

# A Research On The Impact Of Workload On Perceived Stress In Service Sector

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## Abstract:

*In this study, the effect of excessive workload levels on stress levels of employees was examined. The sample of the study consists of 117 employees working in supermarkets operating in Konya province. Research data were collected using a survey technique. The workload scale and the perceived stress scale were used to measure research variables. The reliability of the scales was tested with Cronbach's Alpha, and their validity was tested with confirmatory factor analysis. Additionally, simple regression analysis was used to determine the relationship between variables. According to the findings of the study, it is seen that employees' workload levels are positively and significantly related to their stress levels. As a result, excessive workload can be highlighted as a determining factor in the stress experienced by employees.*

**Background:** *In this study, the effect of workload on employees' organizational perceived stress levels was examined. With these results, it is hoped that this study will guide future researchers in determining similar situations in different sectors.*

**Materials and methods:** *The research data was collected through a survey method. The survey was conducted physically, face to face. A total of 119 survey forms were filled out for the study. However, incomplete, inconsistent and incorrectly filled survey forms were excluded from the scope of the study. A total of 117 survey formulas were evaluated. The survey consists of three sections: demographic questions, workload and perceived stress. IBM AMOS-22 and SPSS-27 package programs were used in the research.*

**Result:** *According to the Pearson correlation analysis findings, a statistically significant and positive relationship was determined between the workload level of the employees and their perceived stress ( $r = 0,696$ ;  $p = 0,000$ ). In addition, results also show that workload has a statistically significant and positive relation with the sub-dimensions perceived insufficient self-efficacy ( $r = 0,498$ ;  $p = 0,000$ ), perceived stress/distress ( $r = 0,355$ ;  $p = 0,000$ ) of perceived stress. In this study, regression analysis was performed in order to obtain the effect of workload on perceived stress. In the analysis, while perceived stress was taken as the dependent variable, workload was taken as the independent variable. When the findings are analyzed, it was observed workload level significantly predicted perceived stress ( $R^2 = 0,413$ ,  $p < 0,05$ ). According to the results obtained, the independent variable explains 41,3% of the change in the dependent variable. Accordingly, it is understood that the workload level of employees explains the variance of perceived by 41,3%. It was determined that workload significantly predicted perceived stress, and in this context, the level of workload of employees explained the variance of perceived stress by 41,3%. Consequently, it has been determined that workload has a positive and significant effect on perceived stress, and perceived stress increases as the level of workload of employees increases. Based on these results, H1: "Workload of employees has a statistically significant and positive effect on their perceived stress." the main hypothesis was accepted.*

**Conclusion:** *Studies on the causes of stress have identified many factors that cause stress. Factors such as work-related demands and the individual's control over the job are among those that can be considered in this context. This study determined that workload increases an individual's stress.*

**Key Words:** *Workload, Stress, Perceived stress,*

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## I. Introduction

Weiner was the first to address the concept of workload (Hicks, 1960), which dates back to the 1960s. Weiner defined the concept of workload as various challenges that affect employees' job reactions and performance (Azizoğlu, 2021). Workload is the meaning of the work given to the individual that is above his/her capacity. Workload is the situation where the task expected from an individual exceeds his/her capacity (Tsang and Vidulich, 2006; Keser, 2006). Therefore, according to Reilly (1982), workload is the perception of an individual under time pressure due to the high number of responsibilities and commitments in his/her life (Jones et al., 2007). Therefore, workload can cause negative consequences both organizationally and individually.

Individuals feel stressed due to excessive workload and experience burnout, dissatisfaction, low performance, high desire to leave work, and imbalance between work and private life (Jones et al., 2007; Golden and Jorgensen, 2002; Luk and Shaffer, 2005; Tayfur and Arslan, 2012; Gümüştekin and Öztemiz, 2005). Therefore, excessive workload is expressed as one of the most important causes of stress among employees at work (Altaf and Awan 2011). Stress resulting from the nature of the job, the structure of the organization, administrative reasons, or social and environmental reasons can be called job stress (Cox and Griffiths, 2010). Weiner (1992), according to stress can be defined as an acute or external demand that challenges or threatens an individual's ability to cope (Siegrist and Rödel, 2006). Therefore, stress depends on the individual's interaction with his/her environment (Patterson et al., 2012). Weiner (1992), according to stress occurs when important tasks must be completed and cannot be avoided (Siegrist and Rödel, 2006). Stress, which is defined as mental pressure and tension in psychology (Tucker, et.al, 2008), can also be used instead of concepts such as tension, anxiety, conflict, arousal, harsh external conditions, emotional depression, threat to self or security, frustration, etc. (Baltaş and Baltaş, 2008). According to Phillips (2013), perceived stress is the extent to which an individual can control his or her own life, how he or she copes with difficulties, his or her self-confidence, and his or her feelings and thoughts about the stress he or she experiences in a particular situation (Tagay et al., 2018:167).

