

Exploring the Role of Job Crafting, Neuroticism, and Resilience in Teacher Burnout and Work Engagement: A Mediation Analysis

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#### Abstract

According to Tims et al. (2015), job crafting is a prospective workplace strategy employees use to enhance their mental well-being. It includes employees taking the initiative to adapt features of their jobs to create a more fulfilling and engaging work experience. The study inspected the implication of job crafting in various workplace settings and aimed to know if behavioural and cognitive job crafting mediate the relationship between neuroticism and resilience with burnout and work engagement. The data was obtained from 76 respondents with a mean age of M = 46.63(11.91). Self-report measures were used to measure neuroticism, resilience, burnout, work engagement and job crafting. Correlation, hierarchical linear regression, and mediation analysis were used to assess the study variables' direct and indirect effects. The study results indicated that job crafting had a significant positive association with work engagement. Furthermore, job crafting was positively associated with burnout but statistically insignificant, contrary to the hypothesis. Moreover, resilience had a significant positive association with cognitive job crafting but not with behavioural job crafting. Furthermore, neuroticism had an insignificant negative association with cognitive job crafting and an insignificant positive association with behavioural job crafting. Similarly, there was no mediating effect of job crafting on the relationship between neuroticism and work engagement and between resilience and work engagement among school teachers. However, in mediation analysis, resilience had a significant negative direct relationship with burnout, indicating that highly resilient individuals tend to have less burnout. Similarly, neuroticism had a significant positive relationship with burnout, indicating that individuals who were high in neuroticism were more likely to burnout. Given the limitation of this study, further research should be done to understand the implications of job crafting in education. The practical implication of the study is that not all kinds of job-crafting behaviour are suitable in education settings and need more coping strategies to mitigate stress.

Keywords: Burnout, cognitive job crafting, neuroticism, resilience, work engagement.

### Introduction

Organisations often strive to cultivate workplaces that foster robust employee engagement and motivation. However, given the intricate and demanding nature of employees' roles, the reliance on external resources may fall short, necessitating employees to harness their capabilities to accomplish their tasks (Vogt et al., 2016). Furthermore, with the ever-advancing global technological landscape, the workplace has grown increasingly unpredictable and complex, posing challenges for organisations in establishing optimal roles for their workforce. Consequently, the establishment of flexible positions, enabling employees to adapt their responsibilities and duties, emerges as a paramount imperative (Zhang & Parker, 2019). Tims and Bakker (2010) refer to such employee-initiated endeavours to reconfigure and tailor their work as "job crafting".

Both cognitive and behavioural job crafting involves individual adjustments within a job without a complete redesign, aligning with established job responsibilities (Berg & Dutton, 2008). This practice promotes greater autonomy among employees, fostering a heightened sense of responsibility for their work. Consequently, this autonomy often results in increased motivation and a willingness to invest more effort in their job tasks (Parker & Ohly, 2008). Job crafting manifests in various forms: Workers may modify task-related elements, such as task volume or type, or they may make alterations in their interpersonal interactions, be it with clients or coworkers, transforming the work environment to better suit their unique qualities. Furthermore, individuals reshape their perception of job components to enhance the sense of meaning derived from their work (Wrzesniewski & Dutton, 2001). Job crafting empowers employees to proactively tailor their work experiences, ultimately benefiting both the individual and the organisation.

The proposed research holds both practical and theoretical significance. First, the current study adds to the knowledge of meaningful work by demonstrating antecedents and outcomes of cognitive and behavioural job crafting and their mediation role between resilience/neuroticism and burnout/work engagement. Identifying this process in our research advances knowledge of relationship between cognitive and behavioural job crafting, neuroticism and resilience of employees. Furthermore, most research concentrated on the behavioural aspects of job crafting, with less attention paid to the cognitive aspects (Rudolph et al., 2017; Zhang & Parker, 2019). According to Lazazzara et al. (2020) and Weseler and Niessen (2016), scales used to measure job

crafting frequently lacked items intended to evaluate the cognitive dimension. The study also helped employees understand the individual characteristics contributing to their work-related behaviour and the possible need to organise workshops to enhance the skills needed for progress at work. Based on the above literature, the study aimed to know if behavioural and cognitive job crafting mediate the relationship between neuroticism and resilience with burnout and work engagement.

### **Behavioural and Cognitive Job Crafting**

Tim et al. (2012) employed the Job Demands-Resources (JD-R) model to classify job characteristics into two categories: Job demands and job resources. Past research, such as studies by Bakker and Demerouti (2008) and Halbesleben (2010), consistently linked job resources to higher levels of work engagement. At times of extensive job demands, this association becomes more critical (Hakanen et al., 2005). According to Tims et al. (2012), individuals design their work by increasing the structural and social resources at workplace by getting feedback and autonomy, respectively. When challenges increase in workplace, it establishes the core of the second facet of job crafting. Inadequate encouragement at work can lead to unfavourable outcomes, including boredom, increased absenteeism, and job dissatisfaction (Kass et al., 2001). Therefore, it is vital to foster work motivation to ensure that employees face an appropriate level of demanding job requirements. Employees are intrinsically motivated by such challenging roles, fostering the enhancement of their skills and knowledge or the pursuit of more ambitious objectives (LePine et al., 2005).

