

Original Article

The relationship between occupational balance, perceived stress, and coping attitudes among university students

A relação entre equilíbrio ocupacional, estresse percebido e atitudes de enfrentamento entre estudantes universitários

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Abstract

Introduction: Occupational balance is a vital determinant of health and well-being, yet university students often experience significant imbalances due to academic, social, and developmental pressures. **Objectives:** This study aims to analyze the relationships between university students' occupational balance, perceived stress, sources of stress, stress reactions, and coping attitudes. **Method:** A cross-sectional study was conducted with 170 university students (aged 18–25). Data were collected using the Occupational Balance Questionnaire (OBQ11-T), Perceived Stress Scale (PSS-14), Student-life Stress Inventory-Revisited (SSI-R), and the Coping Attitudes Evaluation Scale-Revised (COPE-R). Statistical analyses included Spearman correlation and stepwise multiple linear regression to identify predictors of occupational balance. **Results:** Occupational balance was significantly negatively correlated with perceived stress ($r = -0.55$, $p < 0.001$) and SSI-R total scores. Adaptive coping strategies, such as approach and self-help, showed positive correlations with balance, while maladaptive strategies like avoidance and self-punishment were negatively associated. Regression analysis revealed that perceived stress was the strongest predictor, explaining 54% of the variance in occupational balance alongside socioeconomic factors and specific coping mechanisms. **Conclusion:** Reducing stress levels and fostering proactive coping attitudes are essential for achieving occupational balance. Occupational therapy interventions focusing on lifestyle management and stress reduction are recommended to enhance students' quality of life and academic success.

Keywords: Student; Stress, Psychological; Coping Skills; Activities of Daily Living.

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Resumo

Introdução: O equilíbrio ocupacional é um determinante vital da saúde e do bem-estar, contudo, estudantes universitários frequentemente vivenciam desequilíbrios significativos devido a pressões acadêmicas, sociais e de desenvolvimento. **Objetivos:** Este estudo visa analisar as relações entre o equilíbrio ocupacional de estudantes universitários, o estresse percebido, fontes de estresse, reações ao estresse e atitudes de enfrentamento. **Método:** Foi realizado um estudo transversal com 170 estudantes universitários (18-25 anos). Os dados foram coletados por meio do Questionário de Equilíbrio Ocupacional (OBQ11-T), Escala de Estresse Percebido (PSS-14), Inventário de Estresse da Vida Estudantil Revisado (SSI-R) e a Escala de Avaliação de Atitudes de Enfrentamento Revisada (COPE-R). As análises estatísticas incluíram a correlação de Spearman e regressão linear múltipla stepwise para identificar preditores do equilíbrio ocupacional. **Resultados:** O equilíbrio ocupacional correlacionou-se significativamente de forma negativa com o estresse percebido ($r = -0,55$, $p < 0,001$) e escores totais do SSI-R. Estratégias de enfrentamento adaptativas, como abordagem e autoajuda, mostraram correlações positivas com o equilíbrio, enquanto estratégias mal adaptativas, como evitação e autopunição, associaram-se negativamente. A análise de regressão revelou que o estresse percebido foi o preditor mais forte, explicando 54% da variância no equilíbrio ocupacional, juntamente com fatores socioeconômicos e mecanismos de enfrentamento específicos. **Conclusão:** Reduzir os níveis de estresse e promover atitudes de enfrentamento proativas são essenciais para alcançar o equilíbrio ocupacional. Recomendam-se intervenções de terapia ocupacional focadas na gestão do estilo de vida e redução do estresse para melhorar a qualidade de vida e o sucesso acadêmico dos estudantes.

Palavras-chave: Estudante; Estresse na Vida; Comportamento de Enfrentamento, Atividade Cotidiana.

Introduction

Our lives are like a river in constant flux. Throughout our lives, we have various roles and responsibilities that these roles entail. While performing these roles, it is important to maintain occupational balance. Occupational balance is an extremely important concept that is also related to health and well-being (Hülya, 2020). Occupational balance is a subjective concept and it has more than one definition. First, Meyer (1977) said that work, play, rest and sleep areas, which he referred to as the 'big four', must be balanced even during difficulties. Reed and Sanderson (Reed & Sanderson, 1999) define occupational balance as the management of occupations in a way that meets the needs of one's roles and provides personal satisfaction. Wilcock (2006) defined occupational balance as a balance of participation in an occupation leading to well-being. To give an example, the balance may be among physical, mental and social occupations, between optional and obligatory occupations, between tiring and relaxing occupations, or between 'doing' and 'being' (Wilcock, 2006).

The balance between the occupations was thought to support a person's health and well-being (Bryant et al., 2022). But technological development and industrialisation tend to increase the intensity of daily life for people. This situation has been associated with work/life imbalance, where people can perform compulsory activities, such as going to work or school but cannot spare enough time for leisure activities (Wagman & Håkansson, 2014; Çakıroğlu & Dağdelen, 2026).

