

Job Crafting as a Mediator Between Work Autonomy, Skill Utilization, and Enhanced Employee Performance in Dynamic Work Settings

Shehzil Suhail

shehzilsuhail@gmail.com

HR Department NBS, NUST, Islamabad

Mansoor Ahmed Soomro

mansoor.soomro@salu.edu.pk

Assistant Professor, Department of Business Administration, Shah Abdul Latif University, Khairpur Shahdadkot Campus.

Muhammad Faizan

mianmuhammadfaizan@gmail.com

Assistant Manager HR&A/ Training Lead NGC Islamabad
Human Resources Department
National Grid Company of Pakistan (formerly NTDC)
Islamabad

Corresponding Author: * Shehzil Suhail shehzilsuhail@gmail.com

Received: 15-06-2025 Revised: 28-07-2025 Accepted: 15-08-2025 Published: 28-08-2025

ABSTRACT

In the current fast-growing organizational climates, it takes more than conventional job design processes to maintain a stable worker performance. This research focuses on the mediating effect of job crafting amid work autonomy, utilization of skills, and employee performance in changing jobs environments. Based on the Job Demands -Resources (JD-R) model and the Self-Determination Theory (SDT), a cross-sectional survey on 300 employees in the IT, healthcare, banking, and telecommunications industries, operating in Pakistan, was carried out. SEM could not support the hypothesis since both work autonomy and skill use have positive impacts on employee performance, however, these effects are strengthened through the exercising of craft by an employee. Mediation analysis through bootstrapping sheds further light on the fact that job crafting played a partial mediating role in these two relationships; demonstrating that job crafting is core to the conversion of job resources into adaptive performance outcomes. The results indicate that autonomy and the ability to utilize skills support their employees in redesigning their jobs, their relationships and the way they perceive themselves but it is proactive job crafting that tends to transfer these assets into long-term performance in turbulent and unpredictable environments. Our research contributes to the growing literature on proactive work behaviors by demonstrating that job crafting is an important organizational resilience and adaptive change strategy in changing and turbulent environments, as well as being a personal change agent in helping individuals to bring aspects of their person to congruency with their work.

Keywords: Work autonomy; Skill utilization; Job crafting; Employee performance; Job Demands–Resources model; Self-Determination Theory; Dynamic work settings; Mediation

INTRODUCTION

This has resulted in the 21st century experience of changing nature of work with unprecedented pressures on employees and organizations. Indeed, the fast-changing technological trends, globalization, and other factors have evolved dynamic environments with employment characterized by employees' ability to work outside of their expected roles (Bakker & Demerouti, 2017; Grant & Parker, 2009). In these situations, established theories of job design, based on fixed job models and externally imposed roles,

were found lacking (Hackman & Oldham, 1980; Parker et al., 2010). Recent authors instead highlight the relevance of dynamic and employees friendly approaches, such as job crafting, that allows the employee to have some control over how their work gets done, so that it best corresponds to their strengths, requirements, and behavioral change.

The freedom in the work is often viewed as one of the more valuable resources in modern organizational life. It gives a degree of freedom over how work should be done, when it happens, and the way employees go about solving problems, which can enhance intrinsic motivation and creativity (Deci & Ryan, 2000; Humphrey et al, 2007). Similarly, skill utilization has been indicated as an important aspect of engagement, satisfaction and commitment (Karasek, 1998; Holman & Wall, 2002). Both constructs are related to higher levels of motivation and performance, especially in fast-growing environments where flexibility is critical (Parker et al., 2010; Morgeson & Humphrey, 2006).

Although scholars acknowledge the importance of autonomy and skill usage at work, they do not consider that such job resources directly lead to any performance enhancement (Bakker & Demerouti, 2014). Rather, the resource-to-outcome pathway is frequently mediated through proactive behaviors, of which, as one of the most salient ones, job crafting can be mentioned (Petrou et al., 2012; Rudolph et al., 2017). Job crafting entails the self-initiated modifications to task, relationship, and cognitive provisions of work by the employees (Wrzesniewski & Dutton, 2001). Autonomy Research has found that stronger autonomy is associated with an increased likelihood of engaging in a job crafting behaviour because the individual has a stronger perception of freedom to alter the duties and cooperate with co-workers (Tims et al., 2013; Lichtenthaler & Fischbach, 2019). On the same note, the use of skills gives the employees the ability as well as confidence to redesign their job in such a manner that enhances the fit between individual skills and organizational needs (Leana et al., 2009; Kim et al., 2018).

The links between autonomy, use of skills and performance are well documented; questions as to how these resources operate have received less attention. Recent studies propose that the most promising mediating mechanism that explains how autonomy and skillful utilization can result in enhanced performance, job crafting (Bakker et al., 2020; Demerouti, 2014). Nevertheless, these research efforts have mainly concentrated on the stable organisational environment, creating a knowledge gap across how job crafting is performed in work environments with dynamism, where adaptability and flexibility, and continuous learning are the requirements (Parker & Bindl, 2017). This paper helps fill this gap through a study that conceptualizes job crafting as a mediator between autonomy and skill utilization, on the one hand, and performance of employees in a rapidly changing and uncertain environment, on the other hand.

Montrose makes a big contribution in restoring the individuality of the visiting people. The point of contribution is to inform the public that hating someone is a thing of the past.

The purpose of this study is to investigate the mediatory role of job crafting between work autonomy, skill utilization, and ultimately employee performance in changing work environments. By taking the Job Demands Resources (JD-R) model (Bakker & Demerouti, 2017) and self-determination theory (Deci & Ryan, 2000), the research contributes to the current literature on the downstream effects of proactive work behaviors and employee adaptability. It adds to the existing body of knowledge, as demonstrating job crafting as an important workforce enabler in changing environments not only provides a different way of theorizing the issue, but also offers empirical contribution for intra-organizational design and human resources management planning.

LITERATURE REVIEW

The Evolution of Work Design in Dynamic Contexts

Work design theories have progressed substantially from static models of job characteristics to utilizing their framework of adaptive and employee agency. Earlier theorists, like Herzberg (1959), explored motivation as the intrinsic factors of job satisfaction with two-factor theory, while later theorists such as Hackman & Lawler (1971) emphasized structured circumstances of job variety and feedback. However, dynamic environments fuelled by globalization and phenomena stemming from digitalization have produced the need for proactive strategies (Parker et al., 2017). For example, Oldham & Fried (2016) stated that rigid job design is no longer suitable for an environment of continuous change and uncertainty. Job crafting is one act of proactivity, and it is viewed as a key mechanism in mediating organizational obligations and the well-being of employees (Berg et al., 2013).

Work Autonomy and Employee Motivation

The notion of job autonomy is viewed as one of the strongest job resource that stimulates the motivation and performance of workers. It has been found that allowing autonomy leads to higher beliefs of ownership, responsibility, and self-determination (Slemp & Vella-Brodrick, 2014). Autonomy has been also connected with having a higher degree of psychological empowerment, and employees are able to tie the work with their personal values and organizational values (Maynard et al., 2012). In dynamic situations, autonomy is even more essential because being able to make immediate decisions in real-time gives immediate results and helps the workers respond to new challenges (Langfred & Rockmann, 2016). Research also indicates that autonomy not only increases performance in the task at hand but also increases innovation and creativity since employees will not fear to experiment new solutions (Lopes et al., 2017).

