

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership



Leslie Afotey Odai¹, Bilal Beshir Mohamed Rezge², Benard Korankye³, Stancey Tumiso Nkgowe⁴, Jackson Ansah⁵, Arina Shmetkova⁶

^{1,3,4} School of Business Administration, Zhejiang Gongshang University, Hangzhou, China, 310018.

^{2,5} School of Management Science and E-business, Zhejiang Gongshang University, Hangzhou, China, 310018.

⁶ School of International Education, Zhejiang Gongshang University, Hangzhou, China, 310018.

ABSTRACT: This study investigates how psychological safety influences job crafting through self-efficacy as a mediating mechanism and humble leadership as a moderator. A three-wave design, yielding 663 accurate responses, was employed to recruit employees in the banking industry. A structural equation modeling approach and SPSS PROCESS macro were used to arrive at valid outcomes. The results demonstrate that psychological safety positively impacts self-efficacy. Self-efficacy relates positively with job crafting and mediates the association between psychological safety and job crafting. Also, humble leadership moderates and boosts the association between psychological safety, self-efficacy and job crafting. Theoretical and practical implications are offered.

KEYWORDS: Psychological safety, Self-efficacy, Humble leadership, Job crafting

I. INTRODUCTION

Research indicates that psychological safety is gaining importance in fostering firms' success in the modern business landscape (Newman et al., 2017). The increasing pressure on organizational members to engage in exploratory activities is rising alongside the growing need for firms to continuously create new competitive advantages (Azzari & Pelissari, 2020). Psychological safety in the work environment is crucial for improving performance at the individual, team, and organizational levels (Lee, 2022). It refers to a shared belief or sense of safety that allows an individual to take interpersonal risks in the workplace without fearing negative consequences (Edmondson et al., 2007; Edmondson & Lei, 2014). Individuals who feel psychologically safe are more inclined to speak up, take initiative, and engage in proactive behaviors. Specifically, it has been associated with voice behaviors (i.e. speaking up) (Lee & Dahinten, 2021) and is a pivotal factor in fostering creativity at work (Liu et al., 2016). Considering the frequently unpredictable nature of these actions and the potential for failure, it is crucial to create an environment where employees feel secure in questioning the status quo without fear of adverse consequences. This is essential for fostering proactive work behaviors (Plomp et al., 2019).

A particular type of proactivity at the job level is job crafting. Job crafting refers to a series of self-driven actions that employees take to proactively alter their tasks, workplace relationships, and the meaningfulness of their work to better conform with their goals and needs (Wrzesniewski & Dutton, 2001). In today's complex and uncertain business landscape, employees must be proactive and exceed expectations in their roles, as traditional top-down management methods are insufficient to address ongoing and unpredictable changes (Lee & Lee, 2018). However, due to the risks tied to proactive behaviors, individuals are hesitant to exert effort or express their opinions. Therefore, when organizations nurture psychologically safe environments, employees are more likely to openly share express their opinions and talk about ongoing issues (Kızrak et al., 2024). Employees indulge in job crafting behaviors when they perceive their workplace as psychologically safe (Lee, 2022). Although existing literature has suggested that psychological safety enhances job crafting (de Carvalho Chinelato et al., 2020; Plomp et al., 2019), the mechanism explaining this association remains unexamined.

To fill this gap, this study draws on the job demands-resources (JD-R) theory to investigate self-efficacy as a mechanism, explaining the impact of psychological safety on job crafting. The JD-R theory offers a perspective for understanding the nexus between job demands and resources, personal resources, and various outcomes for both individuals and organizations (Bakker & Demerouti, 2007). Self-efficacy beliefs form the basis for the deliberate control individuals have over their actions and the events that shape their lives (Bandura, 1997). People will only be motivated to change their physical and social surroundings to fulfil their needs and achieve their objectives if they believe they can exert control over their actions, influence events, and achieve the intended

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership

outcomes (Miraglia et al., 2017). Previous researchers assert that self-efficacy acts as a personal resource that stimulates job crafting (Kanten, 2014; Tims et al., 2014). Thus, it is expected to mediate the association between psychological safety (i.e., job resource) (Bronkhorst, 2015) and job crafting.

Moreover, a leadership trait identified as a social resource for employees (Morris et al., 2005; Wang et al., 2016), which facilitates their psychological safety, is humble leadership (Walters & Diab, 2016; Wang et al., 2018). Owens & Hekman (2012) referred to humble leadership as “leading from the ground” or “bottom-up leadership”. When followers of humble leaders develop exceptional leader-follower relationships, it reduces perceived risks and increases the psychological safety of the followers (Mrayyan & Al-Rjoub, 2024). Being receptive to novel ideas and feedback, appreciating the skills and others’ contributions, and maintaining an honest self-assessment are all key interpersonal characteristics of humble leadership (Kelemen et al., 2023), which increases an individual’s self-efficacy (Al Hawamdeh, 2023). We therefore, theorize humble leadership as a crucial boundary condition for the aforementioned mechanism. In other words, when employees engage with humble leaders, they tend to feel psychologically safe to be self-efficacious and subsequently engage in job crafting.

The study contributes to literature in distinct ways. It stands out as the first to employ self-efficacy as a mediating mechanism to explain the association between psychological safety and job crafting. This is of great significance as previous investigations have overlooked this aspect. The study contributes to the JD-R theory by revealing how the interplay between job resources, personal resources from employees, and their leaders interact to promote job crafting behaviors. Moreover, the study has practical implications for helping organizations and managers implement interventions to encourage the engagement of their workforce in job crafting endeavors.