In addition, in some critical periods in people's lives such as going to university, occupational imbalance may emerge. It may take time for people to return to their old activity patterns or create a new activity pattern (Jonsson et al., 2000). It has been stated that occupational balance is one of the important determinants of health and well-being in young people (Guszkowska & Dąbrowska-Zimakowska, 2022; Wagman et al., 2012). The deterioration or decline in occupational balance can also be associated with the quality of life of individuals. It has been reported that occupational imbalance affects both physical and psychological states, creates a significant stress on the body and mind, and also causes mental health problems and exhaustion (Akın et al., 2017; Håkansson & Ahlborg Junior, 2018; Rodríguez-Fernández et al., 2021).

Selye defines stress as the body's response to a pressure change in the body (Selye, 1973). Cüceloğlu defines stress as the effort that a person exerts beyond his physical and psychological limits due to unsuitable conditions in his physical and social environment (Cüceloğlu, 2011). The concept of stress brings with it the concept of coping with stress. Folkman & Lazarus define coping with stress as 'constantly changing cognitive and behavioural efforts of oneself to cope with the demands posed by sources of stress'. In coping with stress, the person constantly strives to reduce, control and regulate the conflicts he experiences in the face of internal or environmental factors that are seen as stressful for him and cannot be resolved with his personal resources (Folkman & Lazarus, 1988).

University students come from very different social and cultural environments. At the same time, they experience many stressful situations in their lives because they are at the end of adolescence, which is a variable development period (Yamaç, 2009). People may express various behaviours to cope with the stress they experience. To cope with stress, many people exhibit behaviours such as eating, smoking or using alcohol (Håkansson & Ahlborg Junior, 2018). University students not only try to discover their own identity, reconcile their incompatible values, and achieve their independence, but also try to adapt to the rules of the new university environment and gain proficiency in their area. The university environment significantly affects students' relationships with other people and their emotional and mental development (Håkansson & Ahlborg Junior, 2018; Yamaç, 2009; Yu et al., 2018). Since many university students do not live in the same city as their families, they may stay away from social support sources such as their families and a familiar social environment (Yamaç, 2009).

Although the relationship between health and occupational balance has been noted by professionals, few studies focus on occupational balance as the main topic (Wilcock et al., 1997). Owing to this, studies on occupational balance are limited and studies with different sample groups are needed. This study aims to examine the relationship between university students' occupational balance, perceived stress, and coping attitudes. It is expected that higher occupational balance will be associated with lower levels of perceived stress and a greater tendency to utilize problem-focused coping strategies. Conversely, a deterioration in occupational balance is anticipated to correlate with increased stress levels and less effective coping mechanisms.

Methods

A web-based, cross-sectional survey design was chosen to simultaneously assess occupational balance, stress, and coping attitudes across a diverse student population.

This methodology is ideal for identifying correlations among subjective experiences using validated self-report tools. Crucially, the web-based approach provides the necessary anonymity and accessibility for gathering data on sensitive psychological topics at a specific point in time.

Data collection and procedure

Data were collected via Google Forms during the 2020–2021 academic year. To ensure the integrity of the data and prevent multiple entries from the same participant, the “Limit to 1 response” setting was enabled. Although this required a Google login, the authors did not collect or have access to the participants’ email addresses or IP addresses, thereby ensuring full anonymity. The survey link was distributed through a convenience sampling method via academic and student-focused WhatsApp groups.

Participants

The study was conducted with 170 university students (aged 18–25) enrolled in formal education in Turkey.

- *Sample Size Calculation:* Before data collection, a power analysis was performed using G*Power. Since no previous studies had specifically examined the relationship between occupational balance and coping attitudes in this population, a minimum expected correlation of $r = 0.25$ (small-to-medium effect) was used. With a power of 95% and a significance level of $\alpha = 0.05$, the minimum required sample size was determined to be 164. The final sample of 170 exceeds this requirement.
- *Selection Process:* To maintain the target population’s characteristics, the survey was closed once the pre-determined sample size was achieved.
- *Inclusion/Exclusion Criteria:* Inclusion criteria were being a university student aged 18–25 and providing informed consent. To ensure data integrity, all questions in the electronic form were set as mandatory fields; therefore, no incomplete questionnaires were submitted. The study reached its pre-determined target of 170 participants who all met the inclusion criteria (aged 18–25 and currently enrolled in university), and thus, no participants were excluded from the final analysis.
- *Informed Consent:* The first page of the Google Form provided detailed information about the study’s purpose, voluntary nature, and the right to withdraw at any time. Participants could only access the assessment scales after digitally confirming their consent.
- *Anonymity and Storage:* No identifiable personal data (names, IDs, or IP addresses) were recorded. Data were exported into a password-protected spreadsheet accessible only to the research team. To maintain strict confidentiality, the collected data were not shared with any third-party institutions or organizations. The information was used solely for scientific purposes within the scope of this research. Participants were informed that they could contact the corresponding author via the provided email address if they wished to receive information regarding the study’s overall findings.

Outcome measures

Demographic information

This form, developed by the researchers, aimed to gather context-specific data such as age, gender, year of study, parental education, and socioeconomic status. These variables were selected based on their potential to act as confounders for stress levels and occupational patterns in the university population.

