
3. Two-factor model[b]	3037.228	323	9.403	.000	.16	.13	.56
4. One-factor model	3422.000	324	10.562	.000	.17	.13	.52

Note. N = 321. The four-factor model included employee resilience, career satisfaction, job crafting, and STARA awareness. The three-factor model comprised of employee resilience and job crafting collapsed into one factor, career satisfaction, and STARA awareness as separate factors. The two-factor model[a] contained employee resilience and job satisfaction collapsed into one factor, and career satisfaction and STARA awareness collapsed into another factor. The two-factor model[b] included employee resilience and STARA collapsed into one factor and job crafting and career satisfaction collapsed into another factor. In the one-factor model, all the constructs were collapsed into one factor.

Source: Table by the Authors

The results of CFA show that the four-factor model had a good model fit to the data with the following fit indices: χ^2 (751.455, N = 321) = 2.146, p < 0.001; RMSEA = .06; SRMR = .06 and CFI = .93). As an alternative model, the three-factor model included employee resilience and job crafting, which collapsed into one factor, career satisfaction, and STARA awareness as separate factors. The two-factor model[a] included employee resilience and job satisfaction, which collapsed into one factor, and career satisfaction and STARA awareness, which collapsed into another factor. The two-factor model[b] included employee resilience and STARA, which collapsed into one factor, and job crafting and career satisfaction, which collapsed into another factor. In the one-factor model, all the study variables were taken as one factor. Compared to other alternative models, the four-factor model had a better fit than the three-factor (χ^2 (321, N = 321) = 1703.218, p < 0.001; RMSEA = .11; SRMR = .08; and CFI = .81), two-factor[a] (χ^2 (323, N = 321) = 2880.079, p < 0.001; RMSEA = .16; SRMR = .20; and CFI = .60), two-factor[b] (χ^2 (323, N = 321) = 3037.228, p < 0.001; RMSEA = .16; SRMR = .13; and CFI = .56), and the one-factor model (χ^2 (324, N = 321) = 3422.0, p < .001; RMSEA = .17; SRMR = .13 and; CFI = .52) (Table 2).

Table 3. Results of the Structural Model

Path	DE	95% CI	IE	95% CI	TE	95% CI
Employee resilience → Career satisfaction (H1)	.12	[-.13,.35]			.45**	[.33,.55]
Employee resilience → Job crafting (H2)	.80**	[.72,.86]			.80**	[.72,.86]
Job crafting → Career satisfaction (H3)	.42**	[.18,.66]			.42**	[.18,.66]
Employee resilience → Job crafting → Career satisfaction (H4)			.33**	[.14,.54]		

Note. DE = Direct effect; IE = Indirect effect; TE: Total effect; CI = confidence interval.
* p < .05, **p <.01. Model fit indices: χ^2 = 646.045, df= 220, χ^2/df= 2.937, CFI = 0.92, SRMR = .07, RMSEA = .07, p = .000

Source: Table by the Authors

The proposed research model was evaluated utilizing structural equation modeling subsequent to the execution of CFA. The results of the overall structural model, including direct, indirect, and total effects, are presented in Table 3. The results showed that the direct effect of employee resilience on career satisfaction (β =.12, p > .01) was found to be insignificant while employee resilience has a significant direct effect on job crafting (β = .80, p < .01). Thus, H1 was rejected and H2 was accepted. Also, the direct effect of job crafting on career satisfaction was significant (β =.42, p < .01). Hence, H3 was supported.

Using 5,000 bootstrap samples, all indirect effects have been assessed with 95% bootstrap confidence intervals. Table 3 shows that the indirect effect of the mediator, job crafting, on the relationship between employee resilience and career satisfaction (β = .33, p < .01) was significantly

positive. Thus, job crafting fully mediates the relationship between employee resilience and career satisfaction and H4 was supported.

4.3. Testing the Moderating Role of STARA Awareness

To test the moderating role of STARA awareness, PROCESS Macro (Model 8) for SPSS was used (Heyes, 2013). We tested the moderator role of STARA awareness between employee resilience and job crafting. Table 4 presents the estimates, standard errors, and bootstrap confidence intervals for the conditional effects of STARA awareness across low and high levels of employee resilience. Since the conditional effect of STARA awareness is statistically significant (b = -.09, SE = .04, t = -2.19, p < .05), H5 is supported. The illustration of the moderating role of STARA awareness is depicted in Figure 2. On the other hand, as seen in Table 4, the moderated-mediation role of STARA awareness was found to be insignificant (b = -.04, SE = .03, t = -0.11, p > .05), thus H6 is rejected.