II. THEORY AND HYPOTHESES DEVELOPMENT

A. *Psychological safety and self-efficacy*

A psychologically safe environment fosters an atmosphere where employees can develop self-efficacy (Lee et al., 2020). The idea of psychological safety revolves around the belief that individuals in an organization trust that mistakes are a natural part of the learning experience and that voicing concerns or asking questions won’t lead to any negative consequences from their leaders or colleagues (Aksoy & Mamatoğlu, 2020). Employees with higher self-efficacy believe they contribute more positively to their teams and firms compared to those with lower self-efficacy, as they are more capable of expressing their ideas and overcoming their fears by speaking within a psychologically safe environment (Byeon et al., 2023).

Greater levels of self-efficacy have been observed among employees who work in a workplace environment characterized by psychological safety. For instance, Aksoy & Mamatoğlu (2020) examined the relationship between psychological safety and self-efficacy among occupational safety specialists in Turkey. A correlational analysis revealed a significant association between psychological safety and workers’ self-efficacy. Maqsood et al. (2023) investigated the link between psychological safety and self-efficacy among employees from diverse sectors (i.e., industrial, education and IT) in Pakistan. They discovered that psychological safety correlates positively with self-efficacy. Byeon et al. (2023) examined the nexus between psychological safety and self-efficacy among therapists and leaders in the United States. However, using a polynomial regression and response surface analysis, the results demonstrated that greater inconsistencies between therapist and leader reports of psychological safety in both directions resulted in lower therapist self-efficacy. Based on the discussed literature, we hypothesize that:

H1: Psychological safety enhances self-efficacy.

B. *Self-efficacy and job crafting*

Self-efficacy describes an individual’s belief in their ability to successfully carry out a specific task or role in both their professional and social lives (Kanten, 2014). Regarding this, individuals must have confidence in their own abilities to achieve success in their professions (Lyons & Bandura, 2019). When employees have confidence in their own skills and abilities, they are considered to have high self-efficacy. Employees with high self-efficacy have a propensity to experience greater job satisfaction, as they feel competent in their roles, set more challenging goals, and handle difficult situations better than those with lower self-efficacy (Eibl et al., 2020).

Previous investigations have demonstrated that self-efficacy facilitates a proactive behavior like job crafting. For instance, Kanten (2014), in a sample of 252 hotel employees in Antalya, Turkey, explored self-efficacy as an antecedent of job crafting. Utilizing a structural equation modeling (SEM) technique, the findings proved that self-efficacy relates positively to job crafting. Tims et al. (2014) investigated the nexus between self-efficacy and daily job crafting among employees in the information technology industry. Employing a multilevel SEM approach, the findings demonstrated a positive effect between self-efficacy and daily job crafting. Specifically, the results indicated that employees who experienced higher self-efficacy on a given day were more likely to leverage their job resources on that day. Again, Miraglia et al. (2017) examined the effect of self-efficacy on job crafting among a sample of 465 white-collar workers in Italy. It was ascertained that self-efficacy positively affects job crafting with the relationship, being reciprocal. The authors called for more studies to be conducted on this association. Against this backdrop, this study hypothesizes that:

H2: Self-efficacy influences job crafting.

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership

C. *Mediating role of job crafting*

Based on the JD-R theory, job crafting was conceptualized as “changes employees may make regarding their job demands and job resources” (Tims et al., 2012). This conceptualization employs the JD-R theory (Bakker et al., 2007) as its foundation. Job crafters are anticipated to proactively modify their tasks, responsibilities, and workplace engagement by enhancing the amount of job resources, whether structural (e.g., job autonomy, training opportunities) or social (e.g., support and guidance from supervisors and colleagues) and by increasing challenging job demands (Bakker et al., 2012). We argue that when employees are presented with a job resource like psychological safety, in a bid to increase this resource, this will stimulate their self-efficacy (i.e., personal resource), which will then result in them crafting their jobs.

Personal resources are intended to boost goal attainment and promote personal growth by accumulating additional job resources. Therefore, the level of job resources (i.e., psychological safety) is anticipated to impact self-efficacy, which in turn affects individual behaviors (Miraglia et al., 2017). Specifically, employees with high-level self-efficacy beliefs diligently look for opportunities to demonstrate their abilities and engage in challenging experiences to promote their personal and professional development (Lyons & Bandura, 2019). As a result, they are more inclined to enhance their structural job resources to attain greater autonomy, skills, and knowledge. Similarly, they pursue greater levels of social job resources to obtain more feedback, support and advice from supervisors and co-workers (Rošková & Faragová, 2020). Consequently, this ensures their personal and professional development.

Additionally, Individuals with high self-efficacy set higher standards and goals for themselves, put in more effort and show more remarkable persistence, thoroughly explore their surroundings, and concentrate on growth opportunities instead of viewing situations as threats (Jhmi et al., 2021). As a result, they tend to build additional resources to manage challenging situations and achieve their objectives (Xanthopoulou et al., 2009). They are also more inclined to undertake extra workload and participate in proactive and stimulating projects, effectively increasing their challenging job demands. Based on this, we propose that;

H3: The association between psychological safety and job crafting is mediated by self-efficacy.

D. *Moderating role of humble leadership*

The JD-R theory suggests that when employees possess more resources, they become more invested in their work, motivating them to engage in more job crafting (Petrov et al., 2023). In accordance with this viewpoint, we argue that a personal resource like humble leadership will reinforce employees’ sense of psychological safety, as leaders play a pertinent role in implementing measures to ensure psychological safety. This will, in turn, enable them to be highly self-efficacious in crafting their jobs.