Occupational Balance Questionnaire 11-T (OBQ11-T)

The Occupational Balance Questionnaire scale is developed to measure the occupational balance of individuals. It is a self-rating scale that measures occupational balance in different dimensions. The purpose of the scale is to measure satisfaction according to the amount and variety of daily activities of the person and to define the occupational balance according to the results obtained. The scale was developed by Wagman & Håkansson in 2014. It was adapted into Turkish by Günel et al. in 2020. Cronbach's alpha value for the total score of the scale is 0.785. Each item in the scale is scored with a 4-point Likert-type scale ranging from 'strongly disagree (0)' to 'strongly agree (3)'. The total score is obtained by totalling the scores of all items and ranges from 0 to 33; higher scores indicate better occupational balance (Günel et al., 2020).

Coping Attitudes Evaluation Scale-Revised (COPE-R)

The purpose of the scale is to determine stress coping attitudes. Carver et al. developed it in 1989 as 60 items and 15 sub-dimensions. It was adapted into Turkish by Dicle & Ersanli in 2015 as 5 sub-dimensions, 32 items, with the names 'Self-help, approach, accommodation, avoidance and self-punishment'. Cronbach's alpha value for the total score of the scale is 0.979. The maximum score that can be obtained on the adapted scale is 128, and the minimum score is 32. A high score on the scale indicates a high level of coping attitude and a low score indicates a low level of coping attitude (Dicle & Ersanli, 2015).

Perceived stress scale

Cohen et al. developed it in 1983. It consists of 14 items in total. The scale was developed to determine the perceived stress level. It was translated into Turkish by Eskin. Cronbach's alpha value for the total score of the scale is 0.84. Participants evaluate each item on a 5-point Likert-type scale ranging from 'Never (0)' to 'Very often (4)'. A high total score indicates a high perceived stress level (Eskin et al., 2013).

Student-life Stress Inventory-Revisited (SSI-R)

The scale was developed to determine the stress in students' lives. It is a 5-point Likert-type assessment test consisting of nine subscales and 53 items, translated into Turkish by Baloğlu and Bardakçı. Cronbach's alpha value for the total score of the scale is 0.88. In the subscales, there are two dimensions as Stress Sources and Stress Responses. In the dimension of sources of stress, there are 5 sub-scales: frustrations (7 items), conflicts (4 items), pressures (4 items), changes (3 items) and self-imposed (6 items). In the dimension of stress reactions, there are a total of 4 sub-scales: physiological reactions (14 items), emotional reactions (4 items), behavioural reactions (8 items), and evaluative reactions (3 items). Scale choices range from 'Never (1)' to 'Always (5)'. In the evaluation, the scores of each item are summed and sub-scale scores are obtained. Items 8, 51, 52 and 53 are reverse scored. The scores that can be obtained from the scale range from 53 to 265. A high score indicates a high-stress level (Baloğlu & Bardakçı, 2010).

Statistical analysis

Statistical analyses were performed using IBM SPSS Statistics V23.0. Descriptive statistics were presented as frequencies and percentages for categorical variables, and as mean $\pm$ standard deviation, median, and minimum-maximum values for numerical variables.

Data normality was evaluated using the Kolmogorov-Smirnov test ($n \geq 50$), skewness-kurtosis coefficients, and visual inspection of histograms.

Since the variables (occupational balance, stress scales, and coping attitudes) did not meet the assumptions of normal distribution, non-parametric tests were employed:

- Spearman correlation coefficient was used to analyze relationships between numerical variables.
- Mann-Whitney U and Kruskal-Wallis tests were utilized to compare occupational balance scores across demographic groups (e.g., gender, smoking status, income, and education levels).
- To control for the increased risk of Type I error during multiple comparisons, a significance level of $p < 0.05$ was strictly maintained, and Dunn's post-hoc test was applied where necessary.

Finally, a Stepwise Multiple Linear Regression model was established to identify the predictors of occupational balance. Assumptions for regression, including the normality of residuals ($p = 0.200$) and multicollinearity (VIF values), were verified to ensure model validity

Results

Descriptive findings

The mean age of the participants was 21.3 ± 1.7 (18–25) years. 68.2% of the participants were women ($n = 116$). The findings of all demographic information obtained are given in Table 1.

Table 1. The demographic profile and descriptive statistics of the respondents.

Demographic Information		n	%
Gender	Female	116	68.2
	Male	54	31.8
Grade/class	Class 1	37	21.8
	Class 2	27	15.9
	Class 3	44	25.9
	Class 4	51	30.0
	Class 5	8	4.7
	Class 6	3	1.8
Educational status of mothers	Primary school	62	36.5
	Middle School	20	11.8
	High school	39	22.9
	Junior college/ Associate degree	16	9.4
	College/University	31	18.2
Educational status of fathers	Postgraduate	2	1.2
	Primary school	36	21.2
	Middle School	22	12.9
	High school	45	26.5
	Junior college/ Associate degree	9	5.3
	College/University	50	29.4
	Postgraduate	8	4.7

Table 1. Continued...