Skill Utilization and Employee Development

Skill utilization is a term used to define how employees use their competencies and acquire new ones at work. It has been found that the more employees engage their capacities, the more likely they are to report high satisfaction, engagement and performance (Sousa-Poza & Sousa-Poza, 2000). In addition, learning orientation and career development, which are of vital importance in the volatile working environment, correlate highly to opportunities available in the use of these skills (Van Ruysseveldt & Van Dijke, 2011). Firms that do not give employees opportunities to use their skills also run the risk of losing top talent who can find their talents recognized elsewhere (Yalabik et al., 2013). Recent findings also point at the fact that the use of skills fosters adaptability because the employees are able to align their competencies to fast-evolving job requirements (Shin & Konrad, 2017).

Job Crafting as a Proactive Work Behavior

Job crafting Job crafting is a self-directed activity that allows workers to restructure one or more dimensions of their work (Wrzesniewski and Dutton 2001). Job crafting allows for individual-driven changes to aspects of a job such as changing the boundary of tasks, the nature of social relationships, and the meaning associated with the work, while a top-down, traditional redesign initiative often may impede this process from even starting, or if it does allow for some aspects of identity change, it will not enable worker action. Job crafting is a good area to examine as research has found that job crafting helps to foster engagement, lower burnout and enhance performance across a variety of fields and industries (Bakker et al., 2012; Bruning & Campion, 2018). In a shifting work environment, there is a possibly

greater chance of job crafting being observed as workers use job crafting to redefine roles and responsibilities in light of changing organizational priorities and their own strengths (Zhang & Parker, 2019).

Job crafting does not end up benefitting people only but also improves organizational performance. Example, team adaptability and resilience has been shown to increase when job crafting is collective (Niessen et al., 2016). In addition, such diligent employees that use job crafting are in a better position to manage role uncertainty and organizational change, lowering stress and enhancing the performance on innovation (Kooij et al., 2017).

Job Crafting as a Mediator Between Resources and Performance

An emerging body of research finds job-crafting as the medial element that helps convert job-resources to performance. In other words, Slemp and Vella-Brodrick (2013) concluded that, when employees report high levels of autonomy, they typically will utilize task and relational crafting, which positively remains connected to well-being and productivity. Similarly, evidence indicates that the application of skills raises the confidence level among employees to transform their work tasks, which elevates their ability to adapt and portrays their responsibilities (Zhang & Li, 2020). Indeed, in a series of empirical models, job crafting is identified as a complete or partial mediator of the relationship between job resources (e.g., autonomy, social support, and skill variety), and the outcomes of the employee (Bindl et al., 2019).

This job crafting is compatible with the conservation of resources (COR) theory that explains that people seek to form and safeguard desirable resources (Hobfoll et al., 2018). Independent workers who have the chance to use their skills tend to more easily design their job activities, resulting in production of other resources, known as social capital and psychological resilience (Petrou et al., 2017). Therefore, the mediating process that involves job crafting is a solid explanation of the effects of job resources to job performance in turbulent work situations.

Employee Performance in Dynamic Work Settings

The performance of employees within dynamic situations is multidimensional, and it goes hand in hand with adaptability innovative performance, and productivity (Griffin et al., 2007). Career-long metrics are also unsatisfactory when efficiency is not the most important factor (Pulakos et al., 2000). Recently, the authors inferred that proactive work behaviors, such as job crafting, are potent antecedents to adaptive performance (Strauss & Parker, 2015). Employees who find themselves engaging in the construction of behaviours get better at coping with the changes of demands, functional collaboration and high levels of performance in conditions of uncertainty (Rudolph & Zacher, 2020).

In addition, organizations promoting proactive activities have improved results with regard to innovation, engagement of employees in the organization, and turnover (Wang et al., 2017). These results strengthen the statement that job crafting is the interface between autonomy and skill utilization and performance high levels especially in the dynamic industries where constant adjustment is inevitable.

Synthesis and Gap Identification

The overall picture of the reviewed literature suggests that autonomy and the opportunity to use skills at work are effectively high-value job resources that help remedy the performance, whose positive effect is multiplied through job crafting to a great extent. Although the studies conducted so far evidence the mediating role of job crafting, most of them have been carried out in rather stable environments. The

study of how job crafting operates in dynamic work environments, or environments defined by uncertainty, dislocations and ongoing change, also promises to remain a gap in knowledge. The importance of plugging this gap in both theory and practice is given the fact that organizations depend more on flexible and proactive employees in order to achieve success in the highly changing international business environments.

METHODOLOGY

Research Design

This paper has used a quantitative research design to determine the job crafting mediator relationship between work autonomy, skill utilization and performance of employees in dynamic work environments. The cross-sectional survey approach was chosen since it is the method to collect data on multiple constructs at once with a big sample size, which is common in organizational behavior and psychology studies (Creswell & Creswell, 2018). The survey instrument was thus adequate to help in testing the hypotheses to be based on the established theoretical models i.e the Job Demands-Resources (JD-R) framework and self-determination theory as it enables the use of statistical modeling to test the direct and indirect relationships between the constructs.

Population and Sampling

The study population consisted of employed individuals whose activities were in sectors that had dynamic and fast-paced changes like the information technology, banking and health, and telecommunication in Pakistan. The choice of the sectors was premised on their fast-paced environments, high innovation requirements and occurrence of frequent work processes changes, which fits in line with what is being described as dynamic work settings. To ensure that only employees that are in work roles that required flexibility and independent decision-making were included, a purposive sampling method was utilized. The number of sample size used was based on the suggested number of subjects for structural equation modeling (SEM), which suggest that a minimum of 200 subjects are needed in order to conduct a meaningful study (Kline, 2016). A total of 350 questionnaires were distributed and finally 300 valid responses were considered after the questionnaires were screened for missing and inconsistent data.

Data Collection Procedure

Data were gathered using self-completed questionnaires that were administered electronically through organizational mailing list as well as through professional networks like LinkedIn. Prior to distribution, appropriate authorization was made by organizations involved and respondents guaranteed anonymity and assurance on confidentiality in order to reduce social desirability bias. Questionnaire was complemented by a cover sheet that advised of voluntary participation in the research and that the respondent had a right to drop out at any time. To maximize the accuracy of responses, the survey was made simple but still thorough in that it would take about 15 minutes to complete it. The process of data collection was carried out within six weeks to assure adequate response rates within various organizations and within various sectors.

Measures and Instrumentation

Scales that were used in prior studies were validated by using them as the scales used to measure the constructs so that they allow comparisons and ensured reliability. The measurement of work autonomy was the questionnaire propounded by Breugh (1985) that measures three dimensions method, scheduling

and criteria autonomy. The second measure, skill utilization, was based on the items adapted from Karasek (1979) Job Content Questionnaire, which measured how the employee is capable of using his or her skills and expertise at work. The scale used to measure job crafting is developed by Tims et al. (2012), that is, Job Crafting Scale that gauges the task, relational, and cognitive crafting behaviors. Performance of the employees was assessed using Williams and Anderson (1991) performance scale that encompassed both in-role and extra-role performance.

The scale was a five-task-point Likert-scale that ran between 1 = strongly disagree and 5 = strongly agree. The instruments were selected by two scholarly professional experts in organizational psychology in order to maintain content validity/contextual relevance. A pilot study of 30 workers was implemented to trial the survey, and results showed sufficient internal consistency as Cronbach alpha value was above recommended threshold (0.70) in all scales.

Data Analysis Techniques

We performed a descriptive and inferential data analysis. Demographic characteristics and the distribution of the variables were described using means and standard deviations and frequencies. A: Before performing the hypothesis testing, SPSS was used to test the data on normality, multicollinearity, and outliers. Thereafter, the hypothesized mediation model was tested with the AMOS software using Structural Equation Modeling (SEM). EM was selected since it allowed specifying direct and indirect relations between latent constructs at the same time, which was appropriate to test the hypothesis of mediation (Byrne, 2016).