Humble leaders openly acknowledge their limitations and mistakes, viewing errors as a natural and beneficial part of the learning process (Owens & Hekman, 2012). Such actions convey crucial messages, allowing followers to feel psychologically safe to undertake interpersonal risks and express themselves, which helps them unlock their potential and foster their development. This is particularly true in instances where followers under humble leaders have strong leader-follower relationships (Wang et al., 2018). Since humility plays a vital role in building strong interpersonal relationships (Bharanitharan et al., 2018), humble leaders can nurture a psychologically safe environment for their followers. This environment can enhance followers’ self-efficacy beliefs (Hawamdeh, 2023) and increase their need for social ties in job crafting.

Humble leaders interact with employees by valuing their strengths and contributions (Owens & Hekman, 2016), promoting a culture of learning, and fostering teachability. They motivate followers to recognize their limitations and actively seek structural job resources, like skills and knowledge, to address and improve upon them (Rego et al., 2019). Humble leaders create an environment that motivates employees to be open and actively seek social job resources like feedback and advice from coworkers and clients about their service performance. This feedback from others can further reinforce employees’ feedback-seeking behavior (Luu, 2021).

Furthermore, humble leaders who are open to involving others in decision-making can create numerous opportunities for organizational members to interact and share resources (Chen et al., 2021). In other words, leaders who exhibit humility can encourage their followers to actively seek and exchange resources by promoting a proactive approach to resource acquisition and sharing (Ou et al., 2018). Humble leaders also motivate their followers to pursue job challenges, which helps them develop new expertise and skills. This approach enables members to align better with their enhanced competence and strengths (Luu, 2021). We therefore propose that:

H4: Humble leadership intensifies the association between psychological safety and self-efficacy.

H5: Humble leadership moderates the mediating effect of self-efficacy on the association between psychological safety and job crafting. Specifically, the indirect impact of psychological safety on job crafting via self-efficacy is intensified at high levels of humble leadership rather than low.

Based on the discussed hypotheses, Figure 1 presents the research model.

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership

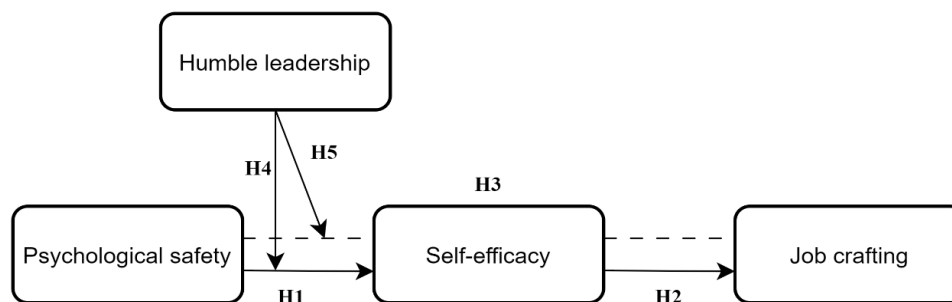


Figure 1: Research model

III. METHODOLOGY

A. Participants and approach

The survey included full-time employees chosen at random from 10 commercial banks in Ghana. Data for this investigation was gathered using SurveyMonkey, a professional online platform that organizes and facilitates online surveys (Waclawski, 2012). The data collection followed a three-wave design with two-week intervals, conducted during May and June 2024. Participants gave their informed consent before accessing the survey content, which was conducted anonymously. They were notified that their participation was completely voluntary and that they could discontinue at any point if they chose to do so.

We surveyed employee responses concerning psychological safety and their demography at T1, obtaining 700 valid responses. The study then obtained 680 responses at T2, for which employees reported their “self-efficacy” and the “humble leadership” trait of their immediate supervisors. At T3, employees reported their “job crafting”, resulting in 663 responses constituting the final, which were subsequently used for the analysis. The sample consisted of 51.16% male and 48.4, with the majority aged between 27-36 years (45.2%). For their qualification, most of the employees (78.4%) held a bachelor’s degree and worked in private commercial banks (67.3%). A detailed summary of the demographic features of study participants is depicted in Table 1.

Table 1: Profile of respondents

Demography	Segments	Frequency	%
Gender	Male	342	51.6
	Female	321	48.4
Age	18-26 years	240	36.2
	27-36 years	300	45.2
	37-46 years	100	15.1
	47 years and above	23	3.5
Qualification	Diploma certificate	36	5.4
	Bachelor degree	520	78.4
	Post-graduate degree	107	16.2
Tenure	1-2 years	79	11.9
	3-5 years	436	65.8
	6 years and above	148	22.3
Bank type	Public	217	32.7
	private	446	67.3

B. Measures

We utilized items adapted from previous investigations to measure the study variables. All items were rated on a 5-point scale Likert scale ranging from 1 “strongly disagree” through to 5 “strongly agree”. The items were administered in English.