Demographic Information		n	%
Number of siblings	None	9	5.3
	1	71	41.8
	2	53	31.2
	3	18	10.6
	4	9	5.3
	5+	10	5.9
Smoking	Yes	36	21.2
	No	134	78.8
Alcohol use	Yes	51	30.0
	No	119	70.0
Chronic disease	Available	12	7.1
	None	158	92.9
Parental relationship status	Together	153	90.0
	Divided	17	10.0
Parents' living situation	His/her mother died	1	0.6
	His/her father died	9	5.3
	They both live	160	94.1
Working status outside of school	Not working	148	87.1
	Part time work	11	6.5
	Full time work	11	6.5
Average monthly income	0-2406	35	20.6
	2406-5000	65	38.2
	5000-7838	32	18.8
	7838+	38	22.4
Free health insurance	Yes	132	77.6
	No	38	22.4

The mean occupational balance score among students was 16.69 ± 5.77 , while the mean perceived stress score was 29.61 ± 6.76 . Among the coping attitudes, the highest average was observed in the approach sub-dimension. Regarding sources of stress, frustration had the highest mean score, and among stress responses, physiological responses were the most prominent. Table 2 presents the descriptive statistics for the Occupational Balance Questionnaire, Coping Attitudes Evaluation Scale-Revised, Student-Life Stress Inventory-Revised, and Perceived Stress Scale.

Analysis revealed that occupational balance was significantly higher in male students compared to female students ($Z = -2.294$, $p = 0.022$). Similarly, non-smokers showed significantly higher occupational balance than smokers ($Z = -3.134$, $p = 0.002$). Students with free health insurance also had significantly higher occupational balance than those without ($Z = -3.073$, $p = 0.002$). No significant differences in occupational balance were found based on chronic disease status, alcohol use, or whether students lived with their parents ($p > 0.05$).

Table 2. Total and sub-dimension scores of assessment tools.

ASSESSMENT TESTS		Mean±Sd
Occupational Balance Questionnaire		16.69±5.77
COPE-R	Self-Help	16.11±3.9
	Approach	21.28±3.96
	Accommodation	19.53±4.08
	Avoidance	11.84±3.76
	Self-Punishment	16.38±4.79
	Total score	85.28±9.78
Perceived Stress Scale		29.61±6.76
SSI-R	Frustrations	19.16±4.75
	Conflicts	11.20±2.09
	Pressures	12.24±3.76
	Changes	8.18±2.50
	Self-Imposed	20.93±3.58
	Physiological Reactions	33.84±10.94
	Emotional Reactions	13.17±4.17
	Behavioral Reactions	19.44±6.13
	Evaluative Reactions	9.67±5.08
	Total score	147.84±27.49

Occupational balance was found to differ significantly according to father's education level ($p = 0.036$), monthly average income ($p = 0.012$), and employment status outside of school ($p = 0.003$). No significant differences were observed based on year of study, mother's education level, place of residence, or number of siblings ($p > 0.05$) (see Table 3).

Table 3. Comparison of occupational balance scores by demographic information groups.

FEATURES	Mean±SD	Min-Max	p	Post hoc
Grade/class				
Grade 1	16.54±6,07	6-33	0.365	
Grade 2	18.67±5,78	7-33		
Grade 3	16.75±5,69	4-33		
Grade 4	15.96±5,61	4-30		
Grade 5	16.63±5,40	4-21		
Grade 6	12.33±6,43	5-17		
Educational status of mothers				

* $p < 0,05$. Superscript letters (a, b, c) indicate statistically significant differences between groups based on post-hoc analysis.

Table 3. Continued...

FEATURES	Mean±SD	Min-Max	p	Post hoc
Primary school	16.35±5.84	4-30	0.465	
Middle School	17.75±4.44	8-27		
High school	16.74±5.30	7-30		
Junior college/ Associate degree	15.13±6.47	5-33		
University / lisans üstü	17.36±6.62	4-33		
Educational status of fathers				
Primary school ^a	14.58±4.48	5-25	0.036*	a-b=(p=0.042)
Middle School	17.27±6.11	8-30		
High school ^b	17.98±5.73	4-33		
Junior college/ Associate degree	15.89±6.41	4-25		
College/University	16.52±6.41	4-33		
Postgraduate	19.25±2.96	13-22		
where he/she lives				
home with friends	15.13±5.40	5-30	0.073	
home with family	18.16±5.66	7-33		
home alone	17.60±4.22	11-24		
state dormitory	16.70±5.75	5-33		
private dormitory	14.29±6.10	4-25		
Apart	18.60±8.79	4-25		
Number of siblings				
None	11.78±6.83	5-22	0.141	
1	17.18±5.75	4-33		
2	17.53±5.59	4-33		
3	15.44±5.33	4-26		
4	17.11±6.23	10-27		
5+	15.00±4.76	8-23		
Working status outside of school				
Not working ^a	16.91±5.53	4-33	0.003*	a-c=(p=0.005) b-c=(p=0.006)
Part time work ^b	19.45±6.68	11-30		
Full time work ^c	10.91±4.78	5-17		
Average monthly income				
0-2406 TL	16.23±5.79	4-28	0.012*	a-b=(p=0.017)
2406-5000 ^a TL	15.85±5.58	4-33		
5000-7838 TL	15.69±4.19	7-23		
7838+ ^b TL	19.39±6.57	4-33		

*p<0,05. Superscript letters (a, b, c) indicate statistically significant differences between groups based on post-hoc analysis.