The third dimension of job crafting pertains to mitigating the severity of demanding work requirements. When employees feel overwhelmed by their work obligations, they may proactively seek to reduce these demands. Prolonged exposure to high demands, particularly in conjunction with scarce employment resources, can give rise to burnout and other adverse health effects (Schaufeli et al., 2009). The fourth component of job crafting involves diminishing demanding job requirements. In contrast to their counterparts with lower cynicism scores, employees exhibiting higher cynicism are more inclined to lower their job expectations and less likely to increase their job resources and demands. Furthermore, Tims et al. (2012) observed no significant correlations between decreasing hindering job demands and job performance, employability, or work engagement.

According to Wrzesniewski and Dutton (2001), cognitive job crafting refers to the behavioural and cognitive adjustments people make inside of their jobs. In order to transform their work identities and increase the significance of their work, employees are believed to participate in three different forms of crafting: Task, relational, and cognitive crafting. Task crafting is modifying the parameters of the work, e.g., taking on jobs that are in line with personal interests or changing the quantity, nature, or scope of the activities performed. Relational crafting is known as initiating changes in the relational aspects of the profession, such as the quantity and quality of interactions with colleagues. Conversely, cognitive crafting is how one sees or frames the work. Wrzesniewski and Dutton (2001) argued that the cognitive aspect of crafting is especially important and strongly related to the meaning and identity of one's work. According to Berg et al. (2013a) and Wrzesniewski and Dutton (2001), employees can achieve harmony with their surroundings by redefining or reframing their perception of their work, even without behavioural changes.

### Advantages and Complexities of Job Crafting

Job crafting is an evolving concept that brings notable benefits and challenges for both employees and their workplaces, as mentioned below.

According to Berg et al. (2013b), job crafting is positively connected to how an individual find their work meaningful and feels connected to it. Ghitulescu (2006) also found a positive connection between job crafting and organisational commitment, work satisfaction, and a reduction in absenteeism. Similarly, Tims et al. (2015) emphasised that job crafting is predictive of improved job performance and increased work engagement. Additionally, Tims et al. (2013) found significant connections between job crafting, performance, and engagement at both individual and team levels. Moreover, job crafting has been regarded as a systemic strategy to enhance employee engagement and overall organisational performance (Tims & Bakker, 2010).

Although job crafting has its advantages, it also comes with its own set of challenges. Berg et al. (2013) found the contradicting effect of job crafting on an organisation's goals. Similarly, Demerouti et al. (2015) and Niessen et al. (2016) found that job performance of an employee had decreased because of reducing the job demands. Therefore, job crafting is a complicated matter that necessitates intensive description. The present study's objective was to examine how cognitive

and behavioural job crafting mediates the relationship between neuroticism, work engagement, resilience, and burnout.

### Job Crafting and Work Engagement

Engagement at work has been a topic that has been widely discussed in the literature and fosters mental satisfaction with one's job. Work engagement comprises vigour, dedication, and absorption (Schaufeli et al., 2002). In their work, Bakker et al. (2008) demonstrated that the engagement level of the employees determines job energy, time, and enthusiasm. Another factor that has been found helpful in improving work engagement for individuals and teams was developing job resources and setting job requirements levels (Tims et al., 2013). Furthermore, employees who were highly motivated tended to exhibit a desire to demonstrate their independence (Schaufeli et al., 2001). Furthermore, a proper workplace leads to job resources that improve positive engagement (Bakker et al., 2012).

Past studies have also supported the idea that job crafting can result from work engagement (Bindl et al., 2019; Robledo et al., 2019). According to Bakker (2018), employees who are engaged want to stay engaged and participate in activities to mobilise new resources. Additionally, they actively foster a working environment according to their needs and requirements (Laguía et al., 2024). Previously referred to literature suggests that job crafting is likely related to work engagement.

> H1. Job crafting is positively associated with work engagement.

### **Job Crafting and Burnout**

Burnout is a complicated condition and is characterised by the emotional, physical, and mental exhaustion that occurs under prolonged or excessive job stress or work demands (Lubbadeh, 2020). People who are burned out usually have doubts about their job satisfaction and often report that they are not that effective career-wise (Golonka et al., 2019). Burnout constitutes a very important risk issue for companies, and it causes millions of dollars in expenses (Bakker et al., 2014).

Travaglianti et al. (2016) revealed that there was a direct link between job crafting and outcomes that included burnout and work engagement. Job crafting was negatively correlated with burnout since it was seen as a proactive behaviour that attributes power to employees to reshape the significance of their roles and decrease stress. According to Tims and Bakker (2010),

individuals who can work out their resources, take on more demanding assignments, and eliminate the stressors that prevent them from carrying out their tasks well (i.e., job crafting) are likely to be more engaged in their work and have less burnout.

▶ H2. Job crafting is negatively associated with burnout.