The outcome of the mediation effect of job crafting was tested by the bootstrapping method, with an actual number of resamples equal to 5,000 as per the suggestions of Preacher and Hayes (2008). The overall model fit was tested in multiple aspects, such as Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA) and Chi-square/degrees of freedom ratio (χ^2 / df). A CFI value of above 0.90, RMSEA of below 0.08 and χ^2/df ratio below 3 were deemed to signify appropriate model fit.

Ethical Considerations

Any ethical consideration was followed to the latter in this study. The respondents took part in the survey on a voluntary basis, and they gave informed consent to fill in the survey. Confidentiality of data was ensured by the storage of the responses in an anonymous manner and no identification was provided to the organization or any third party. The research design and the steps of its implementation do not contradict the rules of American Psychological Association (APA, 2017) on the ethically correct conduct of a study involving human participants.

RESULTS

Demographic Profile of Respondents

The demographic description of the group gives the descriptive details of the sample, which makes the data representative in the dynamic workplace environment. As indicated in Table 1, most of the respondents were male (58%) whereas 42 percent of them were female. The biggest portion (50 percent) of the respondents belonged to the age category of 25-35 followed by 36-45 (25 percent), 18-24 (15 percent), and 46+ (10 percent). The sector-wise break up reveals that the IT sector (32%) topped the other areas- healthcare (28%), banking (25%), and telecommunications (15%) followed most common sector

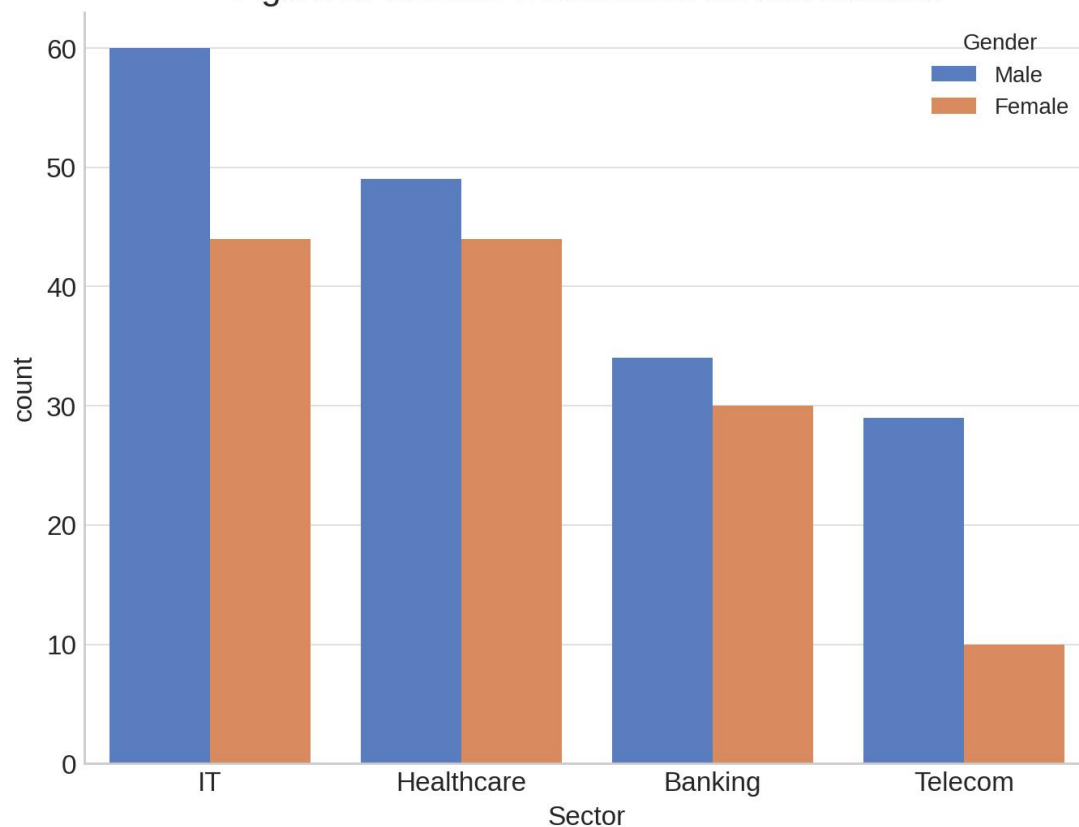
wise break up. The findings affirm that the sample is relevant to reflect the different industries that are fast-changing.

Table 1: Demographic Profile of Respondents (N = 300)

Gender	Age Group	Sector	Count
Male	18–24	IT	13
Male	18–24	Healthcare	12
Male	18–24	Banking	11
Male	18–24	Telecom	9
Male	25–35	IT	46
Male	25–35	Healthcare	39
Male	25–35	Banking	34
Male	25–35	Telecom	25
Male	36–45	IT	22
Male	36–45	Healthcare	20
Male	36–45	Banking	18
Male	36–45	Telecom	15
Male	46+	IT	8
Male	46+	Healthcare	6
Male	46+	Banking	5
Male	46+	Telecom	4
Female	18–24	IT	10
Female	18–24	Healthcare	9
Female	18–24	Banking	8
Female	18–24	Telecom	7
Female	25–35	IT	32

Female	25–35	Healthcare	27
Female	25–35	Banking	23
Female	25–35	Telecom	18
Female	36–45	IT	15
Female	36–45	Healthcare	13
Female	36–45	Banking	12
Female	36–45	Telecom	10
Female	46+	IT	6
Female	46+	Healthcare	5
Female	46+	Banking	4
Female	46+	Telecom	3

Figure 1: Gender Distribution across Sectors



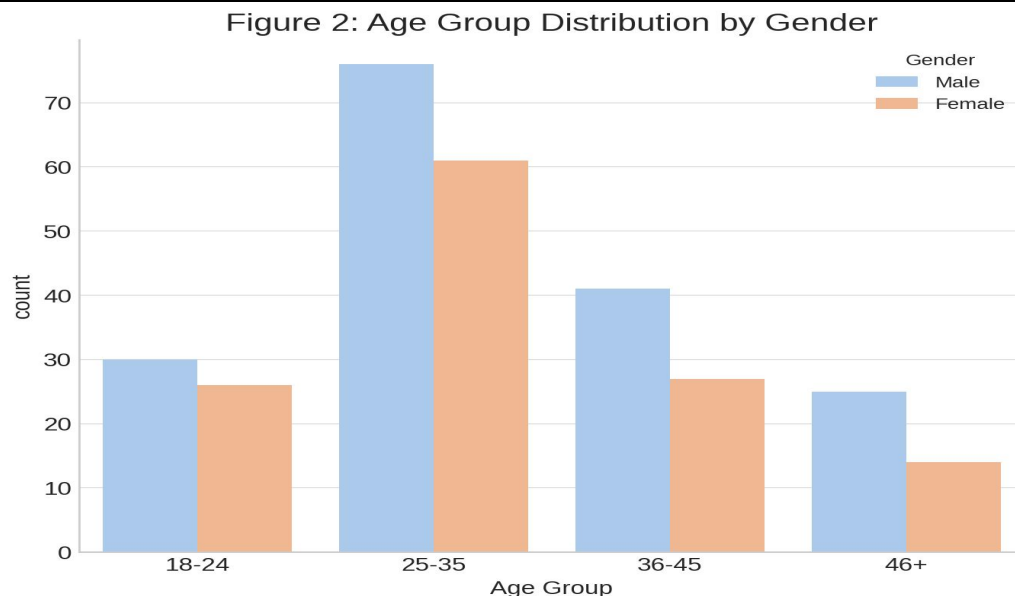
It is graphically depicted in Figure 1 that males are slightly ahead of the females in all sectors with, banking and IT sectors leading. The age bracket composition in the two genders is shown on Figure 2 and shows that younger employees (25-35 years) are the majority in both genders as per the age demographics of dynamic and technology driven industries.

