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**A RESEARCH OF VARIOUS WORK VARIABLES ON PHARMACISTS
OPERATING IN SERVICE INDUSTRY: THE PROVINCE OF ERZURUM
SAMPLE**

Abstract:

Pharmacists are people who sell instant drugs prescribed by doctors to customer prepare other necessary drugs and conduct research regarding the development and analyses of drugs in laboratories. Their education and experience on health issues and their accessibility make them an important actor in healthcare and patients generally prefer them to the other health organizations. In addition being the first and the last health workers consulted by patients make them a vital part of healthcare system.

In this study, the public and private pharmacists operating in the province of Erzurum is examined in terms of work stress, ergonomics, job satisfaction and performance. According to the data obtained from 13 regional chamber of pharmacist, there are 115 private and 18 public pharmacists operating in city center and other districts of Erzurum. In this study, a total of 133 pharmacists were surveyed. The data were analyzed with SPSS 16.0 software and the results were discussed.

Keywords:

ergonomics, job satisfaction, job performance

JEL Classification: M10

INTRODUCTION

Pharmacists are people who sell instant drugs prescribed by doctors to customers. They prepare other necessary drugs and conduct researches regarding the development and analyses of drugs in laboratories. Their education and experience on health issues and their accessibility make them an important actor in healthcare and patients generally prefer them to the other health organizations. In addition being the first and the last health workers consulted by patients make them a vital part of healthcare system. The aim of this study is to investigate the relationships between some work variables on a sample consisted of pharmacist working in a province of Turkey. In this context the concepts of job stress, job performance, job satisfaction and ergonomics are discussed. Job stress can be defined as an employee's awareness or feeling of personal dysfunction as a result of perceived conditions or happenings in the workplace, and the employee's psychological and physiological reactions caused by these uncomfortable, undesirable factors or threats in the employee's immediate workplace environment (Montgomery et al., 1996). Job performance is quantity and quality of task accomplishments by an individual or group at work. Performance, as is commonly said, is the bottom line for people at work. It is a cornerstone of productivity, and it should contribute to the accomplishment of organizational objectives. Job satisfaction is the degree to which an individual feels positively or negatively about various aspects of the job. Managers should consider both job performance and job satisfaction as key results to be achieved by people at work. One without the other is simply insufficient to meet the high standards of today's workplace. But as earlier examples showed, some workers achieve a sense of personal satisfaction from their jobs and others do not. (Schermerhorn, 1996:267) Citing problems with the earlier studies, a ground breaking analysis recently concluded that there is a moderate relationship between job satisfaction and job performance. In other words, happy workers are more productive workers to some extent. Ergonomics is "the scientific discipline to optimize the interaction between humans and other elements of the system and using the theory, knowledge, principles, data and methods to optimize human well-being and performance of the system (Sekulova, Simon: 2010:462). Managers should discover what works means to other people and then they should try to create work environments that help them achieve high levels of both performance and satisfaction. (Schermerhorn, 1996:267)

Methods

In this study, it has been aimed to reveal the stress levels, performances, job satisfaction and ergonomic work conditions of the pharmacists in Erzurum. For this objective, a questionnaire based on the former studies and literature was formed and applied to the pharmacists working in Erzurum. For the study to achieve its objective and in order to obtain true information, questionnaire forms were filled through meeting the pharmacists in person. Data were analyzed by means of SPSS 16.0 and the results were interpreted.

Population

The population of the study consists of pharmacists in Erzurum. The population framework was obtained from Chamber of Pharmacists and it was detected that there were 133 pharmacists operating in Erzurum.

Questionnaire consists of two parts. In the first part, there are questions about the general features of the Pharmacists. In the second part, there are questions about job stress, performance, job satisfaction and ergonomics. The data obtained as a result of the application of the questionnaire was transformed into tables and the tables were then interpreted. Table 1. summarizes the general features of the respondents.