### **Resilience as an Antecedent of Job Crafting**

According to Luthans (2002), resilience is the positive psychological capacity to bounce back and recover from adversities and positive changes. It is an essential tool that helps people navigate changing circumstances (Waugh et al., 2008), allows workers to see obstacles as chances for improvement, and helps them go beyond their limits (Bonanno, 2004; Luthans, 2002). Therefore, in this research, resilience is considered an antecedent of job crafting. Resilience in the workplace signifies the capacity to effectively navigate stressors and challenges (Jackson & Maslach, 2020). Resilient employees exhibit superior workload management, maintain a positive outlook, and proactively seek support from peers and superiors (Jones, 2019). Research indicates resilient individuals are more inclined to engage in job-crafting behaviours, including pursuing new projects, cultivating supportive colleague relationships, and aligning job tasks with personal values and goals (Sulistiyorini & Zahra, 2020; Tims et al., 2013). This resilience fosters both personal growth and organisational success. Based on the above literature, it can be hypothesised that a high level of resilience leads to a high level of job crafting.

➤ H3. Resilience is positively associated with job crafting.

### Neuroticism as an Antecedent of Job Crafting

In past research, the influence of various personality traits on job-crafting behaviours has been recognised (Lyons, 2008). In their research, Bell and Njoli (2016) reported that neuroticism, conscientiousness, agreeableness, and openness to new experiences were the most significant and useful personality traits for predicting job crafting. Therefore, in this research, personality characteristics of neuroticism were considered an antecedent of job crafting. Neuroticism, as an individual personality characteristic, shows a person's tendency to experience stress (Morgan & De Bruin, 2010), and in a professional setting, it shows a lack of mental and emotional adjustment among employees (John & Srivastava, 1999). Moreover, high neuroticism scores lead to employees perceiving their work environment as intimidating, resulting in negative feelings and diminished work efficiency (Schneider, 2004). The continual challenges faced by high-

neuroticism individuals often lead to exhaustion (Bolger & Schilling, 1991) and a heightened risk of burnout (Langelaan et al., 2006). Based on the above literature, it can be hypothesised that neuroticism leads to a low level of job crafting.

▶ H4. Neuroticism is negatively associated with job crafting.

### **Mediation Effect**

Job crafting is a process where employees proactively modify their tasks to align with their preferences, and it plays a crucial role in workplace well-being. As described above, several studies have found the direct outcome of job crafting, such as burnout and work engagement, where employees redefine the job environment to mitigate stress and increase engagement (Tims & Bakker, 2010; Travaglianti et al., 2016). Additionally, studies have found that individual with high neuroticism perceive their work environment as challenging, resulting in diminished work efficiency (Schneider, 2004). On the contrary, highly resilient employees manage their workload, have a positive outlook, and seek peer support (Jones, 2019).

Based on the above literature, we can hypothesise that cognitive and behavioural job crafting mediates the link between resilience and neuroticism and work engagement and burnout.

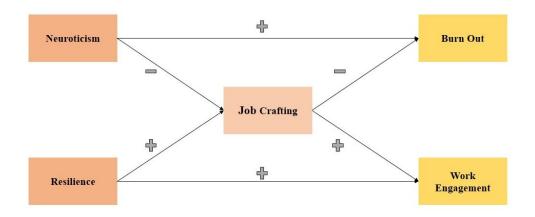
- H5a. Job crafting mediates the relationship between resilience and work engagement.
- > H5b. Job crafting mediates the relationship between resilience and burnout
- H6a. Job crafting mediates the relationship between neuroticism and work engagement.
- ▶ H6b. Job crafting mediates the relationship between neuroticism and burnout.

### **Conceptual Model**

Based on the above literature, a conceptual model was proposed to explore how neuroticism and resilience, mediated by job crafting, impact work engagement and burnout.

### Figure 1

Model Exploring Mediation Effect of Job Crafting on Study Variables



### Methods

#### Procedure

A questionnaire was developed to test the hypothesis using the Qualtrics platform (appendix). The questionnaire comprised 138 items and was distributed with the help of TEN HAVE CM and personal social network. The questionnaire was emailed to participants with a brief study description. Detailed explanation was provided to participants related to purpose, procedure and possible risks and benefits. Prior to their involvement, individuals were explicitly informed about these aspects and asked to provide written informed consent. This approach ensures that participants were well-informed and willingly agreed to take part in the research.

### **Participants**

Participants were selected via convenient sampling with predefined inclusion and exclusion criteria. Eligible participants were Dutch educators in the secondary and higher education sector aged over 18, working a minimum of 20 hours weekly and possessing expertise in one or two disciplines. Primary school teachers were excluded. Initially, 106 individuals completed the questionnaire, but 28 did not, reducing the sample to 76. One person should have met the criteria and was removed. The mean age of participants was 46.63 (SD = 11.91), with 58%

being female. In terms of educational levels, 55% held higher education positions, 29% worked at VWO, and 21% at MBO, with teaching experience ranging from 0 to 40 years. Table 1 describes the participant's characteristics in detail.