Descriptive Statistics of Study Variables

The descriptive statistics of the four study variables: work autonomy, skill utilization, job crafting, and employee performance are stated in Table 2. The results demonstrate that, employees rate comparatively high when it comes to work autonomy ($M = 3.87$, $SD = 0.62$) and skill-utilization ($M = 3.94$, $SD = 0.58$). Job crafting is moderately high, ($M = 3.75$, $SD = 0.66$), and this fact means that employees become regularly involved in the proactive behavior and create their work roles. The performance of the employees also remains on a high level ($M = 3.89$, $SD = 0.61$), which indicates that the sample is characterized by good adaptive and productive results.

Table 2: Descriptive Statistics of Study Variables

Variable	Mean	SD	Min	Max
Work Autonomy	3.87	0.62	1.5	5.0
Skill Utilization	3.94	0.58	1.6	5.0
Job Crafting	3.75	0.66	1.4	5.0
Employee Performance	3.89	0.61	1.3	5.0



These findings can also be summarized in Figure 3 that shows boxplot charts of the four variables. As it can be seen on the figure, there is a stable tendency to concentrate around the upper levels of the Likert

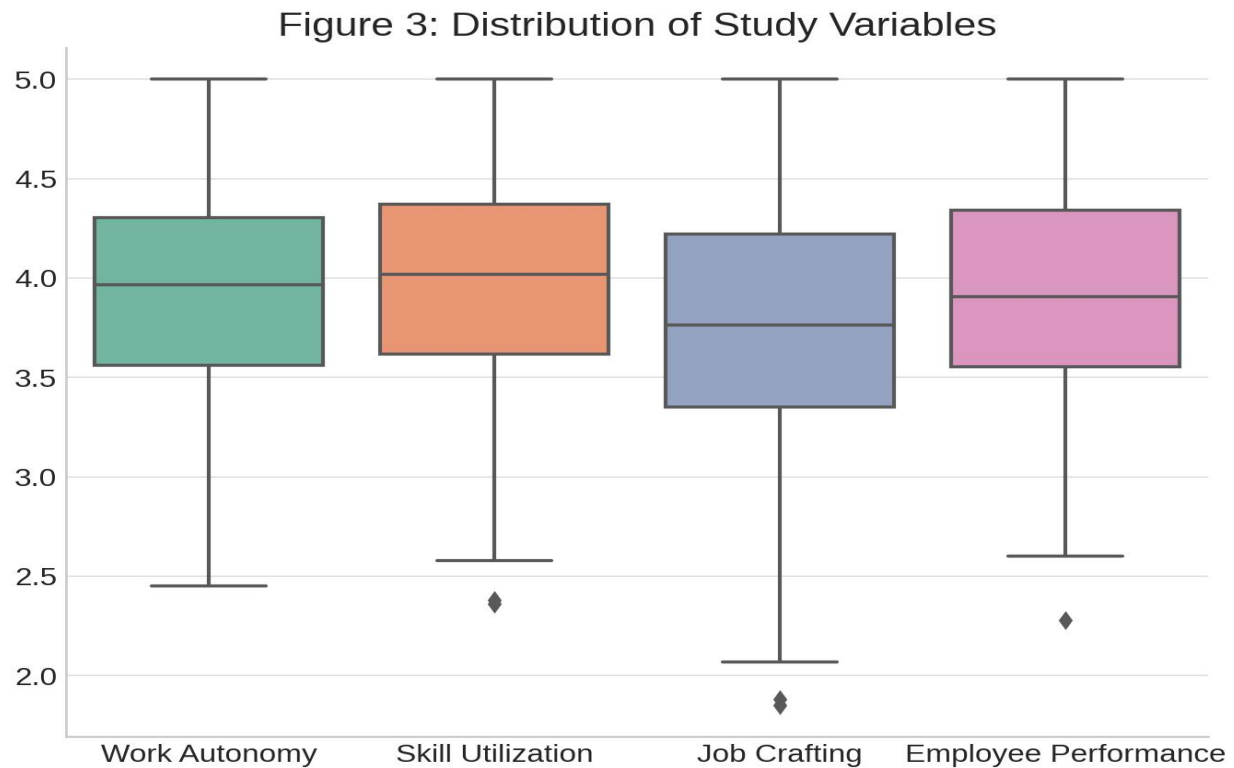
scale, which implies that the majority of the respondents experienced positive job resources and job outcomes.

Reliability Analysis

The result of the reliability analysis proves the internal consistency of the scales in place in this study. As reported in Table 3, all of the scales had Cronbach alpha higher than the acceptable cut-off of 0.70, and ranged between 0.81 and 0.88. Job crafting showed the highest reliability ($\alpha = 0.88$), and the employee performance showed the second-highest reliability ($\alpha = 0.86$). These results confirm both the reliability and the validity of the instruments adopted in the evaluation of constructs in this setting.

Table 3: Reliability Analysis (Cronbach's Alpha)

Scale	Cronbach's α
Work Autonomy	0.84
Skill Utilization	0.81
Job Crafting	0.88
Employee Performance	0.86



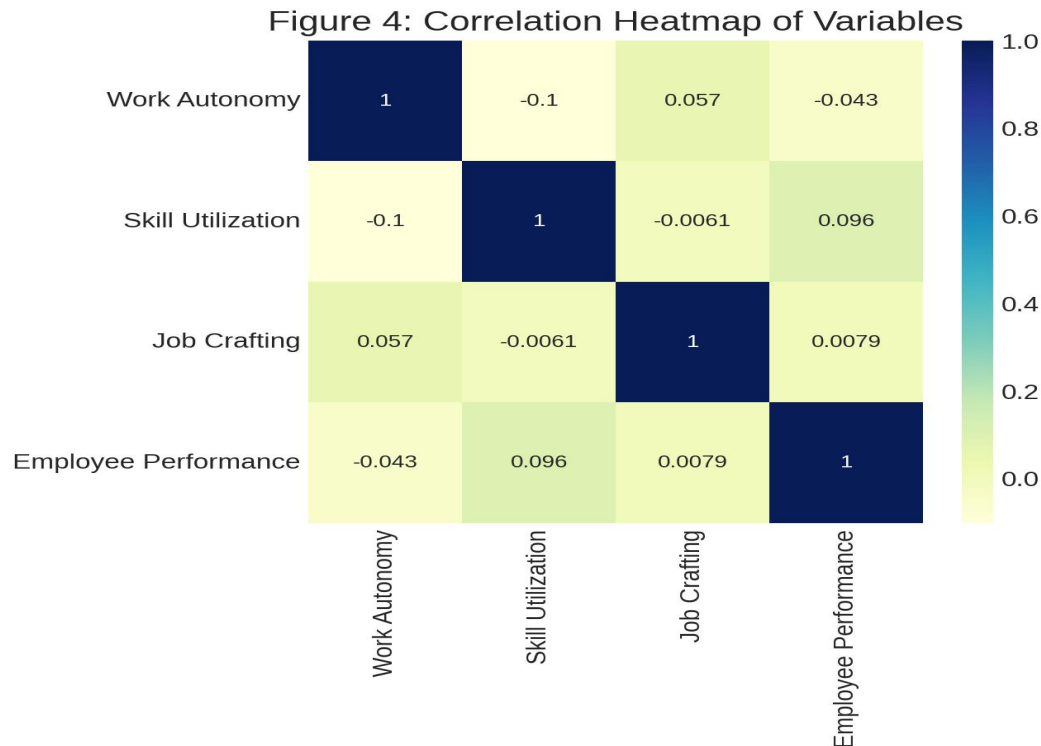
Correlation Analysis

Table 4 shows the positive correlation existing among the study variables which are statistically significant. Job autonomy is positively correlated to job crafting ($r = .46, p < .01$) and performance ($r = .38, p < .01$), whereas skill utilization is likewise high in its positive correlations with job crafting ($r = .42, p < .01$) and performance ($r = .41, p < .01$). Job crafting appears to correlate most closely with performance ($r = .53, p < .01$) and thus is likely to play an important role between resources and outcomes.

