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ARTICLE

A study on the effects of task diversity and skill diversity on burnout and turnover intention:
Blue-collar workers in the forest products and furniture industries in Türkiye

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#### **Abstract**

**Purpose** – The present study aims to determine the effects of task diversity and skill diversity on burnout and turnover intention.

**Theoretical framework** – This section describes task diversity, skill diversity, burnout, and turnover intention, and presents the relationships between these variables and the research hypotheses.

**Design/methodology/approach** – Using a cross-sectional research design, data were collected from 200 blue-collar workers in various businesses in the forest products and furniture industries in Türkiye. The data were gathered using the Task Diversity Scale introduced by Nimon and Zigarmi (2015), the Skill Diversity Scale introduced by Eyi (2010), the Burnout Scale introduced by Kristensen et al. (2005), and the Turnover Intention Scale developed by Mobley et al. (1978).

**Findings** – The present study revealed negative and significant relationships between task diversity and burnout, as well as turnover intention (r = -0.288; r = -0.216, respectively). Additionally, negative and significant relationships were found between skill diversity and burnout, as well as turnover intention (r = -0.348; r = -0.167, respectively).

**Practical & social implications of research** – The results emphasize the importance of task and skill diversity in organizations in reducing employee burnout and turnover intention.

**Originality/value** – The research was conducted in Turkish forest products and furniture sectors. By examining the possible protective effects of task and skill diversity in this sectoral context, it provides important insights into how diversity can be used to reduce employee burnout and turnover intention. In this respect, the study aims to both fill a gap in the literature and provide practical implications for managers in the relevant sectors.

Keywords: Task diversity, skill diversity, burnout, turnover intention.

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#### 1 Introduction

In the contemporary business environment, which is characterized by fierce competition, retaining employees is of paramount importance to the viability of businesses. However, increased workloads and repetitive tasks can deplete employees' psychological resources, leading to burnout and turnover intentions (Maslach & Leiter, 2016; Schaufeli et al., 2009). Increased burnout and turnover intention has been shown to result in high staff turnover rates and associated costs within organizations (Bakker et al., 2004). Therefore, developing strategies to alleviate burnout and turnover intention is crucial for organizational sustainability. In this context, it is imperative to understand how factors influencing an individual's work experience, particularly those associated with job design, impact employees' levels of burnout and turnover intentions.

In the field of job design, task variety and skill variety are two fundamental elements that have been the subject of numerous studies. These elements have been shown to enhance employees' psychological well-being by increasing their engagement and sense of meaningfulness (Morgeson & Humphrey, 2006). The concept of task variety refers to the diverse range of functions and responsibilities an employee undertakes during the course of their workday. In contrast, skill variety refers to the extent to which an individual employs multiple competencies or knowledge domains to carry out their job responsibilities (Hackman & Oldham, 1976). These aspects of the job reduce monotony and increase meaningfulness by providing cognitive and emotional challenges (Humphrey et al., 2007). The existing literature suggests that this variety helps individuals achieve psychological satisfaction from their jobs and can reduce burnout levels (Bakker & Demerouti, 2007; Crawford et al., 2010).

According to the Job Demands-Resources (JD-R) Model, employees' propensity for burnout and inclination to seek alternative employment are contingent on the disparity between job demands and job resources (Demerouti et al., 2001). Task and skill diversity are considered to be "job resources," and having these resources has been shown to play a role in preventing burnout and turnover intention by offsetting the negative effects of job demands. A review of the literature shows that turnover intention decreases with reduced job stress and monotony (Ning et al., 2023). Job rotation, enrichment, and enlargement have been suggested as being beneficial in reducing monotony (Ardıç & Polatcı, 2008). A previous study carried out by

Baykal and Koçak (2018), which aimed to determine the effects of skill diversity and autonomy on job satisfaction and turnover intention, reported that turnover intention is affected by skill diversity and autonomy. Thus, the present study was designed to identify the effects of perceived task and skill diversity on burnout and turnover intention among blue-collar workers employed in different companies within the forestry and furniture industries.

This study aims to analyze the effects of task and skill diversity on burnout and turnover intention based on the JD-R Model and Self-Efficacy Theory. As can be seen in the existing literature, the relationships between task and skill diversity and burnout and turnover intention are generally analyzed separately. Studies on blue-collar employees, in particular, are quite limited. In this context, the originality of this study emerges at two levels. First, it examined the effects of task and skill diversity on both burnout and turnover intention in the same model.

Second, the study was conducted with blue-collar workers in the forestry and furniture industries in Türkiye. These sectors are physically demanding, have limited job security, and provide few job enrichment opportunities. Repetitive work structures and limited skill use increase the risk of burnout for employees. Therefore, examining the effects of job design elements, such as task and skill diversity, on these groups not only fills a sectoral gap in the literature, but also offers important implications for employers and human resources practitioners. In conclusion, this study aims to contribute to the literature both theoretically and practically by testing the relationships between task and skill diversity, burnout, and turnover intention using an original sample within an explanatory theoretical framework.