No statistically significant relationship was found between students' ages and occupational balance ($p = 0.946$). A moderate, negative, and statistically significant correlation was identified between occupational balance and perceived stress levels ($r = -0.55$, $p = 0.001$).

Occupational balance showed positive and significant correlations with the total COPE-R score ($r = 0.17$, $p = 0.01$), as well as with the approach ($r = 0.44$, $p = 0.001$), accommodation ($r = 0.39$, $p = 0.001$), and self-help sub-dimensions ($r = 0.28$, $p = 0.001$). Conversely, low-level negative significant correlations were observed between occupational balance and the avoidance ($r = -0.38$, $p = 0.001$) and self-punishment ($r = -0.32$, $p = 0.001$) sub-dimensions of the COPE-R scale. Among these, the approach sub-dimension exhibited the strongest correlation with occupational balance, showing a moderate and positive association.

When examining the relationship between students' occupational balance and the total score and sub-dimensions of the SSI-R, significant negative correlations were found between occupational balance and the SSI-R total score ($r = -0.53$, $p = 0.001$), as well as with the sub-dimensions of frustrations ($r = -0.48$, $p = 0.001$), pressures ($r = -0.41$, $p = 0.001$), changes ($r = -0.46$, $p = 0.001$), behavioral reactions ($r = -0.44$, $p = 0.001$), conflicts ($r = -0.38$, $p = 0.001$), physiological reactions ($r = -0.33$, $p = 0.001$), emotional reactions ($r = -0.38$, $p = 0.001$), and evaluative reactions ($r = -0.17$, $p = 0.020$). No significant correlation was found between occupational balance and the self-imposed sub-dimension ($r = -0.11$, $p = 0.123$). Correlation analysis results are presented in Table 4.

Table 4. Correlation between occupational balance, stress and coping attitudes.

		Occupational Balance Questionnaire (n=170)	
		r_s	P
Perceived Stress Scale		-.559	0.001**
COPE-R	Total Score	.179	0.019*
	Self-Help	.289	0.001**
	Approach	.441	0.001**
	Accommodation	.398	0.001**
	Avoidance	-.384	0.001**
	Self-Punishment	-.329	0.001**
SSI-R	Total Score	-.531	0.001**
	Frustrations	-.480	0.001**
	Conflicts	-.382	0.001**
	Pressures	-.419	0.001**
	Changes	-.464	0.001**
	Self-Imposed	-0.119	0.123
	Physiological Reactions	-.336	0.001**
	Emotional Reactions	-.384	0.001**
	Behavioral Reactions	-.448	0.001**
	Evaluative Reactions	-.178	0.020*
Age		0.005	0.946

(SSI-R: Student-life Stress Inventory-Revisited; COPE-R: Coping Attitudes Evaluation Scale-Revised). * $p < 0.05$; ** $p < 0.01$.

In this study, occupational balance was defined as the dependent variable, while other variables were considered independent predictors. A multiple linear regression model was constructed using variables identified as influencing occupational balance. Residual analysis indicated normal distribution of residuals according to the Kolmogorov–Smirnov test ($p = 0.200$). To address potential multicollinearity, the Stepwise method was employed for variable selection.

The model included gender, father's education level, smoking status, employment outside of school, monthly income, total COPE-R score and sub-dimensions, PSS-14, and SSI-R total and sub-dimensions. Following Stepwise selection, the final model retained the following predictors: PSS-14, COPE-R self-help and approach subscales, SSI-R frustration and conflicts subscales, employment status outside school (part-time and non-working groups), and the monthly income category of 2,406–5,000 TL.

Variance Inflation Factor (VIF) values for all variables were below 5, indicating no multicollinearity concerns. The overall regression model was statistically significant ($F = 23.974$, $p < 0.001$), explaining 54% of the variance in occupational balance scores.

Among the predictors, perceived stress (PSS-14) had the strongest effect, exhibiting the highest standardized beta coefficient. Specifically, a one-unit increase in the COPE-R approach subscale score was associated with a 0.320-point increase in occupational balance, while a one-unit increase in the COPE-R self-help subscale corresponded to a 0.207-point increase. Conversely, a one-unit increase in the SSI-R conflicts subscale was linked to a 0.429-point decrease in occupational balance, and a one-unit increase in the SSI-R frustration subscale was associated with a 0.239-point decrease.

Regarding employment status outside school, part-time workers scored on average 6.587 points higher on the occupational balance scale than full-time workers. Similarly, students not working outside school scored 3.715 points higher than full-time workers. Lastly, individuals with a monthly income between 2,406 and 5,000 TL scored on average 1.375 points lower in occupational balance compared to those earning over 7,000 TL.

Discussion

This study aimed to investigate the relationship between occupational balance and perceived stress, sources of stress, stress reactions, and coping attitudes among university students. The findings revealed that increased occupational balance was associated with decreased perceived stress. Additionally, higher levels of stress sources and stress responses were linked to reduced occupational balance. Analysis of coping attitudes indicated that the adoption of effective coping strategies contributed to an improvement in occupational balance.