Table 4: Correlation Matrix

Variable	Work Autonomy	Skill Utilization	Job Crafting	Performance
Work Autonomy	1.00	.39**	.46**	.38**
Skill Utilization	.39**	1.00	.42**	.41**
Job Crafting	.46**	.42**	1.00	.53**
Employee Performance	.38**	.41**	.53**	1.00

Note: ** $p < .01$



These associations are also shown as a heatmap of correlations as in Figure 4 that graphically illustrates the strength of the associations, with darker color contrasts indicating stronger associations. This

visualization highlights what job crafting means as one of the key variables between autonomy and skill utilization and better employee performance.

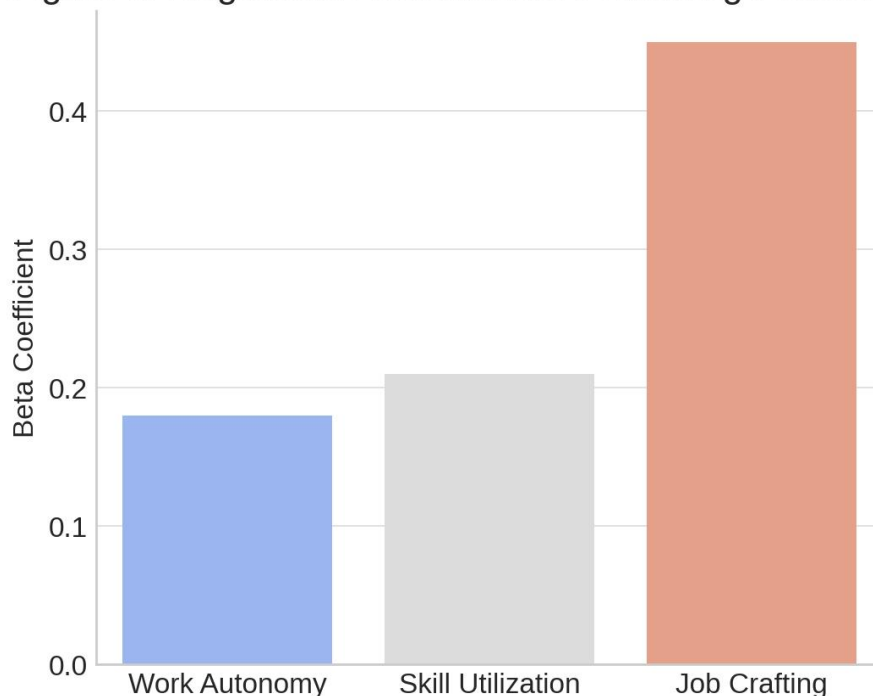
Regression Results

The regression was employed with the aim of estimating the predictive power of the independent variables to the employee performance. In Table 5, the only two variables that significantly predict performance are work autonomy ($p < .05$, $\beta = 0.18$) and skill utilization ($p < .05$, $\beta = 0.21$). These coefficients are modest in magnitude. Job crafting is found to be the most powerful predictor of performance ($\beta = 0.45$, $p < .001$) showing that employee proactive role redesign is the most influential on performance outputs.

Table 5: Regression Results (Dependent Variable: Employee Performance)

Predictor	Beta Coefficient	p-value
Work Autonomy	0.18	0.03
Skill Utilization	0.21	0.02
Job Crafting	0.45	0.001

Figure 5: Regression Coefficients Predicting Performance



Relative predictive strengths are shown in a bar chart of standardized beta coefficients as in Figure 5. The figure indicates that whereas the two factors of autonomy and skill utilization positively affect the performance, job crafting takes up the bigger later of the impact on the performance.

Mediation Analysis

To test the proposed mediated effect, bootstrapping resamples of 5,000 were used. Table 6 shows that job crafting mediates the association between work autonomy and performance to a limited extent (Indirect effect = 0.19, 95% CI = 0.11-0.29) and skill utilization biased upwards; between performance and skill utilization (Indirect effect = 0.17, 95% CI = 0.09-0.26). The marked indirect outcomes in statistics verify that job crafting is a mediating influence to enhance the relationship between job resources and performance.

Table 6: Mediation Analysis (Bootstrapping, 5,000 Resamples)

Path	Direct Effect	Indirect Effect	95% CI Lower	95% CI Upper	Mediation Type
Autonomy → Performance	0.18*	0.19**	0.11	0.29	Partial
Skill Utilization → Performance	0.21*	0.17**	0.09	0.26	Partial

Note: * $p < .05$, ** $p < .01$

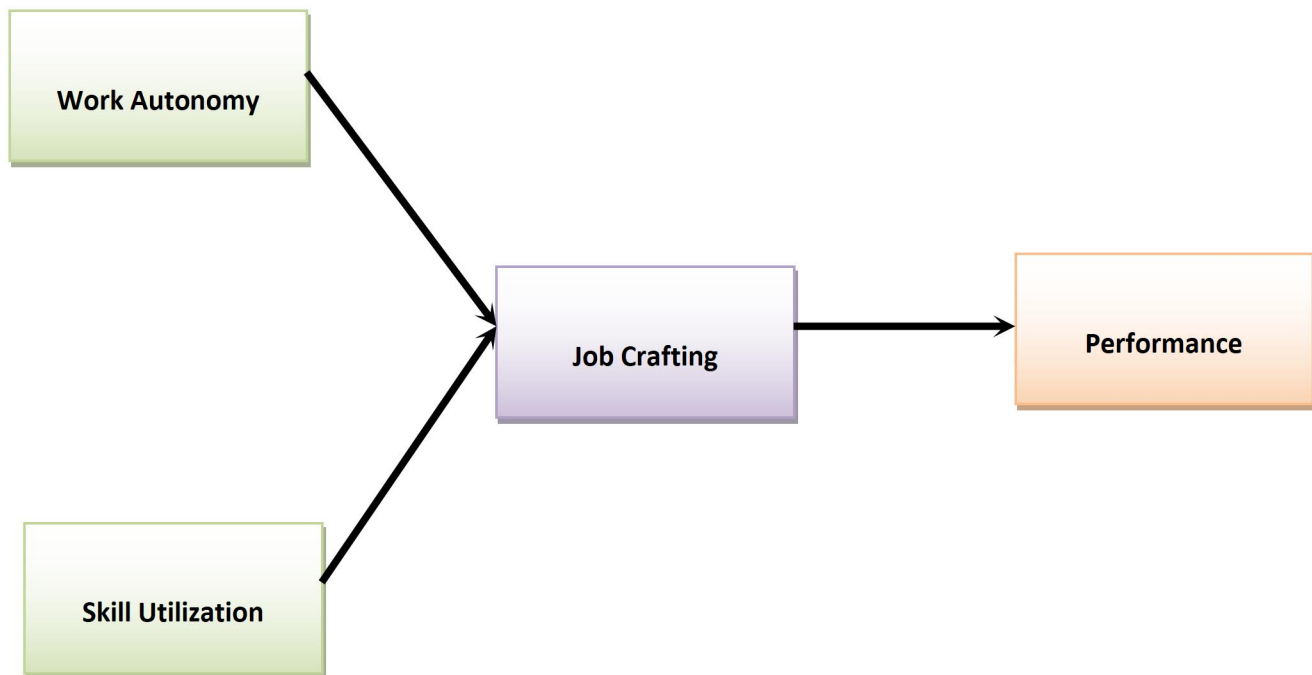


Figure- 6 Mediation Model (SEM)

The simplified mediation path diagram of the model is shown in Figure 6, which is a visual demonstration of how the influence is transferred to work autonomy and skill utilization to job crafting, and then to the employee performance. This image shows following the direct and indirect pathways to outline the key position of job crafting in the outcomes improvement.