Psychological safety: The assessment of psychological safety involved seven items from Edmondson (1999), such as “It is safe to undertake risk on this team”. Three items were reverse-coded to suit the objectives of the study. ($\alpha=0.885$, $CR=0.910$, $AVE=0.592$)

Self-efficacy: Self-efficacy was measured using an eight-item scale created by (Chen et al., 2001). The survey prompted respondents to express their confidence in their ability to perform effectively in various tasks and work situations with items such as, “I am confident that I can perform effectively on many different tasks”. ($\alpha=0.916$, $CR=0.932$, $AVE=0.631$)

Humble leadership: Humble leadership was measured with nine items from Owens et al. (2013), such as, “Our leader shows appreciation for the unique contributions of others”. ($\alpha= 0.921$, $CR=0.935$, $AVE=0.615$)

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership

Job crafting: We followed the approach of Bakker et al. (2012) to assess job crafting with the three sub-dimensions (i.e., increasing structural job resources, increasing social job resources and increasing challenging job demands) developed by (Tims et al., 2012). Each sub-scale comprised five items such as “I try to develop myself professionally”, “I ask others for feedback on my job performance”, and “When an interesting project comes along, I offer myself proactively as a project co-worker”. ($\alpha=0.951$, $CR=0.956$, $AVE=0.594$)

Control variables: Drawing from prior research by Lee (2022), we designated employee gender, age and included the number of years they had worked (i.e., tenure) in the organization as control variables.

IV. RESULTS

A. Reliability and validity tests

We conducted the reliability and validity of the model constructs (i.e., psychological safety, self-efficacy, humble leadership and job crafting) using Smart PLS 4.0. The Cronbach alpha (α), composite reliability (CR), and the Average Variance Extracted (AVE) are indicated under the construct’s measurement. These values, along with their respective outer loadings, meet the threshold requirements (Chin et al., 2008; Hair et al., 2020), indicating the model’s reliability. The model reported a good fit as a Standardized root mean square (SRMR) value of 0.069 and a Normal Fit Index of 0.902 met the acceptable thresholds of < 0.08 and > 0.90 , validating the adequate fit of the model (Bentler & Bonett, 1980). Table 2 presents the descriptives and correlation for all constructs and control variables included in the study. The values in the bracket along the diagonal, representing the square root of the AVE, are higher than the correlation coefficients in their respective columns and rows. This validates adequate discriminant validity as postulated by (Fornell & Larcker, 1981).

Table 2: Descriptives and discriminant validity test

Variables	M	SD	1	2	3	4	5	6	7
Gender	1.48	0.50							
Age	1.87	0.79	.05						
Tenure	2.11	0.59	.02	-.03					
PSS	3.59	0.93	.05	.05	.06	(0.77)			
SE	3.71	0.92	.03	.04	.05	.66**	(.79)		
HBL	3.70	0.90	.04	.05	.12*	.51**	.49**	(.78)	
JC	3.69	0.90	.04	.02	.21	.39**	.41**	.23**	(.77)

Note: Psychological safety (PSS), Self-efficacy (SE), Humble leadership (HBL), Job crafting (JC). Diagonal values in brackets are AVE square root. Below the diagonal are the correlations.

* $p < 0.05$ ** $p < 0.01$

B. Test for common-method bias

Despite the study employing a three-wave design and maintaining participant anonymity to minimize the common method bias (CMB) issues, additional techniques were utilized. Specifically, Harman’s single-factor test was performed using exploratory factor analysis on all construct items. The results indicated that the first factor accounted for 31.29% of the variance which is far lesser than 50%, implying that CMB is not a concern (Podsakoff et al., 2003). Additionally, we employed the variance inflation factor (VIF) to evaluate multicollinearity and, by extension, CMB. According to Kock (2017), VIF values under 3.3 indicate the absence of CMB effects in a model. Our results showed that all VIF values were below 3.3, confirming that CMB was not a problem and does not hinder the testing of the study’s hypotheses.

C. Hypothesis testing

The moderated-mediation model was tested using PROCESS macro in SPP (i.e., model 7 and model 4), following the suggestions of (Hayes, 2013). All the bootstrap results, based on 5000 samples, recorded a significant outcome. As presented in Table 3, in support of H1, the results demonstrate that psychological ownership relates positively with self-efficacy ($\beta = 0.16$, t -value = 5.84, $p < 0.001$). The results support H2 as self-efficacy related positively with job crafting ($\beta = 0.32$, t -value = 6.42, $p < 0.001$). Again, the findings ascertained a positive mediating role of self-efficacy on the association between psychological safety and job crafting ($\beta = 0.55$, $SE=0.02$; 95% $CI= [0.52, 0.60]$), lending support to H3. Regarding H4, the results show that humble leadership positively moderates the association between psychological safety and job crafting ($\beta = 0.32$, t -value = 6.42, $p < 0.001$). The plot of these interactions is showcased in Figure 2, where lower levels of humble leadership ($\beta = .08$, $SE=.03$ $p < 0.01$) reduce the conditional effect of psychological safety on self-efficacy than at high levels of humble leadership ($\beta = .24$, $SE=.03$ $p < 0.001$), supporting H4.

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership

Table 3: Bootstrapping results for the direct and moderating effect

Variables	Self-efficacy				Job Crafting			
	Model 1				Model 2			
	β	SE	<i>t</i>	<i>p</i>	β	SE	<i>t</i>	<i>p</i>
Constant	3.85***	1.28	3.01	.000	1.02***	1.11	9.27	.000
Gender	.43*	.21	2.05	.032	.01	.03	.45	.060
Age	.31	.15	2.92	.056	-.46	.12	-3.83	.807
Tenure	-.45	.12	-3.75	.3073	.01	.02	5.35	.664
PSS	.16***	.03	5.84	.000	.21***	.02	10.51	.000
HBL	.48***	.23	2.09	.000	-	-	-	-
SE	-	-	-	-	.32***	.05	6.42	.000
PSS x HBL	.09***	.02	5.15	.000				
R	.35***				.46***			
R ²	.47***				.24***			
F	14.14***				23.27***			

Conditional effects of psychological safety at values of the humble leadership

HBL	Effect	SE	<i>t</i>	<i>p</i>	LLCI	ULCI
-1.89	.08	.03	2.57	.010	.019	.144
.000	.16	.02	5.84	.000	.107	.215
1.89	.24	.03	7.60	.000	.179	.303

Note: Psychological safety (PSS), Self-efficacy (SE), Humble leadership (HBL).
p* < 0.05; *p* < 0.01, ****p* < 0.001.