### Table: 1

Variable	п	%	M(SD)
Age	76	-	46.63(11.91)
Gender			
Male	32	42.1	-
Female	44	57.9	-
Education			-
VWO	1	1.3	-
MBO	3	3.9	-
HBO	42	55.3	-
WO	30	39.5	-
Employment			
Lower Secondary General Vocational Education	10	13.2	-
Upper Secondary General Vocational Education	8	10.5	-
Lower Secondary Higher General Education	4	5.3	-
Lower Secondary Pre- University Education	3	3.9	-
MBO	16	21.1	-
HBO	4	5.3	-
HAVO Bovenbouw	4	5.3	-
VWO Bovenbouw	22	28.9	-

### Demographic Information

Note. VWO (Preparatory Scientific Education), MBO (Intermediate Vocational Education), HBO (Higher Vocational Education), WO (Scientific Education), MBO (Intermediate Vocational Education), HBO (Higher Professional Education), HAVO Bovenbouw (Senior et al. Education, Upper Level), VWO Bovenbouw (Preparatory Scientific Education, Upper Level)

### **Ethical Consideration**

The University of Utrecht follows the NIP's 2015 Code of Ethics for Psychologists in its academic endeavours. The Faculty Ethics Review Board has given its permission to the current research project, which was properly registered with the Utrecht University Student Ethics Review & Registration Site (UU-SER). The researcher protected the subjects' rights, dignity, and general welfare during the study. The researcher's disclosure of the study's confidentiality policy further protected participants' right to anonymity. Each participant's identity was always kept anonymous throughout the study. Separate research and analysis processes were used. A clause allowing withdrawal from the trial at any moment if participants were not happy with the results was included in the consent form. To ensure the participants' contentment and well-being, the researcher also made the timetable flexible.

### Measures

Items from different questionnaires were combined, and one questionnaire booklet was created to test the study's hypotheses. The collaboration was done for the data collection with another student. Therefore, the subscales not required for the current study were included in the questionnaire. The scales, which were in English, were translated into Dutch before being included in the questionnaire.

### **Resilience Scales**

The current study utilised a combination of two established resilience measurement tools, the Brief Resilience Scale (Smith et al., 2008) and the Connor-Davidson Resilience Scale (Smith et al., 2017). Resilience, in this context, is defined as the capacity to recover from a traumatic experience. To assess resilience, a total of 10 items were selected from both scales. Respondents were asked to rate their responses on a Likert scale (I quickly recover from an emotionally heavy period) and (I am able to find ways to solve problems I encounter) with five possible outcomes, ranging from 1 (Never) to 5 (Very Often).

The total resilience score for each participant in the study ranged from a minimum of 10 to a maximum of 50, with a higher overall score indicating a greater level of resilience. The internal consistency of the scale in this study was assessed using Cronbach's alpha, and it was found to be .81, indicating good reliability and suggesting that the items in the combined scale were measuring the same underlying construct consistently.

### **Big Five Inventory**

The neuroticism characteristics were measured using the Dutch version developed by John Srivastava (1999). The five personality types identified by Bradley Fredric in 1997 served as the basis for the questionnaire. The neuroticism subscale contains eight items and was employed for the current study (example: "I worry a lot"). The eight items on the neuroticism scale range from (1) "Strongly Disagree" to (5) "Strongly Agree" on a 5-point Likert scale. Three items (Emotionally stable, not easily upset), (Is relaxed, can handle stress well), and (Stay calm in tense situations) were reversed scored. The current study used the Dutch version of BFI. The Cronbach Alpha for the neuroticism scale in the current study was .84, indicating good reliability.

### Cognitive Job Crafting

Seven items from the cognitive job crafting questionnaires developed by IJbema and Brenninkmeijer (submitted) and Wzreszniewski and Dutton (2001), such as "I think about goals I want to achieve with my work" and "I tried setting new goals for myself within my job," was used to measure cognitive job crafting. A 5-point Likert scale with the options "Never" (1) and "Very Often" (5) will be used to score the cognitive job-crafting items. The Cronbach alpha for the current study was .70 and was in an acceptable range.

### **Behavioural Job Crafting**

Behavioural job crafting was examined using the job crafting scale (Tims et al., 2012). The instrument comprises 21 items that assess four aspects of the JD-R model. The instrument is in English. However, the behavioural job crafting items were translated into Dutch before the final questionnaire, and the Dutch version was used in this study. The first five 21 items measured structural job resources (e.g., "I try to develop my capabilities."). The next six questions measure decreasing hindering job demands (e.g., "I make sure that my work is mentally less intense"). Questions 12 through 16 measure increasing social job resources (e.g., "I ask my supervisor to coach me"). The last five questions measure increasingly challenging job demands (e.g., "When

an interesting project comes along, I offer myself proactively as a project coworker"). A 5-point Likert scale with the options "Never" (1) and "Always" (5) was used to evaluate the behavioural job crafting items. For the current study, the full-scale reliability was .85. For sub-scales, Cronbach's alpha was .82 for structural resources, .83 for hindering job demands, .81 for increasing job resources, and .84 for challenging job demands, indicating good reliability.

### Work Engagement Scale (UWES)

Schaufeli et al. (2006) Utrecht work engagement scale was used for work engagement. This scale is composed of three distinct subscales, with a total of 17 items. The scale has three subscales: vigour, dedication, and absorption, and each item assesses a different dimension of work engagement. Vigour, comprised of six items such as "At my work, I feel bursting with energy," assess the work energy. Dedication, with five items, such as "I find the work that I do full of meaning and purpose," is the measure of personal recognition and engagement in work invested by individuals. Absorption, comprised of the six items such as "Time flies when I am working," assesses how much people get hooked on the work. To evaluate their responses, participants in the study used a 7-point Likert scale ranging from 1 (Never) to 7 (Always), as the scale they used was based on how frequently they experienced work-related feelings. In this study, the Dutch translation of UWES was used. The full-scale reliability of UWES was .92 indicating good reliability.