Table 1. Demographic Variables

		N	%
WORK SPACE	Private pharmacists	115	86.5
	Public pharmacists	18	13.5
AGE	22-27	29	21.8
	28-33	52	39.1
	34-39	14	10.5
	40-45	12	9
	46 and more	26	19.5
MARITAL STATUS	Married	94	70.7
	Single	39	29.3
EDUCATIONAL DEGREE	University	106	79.7
	Master	24	18
	PHD	3	2.3
GENDER	Female	40	30.1
	Male	93	69.9
EXPERIENCE IN THE SECTOR	Less than 5 years	35	26.3
	6-11	52	39.1
	12-17	12	9
	18 and more	34	25.6
INCOME	Less than 3000 ₺	36	27.1
	3001-4000 ₺	49	36.8
	4001 and more ₺	48	36.1

86.5 % of the pharmacists operating in Erzurum are private pharmacists while 13.5% are public pharmacists. Regarding the age distribution, it is seen that the largest portion (39%) of the pharmacists is between 28 and 33 years old. 70.7% of the pharmacists are married.

79.7% of respondents are university graduates. Considering their gender, it is seen that 69.9% of them are male, 39.1% of them have worked for 6 to 11 years and 36.8% have an income between 3001-4000 ₺. Table 2. summarizes means and standard deviations of job stress.

Table 2. Means and Standard Deviations Scores of the Items About Pharmacists' Job Stress

	Mean	Standard Deviation
I think I cannot solve my personal problems.	2.23	1.24
Recently, difficulties reached a level that I cannot handle.	2.41	1.22
Recently, I think this business has not been performing well.	2.68	1.19
Recently, I think I cannot control the events in my life.	2.25	1.10

The highest mean score about the work stress is 2.68 for the statement: "I think that the business is not going on well." The lowest score belongs to the statement: "I think I cannot solve my personal problems." with a mean score of 2.23. Table 3. Summarizes means and standard deviation of performance.

Table 3. Means and Standard Deviations Scores of the Items About Pharmacists' Job Performance

	Mean	Standard Deviation
I complete my works in time.	3.78	1.06
I often achieve my goals about my work.	3.51	1.05
I am sure that I have at a large extend achieved the standards in the service quality .	3.68	1.01
When a problem breaks out, I produce a solution in the fastest way.	3.83	0.96

The highest mean score about the performances of the pharmacists belong to the statement: "When a problem breaks out, I produce a solution in the fastest way." ($\bar{x} = 3.83$) while the lowest one is "I often achieve my goals about my work" ($\bar{x} = 3.51$)

Table 4. Summarizes means and standard deviation of job satisfaction

Table 4. Mean and Standard Deviation Scores of the Items About Pharmacists' Job Satisfaction

	Mean	Standard deviation
When I consider everything, I am totally pleased with my job.	3.60	1.13
The idea of spending the rest of my life in my current job makes me happy.	3.30	1.81
I often want to quit my job as I do things that I do not like. (reverse)	2.42	1.16
Mostly I focus on my job too deeply to realize how the time has passed.	3.78	1.06
I consider my job enjoyable.	3.53	1.08
My job is better than an average job.	4.01	0.84
I do not consider doing another job.	3.23	1.22
Mostly I am enthusiastic about my job.	3.96	0.83
I am quite satisfied with my job.	3.57	1.04

When the questions about the job satisfaction of the pharmacists are considered, it is seen that the highest score is for the statement "My job is better than an average job." ($\bar{x} = 4.01$) while the lowest mean score is for the statement "I often want to quit my job as I do things that I do not like." ($\bar{x} = 2.42$)

Table 5. Summarizes means and standard deviation of Ergonomics

Table 5. Mean and Standard Deviation Scores of Items About Ergonomics

	Mean	Standard Deviation
The ambient temperature in my pharmacy shop is at a satisfactory level.	4.0	0.91
The humidity rate in my pharmacy shop is at a satisfactory level.	4.0	0.84
The ventilation in my pharmacy shop is at a satisfactory level.	4.0	0.93
The illumination in my pharmacy shop is at a	4.02	0.89

satisfactory level.		
There is harmony between the illumination and the colour in my pharmacy shop.	3.85	0.91
There is a color harmony in my pharmacy shop.	3.78	1.00
The cleaning in my pharmacy shop is done adequately.	3.84	1.08
The chair in my pharmacy shop does not discomfort me when I sit on it for a long time.	3.57	1.12
The furniture and materials in my pharmacy shop are designed according to orthopaedic and anthropometric measures.	3.42	1.07
I like the outer view of my pharmacy shop.	3.71	1.02