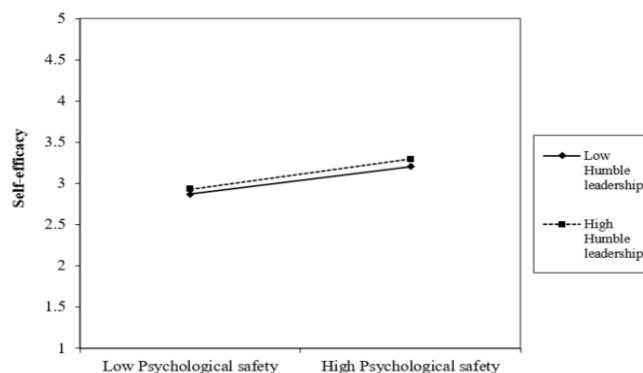


Figure 2: Interaction of psychological safety and humble leadership on self-efficacy.

As depicted in Table 4, at the three values of humble leadership (i.e., -1SD below the mean, the mean, and +SD above the mean), we examined the conditional indirect effect of psychological safety via self-efficacy on job crafting. H5 is supported as lower levels of humble leadership (-SD below the mean) reported a lower conditional indirect effect of psychological safety on job crafting ($\beta = .06$, $SE = .04$; 95% CI = [.016, .141]), while higher levels of humble leadership (+SD above the mean), reported a higher conditional indirect effect of psychological safety on job crafting ($\beta = .17$, $SE = .03$; 95% CI = [.110, .239]). Figure 3 presents the plots of these interactions. Moreover, the moderated mediation is shown to exist as the index of moderated mediation was significant for Job crafting ($\beta = .06$, $SE = .01$; 95% CI = [-.086, -.039])

Table 4: Bootstrapping results for indirect effect at values of the moderator

HBL	Effect	BootSE	BootLLCI	BootULCI
-1.89	.06	.40	.016	.141
.000	.12	.04	.050	.187
1.89	.17	.03	.110	.239

Index of moderated mediation				
	Effect	BootSE	BootLLCI	BootULCI
MA	.06	.01	-.086	-.039

Note: Humble leadership (HBL)

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership

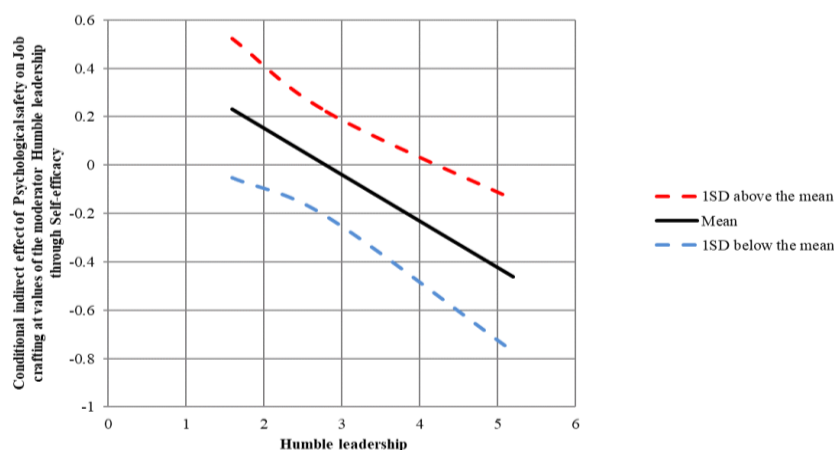


Figure 3: Interaction for conditional indirect effect at values of humble leadership

V. DISCUSSION

The findings indicate that psychological safety has a desirable effect on self-efficacy. This result suggests that when employees feel psychologically safe, they are more confident in their abilities, which can lead to improved organizational outcomes. Employees are more likely to share new ideas, take initiative, and engage in problem-solving activities without fear of negative repercussions. This can lead to a more dynamic and adaptive organizational environment where continuous improvement and creative solutions are highly valued. With the exception of the findings by Byeon et al. (2023), where inconsistencies of psychological safety led to lower levels of self-efficacy, our outcome lends credence to the results of Aksoy & Mamatoğlu (2020) and Maqsood et al. (2023) which indicate that psychological safety enhances the self-efficacy of employees.

Moreover, the findings demonstrated that self-efficacy is a significant contributor to employee job crafting, thus validating the results of previous investigations (Kanten, 2014; Miraglia et al., 2017; Tims et al., 2014). This result implies that employees who have strong confidence in their abilities are more likely to take proactive and deliberate actions within their environment. This means they are more prone to “experiment” with both the task-related and social aspects of their job. Thus, they are more likely to actively engage in bottom-up job design processes, such as job crafting with the goal of not only enhancing their alignment with their job but also fostering their personal growth.

Furthermore, the results proved self-efficacy as a pertinent mediator in the association between psychological safety and job crafting. This implies that self-efficacy plays a key role in how psychological safety influences an individual’s engagement in job crafting activities. Psychological safety fulfills employees’ need for control, thereby boosting their self-efficacy beliefs. When individuals feel they have control over their actions in a work setting, they are more inclined to reshape and adjust work duties, activities, and social interactions to further optimize their job resources and demands. Again, the study confirmed the moderating impact of humble leadership on the relationship between psychological safety, self-efficacy and job crafting. These findings demonstrate the significance of humble leadership in strengthening the effect of psychological safety on self-efficacy and job crafting of employees.