Several studies have examined the relationship between occupational balance and gender with conflicting results (Yu et al., 2018; Wagman et al., 2012; Håkansson & Ahlborg Junior, 2017; Calvo-Paz et al., 2022). While some studies show no significant relationship, others suggest that women may have lower occupational balance scores (Borgh et al., 2018) or men may have lower scores (Wagman & Håkansson, 2014). Our study found that women have lower occupational balance than men; this result should be interpreted within the context of Turkish cultural structures. Women often manage the complex “double burden” of academic responsibilities alongside traditional domestic roles. This mismatch between personal desires and cultural expectations can lead to occupational role tension. According to Wilcock's (2006) framework, when “doing” (active participation) is dictated by external cultural pressures rather than personal “being” (identity), the alignment of occupational balance decreases.

The literature indicates that there is no significant relationship between occupational balance and age (Håkansson & Ahlberg Junior, 2018; Wagman et al., 2012). Consistent with these findings, our study also found no significant association between occupational balance and age. This lack of relationship may be attributed to the relatively narrow age range of university students included in the study.

Another critical finding is the impact of socioeconomic factors. We found that students with lower monthly incomes and those working outside of school exhibited lower occupational balance. This points directly to occupational inequality; financial hardship and employment necessity function as structural barriers limiting a student's freedom to choose remedial or leisure-focused pursuits. Occupational deprivation is conceptualized as a state in which an individual is excluded from participation in meaningful and necessary occupations due to external factors beyond their control, such as economic or environmental barriers (Whiteford, 2000).

Unlike previous studies that have generally individualized occupational balance, our results show that income level determines access to leisure resources and social participation. When a student's time is dominated by compulsory work to meet basic needs, they experience occupational deprivation; this hinders the 'formation' phase of university life-the development of professional and social identities.

Studies have shown that there is a decrease in the stress level when the occupational balance is increased (Akin et al., 2017; Bejerholm, 2010; Håkansson & Ahlberg Junior, 2018; Matuska & Bass, 2016). Yu et al. (2018) reported that occupational balance is most strongly associated with perceived stress among health-related variables. Conversely, Håkansson & Ahlberg Junior (2018) suggest that occupational imbalance and perceived stress may represent overlapping constructs rather than stress directly causing a decrease in occupational balance. The findings of our study are consistent with the existing literature, demonstrating that perceived stress significantly impacts occupational balance. It is posited that reducing stress enables individuals to engage in activities that provide satisfaction in a more balanced manner. Previous research also highlights the influence of mood and motivation on the relationship between stress and occupational performance (Anaby, 2009; McGregor & Little, 1998). Therefore, implementing intervention programs aimed at stress reduction and enhancing well-being is considered crucial for promoting occupational balance. Such interventions are expected to reduce stress levels among individuals maintaining occupational balance and subsequently improve their quality of life and overall well-being.

Håkansson & Ahlberg Junior (2017) stated that the perception of occupational imbalance is associated with stress, and if sustained over time, it may lead to stress-related disorders such as depression and burnout. Furthermore, Eklund & Argentzell (2016) emphasize that engaging in fewer occupations than normal can hinder health and well-being. Anaby (2009) similarly argued that maintaining occupational balance requires preventing individuals from having either excessive or insufficient occupational engagement. In her study, she noted that boredom and burnout are common emotional responses to occupational imbalance: boredom typically arises when occupational engagement is low, while burnout is more common when occupational demands are excessive. Both boredom and burnout represent forms of illness-related stress.

Consistent with these findings, our study observed that increases in behavioral, physiological, emotional, and evaluative stress responses corresponded with decreases in occupational balance. From the perspective of the Life Balance Model (Matuska & Bass, 2016), balance is achieved when occupations meet biological health and relationship needs.

Behavioral reactions, such as social withdrawal, directly impair “belonging,” while physiological distress undermines the energy required for “doing.” Anaby (2009) and Eklund & Argentzell (2016) emphasize that both excessive demands (burnout) and insufficient engagement (boredom) are harmful. Our study confirms that stress sources like pressures and frustrations act as “occupational disruptors,” preventing students from achieving the harmony necessary for well-being.

Yazdani et al. stated in their study that the occupational balance is not in a constant state throughout a person’s life. Occupational balance is constantly changing according to age, life stage, and changes in skills and abilities. It is also a process that changes depending on the environment, role and occupational requirements. In this lifelong dynamic process, the nature of a person’s occupational balance is based on existing connections as well as requests (Yazdani et al., 2018). Life changes can cause stress in people. In our study, it was determined that when the changes, conflicts, frustrations and pressures of the university students increased, the occupational balance decreased. University students are exposed to various conflicts with their parents or in the school/social environment due to their age and changing lifestyles (Paixão et al., 2022). In this case, it can be difficult for them to make the right decision for themselves. They may experience pressure because of friends and family. They may feel helpless under these pressures. Considering all these factors, determining the stress sources of university students with person-centred studies, teaching the right coping methods and following them will make an important contribution to the provision of occupational balance.