### Utrecht Burnout Scale (UBOS)

The Utrecht Burnout Scale (UBOS) of Schaufeli and van Dierendonck (2000) was selected to measure burnout. The scale consists of 15 items. The scale measures three aspects of burnout: emotional exhaustion, which measures exhaustion from work; mental distance, which measures an indifferent attitude towards one's work; and competence, which measures an individual's ability to perform their job. The items are measured from (1) "Never" to (7) "Daily" on a seven-point scale. For burnout score, we added the emotional exhaustion and cynicism score and minus the competence score suggested by Meynaar et al. (2021). The Cronbach alpha for emotional exhaustion in the current study was .91, for mental distance .76 and for competence, it was .71, indicating good reliability.

### Analyses

The data were analysed for normality, outliers, and missing values. To evaluate data normality, two widely used techniques are skewness and kurtosis (Tabachnick et al., 2013). Moreover, assessing multicollinearity among independent variables is vital. A correlation coefficient of .9 or higher indicates a multicollinearity concern and provides insight into association between study variables. (Hair et al., 2016). Two linear regression models were applied to investigate the influence of independent variables on the dependent variable. The first model assessed the relationship between cognitive and behavioural job crafting and work engagement, while the second model examined how cognitive and behavioural job crafting affects burnout. Both models controlled for age and years of experience. Additionally, mediating effect tests were conducted using Hayes's (2012) PROCESS to explore the role of job crafting in the relationships between neuroticism and burnout, as well as resilience and work engagement. Data analysis was carried out using SPSS version 21 (IBM Corp, 2012).

The sample size for the study was chosen using power analysis to assess the possibility of an actual effect. The  $G^*$  Power 3.1.9.7 version was used to determine the power analysis (Erdfelder et al., 1996). The F test was selected for the test family, and a priori power analysis was selected in software as a type of power analysis. The fixed model,  $R^2$  increase, was selected as a Statistical test, and the calculated effect size  $f^2$  was .05. The power was set as .80, and a sample size of 196 was calculated using the power analysis. However, a total of 76 participants were recruited for the study.

#### **Results**

The study started by looking at outliers, missing numbers, and determining normalcy. The assumptions were assessed before starting the hierarchical linear multiple regression. An ordinary P-P plot was used to test the linearity assumptions. The slanted line from the bottom left to the top right showed a linear relationship between the independent and dependent variables. Analyses of scatterplots supported the homoscedastic distribution of most scores. A histogram was used to test the normality assumption. None of the analysis' findings deviated from normality.

The study variables' descriptive statistics and correlations are summarised in Table 2. Neuroticism exhibited a significant negative correlation with resilience (r = -.65, p < .01) and a positive correlation with burnout (r = .52, p < .01). Resilience displayed a positive correlation with

cognitive job crafting (r = .31, p < .01), work engagement (r = .35, p < .01) and with two dimensions of behavioural job crafting: structural resources (r = .24, p < .05) and increased job demand (r = .28, p < .05). Also, resilience and work engagement had a negative correlation with burnout (r = .51, p < .01) and (r = .65, p < .01) respectively. Burnout had a negative association with behavioural job crafting dimension of structural resources (r = .26, p < .05). Cognitive job crafting had positive correlation with resilience (r = .31, p < .01) and work engagement (r = .34, p < .01).

### Table 2

	M(SD)	1	2	3	4	5	6	7	8	9
1 Neuroticism	2.50 (0.677)	-	65**	14	.05	.10	.21	12	.52**	22
2 Resilience	3.58 (0.608)		-	.31**	.24*	.02	05	$.28^{*}$	51**	.35**
3 Cognitive job crafting	3.57 (0.546)			-	.53**	.25*	.22	$.50^{**}$	19	.34**
4 BJC_Struct Resources	3.83 (0.715)				-	.07	.29**	.37**	26*	.41**
5 BJC_Hind Job Demand	2.21 (0.738)					-	.27*	.14	.12	.15
6 BJC_Inc Job Resources	2.52 (0.762)						-	.34**	11	.27*
7 BJC_Inc Job Demand	2.91 (0.903)							-	10	$.28^{*}$
8 Burnout	8.13 (11.71)								-	65**
9 Work Engagement	4.96 (0.91)								-	-

Descriptive Statistics and Correlations of Study Variables

Note: \*p < .05. \*\*p < .01. BJC Struct Resources, Behavioral Job Crafting - Structural Resources. BJC\_Hind Job Demand: Behavioral Job Crafting - Hindrance Job Demand, BJC\_Inc Job Resources: Behavioral Job Crafting - Increase Job Resources, BJC\_Inc Job Demand: Behavioral Work Creating -Increase Job Demand.

In the hierarchical regression analysis shown in Table 3, the influence of cognitive and behavioural job crafting on work engagement was examined to test Hypothesis 1. Age, gender, and experience were introduced as control variables in the first step. These variables collectively explained less than 1% of the variance in work engagement, although the model was not statistically significant (F(3, 71) = 0.11, p = .95). In the second step, cognitive and behavioural job crafting variables were added to the model. This led to a significant 23% increase in the

explained variance, (*F* (8, 66) = 2.55, p < .05). The effect could be ascribed to variable of behavioural job crafting structural resource which was significant ( $\beta = 0.29, p < .05$ ), while other subscales were non-significant. The results of the analysis supported our hypothesis that job crafting was positively associated with work engagement.