A. Theoretical implications

This investigation provides a substantial contribution to research on psychological safety and job crafting. By applying the JD-R theory, this research offers valuable insights into how psychological safety impacts job crafting through the mediating role of self-efficacy. This study addresses a gap in previous research, which has often overlooked the mechanisms explaining this association. Our investigation suggests that psychological safety as a job resource stimulates a personal resource like self-efficacy, which encourages engagement in job crafting in order to increase job resources and job demands. The study contributes to the JD-R theory by demonstrating that interaction between job resources (i.e., psychological safety) and personal resources (i.e., self-efficacy) promotes proactive behaviors among employees.

Again, the inclusion of humble leadership as a boundary condition on the association between psychological safety, self-efficacy and job crafting makes a significant contribution to the JD-R theory. Our investigation suggests that the existence of more resources will motivate employees to accrue additional resources through their proactive behaviors. Specially, we assert that humble leaders can draw from their personal resources to nurture followers’ resource pool, including psychological safety and self-efficacy. This can encourage employees to adopt a proactive resource-gain strategy to accumulate additional resources (i.e., structural, social and challenging job demands).

B. Practical implications

This investigation offers valuable practical insights for organizations and managers with intentions to improve employees’ job crafting behaviors. The findings emphasize the crucial role of psychological safety in enhancing employees’ self-efficacy, which in

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership

turn positively impacts job crafting. When employees view their work environment as supportive and safe, they are more likely to believe in their capabilities, significantly boosting their confidence. The mediating mechanism of self-efficacy implies that psychological safety is a foundational element for encouraging employees to take initiative in their roles. Organizations should prioritize creating an environment where employees feel safe and have a sense of personal control. By fostering such an environment, companies can cultivate a workforce with high self-efficacy, which is essential for inspiring employees to engage in proactive job crafting.

Furthermore, the research highlights the positive nexus between self-efficacy and job crafting. Employees with a strong belief in their abilities are more inclined to modify their job roles, seek new challenges, and enhance their work experience. This proactive behavior is beneficial for both employees and their firms, as it brings about overall desirable organizational outcomes. To leverage this, organizations should implement training and development programs that build employees' self-efficacy, provide opportunities for skill development, and recognize their accomplishments. By doing so, companies can encourage employees to actively participate in modifying their work environment, leading to a more dynamic and innovative workplace.

Additionally, the study reveals that humble leadership plays a vital role in moderating the association between psychological safety, self-efficacy, and job crafting. Leaders who exhibit humility by admitting their limitations, valuing team contributions, and being open to learning can significantly amplify the advantages of a psychologically safe environment. Organizations should focus on eliciting humble leadership qualities within their leadership teams. By promoting humble leadership, companies can maximize the positive impacts of psychological safety and self-efficacy on job crafting, ultimately leading to higher levels of employee creativity and resilience.

C. Limitations and future studies

Even though the study contributes to theory and practice significantly, it has some limitations that warrant attention. The study surveyed only employees from Ghana's banking industry and did not include those from other industries, which may limit the generalizability of the findings. To resolve this limitation, future research could include participants from various industries in Ghana to generalize the study's findings. While the investigation adopted procedural and statistical measures, the data was sourced solely from employees, which could result in bias. Future studies could address this limitation by including leader-employee dyads to achieve more comprehensive findings. Although certain variables, such as the employee's gender, age, and tenure, were controlled, tenure under the leader was not included as a control variable. Future research should consider incorporating tenure under a leader as a control variable, as literature suggests that it may play a role in influencing the relationship between humble leadership and individual outcomes (Owens et al., 2013).

VI. CONCLUSION

Utilizing a moderated-mediation model, this investigation discovered that self-efficacy acts as a mediating mechanism to explain the association between psychological safety and job crafting. Our study sheds light on the importance of humble leadership as a boundary condition, which strengthens the association between psychological safety, self-efficacy and job crafting. These results are crucial to the literature on psychological safety and job crafting, as previous research have overlooked the mediating and boundary conditions within this association.

ACKNOWLEDGMENT

The authors would like to extend their appreciation to all the participants of this study, whose contributions were essential to making this research possible. We also want to thank the School of Business Administration at Zhejiang Gongshang University for their ongoing support.

REFERENCES

- 1) Aksoy, Ş., & Mamatoğlu, N. (2020). Mediator Role of Professional Self – Efficacy Belief Between Psychological Safety and Self – Reported Personal Initiative. *Nesne Psikoloji Dergisi*, 8(17), 0–3. <https://doi.org/10.7816/nesne-08-17-03>
- 2) Al Hawamdeh, N. (2023). Does humble leadership mitigate employees' knowledge-hiding behaviour? The mediating role of employees' self-efficacy and trust in their leader. *Journal of Knowledge Management*, 27(6), 1702–1719.
- 3) Azzari, V., & Pelissari, A. (2020). Does brand awareness influences purchase intention? The mediation role of brand equity dimensions. *Brazilian Business Review*, 17(6), 669–685. <https://doi.org/10.15728/BBR.2020.17.6.4>
- 4) Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- 5) Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274–284. <https://doi.org/10.1037/0022-0663.99.2.274>
- 6) Bakker, A. B., Tims, M., & Derks, D. (2012). Proactive personality and job performance: The role of job crafting and work engagement. *Human Relations*, 65(10), 1359–1378. <https://doi.org/10.1177/0018726712453471>