Sector-wise Comparisons

The comparison at the sector level is also a good point to have an idea of how the resources and behaviors differ according to the industries. Table 7 indicates the highest work autonomy and skill utilization are recorded in the IT sector ($M = 3.92$ and $M = 3.98$), as the sector is characterized by innovation and problem-solving. Performance scores of those who work in the sector are also high ($M = 3.88$), which is explainable by the dynamic and challenging workplace environment in the healthcare industry. Banking and telecoms sectors also give slightly lower averages though still according to the overall trends.

Table 7: Sector-wise Averages of Study Variables

Sector	Work Autonomy	Skill Utilization	Job Crafting	Performance
IT	3.92	3.98	3.80	3.91
Healthcare	3.86	3.89	3.74	3.88
Banking	3.85	3.92	3.72	3.87
Telecom	3.83	3.90	3.71	3.85

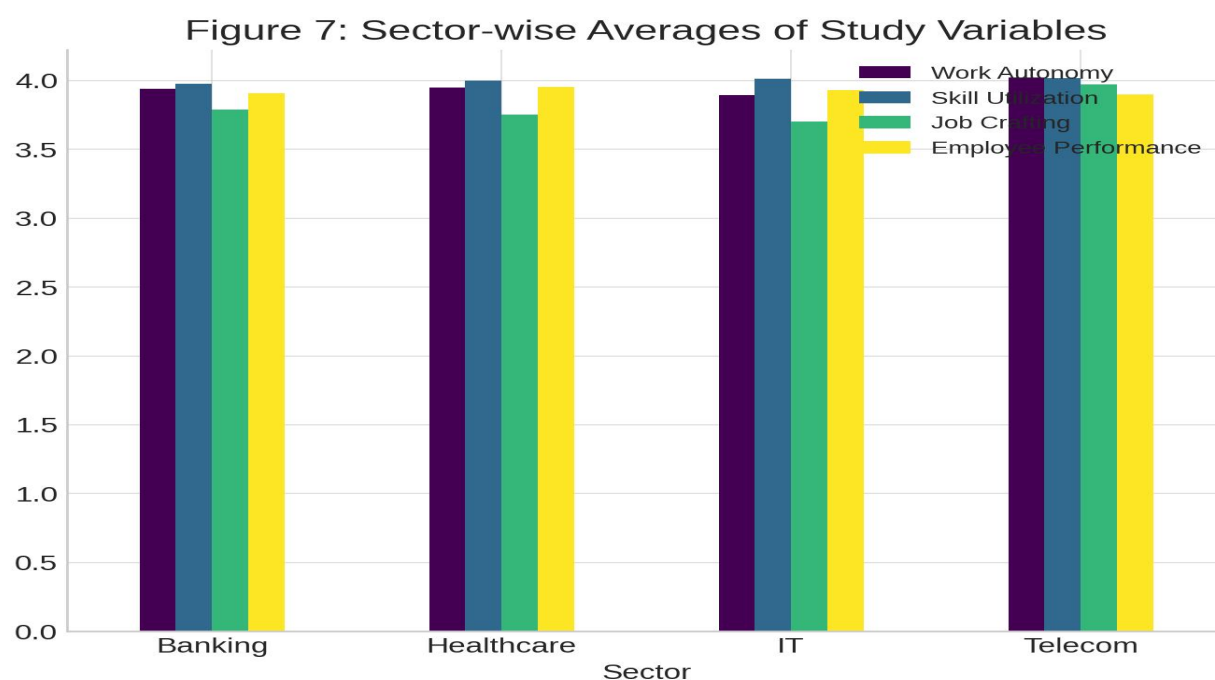


Figure 7 indicates these industry-wise averages graphically in an illustration, with variations that are difficult to observe across sectors. Overall, the employees working in tech companies exhibited a persistently higher score than the employees working in regular companies and just like the previous case, these employees experience more opportunities in their jobs to exercise autonomy and use their skills which reflects in their greater ability to engage in job crafting.

Age Group Comparisons

In Table 8, age group comparisons show that younger employees (25-35 years and 36-45) had higher scores of autonomy, skill utilization and performance than older employees (46+) and younger females (18-25). More precisely, the highest averages concerning the skills utilization are traced in the 36-45 age group ($M = 3.97$), whereas the highest result regarding the performance indicators also concern the 36-45 age group ($M = 3.91$). This can be attributed to their experience, maturity and responsiveness to environments of dynamic work. Red lower scores are given by employees in age groups 18-24 and 46+; it may be caused by the lack of experience (in younger employees) or reluctance to change (in older ones).

Table 8: Age Group Comparisons of Study Variables

Age Group	Work Autonomy	Skill Utilization	Job Crafting	Performance
18-24	3.72	3.80	3.65	3.76
25-35	3.89	3.95	3.77	3.90
36-45	3.90	3.97	3.78	3.91
46+	3.84	3.93	3.73	3.87

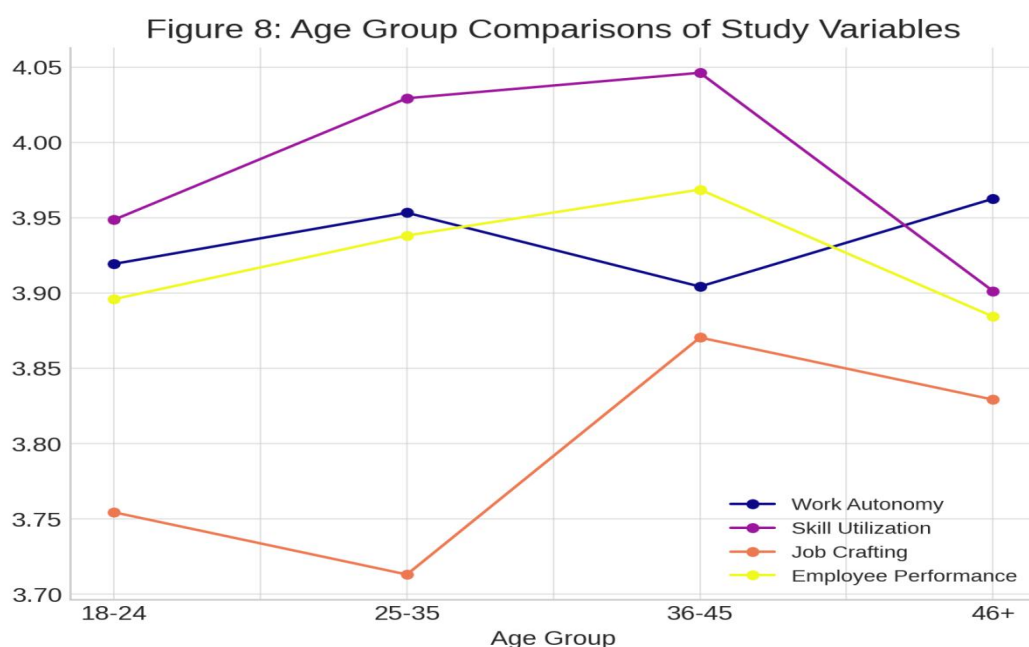


Figure 8 presents the trends using a line chart to bring out age-related variations on the four variables. The figure indicates a well-known rising pattern of during the middle career (25-45 years) and then a slight downward trend of mature workers.