### Table 3

Variable	Model	1			Model 2				
v arrable	В	SE	β	t	В	SE	β	t	
Age	0.01	0.01	0.18	0.10	0.008	0.12	0.11	0.68	
Gender	-0.12	0.21	-0.06	-0.54	-0.11	0.20	-0.06	-0.54	
Experience	0.01	0.01	0.01	0.07	-0.01	0.01	0.10	0.67	
CJC total					0.28	0.24	0.12	0.88	
BJC_Struct Resources					0.37	0.17	$0.29^{*}$	2.24	
BJC_Hind Job					0.06	0.14	0.49	0.43	
Demand									
BJC_Inc Job					0.24	0.15	0.20	1 52	
Resources					0.24	0.15	0.20	1.53	
BJC_Inc Job Demand					0.04	0.13	0.04	0.29	
$R^2$			0.005				0.237		
$\Delta R^2$			0.005				0.232**		

H1: Hierarchical Regression Analysis with Work Engagement as Dependent Variable

*Note:* \*p < .05. \*\*p < .01. CJC, Cognitive job crafting, *BJC Struct Resources, Behavioral Job Crafting - Structural Resources. BJC\_Hind Job Demand: Behavioral Job Crafting - Hindrance Job Demand, BJC\_Inc Job Resources: Behavioral Job Crafting - Increase Job Resources, BJC\_Inc Job Demand: Behavioral Work Creating - Increase Job Demand.* 

Table 4 presents the results of a hierarchical regression analysis examining the influence of cognitive and behavioural job crafting on burnout to examine hypothesis 2. In the first step, age, gender, and experience were included as control factors, accounting for 5% of the change in burnout and were not statistically significant (F(3, 71) = 1.21, p = .31). In the second step,

cognitive and behavioural job crafting was presented, and brought insignificant additional 13% change. The overall model was insignificant (F(8, 66) = 1.77, p = .09). None of the job crafting variables had a significant association with burnout. The findings did not support our second hypothesis that job crafting was negatively associated with burnout.

### Table 4

Variable	Model	1			Model 2				
	В	SE	β	t	В	SE	β	t	
Age	-0.27	0.16	-0.27	-1.68	-0.34	0.16	-0.34*	-2.10	
Gender	1.91	2.75	0.08	-0.69	2.58	2.72	0.11	0.94	
Experience	0.17	0.18	0.16	1.57	0.11	0.17	0.10	0.63	
CJC total					-2.86	3.17	-0.13	-0.90	
BJC_Struct					-3.50	2.26	-0.21	-1.55	
Resources									
BJC_Hind Job					3.01	1.90	0.19	1.58	
Demand									
BJC_Inc Job					-3.16	2.09	-0.20	-1.51	
Resource									
BJC_Inc Job Demand					1.31	1.79	0.09	0.73	
$R^2$			0.05				0.18		
$\Delta R^2$			0.05				0.13		

H2. Hierarchical Regression Analysis with Burnout as Dependent Variable

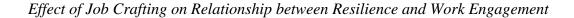
Note: \*p < .05. \*\*p < .01. \*\*\*p < .001. CJC, Cognitive job crafting, BJC Struct Resources, Behavioral Job Crafting - Structural Resources. BJC\_Hind Job Demand: Behavioral Job Crafting -Hindrance Job Demand, BJC\_Inc Job Resources: Behavioral Job Crafting - Increase Job Resources, BJC\_Inc Job Demand: Behavioral Work Creating - Increase Job Demand.

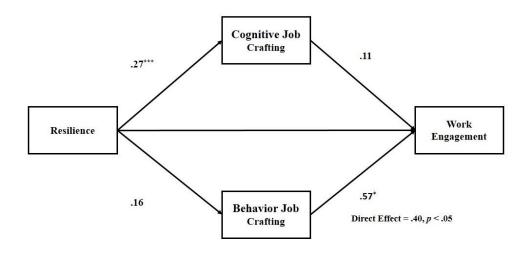
To assess the hypothesis 3-6, the PROCESS procedure was employed. The study examined the effect of cognitive and behavioural job crafting on the relationship between resilience and work engagement. The results indicated that resilience was a significant predictor for cognitive job

crafting (B = 0.27, t(76) = 2.77, p < .001) but was insignificant in predicting behaviour job crafting (B = 0.16, t(76) = 1.66, p = .10). The results partly supported our third hypothesis that resilience positively related to job crafting.

The results indicated an insignificant indirect effect of resilience on work engagement through cognitive job crafting (B = 0.03, t (76) = 0.55, [-.0939, .1403]) and through behaviour job crafting (B = 0.09, t (76) = 2.58, [-.0182, .2630]). However, the direct effect of resilience on work engagement was significant (B = 0.40, t (76) = 2.53, p < .05). Hence, the results did not support the 5<sup>th</sup> a hypothesis that job crafting mediates the relationship between resilience and work engagement. Figure 2 depicts the resilience and cognitive and behavioural job crafting paradigm concerning work engagement.