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership

- 7) Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- 8) Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588.
- 9) Bharanitharan, K., Chen, Z. X., Bahmannia, S., & Lowe, K. B. (2018). Is leader humility a friend or foe, or both? An attachment theory lens on leader humility and its contradictory outcomes. *Journal of Business Ethics*, 160, 729–743. <https://doi.org/10.1007/s10551-018-3925-z>
- 10) Bronkhorst, B. (2015). Behaving safely under pressure: The effects of job demands, resources, and safety climate on employee physical and psychosocial safety behavior. *Journal of Safety Research*, 55, 63–72.
- 11) Byeon, Y. V., Brookman-Fraze, L., Aarons, G. A., & Lau, A. S. (2023). Misalignment in Community Mental Health Leader and Therapist Ratings of Psychological Safety Climate Predicts Therapist Self-Efficacy with Evidence-Based Practices (EBPs). *Administration and Policy in Mental Health and Mental Health Services Research*, 50(4), 673–684. <https://doi.org/10.1007/s10488-023-01269-8>
- 12) Chen, C., Feng, J., Liu, X., & Yao, J. (2021). Leader humility, team job crafting and team creativity: The moderating role of leader–leader exchange. *Human Resource Management Journal*, 31(1), 326–340. <https://doi.org/10.1111/1748-8583.12306>
- 13) Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4(1), 62–83. <https://doi.org/10.1177/109442810141004>
- 14) Chin, W. W., Peterson, R. A., & Brown, S. P. (2008). Structural equation modeling in marketing: Some practical reminders. In *Journal of Marketing Theory and Practice* (Vol. 16, Issue 4, pp. 287–298). <https://doi.org/10.2753/MTP1069-6679160402>
- 15) de Carvalho Chinelato, R. S., de Oliveira e Mota Tavares, S. M., Ferreira, M. C., & Valentini, F. (2020). Predictors of Job Crafting Behaviors: A Mediation Analysis. *Psicologia: Teoria e Pesquisa*, 36, 1–9. <https://doi.org/10.1590/0102.3772e3654>
- 16) Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383.
- 17) Edmondson, A. C., Dillon, J. R., & Roloff, K. S. (2007). 6 three perspectives on team learning: outcome improvement, task Mastery, and group process. *Academy of Management Annals*, 1(1), 269–314.
- 18) Edmondson, A. C., & Lei, Z. (2014). Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(July), 23–43. <https://doi.org/10.1146/annurev-orgpsych-031413-091305>
- 19) Eibl, B., Lang, F. R., & Niessen, C. (2020). Employee voice at work: The role of employees' gender, self-efficacy beliefs, and leadership. *European Journal of Work and Organizational Psychology*, 29(4), 570–585. <https://doi.org/10.1080/1359432X.2020.1733979>
- 20) Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- 21) Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://doi.org/10.1016/J.JBUSRES.2019.11.069>
- 22) Hayes, A. F. (2013). *Mediation, moderation, and conditional process analysis: A Regression-Based Approach*, Guilford Press, New York, NY. 1, 20.
- 23) Jhmi, A., Ebrahimi, E., Safari, R., & Reza Fathi, M. (2021). Job Crafting and the Role of Self-efficacy and Engagement in the Academic Jobs. *J Health Man & Info*, 8(1), 40–52. <http://jhmi.sums.ac.ir>
- 24) Kanten, P. (2014). The antecedents of job crafting: perceived organizational support, job characteristics and self-efficacy. *European Journal of Business and Social Sciences*, 3(5), 113–128.
- 25) Kelemen, T. K., Matthews, S. H., Matthews, M. J., & Henry, S. E. (2023). Humble leadership: A review and synthesis of leader expressed humility. *Journal of Organizational Behavior*, 44(2), 202–224.
- 26) Kızrak, M., Çınar, E., Aydın, E., & Kemikkıran, N. (2024). How psychological safety influences intention to leave? The mediation roles of networking ability and relational job crafting. *Current Psychology*, 43(10), 9485–9503.
- 27) Kock, N. (2017). Common method bias: a full collinearity assessment method for PLS-SEM. *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications*, 245–257.
- 28) Lee, J. Y. (2022). How does psychological safety foster employee performance? A serial multiple mediation of job crafting and thriving. *International Journal of Organization Theory and Behavior*, 25(3–4), 98–112. <https://doi.org/10.1108/IJOTB-12-2021-0239>
- 29) Lee, J. Y., & Lee, Y. (2018). Job crafting and performance: Literature review and implications for human resource development. *Human Resource Development Review*, 17(3), 277–313.
- 30) Lee, K. H., Hyun, S. S., Park, H., & Kim, K. (2020). The antecedents and consequences of psychological safety in airline