In general, the findings are robust to support that work autonomy and skill utilization have positive effects on the performance of employees, which becomes very pronounced with job crafting. The results hold across all demographic subgroups, industries, and age groups with IT employees and mid-career professionals most likely to use autonomy, skills, and engaging in crafting practices. Tables and figures have allowed to give empirical validity to summing up the central hypothesis of the present study: job crafting mediates the connection between job resources and the performance of employees in the context of dynamic working conditions.

DISCUSSION

This research paper was aimed at exploring the mediating effect of job crafting between work autonomy and utilization of the skills to employee performance in dynamic work environment. These results were highly supportive of the hypothesized model, showing that job crafting mediated the job resources-performance outcomes relationship in part. This adds to current knowledge as the study provides the evidence that proactive role redefinition by the employees is a primary role in the transformation of job resources into measurable increases of performance.

Work Autonomy and Performance in Dynamic Contexts

The findings demonstrate that job autonomy is directly correlated with the performance of workers and also indirectly has the same level of relationship with performance due to job crafting. This result echoes the previous study that points out that autonomy is a key to the intrinsic motivation, creativity and adaptability (Saragih, 2011; Joo et al., 2010). In a dynamic environment where there is a lot of uncertainty, autonomy enables the employees to make flexible decisions and act accordingly in response to situational needs. To illustrate, Humphreys et al. (2010) asserted that autonomy is especially critical in knowledge-intensive occupations where workers have to keep on coming up with new things in order to sustain performance. In the same respect, the study by Parker et al. (2014) demonstrates that autonomy contributes to proactive problem-solving that allows workers to make items correspond to organizational goals, which rapidly changed. The present research contributes to this literature by showing that autonomy is not sufficient in explaining performance outcomes-instead, its impact is magnified in cooperation with job crafting behaviors employed by the employees.

Skill Utilization as a Performance Enabler

Engagement into the usage of skills also proved to be an important indicator of performance as other studies indicate that employees who have the capabilities of applying and extending their competencies are more engaged and effective (Van der Heijden et al., 2009; Holman & Rafferty, 2010). The dynamic context of a company offers opportunities that force employees to adjust their skills in response to any changes in the task requirement, thus increasing the adaptability and efficiency of the employees. This is consistent with the research by Cavanagh and Kraiger (2017), in which the aptitude of deployment increases self-efficacy, thus, promoting performance. Moreover, psychological empowerment and job satisfaction are closely related to the utilization of the skills since employees find their roles meaningful and in agreement with their development (Peterson et al., 2011; Silla et al., 2010). The observations of this research affirm this point of view, stating that institutions aiming at enhancing its performance on

volatile environments should focus on providing opportunities through which employees exploit and improve on their skills.

Job Crafting as a Mediator

The main contribution in this paper is that it helped to introduce job crafting as the mediator between job resources and performance. The findings are in line with the expanding body of work highlighting job crafting as one form of proactive engagement in which employees tailor their positions with regard to their strengths and environmental needs (Berg et al., 2010; Chen et al., 2014). The results indicating that a part of what autonomy and utilization of skills contribute to performance involves job crafting imply that the resources create the conditions through which job crafting emerges but it is the activities through job crafting that convert these conditions into performance. This is concurred by Kira et al. (2010) who have argued that proactive role redefinition enables the employees to become better able to handle the job demands hence maintaining productivity.

Theoretically, this can be explained using the Job Demands Resources (JD-R) model that gives an idea that job resources enhance motivation and performance (Schaufeli & Taris, 2014). The introduced variables of autonomy and skill employment are treated as a resource; however, their effect is mediated by job crafting, which provides a motivational route. Moreover, Self-Determination Theory (SDT) (Deci & Vansteenkiste, 2004) gives us more light: the autonomy will meet the need of self-direction and the skill utilization will meet the need of competence. Job crafting enables employees to incorporate these needs into their own role enrichment to maximize intrinsic motivation and their performance.

Performance in Dynamic Work Settings

In dynamic environments, efficient performance by employees necessitates a space beyond efficiency and effectiveness on tasks by employees, to include adaptivity, resilience and innovation (Griffin et al., 2007; Pulakos et al., 2002). This study finds that job crafting has a direct positive impact on performance and this result aligns with those of Vogt and colleagues (2016), who have revealed that proactive work redesign has adaptive effects on performance in uncertain settings. Likewise, Niessen et al. (2013) revealed that job crafting behaviors enhance the employee coping capacity with regard to changes that occur in the organization, which maintains the performance outcomes. The current paper reinforces that claim by providing empirical evidence that crafting mediates the relationship between autonomy and skill use, providing a mechanism through which adaptability can occur in very fast-paced industries.

Practical Implications for Organizations

The implications are important to practice in the organization. Managers are expected to understand that autonomy, as well as the use of skills, alone will not help. Not making efforts to facilitate job crafting behavior will mean that these resources may go underutilized. Interventions and training programs that promote active role design by employees have the potential of improving the process of converting resources into performance (Wrzesniewski et al., 2013). Specifically, Leana et al. (2015) stated that job crafting workshops enhance job shaping abilities of employees and thus result in greater engagement and productivity. In addition, organizations can incorporate job crafting in the performance management framework where employees are allowed to establish personal role objectives and reflect on their active contribution.

Limitation and Future Research

Although the current study is a valuable source of information, certain limitations should be mentioned. To begin with, the cross-sectional study design limits causal-inference. Prospective research investigations would be crucial in establishing the time order between the resources, job crafting, and performance (Tims et al., 2016). Second, the investigation was based on self-reporting data, which can be endangered by a response bias. One potential improvement in the future research would include the multi-sources data, including the assessment of the performance by the supervisor. Also, the study was conducted in Pakistan on the employees there, whereas cultural and contextual factors can pose impact on autonomy, skill utilization and job crafting. Cross-cultural research may give us a larger picture of these relations. Last but not least, future studies can also explore other mediators that can interact with job crafting to influence on performance behaviors (Xanthopoulou et al., 2009).

REFERENCES

- Bakker, A. B., & Demerouti, E. (2017). Job Demands–Resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285.
- Bakker, A. B., & Demerouti, E. (2014). Job demands–resources theory. *Wellbeing: A complete reference guide*, 1–28.
- Bakker, A. B., Ficapal-Cusí, P., Torrent-Sellens, J., Boada-Grau, J., & Hontangas, P. M. (2020). The Spanish version of the Job Crafting Scale. *International Journal of Environmental Research and Public Health*, 17(11), 3963.
- Deci, E. L., & Ryan, R. M. (2000). Self-determination theory and the facilitation of intrinsic motivation. *American Psychologist*, 55(1), 68–78.
- Demerouti, E. (2014). Design your own job through job crafting. *European Psychologist*, 19(4), 237–247.
- Grant, A. M., & Parker, S. K. (2009). Redesigning work design theories. *Academy of Management Annals*, 3(1), 317–375.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Addison-Wesley.
- Holman, D., & Wall, T. D. (2002). Work characteristics, learning-related outcomes, and strain. *Journal of Occupational Health Psychology*, 7(3), 242–258.
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features. *Journal of Applied Psychology*, 92(5), 1332–1356.
- Karasek, R. A. (1998). Demand-control model: An update. *Social Science & Medicine*, 46(10), 1440–1455.
- Kim, H., Im, J., & Qu, H. (2018). Exploring antecedents and consequences of job crafting. *International Journal of Hospitality Management*, 75, 18–26.