# 2 Conceptual framework

This section describes task diversity, skill diversity, burnout, and turnover intention, as well as the relationships between these variables and the research hypotheses.

# 2.1 Task diversity

Task diversity in the workplace has become a growing focus of importance for organizations. As studies increasingly reveal the benefits of diverse tasks, companies are motivated to make diversity efforts a priority (Pemberton & Kisamore, 2023). Task diversity refers to the extent to which employees can perform a wide range of tasks. It refers to the differences in the number and

quality of tasks performed by employees in their daily workflows (Morgeson & Humphrey, 2006). It signifies the use of different skills and diversity in job content. It offers significant opportunities to utilize various skills (Morf et al., 2017). It encourages individuals to perform different tasks and utilize diverse abilities (Hackman & Oldham, 1976). This diversity can reduce job monotony and enhance motivation and commitment. In their study, Choi et al. (2013) found that the importance and autonomy of the task have a negative effect on turnover intention. They concluded that task design and organizational support prevent turnover intention among employees.

# 2.2 Skill diversity

Skill diversity is an informational characteristic of a job that indicates the extent to which a wide range of skills is required to complete it. The main purpose of skill diversity is to increase responsibility, multitasking, innovation, and input (Van Veldhoven et al., 2020). Skill diversity contributes to employees experiencing higher levels of expertise. It is believed that skill diversity can provide opportunities for employees who find their jobs less interesting to use different skills, which positively influences their continuance in the job (Zaniboni et al., 2013). Working in a job with high skill diversity facilitates personal development. Jobs that facilitate personal development are perceived as more meaningful. Performing such tasks motivates individuals, making the relevant job enjoyable (Li et al., 2020). Skill diversity encompasses the knowledge and skills individuals acquire through job rotation and organizational training programs. In job rotation, individuals perform different tasks, encounter various challenges, and gain diverse job experiences. Organizational training programs enable individuals to develop both knowledge and technical skills, as well as generate innovative ideas according to job requirements (Chen et al., 2011).

#### 2.3 Burnout

Burnout is defined as feeling unsuccessful and worn out. It manifests through various symptoms that vary from person to person in terms of type and severity (Freudenberger, 1974). These symptoms are categorized into three groups: physical, emotional, and mental. Physical symptoms include sleeplessness, low energy, fatigue, frequent colds, unexplained headaches, general body aches, and weight loss. Emotional symptoms include

emotional exhaustion, a quick temper, occasional cognitive difficulties, anxiety, restlessness, impatience, feelings of worthlessness, indecisiveness, helplessness, and feeling trapped. Mental symptoms include negative attitudes toward oneself, one's job, and life in general. Consequently, behaviors such as quitting or procrastinating at work are observed in individuals (Demir, 2009). Burnout is a concept with three sub-dimensions: emotional exhaustion, desensitization, and reduced personal accomplishment. Burnout significantly affects individuals and organizations. Organizations' failure to consider the human aspects of work and their excessive demands on employees lead to burnout. Burnout is a process, not a situation that occurs overnight (Ar1 & Bal, 2008).

### 2.4 Turnover intention

Turnover intention, which is considered a direct antecedent of actual turnover, has been an important variable in the organizational behavior literature for many years. Turnover intention is defined as the conscious willingness of employees to actively seek alternative job opportunities in other organizations (Akın, 2019). The transformation of turnover intention into actual turnover is a process influenced by many factors. It includes considering leaving the job, initiating a job search, evaluating alternative opportunities, and deciding whether to stay or leave (Seyrek & İnal, 2017). Studies have reported that employees with higher levels of gratitude and trust toward their organization and who receive greater organizational support have lower turnover intentions (Treglown et al., 2018). The quality of work and all its dimensions are determinants of turnover intention (Ertürk, 2022). Employees' tendency to leave their jobs is affected not only by personal factors but also by factors such as job design (task/skill diversity, autonomy, feedback).

# 2.5 Relationships between task diversity, skill diversity, burnout, and turnover intention

According to the Job Demands-Resources (JD-R) theory, having a diversity of tasks and skills has a beneficial effect on employees' psychological well-being. This counteracts the negative effects of high job demands in the workplace (Rattrie et al., 2020). According to the JD-R model, task diversity can mitigate the negative impact of job demands by providing employees with psychological resources (Demerouti et al., 2001). Using more than

one skill in one's job makes the job feel more personal and valuable (Hackman & Oldham, 1976). According to the JD-R model, skill diversity can prevent negative outcomes, such as stress and burnout, as it is a meaningful and motivating element of work for employees (Bakker & Demerouti, 2007). Morgeson and Humphrey (2006) stated that task diversity forms meaningful work experiences, increasing motivation and reducing burnout. Task diversity reduces work monotony, making work more attractive and contributing to employees' continuous engagement (Van Veldhoven et al., 2020). Varied tasks help decrease burnout levels by preventing monotony and enhancing employees' commitment to their work (Kristof-Brown et al., 2005). Roles that offer job richness provide employees with mental variety, supporting not only their cognitive but also their emotional energy. This reduces burnout and allows individuals to maintain interest in their work (Bakker et al., 2023). While repetitive tasks mentally tire employees and cause a loss of meaning, diverse tasks can reduce burnout by providing the opportunity to see the whole picture. Based on theory and empirical research, the following hypotheses were formulated.