### Figure 2





*Note.* Diagram illustrating the cognitive and behavioural job crafting mediating effect on resilience and work engagement.

The study examined the mediating effect of cognitive and behavioural job crafting on the relationship between resilience and burnout. The results indicate the insignificant indirect effect of resilience on burnout through cognitive job crafting (B = -0.16, t (76) = -0.22, [-.0939, .1403])

and behaviour job crafting (B = -0.03, t (76) = -0.06, [-.0182,.2630]). Furthermore, the direct effect of resilience on burnout was significant (B = -9.62, t (76) = -4.68, p < .001). The results of our analysis indicated no mediation between resilience and burnout through cognitive and behavioural job crafting and did not support 5<sup>th</sup> b hypothesis.

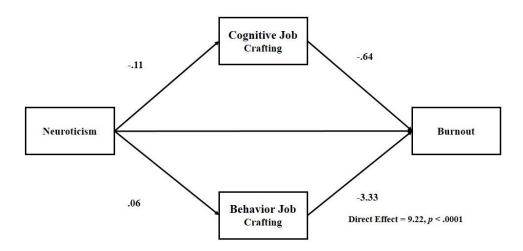
The study examined the mediating effect of cognitive and behavioural job crafting on the relationship between neuroticism and work engagement. The results indicated that neuroticism was not a significant predictor for both cognitive job crafting (B = -0.11, t (76) = -1.18, p = .23) and behaviour job crafting (B = 0.06, t (76) = 0.72, p = .47). The results of our study did not support our fourth hypothesis that neuroticism leads to low level of job crafting.

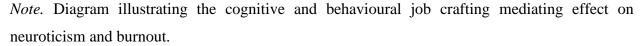
Additionally, the results indicated the insignificant indirect effect of neuroticism on work engagement through cognitive job crafting (B = -0.01, t (76) = 0.66, [-.0863,.0384]) and on behaviour job crafting (B = 0.04, t (76) = 3.01, [-.0648, .1733]). However, the direct effect of neuroticism on work engagement was significant (B = -0.32, t (76) = -2.28, p < .05). The results did not support the 6<sup>th</sup> a hypothesis that job crafting mediates the relationship between neuroticism and work engagement.

The study examined the mediating effect of cognitive and behavioural job crafting on the relationship between neuroticism and burnout. The results indicate the insignificant indirect effect of resilience on burnout through cognitive job crafting (B = 0.07, t (76) = -0.24, [-.8185,.9626]) and behaviour job crafting (B = -0.21, t (76) = -1.19, [-1.2510,.3771]). Furthermore, the direct effect of neuroticism on burnout was significant (B = 9.22, t (76) = 5.26, p < .001). The results of our analysis indicated no mediation between neuroticism and burnout through cognitive and behavioural job crafting and did not support 6<sup>th</sup> b hypothesis. Figure 3 depicts the neuroticism and cognitive and behavioural job crafting paradigm concerning burnout.

### Figure 3

Effect of Job Crafting on Relationship between Neuroticism and Burnout





#### Discussion

The study focused on the behavioural and cognitive job crafting mediating the relationship between neuroticism and resilience with burnout and work engagement among school teachers. The study found no mediation effect of behavioural job crafting between resilience and work engagement and between neuroticism and work engagement.

#### Job Crafting and Work Engagement

The study findings aligned with previous research and confirmed our first hypothesis, which state that job crafting is positively associated with work engagement. One explanation could be that job crafting act as proactive behaviour which motivates employee to do the changes in their job characteristics. Employees are also more likely to be engaged in their work and not be exhausted out by it when they are able to actively expand their resources and challenge demands. (Tims & Bakker, 2010; Tims et al., 2013). Another explanation could be the time of questionnaire

administration on school teachers were already under stress due to end of schools' days, which requires them to stay longer hours due to workload. They were engaged in job crafting to reduce stress resulted in increases in work engagement.

### Job Crafting and Burnout

Cognitive and behavioural job crafting had a positive but non-significant relationship with burnout. However, only behavioural job crafting dimension of structural resources had significant negative association with burnout and partially confirm the study's second hypothesis. The positive association did not align with previous studies' results (Tims & Bakker, 2010; Travaglianti et al., 2016). One explanation could be that modification in thinking and increasing resources to reduce the workload may decrease burnout, but increasing job demands such as starting a new initiative and decreasing challenging tasks during the end of school may temporarily give relief to them to avoid stress but avoiding of task during the stressful time of year can lead to burnout.

### **Resilience and Job Crafting**

The study findings partially supported the third hypothesis, which stated that Resilience is positively associated with job crafting. The results indicated that Resilience had a positive significant relationship with cognitive job crafting and a non-significant relationship with behavioural job crafting. This aligned with previous research indicating that teachers engaged in activities such as getting support from colleagues, and aligning their tasks with personal values and goals to mitigate their workload and stress (Sulistiyorini & Zahra, 2020; Tims et al., 2013)

### **Neuroticism and Job Crafting**

The study findings found that neuroticism had an insignificant negative association with cognitive job crafting and an insignificant positive association with behavioural job crafting and did not confirm the fourth hypothesis. There has been less research done to explain the effect of personality characteristics and their relationship with job crafting. However, high neuroticism makes the work environment intimidating and reduces work efficiency (Schneider, 2004). As a result, to reduce the stress related to work in schools, individuals tend to engage in behavioural job

crafting. This was also supported by previous research that employees with neuroticism manage their emotions by modifying their tasks (Bosnjak et al., 2007).