## **II. Material And Methods**

### **Purpose and Importance of the Research**

The purpose of this study is to determine the effect of workload on perceived stress. In this study, the relationship between workload and perceived stress is examined. The hypothesis created for this purpose is presented below.

H1: Workload of employees has a statistically significant and positive effect on their perceived stress.

### **The Universe and Sample of the Research**

The population of the research consists of employees in supermarket employees in Konya. The sample of the research consists of 117 employees in supermarket in Konya, and convenience sampling method was used in the research. This research is a quantitative study and a survey was used as data collection. Survey forms were distributed to 119 employees, but 2 of the surveys were removed from the sample due to incomplete or incorrect filling. A total of 117 surveys were evaluated. Findings regarding the demographic characteristics of the research participants are presented in Table 1. The research was conducted after obtaining the permission of Selcuk University Ethics Committee numbered E-697505. Findings regarding the demographic characteristics of the participants are presented in Table 1.

**Table 1. Demographic Characteristics of the Participants (n = 117)**

<b>Demographic Characteristics</b>		<b>n</b>	<b>%</b>
Gender	Woman	55	47,0
	Man	62	52,9
Age	18-25 age	58	49,5
	26-30 age	22	18,8
	31-35 age	25	21,3
	36-40 age	5	4,27
	41 age and over	7	5,98
Education	Primary /secondary school	41	35,0
	High school	32	27,3
	Associate degree	23	19,6
	Bachelor	21	17,9
	Master	-	-
Total		117	100,00

According to the findings from Table 1, it was determined that 47% participants were female, and 52,9% were male; 49,5% are 18-25 age, and 18,8% are 26-30 age; 21,3% are 31-35 age; 5,98 % are 41 age and over; 37,5 % are university graduates.

### **Data Collection Tool Used in the Research**

Research data was collected by survey method. The survey was prepared as physical survey. A total of 119 survey forms were filled out for the research. However, incomplete, inconsistent and incorrectly filled survey forms were excluded from the scope of the research. A total of 117 survey forms were evaluated. The survey form includes three sections consisting of demographic questions, workload scale, perceived stress scale. The workload scale included in the survey form is based on Peterson et.al. (1995) with 11 expressions and a 5-point Likert type. The scale is one dimensional. The scale was evaluated on a five-point Likert type (5 = Strongly agree, 4 = Agree, 3

= Undecided, 2 = Disagree, 1 = Strongly disagree). The scale was adapted into Turkish by Derya (2008). The Cronbach alpha coefficient of the scale is 0.79 (Derya, 2008). The perceived stress scale included in the survey form is based on Cohen et.al. (1983) with 14 expressions and a 5-point Likert type. The scale is two dimensional. The scale was evaluated on a five-point Likert type (5 = Strongly agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = Strongly disagree). The scale was adapted into Turkish by Eskin et. al (2013). The Cronbach alpha coefficient of the scale is 0.84 (Eskin et. al., 2013). Before applying the scale used in the research, a pilot application was carried out. In this regard, surveys were administered to 30 employees in supermarket. Within the scope of the findings obtained through face-to-face interview method, it was seen that all the statements in the survey were understandable. Accordingly, no changes were made to the survey form.

### Data Analysis

The data obtained from the survey study were analyzed with IBM AMOS-22 and SPSS-27 package program. In this context, descriptive analyzes were conducted to determine the demographic structure of the participants, validity and reliability analyzes of the scales, and simple regression analysis to test hypotheses.

## III. Results

### Number of Validity and Reliability Tests of the Scales

In this study, reliability analysis (Cronbach Alpha) and confirmatory factor analysis were applied to determine the reliability and construct validity of the workload scale. As a result of the reliability analysis, the reliability coefficient of the workload scale was determined as .859. Confirmatory factor analysis was performed to determine the construct validity of the scale. As a result of confirmatory factor analysis, the single-factor structure of the scale was confirmed without removing any items. The goodness of fit values for factor analysis are CMIN/DF: =1.015, RMSEA=0.015, CFI=0.999, TLI=0.991 and are at a good and acceptable level.