H<sub>1</sub>. Task diversity negatively affects employees' burnout levels.

H<sub>2</sub>. Skill diversity negatively affects employees' burnout levels.

Although many factors play a role in the development of turnover intention, job characteristics stand out as a determining factor in shaping it. Akın (2019) noted the effect of job characteristics on job dedication and its significant impact on turnover intention. According to the self-efficacy theory (Bandura, 1997), the ability to use one's skills increases the perception of competence, which

in turn supports the tendency to stay at work. When the job is compatible with the individual's competencies, the employee is more commitment to the job and less likely to leave (Parker et al., 2001). Zaniboni et al. (2013) found that increased skill diversity results in lower turnover intentions among older employees than among younger ones. A meta-analysis by Humphrey et al. (2007) found that tasks in which employees can use different skills reduce turnover intentions. Similarly, Harrison et al. (2006) emphasized that diverse tasks and skills can increase employees' interest and commitment to their work. Task diversity increases employees' commitment to their jobs and ensures they remain in the job (Kristof-Brown et al., 2005). Other studies have also shown that improving job characteristics can reduce undesirable consequences such as turnover (Karsh et al., 2005; Slattery et al., 2010). In particular, monotonous and repetitive tasks may cause employees to become alienated from their jobs and consider leaving more quickly (Schaufeli & Bakker, 2004). In light of these theoretical and empirical findings, the following hypotheses are proposed:

H<sub>3</sub>. Task diversity negatively affects employees' turnover intention.

H<sub>4</sub>. Skill diversity negatively affects employees' turnover intention.

Figure 1 shows the research model developed based on the theoretical approaches and empirical findings in the literature.

# 3. Research methodology

This study employs a cross-sectional research design within a quantitative framework to collect and

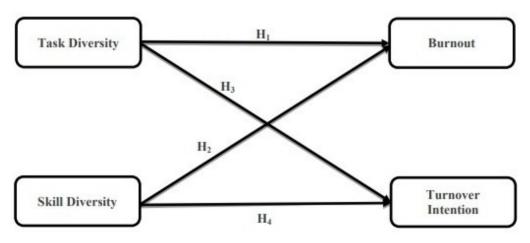


Figure 1. Study model

analyze data at a specific point in time. The data analysis was conducted using the SPSS Statistics 23 and Amos 22 software packages. The research model includes exploratory and confirmatory factor analysis, reliability analysis results, descriptive statistics related to scales, correlation analysis to determine relationships between variables, and regression analysis to test research hypotheses.

### 3.1 Population and sample

The population of this study consists of blue-collar workers employed in various enterprises in the forest products and furniture industry in Kastamonu Province, Türkiye. The forest products and furniture sector is a strategic area of the Turkish economy in terms of both employment and exports. It is notable for its labor-intensive structures (Union of Chambers and Commodity Exchanges of Türkiye, 2023). Kastamonu is one of the leading provinces in the Black Sea Region in the production of forest products and furniture, and the region's production-oriented work structure increases the density of the blue-collar workforce. The forest products sector transforms primary and secondary forest products into semi-finished or finished goods. It is a sector that primarily employs blue-collar workers. It comprises a significant portion of the workforce in Türkiye (Yıldırım et al., 2018). The blue-collar employee group generally works in jobs defined by monotonous tasks based on narrow skill sets, which can lead to negative outcomes such as burnout and quitting (Schaufeli & Taris, 2014). For example, task diversity among blue-collar workers in the forest products and furniture sector may entail activities such as operating different machines on the production line, assembling various product types, or performing quality control. Examining the effect of task and skill diversity on burnout and intention to quit specifically for blue-collar employees addresses a gap in the literature that receives limited attention.

The research was conducted using a convenience sampling method. This method was chosen based on field access, production shifts, and company permit procedures. The method was preferred because it allows for rapid data collection, which is especially advantageous in field research (Etikan et al., 2016). After obtaining ethics committee approval and the necessary institutional permits, 200 volunteers were recruited to participate in the study. Table 1 shows the distribution of participants' demographic characteristics.