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership

- firms: Focusing on high-quality interpersonal relationships. *International Journal of Environmental Research and Public Health*, 17(7). <https://doi.org/10.3390/ijerph17072187>
- 31) Lee, S. E., & Dahinten, V. S. (2021). Psychological safety as a mediator of the relationship between inclusive leadership and nurse voice behaviors and error reporting. *Journal of Nursing Scholarship*, 53(6), 737–745.
 - 32) Liu, W., Zhang, P., Liao, J., Hao, P., & Mao, J. (2016). Abusive supervision and employee creativity: The mediating role of psychological safety and organizational identification. *Management Decision*, 54(1), 130–147.
 - 33) Luu, T. T. (2021). Can humble leaders nurture employee well-being? The roles of job crafting and public service motivation. *Personnel Review*, 50(3), 789–811. <https://doi.org/10.1108/PR-12-2019-0701>
 - 34) Lyons, P., & Bandura, R. (2019). Self-efficacy: core of employee success. *Development and Learning in Organizations: An International Journal*, 33(3), 9–12. <https://doi.org/doi.org/10.1108/DLO-04-2018-0045>
 - 35) Maqsood, S., Sohail, M., & Naeem, F. (2023). Psychosocial safety climate and self-efficacy: Moderating role of job-related expectations in Pakistani private-sector employees during the COVID-19 pandemic. *Frontiers in Psychology*, 13, 1–12. <https://doi.org/10.3389/fpsyg.2022.1016050>
 - 36) Miraglia, M., Cenciotti, R., Alessandri, G., & Borgogni, L. (2017). Translating self-efficacy in job performance over time: The role of job crafting. *Human Performance*, 30(5), 254–271.
 - 37) Morris, J. A., Brotheridge, C. M., & Urbanski, J. C. (2005). Bringing humility to leadership: Antecedents and consequences of leader humility. *Human Relations*, 58(10), 1323–1350.
 - 38) Mrayyan, M. T., & Al-Rjoub, S. F. (2024). Levels and Predictors of Leaders' Humble Leadership, Participants' Psychological Safety, Knowledge Sharing in the Team, and Followers' Creativity in Nursing: A Cross-Sectional Online Survey. *Journal of Nursing Management*, 2024(1), 1–16. <https://doi.org/10.1155/2024/9660787>
 - 39) Newman, A., Donohue, R., & Eva, N. (2017). Psychological safety: A systematic review of the literature. *Human Resource Management Review*, 27(3), 521–535. <https://doi.org/10.1016/j.hrmr.2017.01.001>
 - 40) Ou, A. Y., Waldman, D. A., & Peterson, S. J. (2018). Do humble CEOs matter? An examination of CEO humility and firm outcomes. *Journal of Management*, 44(3), 1147–1173. <https://doi.org/10.1177/0149206315604187>
 - 41) Owens, B. P., & Hekman, D. R. (2012). Modeling how to grow: An inductive examination of humble leader behaviors, contingencies, and outcomes. *Academy of Management Journal*, 55(4), 787–818. <https://doi.org/10.5465/amj.2010.0441>
 - 42) Owens, B. P., & Hekman, D. R. (2016). How does leader humility influence team performance? Exploring the mechanisms of contagion and collective promotion focus. *Academy of Management Journal*, 59(3), 1088–1111. <https://doi.org/10.5465/amj.2013.0660>
 - 43) Owens, B. P., Johnson, M. D., & Mitchell, T. R. (2013). Expressed humility in organizations: Implications for performance, teams, and leadership. *Organization Science*, 24(5), 1517–1538. <https://doi.org/10.1287/orsc.1120.0795>
 - 44) Petrov, S., Oprea, B., & Opariuc-Dan, C. (2023). Psychological Safety and Job Performance: The Mediating Role of Work Engagement and Job Crafting. *Psihologia Resurselor Umane*, 21(2), 89–99. <https://doi.org/10.24837/pru.v21i2.536>
 - 45) Plomp, J., Tims, M., Khapova, S. N., Jansen, P., & Bakker, A. (2019). Psychological safety, job crafting, and employability. A comparison between permanent and temporary workers. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00974>
 - 46) Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879. <https://doi.org/10.1037/0021-9010.88.5.879>
 - 47) Rego, A., Owens, B., Yam, K. C., Bluhm, D., Cunha, M. P. e, Silard, A., Gonçalves, L., Martins, M., Simpson, A. V., & Liu, W. (2019). Leader humility and team performance: Exploring the mediating mechanisms of team PsyCap and task allocation effectiveness. *Journal of Management*, 45(3), 1009–1033.
 - 48) Rošková, E., & Faragová, L. (2020). Job Crafting, Work Engagement, Burnout: Mediating Role of Self-Efficacy. *Studia Psychologica*, 62(2), 148–163. <https://doi.org/10.31577/sp.2020.02.797>
 - 49) Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1), 173–186. <https://doi.org/10.1016/j.jvb.2011.05.009>
 - 50) Tims, M., Bakker, A. B., & Derks, D. (2014). Daily job crafting and the self-efficacy – Performance relationship. *Journal of Managerial Psychology*, 29(5), 490–507. <https://doi.org/10.1108/JMP-05-2012-0148>
 - 51) Waclawski, E. (2012). How I use it: Survey monkey. *Occupational Medicine*, 62(6), 477.
 - 52) Walters, K. N., & Diab, D. L. (2016). Humble leadership: Implications for psychological safety and follower engagement. *Journal of Leadership Studies*, 10(2), 7–18. <https://doi.org/10.1002/jls.21434>
 - 53) Wang, L., Li, J., & Shi, L. (2016). Who displays humility, when does it matter, and how does it feel? *Academy of Management Proceedings*, 2016(1), 12275.
 - 54) Wang, Y., Liu, J., & Zhu, Y. (2018). Humble leadership, psychological safety, knowledge sharing, and follower creativity: A cross-level investigation. *Frontiers in Psychology*, 9, 1–9. <https://doi.org/10.3389/fpsyg.2018.01727>

How Psychological Safety Impacts Job Crafting: Roles of Self-Efficacy and Humble Leadership

- 55) Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26(2), 179–201.
- 56) Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3), 235–244.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.