Reliability analysis (Cronbach Alpha) and confirmatory factor analysis were applied to determine the reliability and construct validity of the perceived stress scale. As a result of the reliability analysis, the reliability coefficient of the perceived stress scale was determined as .813. Confirmatory factor analysis was conducted to determine the construct validity of the scale. The confirmatory factor analysis confirmed the two-factor structure of the scale without removing any items. The goodness of fit values for factor analysis are CMIN/DF: 3,298; GFI: .878; CFI: .916; NFI: .879; TLI: .913; RMSEA: .088 and are at a good and acceptable level.

### Findings

According to the Pearson correlation analysis findings in Table 2, a statistically significant and positive relationship was determined between the workload level of the employees and their perceived stress ( $r = 0,696$ ;  $p = 0.000$ ). In addition, results also show that workload has a statistically significant and positive relation with the sub-dimensions perceived insufficient self-efficacy ( $r = 0,498$ ;  $p = 0.000$ ), perceived stress/distress ( $r = 0,355$ ;  $p = 0.000$ ) of perceived stress.

**Table 2. Correlation Matrix**

	1	2	3	4
1. Workload	1			
2. Perceived Stress	,696**	1		
3. Perceived insufficient self-efficacy	,498**	,415**	1	
4. Perceived stress/distress	,355**	,521**	,452**	1

\*\*Correlation is significant at the 0.01 level (2-tailed).

In this study, regression analysis was performed in order to obtain the effect of workload on perceived stress. In the analysis, while perceived stress was taken as the dependent variable, workload was taken as the independent variable. The findings obtained are shown in Table 3.

**Table 3. Regression Findings Related to the Effect of Workload on Perceived Stress**

Dependent variable	R <sup>2</sup>	Independent variable	B	Std. Error	t	p	F
Perceived Stress	0,413	Workload	,278	,043	,468	,000	116,910

When the findings shown in Table 3 are analyzed, it was observed of workload level significantly predicted perceived stress ( $R^2 = 0,413$ ,  $p < 0.05$ ). According to the results obtained, the independent variable explains 41,3% of the change in the dependent variable. Accordingly, it is understood that the workload level of employees explains the variance of perceived by 41,3%.

It was determined that workload significantly predicted perceived stress, and in this context, the level of workload of employees explained the variance of perceived stress by 41,3%. Consequently, it has been determined that workload has a positive and significant effect on perceived stress, and perceived stress increases as the level

of workload of employees increases. Based on these results, H1: “Workload of employees has a statistically significant and positive effect on their perceived stress.” the main hypothesis was accepted.

#### IV. Conclusion

Studies on the causes of stress have identified many factors that cause stress. Factors such as work-related demands and the individual's control over the job are among those that can be considered in this context. This study determined that workload increases an individual's stress. These results are consistent with the findings of Mazloum et al. (2008), Geurts et al. (1998), Utami and Bonussyeani (2013). According to the results of the study, it was determined that workload and job stress are directly related to each other. In this context, alleviating the negativities experienced in the organization should be among the priorities of managers. Because excessive workload, lack of control over work, and stress will negatively affect the performance and productivity of the individual. This will not only cause personal loss but also cause serious damage to the organization. To achieve this, effective communication in the organization is crucial. Obtaining accurate feedback from employees will be useful in managing the process. It is essential that employees be given a fair workload distribution and be given the opportunity to flex the process with various work schedules. In this study, regression analysis was performed in order to obtain the effect of workload on perceived stress. In the analysis, while perceived stress was taken as the dependent variable, workload was taken as the independent variable. When the findings shown in Table 3 are analyzed, it was observed workload level significantly predicted perceived stress ( $R^2=0,413$ ,  $p<0.05$ ). According to the results obtained, the independent variable explains 41,3% of the change in the dependent variable. Accordingly, it is understood that the workload level of employees explains the variance of perceived by 41,3%.

It was determined that workload significantly predicted perceived stress, and in this context, the level of workload of employees explained the variance of perceived stress by 41,3%. Consequently, it has been determined that workload has a positive and significant effect on perceived stress, and perceived stress increases as the level of workload of employees increases. Based on these results, H1: “Workload of employees has a statistically significant and positive effect on their perceived stress.” the main hypothesis was accepted. According to the Pearson correlation analysis findings a statistically significant and positive relationship was determined between the workload level of the employees and their perceived stress ( $r=0,696$ ;  $p=0.000$ ). In addition, results also show that workload has a statistically significant and positive relation with the sub-dimensions perceived insufficient self-efficacy ( $r=0,498$ ;  $p=0.000$ ), perceived stress/distress ( $r=0,355$ ;  $p=0.000$ ) of perceived stress. As with many studies, this study has some limitations, especially due to lack of time and resources. The first of these limitations is that the current data was collected from supermarket employees, making generalizations impossible. Future studies conducted across different regions and sizes could further generalize the results.

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