### 3.2 Data collection tool

The survey technique was used for the data collection in this study (Supplementary Data 1- Database). The validity and reliability of the scales were tested, and scales already adapted to Turkish were used. The first section of the survey includes five items to determine the participants' demographics, and the second section includes 16 items to determine their opinions regarding the research variables (Supplementary Data 2- Appendix A). A five-point

Table 1 **Distribution of Participants' Demographic Characteristics** 

| Demographic variable       | Group              | Frequency | Percentage |  |
|----------------------------|--------------------|-----------|------------|--|
| Sex                        | Male               | 152       | 76.0       |  |
|                            | Female             | 48        | 24.0       |  |
|                            | 20-29              | 26        | 13.0       |  |
| Λ                          | 30-39              | 44        | 22.0       |  |
| Age group                  | 40-49              | 118       | 59.0       |  |
|                            | Ages 50 and above  | 12        | 6.0        |  |
| Marital status             | Married            | 166       | 83.0       |  |
|                            | Single             | 34        | 17.0       |  |
|                            | Elementary school  | 122       | 61.0       |  |
| Educational level          | High school        | 54        | 27.0       |  |
| Educational level          | Associate's degree | 6         | 3.0        |  |
|                            | Undergraduate      | 18        | 9.0        |  |
|                            | 0-5                | 58        | 29.0       |  |
|                            | 6-10               | 106       | 53.0       |  |
| Vorking experience (years) | 11-15              | 18        | 9.0        |  |
|                            | 16-20              | 16        | 8.0        |  |
|                            | More than 20 years | 2         | 1.0        |  |

Likert scale was used for the survey (1 = strongly disagree, 5 = strongly agree).

To measure task diversity, three statements from the sub-dimensions of the Work Cognition Inventory developed by Nimon and Zigarmi (2015) and tested and validated in Turkish by Müceldili et al. (2021) were used. Examples of these statements include "My job involves more than routine tasks" and "I need to make multifaceted decisions in my job." The reliability coefficient for these three statements was 0.826.

A four-item scale developed by Eyi (2010) was used to measure skill diversity. The scale includes statements such as "My job allows me to utilize various skills" and "My job requires me to acquire new skills." The reliability analysis yielded an alpha coefficient of 0.878.

Seven statements related to professional burnout from the sub-dimensions of the Burnout Scale, introduced by Kristensen et al. (2005) and validated by Bakoğlu et al. (2009) in the Turkish literature, were used to measure burnout levels. Examples of these statements include "I feel exhausted because of my job" and "My job exhausts me emotionally." The reliability coefficient for these seven statements was 0.895.

The Intention to Leave Scale, consisting of a single dimension and three statements introduced by Mobley et al. (1978), was used to measure turnover intention. It was adapted to Turkish by Örücü and Özafşarlıoğlu (2013). Statements such as "I often think about quitting my current job" and "I actively search for jobs in other companies" were included. The Cronbach's alpha coefficient for the scale was 0.904.

# 4. Results

This section of the study presents exploratory and confirmatory factor analysis results regarding the scales, as well as descriptive statistics related to the scales. Correlation analysis was conducted to determine the relationships between variables, and regression analysis was conducted to test the research hypotheses.

# 4.1 Exploratory factor analysis results

The Kaiser-Meyer-Olkin (KMO) test and Bartlett's sphericity test are prerequisites for factor analysis. These tests assess the suitability of the preconditioned data matrix for factor analysis. The KMO value is expected to be higher than 60%, Bartlett's sphericity test is expected to be significant at the 95% confidence interval, the factor eigenvalues are expected to be higher than 1, and the factor loadings are expected to be higher than 0.50 (Hair et al., 2010). The principal components method was employed in the factor analysis of the measurement tools used in this study, and items with factor loadings higher than 0.50 and factors with eigenvalues higher than 1 were considered. Table 2 presents the results of the exploratory factor analysis.

Item 4 of the burnout scale, "I have sufficient energy for my family and friends in my leisure time," was excluded from the initial analysis since its factor loading was lower than 0.50. Factor analysis was then repeated without this item. The second analysis yielded a unidimensional, six-item final form of the scale. Examining the results of the exploratory factor analysis for the scales, it was determined that the Kaiser-Meyer-Olkin (KMO) measure was higher than 0.60 for all scales, the chi-square value was high, Bartlett's test was significant, and the item factor loadings were higher than 0.5.

# 4.2 Confirmatory factor analysis results

The confirmatory factor analysis results for the scales are presented in Table 3.

A confirmatory factor analysis was conducted to determine validity. Considering the results of the confirmatory factor analysis for the scales used in the present study, it was found that the model fit indices were at a good level. Therefore, it was concluded that the scales used in this study were valid and reliable.

Table 2 **Exploratory Factor Analysis Results** 

| Variables                    | Task Diversity | Skill Diversity | Burnout | <b>Turnover Intention</b> |
|------------------------------|----------------|-----------------|---------|---------------------------|
| Factor loading range         | .802924        | 754-910         | 639-871 | 877-936                   |
| Eigenvalue                   | 2.243          | 2.938           | 3.987   | 2.517                     |
| Explained variance (%)       | 74.774         | 73.456          | 66.445  | 83.916                    |
| Kaiser-Meyer-Olkin criterion | .650           | .764            | .875    | .727                      |
| Bartlett test                | 259.353        | 475.595         | 711.624 | 408.950                   |
| Sig.                         | .000           | .000            | .000    | .000                      |

# 4.3 Descriptive statistics for variables

The degree of relationship between the variables used in this study and their respective standard deviation, mean, skewness, and kurtosis values are presented in Table 4.