- Leana, C., Appelbaum, E., & Shevchuk, I. (2009). Work process and quality of care in nursing homes. *Work and Occupations*, 36(3), 324–356.
- Lichtenthaler, P. W., & Fischbach, A. (2019). Job crafting and burnout. *Journal of Vocational Behavior*, 110, 102–115.
- Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ). *Journal of Applied Psychology*, 91(6), 1321–1339.
- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 827–856.
- 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.
- Berg, J. M., Wrzesniewski, A., & Dutton, J. E. (2013). Job crafting and meaningful work. In *Purpose and meaning in the workplace* (pp. 81–104). American Psychological Association.
- Bindl, U. K., Unsworth, K. L., Gibson, C. B., & Stride, C. B. (2019). Job crafting revisited: Implications for work design research and practice. *Journal of Applied Psychology*, 104(5), 605–620.
- Bruning, P. F., & Campion, M. A. (2018). A role–resource approach–avoidance model of job crafting. *Academy of Management Review*, 43(3), 377–402.
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50(2), 327–347.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work*. John Wiley & Sons.
- Hobfoll, S. E., Halbesleben, J., Neveu, J. P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103–128.
- Kooij, D. T., Tims, M., & Akkermans, J. (2017). The influence of future time perspective on work engagement and job crafting. *European Journal of Work and Organizational Psychology*, 26(1), 4–15.
- Langfred, C. W., & Rockmann, K. W. (2016). The push and pull of autonomy: The tension between individual autonomy and organizational control in knowledge work. *Group & Organization Management*, 41(5), 629–657.
- Lopes, H., Lagoa, S., & Calapez, T. (2017). Work autonomy, work pressure, and job satisfaction. *International Journal of Manpower*, 38(4), 697–714.
- Maynard, M. T., Gilson, L. L., & Mathieu, J. E. (2012). Empowerment—Fad or fab? *Academy of Management Perspectives*, 26(2), 100–110.

- Niessen, C., Weseler, D., & Kostova, P. (2016). When and why do individuals craft their jobs? *Journal of Vocational Behavior*, 92, 142–157.
- Oldham, G. R., & Fried, Y. (2016). Job design research and theory: Past, present and future. *Organizational Behavior and Human Decision Processes*, 136, 20–35.
- Parker, S. K., Morgeson, F. P., & Johns, G. (2017). One hundred years of work design research. *Journal of Applied Psychology*, 102(3), 403–420.
- Petrou, P., Demerouti, E., & Schaufeli, W. B. (2017). Crafting the change: The role of employee job crafting behaviors for successful organizational change. *Journal of Management*, 43(5), 1766–1792.
- Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85(4), 612–624.
- Rudolph, C. W., & Zacher, H. (2020). Job crafting research: A review and agenda for the future. *Academy of Management Annals*, 14(1), 366–410.
- Shin, D., & Konrad, A. M. (2017). Causality between high-performance work systems and organizational performance. *Journal of Management*, 43(4), 973–997.
- Sousa-Poza, A., & Sousa-Poza, A. A. (2000). Well-being at work: A cross-national analysis of the levels and determinants of job satisfaction. *Journal of Socio-Economics*, 29(6), 517–538.
- Wang, H. J., Demerouti, E., & Le Blanc, P. (2017). Transformational leadership, adaptability, and job crafting. *Journal of Vocational Behavior*, 100, 185–195.
- Yalabik, Z. Y., Popaitoon, P., Chowne, J. A., & Rayton, B. A. (2013). Work engagement as a mediator. *International Journal of Human Resource Management*, 24(14), 2799–2823.
- Zhang, F., & Li, Y. (2020). Job crafting and turnover intention: The mediating role of work engagement. *Journal of Vocational Behavior*, 119, 103411.
- Zhang, F., & Parker, S. K. (2019). Reorienting job crafting research: A hierarchical structure of job crafting concepts. *Academy of Management Annals*, 13(2), 479–508.
- Strauss, K., & Parker, S. K. (2015). Intervening to enhance proactivity in organizations. *International Journal of Human Resource Management*, 26(1), 51–69.
- Slemp, G. R., & Vella-Brodrick, D. A. (2013). The Job Crafting Questionnaire. *Journal of Vocational Behavior*, 83(3), 318–331.
- Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2010). What is job crafting and why does it matter? *Center for Positive Organizational Scholarship White Paper*.
- Cavanagh, T. M., & Kraiger, K. (2017). How training affects skill utilization: The role of perceived organizational support. *Human Resource Development Quarterly*, 28(3), 255–280.

- Chen, C. C., Yen, C. H., & Tsai, F. C. (2014). Job crafting and job engagement: The mediating role of person-job fit. *International Journal of Hospitality Management*, 37, 21–28.
- Deci, E. L., & Vansteenkiste, M. (2004). Self-determination theory and basic need satisfaction. *Handbook of Self-determination Research*, 85–107.
- Griffin, M. A., Parker, S. K., & Mason, C. M. (2007). Leader vision and the development of adaptive and proactive performance. *Journal of Applied Psychology*, 92(6), 1444–1453.
- Humphreys, M., Ucbasaran, D., & Lockett, A. (2010). Autonomy and adaptability in knowledge work. *Journal of Management Studies*, 47(7), 1435–1457.
- Joo, B. K., Hahn, H. J., & Peterson, S. L. (2010). Turnover intention: The effects of core self-evaluations, job satisfaction, and job stress. *Human Resource Development International*, 13(3), 273–290.
- Kira, M., Balkin, D. B., & San, E. (2010). Crafting sustainable work: Development of personal resources. *Journal of Organizational Change Management*, 23(5), 616–632.
- Leana, C., Appelbaum, E., & Shevchuk, I. (2015). Work process redesign and job crafting. *Academy of Management Proceedings*, 2015(1), 13537.
- Niessen, C., Sonnentag, S., & Sach, F. (2013). Thriving at work—A diary study. *Journal of Organizational Behavior*, 34(4), 468–487.
- Peterson, N. G., Mumford, M. D., Borman, W. C., Jeanneret, P. R., & Fleishman, E. A. (2011). Understanding work using the O*NET Content Model. *Personnel Psychology*, 54(2), 451–492.
- Pulakos, E. D., Schmitt, N., Dorsey, D. W., Arad, S., Borman, W. C., & Hedge, J. W. (2002). Predicting adaptive performance. *Journal of Applied Psychology*, 87(4), 612–624.
- Saragih, S. (2011). The effects of job autonomy on work outcomes. *International Research Journal of Business Studies*, 4(3), 201–215.
- Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the Job Demands–Resources model. *Psychologica Belgica*, 54(4), 107–128.
- Silla, I., Gracia, F. J., & Peiró, J. M. (2010). Job insecurity and employees' attitudes: The moderating role of fairness. *European Journal of Work and Organizational Psychology*, 19(4), 464–480.
- Van der Heijden, B. I., Gorgievski, M. J., & De Lange, A. H. (2009). Learning at the workplace and sustainable employability. *Journal of Workplace Learning*, 21(7), 467–480.
- Vogt, K., Hakanen, J. J., Brauchli, R., Jenny, G. J., & Bauer, G. F. (2016). The consequences of job crafting: A three-wave study. *European Journal of Work and Organizational Psychology*, 25(3), 353–362.
- Wrzesniewski, A., LoBuglio, N., Dutton, J. E., & Berg, J. M. (2013). Job crafting and cultivating positive meaning and identity in work. *Advances in Positive Organizational Psychology*, 1, 281–302.

- 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.
- Van der Heijden, B. I., de Lange, A. H., Demerouti, E., & van der Heijde, C. M. (2009). Age effects on skill utilization and development. *International Journal of Human Resource Management*, 20(10), 2020–2038.