In our study, it was found that when university students used avoidance and self-punishment coping attitudes, their occupational balance was low. Accommodation and self-help approach coping attitudes were found to be high when used. Avoidance and self-punishment are defined as inadequate coping attitudes and since these attitudes are emotion-focused, they are not oriented toward problem solving. Considering these situations, it can be thought that the use of inadequate/passive coping attitudes by a person may cause low occupational balances. In our study, it was found that occupational balance increased when problem-focused correct coping attitudes were preferred. In this case, it is thought that by identifying the coping attitudes that people use and teaching the right coping attitudes, they can reduce stress and provide positive changes in their quality of life and general well-being.

As a result, a significant relationship was identified between occupational balance and stress, including stress reactions, sources of stress, and coping attitudes. Stress plays a crucial role in maintaining occupational balance. Effectively teaching coping strategies can serve as a valuable approach not only for reducing stress but also for promoting occupational balance. It is important to increase awareness of occupational balance from a young age among students, aiming to help them maintain balanced occupations in their lives. This balance is essential for reducing stress levels, enhancing well-being, and improving overall quality of life. Implementing awareness programs for students and conducting longitudinal studies to investigate the long-term effects of such awareness may prove beneficial.

Our study has several limitations that should be considered when interpreting the results. First, the sample was predominantly female. While this reflects the gender distribution in many health and social science departments, achieving gender balance in future research could provide a more comprehensive view of how cultural roles influence occupational health. Second, the use of a convenience sampling method through online platforms may introduce selection bias, as students with higher digital literacy or those more engaged in social media were more likely to participate. Furthermore, the cross-sectional nature of the data prevents us from determining a definitive causal direction between stress and occupational balance.

Implications for occupational therapy

Our findings suggest evidence about unmet occupational needs in the population investigated. We can argue that occupational therapists can possibly make significant contributions to university psychosocial support teams. Occupational Therapists can provide unique, occupation-based interventions that go beyond traditional counseling:

- *Occupational Balance Workshops*: Utilizing time-use diaries to help students identify imbalances and balance academic and leisure roles.
- *Coping Strategy Groups*: Facilitating a transition from avoidance to active participation in meaningful activities to break the stress cycle.
- *Institutional Advocacy*: Addressing “occupational inequality” by advocating for better campus resources that support rest and social inclusion for socioeconomically disadvantaged students.

Conclusion

In our study examining the relationship between occupational balance among university students and their levels of stress, sources of stress, stress reactions, and coping attitudes, it was found that stress decreased as occupational balance increased. Additionally, a reduction in sources of stress and stress reactions was associated with an increase in occupational balance. Therefore, stress management intervention programs that help individuals regulate their stress responses may be effective in promoting occupational balance. Furthermore, a significant relationship was observed between coping attitudes and occupational balance. Consequently, teaching appropriate coping strategies is considered essential for maintaining occupational balance in university students, and the implementation of such intervention programs may be beneficial in raising awareness.

What the study had added

The findings showed that university students’ stress responses and sources of stress were associated with occupational balance. It also showed that there is a relationship between coping attitudes and occupational balance. In this context, teaching stress management and coping attitudes may need to be used in occupational balance interventions.

References

- Akın, A., Ulukök, E., & Arar, T. (2017). Work-life balance: a theoretical research on studies made in Turkey. *Afyon Kocatepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 19(1), 113-124.
- Anaby, D. R. (2009). *Well-being from an occupational perspective: testing a conceptual model*. Vancouver: University of British Columbia.
- Baloğlu, M., & Bardakçı, S. (2010). Güncellenmiş öğrenci yaşamı stres envanteri’nin Türkçe’ye uyarlanması, dil geçerliği ön psikometrik incelenmesi. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 4(33), 57-70.
- Bejerholm, U. (2010). Occupational balance in people with schizophrenia. *Occupational Therapy in Mental Health*, 26(1), 1-17.
- Borgh, M., Eek, F., Wagman, P., & Håkansson, C. (2018). Organisational factors and occupational balance in working parents in Sweden. *Scandinavian Journal of Public Health*, 46(3), 409-416.