The descriptive statistics values of the variables were examined using the skewness and kurtosis values to determine whether the scales met the normal distribution assumption. It was observed that the skewness and kurtosis values of the scales fell within the  $\pm 2$  range. Based on these results, it can be concluded that all of the scales used in this study met the normality assumption. Correlation analysis was used to examine the relationships between task diversity, skill diversity, burnout, and turnover intention. Significant negative relationships were found between task diversity and burnout (r = -0.288; p < 0.01) and turnover intention (r = -0.216; p < 0.01), as well as between skill diversity and burnout (r = -0.348; p < 0.01) and turnover intention (r = -0.167; p < 0.01).

# 4.4 Regression analysis results

Regression analysis was conducted to test the research hypotheses. The results are presented in Table 5.

According to the results of the regression analysis shown in Table 5, in Model 1, task diversity as an independent variable had a significant effect (p<0.05;

 $\beta$ = -0.300) on burnout as the dependent variable. In Model 2, task diversity as an independent variable significantly influenced (p<0.05;  $\beta$  = -0.255) turnover intention as the dependent variable. In Model 3, however, skill diversity as an independent variable was found to have a significant effect (p<0.05;  $\beta$  = -0.328) on burnout as the dependent variable. In Model 4, skill diversity as an independent variable significantly affected (p<0.05;  $\beta$  = -0.178) turnover intention as the dependent variable. Examining the ANOVA analysis results showing the significance and validity of the hypotheses reveals that the models established in line with the research objectives are valid and meaningful hypotheses since the t value is greater than ±1.96 in each model and the p value measuring the significance of the model is less than 0.05 for all hypotheses. Hypotheses H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub>, and H<sub>4</sub> were accepted based on the results obtained.

# 5. Discussion

This study examined the effects of task and skill diversity on employees' burnout levels and turnover intentions. The findings revealed that task and skill diversity had significant and negative effects on both dependent variables.

Table 3 **Confirmatory Factor Analysis Results** 

| Measures of Fit | Acceptable Fit  | Good Fit                         | Task<br>Diversity | Skill<br>Diversity | Burnout | Turnover |
|-----------------|---|----------------------------------|-------------------|--------------------|---------|----------|
| NFI             | .90 ≤ NFI ≤ .95   | .95 ≤ NFI ≤ 1                    | 1.000             | .996               | .981    | 1.000    |
| RMSEA           | 0.05 <rmsea≤0.08< td=""><td>0≤RMSEA≤0.05</td><td>.065</td><td>.071</td><td>.070</td><td>.082</td></rmsea≤0.08<> | 0≤RMSEA≤0.05                     | .065              | .071               | .070    | .082     |
| GFI             | $.90 \le \mathrm{GFI} \le .95$  | $.95 \le \mathrm{GFI} \le 1$     | 1.000             | .995               | .978    | 1.000    |
| AGFI            | $.85 \le AGFI \le .90$  | $.90 \leq \mathrm{AGFI} \leq 1$  | 1.000             | .950               | .933    | 1.000    |
| $X^2/df$        | $2 < \chi 2/\mathrm{df} \le 3$  | $0 \le \chi 2/\mathrm{d}f \le 2$ | .000              | 2.001              | 1.967   | .000     |
| CFI             | $.95 \le \mathrm{CFI} \le .97$  | $.97 \le \mathrm{CFI} \le 1$     | 1.000             | .998               | .990    | 1.000    |

Source: Çokluk et al. (2010). Multivariate statistics for social sciences: SPSS and L1SREL applications. Ankara: Pegem Academy

Table 4

Descriptive Statistics Results for Variables

| Model Variables    | N   | SD     | Skewness | Kurtosis | 1      | 2     | 3      | 4 |
|--------------------|-----|--------|----------|----------|--------|-------|--------|---|
| Task Diversity     | 200 | .84337 | -1.520   | 2.385    | 1      |       |        |   |
| Skill Diversity    | 200 | .93217 | -1.685   | 2.328    | .655** | 1     |        |   |
| Burnout            | 200 | .87744 | 1.608    | 2.255    | 288**  | 348** | 1      |   |
| Turnover Intention | 200 | .99590 | 1.804    | 2.864    | 216**  | 167** | .347** | 1 |