Table 4. Moderator Role of STARA Awareness

Variable	b	SE	t	p	LLCI	ULCI
Mediator (Job Crafting)						
Employee Resilience	0.7362	0.0456	16.1142	0.0000	0.6465	0.8289
STARA Awareness	0.0372	0.0286	1.3011	0.1942	-0.0190	0.0934
Employee Resilience X STARA Awareness (H5)	-0.0926	0.0422	-2.1912	0.0282	-0.1757	-0.0095
	b	SE			LLCI	ULCI
Conditional direct effect						
M-1SD	0.8371	0.0655			0.7083	0.9659
M	0.7362	0.0456			0.6465	0.8259
M+1SD	0.6353	0.6353			0.5092	0.7615
Conditional indirect effect						
M-1SD	0.4291	0.0847			0.2777	0.6103
M	0.3774	0.0672			0.2521	0.5164
M+1SD	0.3257	0.0663			0.2066	0.4695
Index of moderated mediation (H6)	-0.0475	0.0327			-0.1178	0.0123

Source: Table by the Authors

Figure 2 shows the variance of the simple slope for employee resilience on job crafting at different levels of STARA. High-level awareness of STARA negatively affects the degree of the effect of employee resilience on job crafting. On the other hand, a low level of STARA awareness positively affects the degree of the effect of employee resilience on job crafting. Based on Figure 2, the lower STARA awareness has a slightly steeper slope than the higher group, which shows that STARA awareness has an increasing effect on the relationship between employee resilience and job crafting.

Figure 2. The Moderator Role of STARA Awareness

Source: Figure by the Authors.

5. RESULTS

This study investigated the role of job crafting in the relationship between employee resilience and career satisfaction. The results indicated that employee resilience is positively correlated with both job crafting and career satisfaction. This finding implies that employees who can cope with unexpected adversities at work could be more able to balance between their job demands and resources to face different challenges. Also, employees with higher resilience at work would experience higher levels of positive attitudes towards their careers. The present study's findings are consistent with previous research that demonstrates a correlation between resilience and career satisfaction (Srivastava & Madan, 2020). Thus, employees who possess resilience could experience higher levels of satisfaction with their careers.

Another finding of this study indicates that job crafting is positively related to career satisfaction. Employees who actively craft their jobs would possibly be more satisfied with their careers. The results obtained from the SEM analysis suggest that job crafting is a mediator, revealing the mechanism by which employee resilience has a favorable impact on career satisfaction as predicted. In other words, the extent to which employees can bounce back from challenges and setbacks has a direct effect on their overall fulfillment with their careers, and this effect is mediated by job crafting behaviors. Previous studies showed that job crafting served as a mediator in the relationship between mindfulness as a personal resource and resilience (Hur et al., 2023). Also, individuals who possess increased levels of psychological resilience tend to exhibit greater levels of positive affect. Consequently, this increased positive effect is associated with more commitment toward implementing favorable changes in the organization (Shin et al., 2012).

Another significant finding of this study is that STARA awareness moderates the relationship between employee resilience and job crafting. As STARA awareness increases the relationship between employee resilience and career satisfaction is weakens. The observed outcome can be attributed to Ding's (2021) argument that employees, may be concerned about their job insecurity, and losing autonomy because of the implementation of STARA. The implementation of STARA represents a shift in work practices, which introduces potential risks and uncertainties for both the job itself and the individuals. One of the most critical issues would be a decrease in employee resilience (Frey & Osborne, 2017; Tan et al., 2023; Tan & Yeap, 2022). Furthermore, this study demonstrated that individuals who possess resilience are more inclined to engage in job crafting when their STARA awareness levels are low. This finding is particularly significant given the extensive digitization of organizational activities. As prior studies showed, STARA and job crafting are correlated (Kang et al., 2023) showing that if employees are aware of smart technologies and their possible uses in the workplace, they could adjust themselves accordingly. In this study, STARA awareness items are associated with the fear that STARA would displace employees' job opportunities, so the STARA awareness as a threat by employees reduces the relationship between employee resilience and job crafting. Additionally, the moderating-mediator role of STARA awareness was found to be insignificant. This result may be linked to contextual or methodological factors mentioned in the limitations section. This study has also addressed the requirement of a new study by contributing to a new research model that examines the effect of STARA awareness on the relationship between employee resilience and career satisfaction.