### **Mediation Analysis**

The study findings did not confirm the fifth hypothesis (a) and (b) that job crafting mediates the relationship between resilience and work engagement and between resilience and burnout. One explanation could be the direct significant positive relationship of resilience with work engagement. This explains that individuals were already resilient enough that they did not have to use job crafting to alleviate stress and increase work engagement. Also, resilience had a direct a significant negative relationship with burnout. The findings were similar to previous research on resilience and burnout in high school teachers (Ismail et al., 2020). Maslach Jackson (1984) defined burnout as a condition causing emotional and mental exhaustion due to consistent stress (Lubbadeh, 2020), and employees with low resilience struggle with coping with daily stress, leading to burnout (Liu et al., 2021). Since teachers were resilient enough to increase work engagement without burnout and were less likely to engage in cognitive and behavioural job crafting. Additionally, these findings indicated that job crafting was not an underlying mechanism that explains the relationship between resilience, work engagement, and burnout.

The study findings did not confirm the sixth hypothesis (a) and (b) that job crafting mediates the relationship between neuroticism and work engagement and between neuroticism and burnout. One explanation could be that neuroticism had a direct significant negative relationship with work engagement, indicating individuals high in neuroticism are involved in less work engagement. Also, neuroticism had a significant positive relationship with burnout and indicated that individuals high in neuroticism avoid engaging in adaptive behaviours to decrease their stressors and burnout. This could explain the findings of our study since teachers with high levels of neuroticism were already stressed due to their hectic schedules; they tend not to engage in cognitive and behavioural job crafting, leading to burnout and low work engagement. Moreover, because of low sample size, the power to detect effect was reduced and might have an impact on study results. However, future studies are needed to explore this relationship.

### **Correlation Analysis**

The correlation analysis revealed that neuroticism was positively associated with burnout. The association implied that teachers with high scores had more burnout than those with low neuroticism scores. Burnout was also negatively correlated with work engagement. The result supported prior research on the teacher, which showed a link between the personality trait of neuroticism and burnout (Kokkinos, 2007). This could be explained by the fact that individuals with neuroticism perceived their workplace as frightening, leading to less productivity and unpleasant feelings (Schneider, 2004). Because of their perception, they feel exhausted from daily issues (Bolger & Schilling, 1991), increasing their chance of burnout (Langelaan et al., 2006).

### Strengths, Limitations, and Future Prospects

The study's strength was its contribution to demonstrating the association between individual personality characteristics such as neuroticism and job crafting. This result emphasises the significance of individual characteristics and other factors such as resilience, burnout, and work engagement concerning cognitive and behavioural job crafting.

However, the study had its limitations. The study's limited sample size weakened its statistical power to detect significant effects and constrained the generalizability of the findings, representing a key limitation. Moreover, the study's cross-sectional approach was also a limitation since the behaviour cannot be analysed over a long period of time. Because of the timing of the research, most schools refuse to participate in the research due to the hectic schedule at the end of the year, making it challenging to recruit the 196 participants. Additionally, the study's timing could also affect the study's outcome. Since teachers were experiencing immense stress, there could be reasons that teachers did not engage in job crafting behaviour, and if they did, it reduced their work engagement and increased their burnout. Future studies should examine the extent to which the results obtained may be extended to various sample types or depend on specific sample features to determine the circumstances in which job crafting is connected to other factors.

Additionally, little research has looked at the relationship between dark personality characteristics and work crafting, which allows for investigating counterproductive motivations for engaging in job crafting. Future research should be done with a large sample size and reliable

instrument to understand the complex relationship between job crafting and individual personality traits.

### Implications

The study had implications at the workplace. Neuroticism negative relationship with work engagement and a positive relationship with burnout, indicates the need to understand the personality characteristics of employees. Also, teachers with a tendency toward neuroticism did not engage in any job-crafting behaviour to reduce burnout. Moreover, resilient individuals tended to engage in work more by using cognitive job crafting and had low burnout. For practical implications, personality tests can be administered to the teacher to understand their tendency for neuroticism. Additionally, there should be more training or encouragement for non-resilient teachers to engage in job-crafting behaviour.

### Conclusion

In conclusion, the study investigated the mediating effect of behavioural and cognitive job crafting on the relationship between neuroticism and resilience with burnout and work engagement among school teachers. The study found no mediation effect of job crafting between resilience and work engagement and between neuroticism and work engagement. However, resilience had a significant positive relationship with cognitive job crafting, indicating that resilient individual can reframe their perception of their work and resilience's inverse relationship with burnout, suggesting that resilient teachers tend to have lower burnout rates. Similarly, neuroticism was unrelated to job crafting, indicating that individuals with high scores on neuroticism tended to have more burnout and would not engage in any job crafting to reduce it. The practical implication of this study suggests that understanding personality characteristics such as neuroticism and personal coping strategies such as resilience can be helpful in identification of job crafting strategies that would be helpful to improve teacher work engagement and reduce burnout.

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