<sup>\*\*</sup>p<0.01, N=Sample, SD=Standard Deviation



Table 5 **Regression Analysis Results for Hypotheses** 

| Variables       | Beta  | t               | Sig.           | R             | $\mathbb{R}^2$ | F          | Sig.f | RESULT   |
|-----------------|-------|-----------------|----------------|---------------|----------------|------------|-------|----------|
|                 | Н     | 1. Task divers  | ity negatively | affects emplo | oyees' burno   | ut levels. |       |          |
| Constant        | 2.892 | 10.789          | .000           |               |                |            |       |          |
| Task diversity  | 300   | -4.239          | .000           |               |                |            |       |          |
|                 |       |                 |                | 288           | .083           | 17.968     | .000  | Accepted |
|                 | H2.   | Task diversity  | negatively a   | ffects employ | ees' turnovei  | intention. |       |          |
| Constant        | 2.729 | 8.794           | .000           |               |                |            |       |          |
| Task diversity  | 255   | -3.108          | .002           |               |                |            |       |          |
|                 |       |                 |                | 216           | .047           | 9.662      | .002  | Accepted |
|                 | H     | 3. Skill divers | ity negatively | affects emplo | oyees' burno   | ut levels. |       |          |
| Constant        | 3.143 | 11.800          | .000           |               |                |            |       |          |
| Skill diversity | 328   | -5.229          | .000           |               |                |            |       |          |
|                 |       |                 |                | 348           | .121           | 27.344     | .000  | Accepted |
|                 | H4.   | Skill diversity | negatively a   | ffects employ | ees' turnovei  | intention. |       |          |
| Constant        | 2.526 | 7.943           | .000           | <u> </u>      |                | <u></u>    |       |          |
| Skill diversity | 178   | -2.378          | .018           |               |                |            |       |          |
|                 |       |                 |                | 167           | .028           | 5.653      | .018  | Accepted |

The findings of the study demonstrated that task and skill diversity both have a negative effect on burnout, substantiating hypotheses  $H_1$  and  $H_2$ . The negative relationship between task and skill diversity and burnout aligns with the expectations of the Job Characteristics Model (Hackman & Oldham, 1976). The result obtained in the study is in line with other results in the literature (Bakker et al., 2023; Bakker & Demerouti, 2007; Kristof-Brown et al., 2005; Morgeson & Humphrey 2006; Van Veldhoven et al., 2020). In the context of the Job Demands-Resources (JD-R) Model, task and skill diversity function as "job resources" that play a protective role against burnout. It is important for managers to create work environments where employees can use their skills and take part in different tasks in order to prevent burnout.

When the other hypotheses of the study were tested, it was found that task and skill diversity both have a negative effect on turnover intention, and  $\rm H_3$  and  $\rm H_4$  were accepted. This finding is consistent with the Self-Efficacy Theory (Bandura, 1997), which posits that task and skill diversity decrease turnover intention. The result obtained in the present study is consistent with those reported in the relevant literature (Akin, 2019; Harrison et al., 2006; Humphrey et al., 2007; Karsh et al., 2005; Parker et al., 2001; Slattery et al., 2010; Zaniboni et al., 2013). Providing employees with an environment where they can use and develop their skills reduces their turnover intention.

### 6. Conclusion

This study is expected to make original contributions to the existing literature by empirically examining the effects of job design elements, such as task and skill diversity, on the burnout level and turnover intention of blue-collar employees. Analyses of blue-collar workers in the forest products and furniture industries as a sample showed that both types of diversity have significant and negative effects on burnout levels and turnover intentions. In addition, the limited number of such studies conducted in Türkiye and in sectors such as forest products indicates that this research fills an important gap at the regional and sectoral level. In conclusion, this study makes significant theoretical and practical contributions to the organizational behavior literature by applying job design theories to the manufacturing sector and blue-collar workers.

#### 6.1 Theoretical contributions

This study makes a significant contribution to the literature by examining the effects of task and skill diversity on employee burnout and turnover intention within the framework of job design theories. Specifically, the study focuses on blue-collar employees in the manufacturing sector. Unlike most studies, which limit these variables to white-collar employees and service sectors, this study focuses on blue-collar workers in the forest products and furniture industry. This provides an opportunity to test

the validity of theoretical approaches such as the Job Characteristics Model (Hackman & Oldham, 1976), Self-Efficacy Theory (Bandura, 1997), and the Job Demands-Resources Model (Demerouti et al., 2001), in different sectors and employee groups.

#### 6.2 Practical contributions

The findings of the study have important practical implications for human resources managers and operational leaders. First, task and skill diversity have been observed to effectively reduce employee burnout and turnover intention. In this context, it is recommended that tasks be systematically diversified in the production process, on-the-job training programs be organized to provide employees with new skills, and employee rotation be implemented. In addition, systems should be developed to increase the active participation of employees not only in the production output but also in the work process. For example, providing flexibility in job descriptions and giving employees authority in areas such as problem-solving and decision making will increase skill use and make employees feel more valued. Job rotation provides opportunities for employees to experience different tasks and roles, thereby increasing task diversity and elevating motivation. Rewarding employees who take on diverse and successful roles can encourage more reluctant employees to embrace diversity. Such practices can encourage long-term commitment by strengthening employees' sense of belonging to the organization, particularly among blue-collar workers.

# 6.3 Limitations and suggestions for future studies

The present study is subject to certain methodological limitations. First, it should be noted that the data were collected exclusively from blue-collar workers in the forest products and furniture sectors in Türkiye. Consequently, the generalizability of the results to other sectors and countries may be limited. Furthermore, the study used a convenience sampling method, which makes it impossible to guarantee the representativeness of the sample with respect to the population. Second, the cross-sectional design of the study precludes definitive judgments about the cause-and-effect nature of the relationships between variables. Future research can test the validity of the findings using larger, more representative samples. In addition, longitudinal designs could be used to monitor the effects over time, and more sophisticated models could be constructed using mediating variables (e.g., job

satisfaction, psychological empowerment) or moderating variables (e.g., leadership style, perception of organizational support). A comparative study of blue-collar and white-collar employees in different sectors could provide more detailed results on the effectiveness of job design practices.