- Bryant, W., Fieldhouse, J., & Bannigan, K. (2022). *Creek's Occupational Therapy and Mental Health E-Book*. USA: Elsevier Health Sciences.
- Çakıroğlu, G., & Dağdelen, H. Y. (2026). The effects of public transportation use on occupational balance, stress, and fatigue in young adults: a cross-sectional study. *Cadernos Brasileiros de Terapia Ocupacional*, 34, e4165.
- Calvo-Paz, M., Guevara-Ramírez, J., Zapata-López, J. S., & Realpe-Martinez, D. L. (2022). Occupational balance during Covid-19 lockdown among occupational therapy academics. *Cadernos Brasileiros de Terapia Ocupacional*, 30, e3242.
- Cüceloğlu, D. (2011). İnsan ve davranış: Psikolojinin temel kavramları. İstanbul: Remzi Kitabevi.
- Dicle, A. N., & Ersanli, K. (2015). Başa çıkma tutumlarını değerlendirme ölçeğinin türkçeye uyarlama geçerlik ve güvenilirlik çalışması. *The Journal of Academic Social Science*, 16(16), 1-16.
- Eklund, M., & Argentzell, E. (2016). Perception of occupational balance by people with mental illness: a new methodology. *Scandinavian Journal of Occupational Therapy*, 23(4), 304-313.
- Eskin, M., Harlak, H., Demirkıran, F., & Dereboy, Ç. (2013). Algılanan stres ölçeğinin Türkçeye uyarlanması: güvenirlik ve geçerlik analizi. *New/Yeni Symposium Journal*, 51(3), 132-140.
- Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, 54(3), 466-475.
- Günel, A., Pekçetin, S., Demirtürk, F., Şenol, H., Håkansson, C., & Wagman, P. (2020). Validity and reliability of the Turkish occupational balance questionnaire (OBQ11-T). *Scandinavian Journal of Occupational Therapy*, 27(7), 493-499.
- Guszkowska, M., & Dąbrowska-Zimakowska, A. (2022). Occupational balance, changes in occupations and psychological well-being of university students during the COVID-19 pandemic. *Scandinavian Journal of Occupational Therapy*, 30(4), 463-474.
- Håkansson, C., & Ahlberg Junior, G. (2017). Occupations, perceived stress, and stress-related disorders among women and men in the public sector in Sweden. *Scandinavian Journal of Occupational Therapy*, 24(1), 10-17.
- Håkansson, C., & Ahlberg Junior, G. (2018). Occupational imbalance and the role of perceived stress in predicting stress-related disorders. *Scandinavian Journal of Occupational Therapy*, 25(4), 278-287.
- Hülya, Y. (2020). *Aktivite Temelli Ergoterapi*. Turkey: Hipokrat Kitabevi.
- Jonsson, H., Borell, L., & Sadlo, G. (2000). Retirement: an occupational transition with consequences for temporality, balance and meaning of occupations. *Journal of Occupational Science*, 7(1), 29-37.
- Matuska, K., & Bass, J. (2016). Life balance and stress in adults with medical conditions or obesity. *OTJR : Occupation, Participation and Health*, 36(2), 74-81.
- McGregor, I., & Little, B. R. (1998). Personal projects, happiness, and meaning: on doing well and being yourself. *Journal of Personality and Social Psychology*, 74(2), 494.
- Meyer, A. (1977). The philosophy of occupation therapy. Reprinted from the Archives of Occupational Therapy, Volume 1, pp. 1-10, 1922. *The American Journal of Occupational Therapy*, 31(10), 639-642.
- Paixão, G. M. D., Seabra, A. D., Vieira, A. C. D. S., Gorla, J. A., & Cruz, D. C. D. (2022). Occupational participation, stress, anxiety and depression in workers and students from Brazilian universities during the COVID-19 pandemic. *Cadernos Brasileiros de Terapia Ocupacional*, 30, e2952.
- Reed, K. L., & Sanderson, S. N. (1999). *Concepts of occupational therapy*. Philadelphia: Lippincott Williams & Wilkins.
- Rodríguez-Fernández, P., González-Santos, J., Santamaría-Peláez, M., Soto-Cámara, R., & González-Bernal, J. J. (2021). Exploring the occupational balance of young adults during social distancing measures in the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(11), 1-9.
- Selye, H. (1973). The Evolution of the Stress Concept: the originator of the concept traces its development from the discovery in 1936 of the alarm reaction to modern therapeutic applications of syntoxic and catatoxic hormones. *American Scientist*, 61(6), 692-699.
- Wagman, P., & Håkansson, C. (2014). Exploring occupational balance in adults in Sweden. *Scandinavian Journal of Occupational Therapy*, 21(6), 415-420.

- Wagman, P., Håkansson, C., & Björklund, A. (2012). Occupational balance as used in occupational therapy: A concept analysis. *Scandinavian Journal of Occupational Therapy*, 19(4), 322-327.
- Whiteford, G. (2000). Occupational deprivation: global challenge in the new millennium. *British Journal of Occupational Therapy*, 63(5), 200-204.
- Wilcock, A. A. (2006). *An occupational perspective of health*. New Jersey: Slack Incorporated.
- Wilcock, A., Chelin, M., Hall, M., Hamley, N., Morrison, B., Scrivener, L., Townsend, M., & Treen, K. (1997). The relationship between occupational balance and health: a pilot study. *Occupational Therapy International*, 4(1), 17-30.
- Yamaç, Ö. (2009). Üniversite öğrencilerinin algıladıkları sosyal destek ile stresle başa çıkma stilleri arasındaki ilişki (Master's thesis). Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.
- Yazdani, F., Harb, A., Rassafiani, M., Nobakht, L., & Yazdani, N. (2018). Occupational therapists' perception of the concept of occupational balance. *Scandinavian Journal of Occupational Therapy*, 25(4), 288-297.
- Yu, Y., Manku, M., & Backman, C. L. (2018). Measuring occupational balance and its relationship to perceived stress and health: mesurer l'équilibre occupationnel et sa relation avec le stress perçus et la santé. *Canadian Journal of Occupational Therapy. Revue Canadienne d'Ergothérapie*, 85(2), 117-127.

Author's Contributions

Fatıma Zehra Turan: data collection, data interpretation, and article writing. Merve Kaşıkçı: data analysis and article writing. Onur Altuntaş: data interpretation and article writing. All authors approved the final version of the text.

Data Availability

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

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