This study presents several theoretical implications. First, the results highlight the need to incorporate individual resources, such as resilience, and proactive actions, such as job crafting, into existing organizational theories, such as the Job Demands-Resources (JD-R) model. This discovery contributes to our comprehension of the interplay between individual traits and adaptive approaches in influencing outcomes related to careers, hence providing a more comprehensive framework for examining employee satisfaction and effectiveness within organizational contexts. This study suggests that career satisfaction is positively affected by employee resilience and this relationship is mediated by job crafting. Also, this study provided evidence that the relationship between employee resilience and job crafting is moderated by STARA awareness. The study findings imply that employees with higher STARA awareness may experience lower levels of job crafting. However, employees who craft their jobs may be more aware of and competent in the use of smart technologies. Through the examination of these two concepts together, an opportunity arises to investigate potential complementary connections or interdependencies, therefore revealing their collective impact on individuals' career satisfaction. Currently, it is extremely difficult to analyze employees' perspectives on their careers without considering the impact of digitalization. Hence, the primary finding of this study is the identification of job crafting as a functional mechanism for adapting to evolving workplace demands, and its impact on individual career satisfaction. Additionally, the moderating effect of STARA awareness between

employee resilience and job crafting can be explored in future studies in relation to the theory of technology acceptance. Examining STARA through different measurement approaches, in terms of job insecurity and career sustainability, could provide valuable insights for both employees and organizations.

This study also highlights noteworthy practical implications. Given that career satisfaction is a significant cognitive and affective construct about one's job, it is influenced by both employee resilience and job crafting behaviors. Consequently, organizational interventions may be proposed to address these factors. Organizations could allocate resources towards resilience-building initiatives, which aim to provide employees with the necessary skills and mindset to effectively recover from setbacks (Kuntz et al., 2016). The practical implications of the findings indicate that professionals in the field of industrial psychology, as well as those in career and human resource management, should evaluate the extent to which employees possess resilience. Based on this assessment, they should then create career development programs and counseling interventions that promote the development of employee resilience, thereby facilitating the effective utilization of employee adaptability and job crafting behaviors (Coetzee et al., 2023). Moreover, employees who craft their jobs are more likely to pursue their careers in ways that allow them to communicate their career objectives, beliefs, and inspirations, resulting in a better person-organization fit (Kim & Beehr, 2018). Thus, organizations can incorporate evaluations of resilience and job crafting into their performance assessment and goal-setting procedures for internalization of organizational goals and a better fit. This can assist individuals and supervisors in recognizing possible paths for individual advancement and professional development. Creating a workplace environment that fosters creativity and adaptability has the potential to enhance the practice of job crafting as well as positive career outcomes.

There are certain limitations to this study. It is essential to recognize that convenience sampling is associated with several limitations, including the potential for selection bias and limited generalizability. Utilizing a wider range of diverse and cross-cultural samples can lead to the attainment of results that are more generalizable. Furthermore, this study did not consider all potential environmental and individual variables. Also in future investigations, the utilization of a longitudinal data-gathering technique has the potential to yield more insightful results. It is important to emphasize that the variables incorporated into the model created in this research are entirely subjective. In future studies, the mediating role of job crafting on the effect of employee resilience on outcomes such as work engagement (Malik & Garg, 2020), well-being (Tonkin et al., 2018), and organizational commitment (Paul et al., 2016) could be examined. Other mediators could be taken into consideration other than job crafting to explain the mechanisms between employee resilience and career satisfaction such as job embeddedness (Eslamlou et al., 2021), career adaptability (Topino et al., 2022) or employability (Rossier et al., 2017). Future research could investigate employee resilience at the team level by considering collective job crafting. Resilience and job crafting may also have potential contributions to

performance at individual and team levels (Luu, 2017) which, could yield important outcomes for organizational success. Moreover, there are differences in employees' attitudes towards technological innovations (Morikawa, 2017). It is important to understand how employees and managers perceive the implementation of artificial intelligence (Im & Kim, 2022), smart technology, robotics, and algorithms to make their attitudes about these technologies positive for adapting to the new environment and maintaining employee resilience and career satisfaction.

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