#### References

Akın, Ö. (2019). Mediation role of work engagement on the impact of job characteristics on intention to leave. *Journal of Politics Economy and Management*, 2(2), 1-18.

Ardıç, K., & Polatcı, S. (2008). Emotional exhaustion: An application to academic personal (the case of Gazi Osman Pasa University). *Gazi University Faculty of Economics and Administrative Sciences Journal*, 10(2), 69-96.

Arı, G. S., & Bal, E. Ç. (2008). The concept of Burnout: Its importance for individuals and organizations. *Journal of Management and Economics*, 15(1), 131-148.

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. http://doi.org/10.1108/02683940710733115.

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job demands—resources theory: Ten years later. *Annual Review of Organizational Psychology and Organizational Behavior*, *10*(1), 25-53. http://doi.org/10.1146/annurevorgpsych-120920-053933.

Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83-104. http://doi.org/10.1002/hrm.20004.

Bakoğlu, R., Taştan Boz, İ., Yiğit, İ., & Yıldız, S. (2009). An alternative tool for the measurement of burnout: Adaptation of the Copenhagen burnout inventory on Marmara University academics. *I.U. Management Journal*, *20*(63), 77-98.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* W. H. Freeman.

Baykal, E., & Koçak, Ö. E. (2018). Effects of job characteristics on job satisfaction and intention to leave. *Journal of Management, Economics, Literature, Islamic and Political Sciences*, *3*(1), 90-109. http://doi.org/10.24013/jomelips.430641.



Chen, C. J., Shih, H. A., & Yeh, Y. C. (2011). Individual initiative, skill variety, and creativity: The moderating role of knowledge specificity and creative resources. *International Journal of Human Resource Management*, *22*(17), 3447-3461. http://doi.org/10.1080/09585192.2011.599940.

Choi, S. B., Jung, M. Y., & Moon, J. S. (2013). The impact of job characteristics on job stress: Moderating effects of relationship and task conflicts. *Journal of Human Resource Management Research*, 20, 193-213.

Çokluk, O., Şekercioğlu, G., & Büyüköztürk, S. (2010). Multivariate statistics for social sciences: SPSS and L1SREL applications. Pegem Academy

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *The Journal of Applied Psychology*, *95*(5), 834-848. http://doi.org/10.1037/a0019364. PMid:20836586.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *The Journal of Applied Psychology*, *86*(3), 499-512. http://doi.org/10.1037/0021-9010.86.3.499. PMid:11419809.

Demir, N. (2009). Relationship between burn-out and organizational commitment. *Oneri*, 8(32), 193-202. http://doi.org/10.14783/maruoneri.696194.

Ertürk, R. (2022). The effect of teachers' quality of work life on job satisfaction and turnover intentions. *International Journal of Contemporary Educational Research*, *9*(1), 191-203. http://doi.org/10.33200/ijcer.1022519.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical annd. Applied Statistics*, 5(1), 1-4.

Eyi, F. (2010). *Critical thinking as a mediator between job resources and goal achievement* [Master's thesis]. Marmara University Social Sciences Institute.

Freudenberger, H. J. (1974). Staff Burn-Out. *The Journal of Social Issues*, *30*(1), 159-165. http://doi.org/10.1111/j.1540-4560.1974.tb00706.x.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational* 

*Behavior and Human Performance*, *16*(2), 250-279. http://doi.org/10.1016/0030-5073(76)90016-7.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Pearson Education.

Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are the job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, 49(2), 305-325. http://doi.org/10.5465/amj.2006.20786077.

Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *The Journal of Applied Psychology*, *92*(5), 1332-1356. http://doi.org/10.1037/0021-9010.92.5.1332. PMid:17845089.

Karsh, B., Booske, B. C., & Sainfort, F. (2005). Job and organizational determinants of nursing home employee commitment, job satisfaction and intent to turnover. *Ergonomics*, 48(10), 1260-1281. http://doi.org/10.1080/00140130500197195. PMid:16253944.

Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work and Stress*, *19*(3), 192-207. http://doi.org/10.1080/02678370500297720.

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individual's fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2), 281-342. http://doi.org/10.1111/j.1744-6570.2005.00672.x.

Li, J., Sekiguchi, T., & Qi, J. (2020). When and why skill variety influences employee job crafting: Regulatory focus and social exchange perspectives. *Employee Relations*, 42(3), 662-680. http://doi.org/10.1108/ER-06-2019-0240.

Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry; Official Journal of the World Psychiatric Association (WPA)*, 15(2), 103-111. http://doi.org/10.1002/wps.20311. PMid:27265691.



Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *The Journal of Applied Psychology*, *63*(4), 408-414. http://doi.org/10.1037/0021-9010.63.4.408. PMid:701211.

Morf, M., Feierabend, A., & Staffelbach, B. (2017). Task variety and counterproductive work behavior. *Journal of Managerial Psychology*, *32*(8), 581-592. http://doi.org/10.1108/JMP-02-2017-0048.

Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *The Journal of Applied Psychology*, *91*(6), 1321-1339. http://doi.org/10.1037/0021-9010.91.6.1321. PMid:17100487.

Müceldili, B., Tatar, B., & Erdil, O. (2021). Work cognition inventory scale: A scale adaptation study. *Pamukkale University Social Sciences Institute Journal*, 46, 31-41.

Nimon, K., & Zigarmi, D. (2015). The Work Cognition Inventory: Initial evidence of construct validity for the revised form. *Journal of Career Assessment*, *23*(1), 117-136. http://doi.org/10.1177/1069072714523241.

Ning, L., Jia, H., Gao, S., Liu, M., Xu, J., Ge, S., Li, M., & Yu, X. (2023). The mediating role of job satisfaction and presenteeism on the relationship between job stress and turnover intention among primary health care workers. *International Journal for Equity in Health*, 22(1), 155. http://doi.org/10.1186/s12939-023-01971-x. PMid:37582742.

Örücü, E., & Özafşarlıoğlu, S. (2013). The influence of organizational justice on the turnover intention: A study in the republic of South Africa. *Mustafa Kemal University Social Sciences Institute Journal*, 10(23), 335-358.

Parker, S. K., Wall, T. D., & Cordery, J. L. (2001). Future work design research and practice: Towards an elaborated model of work design. *Journal of Occupational and Organizational Psychology*, 74(4), 413-440. http://doi.org/10.1348/096317901167460.

Pemberton, A., & Kisamore, J. (2023). Assessing burnout in diversity and inclusion professionals. *Equality, Diversity and Inclusion*, 42(1), 38-52. http://doi.org/10.1108/EDI-12-2020-0360.

Rattrie, L. T., Kittler, M. G., & Paul, K. I. (2020). Culture, burnout, and engagement: A meta-analysis on national cultural values as moderators in JD-R theory. *Applied Psychology*, *69*(1), 176-220. http://doi.org/10.1111/apps.12209.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, *25*(3), 293-315. http://doi.org/10.1002/job.248.

Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the job demands-resources model: Implications for improving work and health. In G. F. Bauer & O. Hämmig (Eds.), *Bridging occupational, organizational and public health: A transdisciplinary approach* (pp. 43-68). Springer Science + Business Media. http://doi.org/10.1007/978-94-007-5640-3\_4.

Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement and sickness absenteeism. *Journal of Organizational Behavior*, *30*(7), 893-917. http://doi.org/10.1002/job.595.

Seyrek, İ., & İnal, O. (2017). Factors related to turnover intention: A study of information technology employees. *DASED*, *I*(1), 43-62.

Slattery, J. P., Selvarajan, T. T., Anderson, J. E., & Sardessai, R. (2010). Relationship between job characteristics and attitudes: A study of temporary employees. *Journal of Applied Social Psychology*, 40(6), 1539-1565. http://doi.org/10.1111/j.1559-1816.2010.00628.x.

Treglown, L., Zivkov, K., Zarola, A., & Furnham, A. (2018). Intention to quit and the role of dark personality and perceived organizational support: A moderation and mediation model. *PLoS One*, *13*(3), e0195155. http://doi.org/10.1371/journal.pone.0195155. PMid:29596532.

Union of Chambers and Commodity Exchanges of Türkiye - TOBB. (2023). *Industry database*. TOBB. https://sanayi.tobb.org.tr/yeni\_kod\_liste61.php?kod=16

Van Veldhoven, M., Van den Broeck, A., Daniels, K., Bakker, A. B., Tavares, S. M., & Ogbonnaya, C. (2020). Challenging the universality of job resources: Why, when, and for whom are they beneficial? *Applied Psychology*, 69(1), 5-29. http://doi.org/10.1111/apps.12211.



Yıldırım, İ., Akyüz, K. C., Akyüz, İ., & Ersen, N. (2018). Investigation of the employer's perception for occupational health and safety in forest products industry sector. *Artvin Çoruh Üniversitesi Orman Fakültesi Dergisi*, *19*(2), 154-166. http://doi.org/10.17474/artvinofd.426441.

Zaniboni, S., Truxillo, D. M., & Fraccaroli, F. (2013). Differential effects of task variety and skill variety on burnout and turnover intentions for older and younger workers. *European Journal of Work and Organizational Psychology*, 22(3), 306-317. http://doi.org/10.1080/1359432X.2013.782288.

# Supplementary Material

Supplementary material accompanies this paper.

Supplementary Data 1 – Database

Supplementary Data 2 – Appendix A

Supplementary data to this article can be found online at https://doi.org/10.7910/DVN/QBUOHG



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