When ergonomic work conditions of pharmacists is taken into consideration, the highest mean score belongs to the statement “the illumination in my pharmacy shop is satisfactory” ($\bar{x} = 4.02$) while the lowest mean score belongs to the statement “The furniture and materials in my pharmacy shop are designed according to orthopaedic and anthropometric measures.” ($\bar{x} = 3,42$).

t- test was applied in order to detect if there is a significant difference between the public pharmacists and private pharmacists in terms of stress, ergonomics, work satisfaction and performance. However, since the number of private pharmacists (115) in proportion to the public pharmacists (18) is very high, 18 private pharmacists were chosen randomly in order to make a balanced comparison. The results were shown in table 6, 7, 8 and 9.

Independent samples t- test was made in order to see if there is a significant difference between the public and private pharmacists in terms of the levels of work stress and the results were shown in Table 6. Summarizes difference in work stress of the public and private pharmacist

Table 6. Difference in work stress of the public and private pharmacist

private pharmacists (\bar{x})	public pharmacists (\bar{x})	t	p
2.83	2.16	2.63	0.013

When Table 6 is analysed, it can be seen that there is a statistical difference between the public and private pharmacists about the work stress levels. This shows that the activity fields where pharmacists work affect the level of work stress. It can be stated that private pharmacists are exposed to work stress more than public pharmacists.

Table 7. Summarizes Difference in Job Satisfaction of the Public and Private Pharmacist

Table 7. Difference in Job Satisfaction of the Public and Private Pharmacist

private pharmacists (\bar{x})	public pharmacists (\bar{x})	t	p
3.45	3.06	2.46	0.019

When Table 7 is analysed, we can see that there is a significant difference between work satisfaction levels of the private and public pharmacists ($p < 0.05$). Private pharmacists ($\bar{x} : 3.45$) are more pleased with their jobs than public pharmacists ($\bar{x} : 3.06$). Being independent from any institution or person might be a reason for this difference. Table 8. Summarizes difference in performance of the public and private pharmacist

Table 8. Difference in Performance of the Public and Private Pharmacist

private pharmacists (\bar{x})	public pharmacists (\bar{x})	t	p
3.76	3.36	2.14	0.040

When Table 8 is analysed, it can be seen that there is a statistically significant difference between public and private pharmacists in terms of mean performance scores ($p < 0.05$). Private pharmacists ($\bar{x} : 3.76$) have higher performance level compared to public pharmacists ($\bar{x} : 3.36$).

Table 9. Summarizes difference in ergonomics work conditions of the public and private pharmacist

Table 9. Difference in ergonomics work conditions

private pharmacists (\bar{x})	Public pharmacists (\bar{x})	t	p
3.83	3.40	1.76	0.087

When Table 9 is analysed, it can be seen that there is not a statistical difference ($p>0.05$) between the public and private pharmacists in terms of the mean scores of ergonomic work conditions. That is, private and public pharmacists have similar ergonomic work conditions.

A correlation analyses was made in order to detect the relationships among work stress, performance, work satisfaction and ergonomic work conditions and the results were shown in Table 10.

Table 10. The relationships among work stress, performance, work satisfaction and ergonomic work conditions

		STRESS	PERFORMANCE	SATISFACTION
STRESS	Pearson Correlation	1	-,153	-,119
	Sig. (2-tailed)		,080	,175
	N	132	132	132
PERFORMANCE	Pearson Correlation	-,153	1	,653**
	Sig. (2-tailed)	,080		,000
	N	132	133	133
SATISFACTION	Pearson Correlation	-,119	,653**	1
	Sig. (2-tailed)	,175	,000	
	N	132	133	133
ERGONOMICS	Pearson Correlation	,055	,218*	,395**
	Sig. (2-tailed)	,537	,013	,000
	N	129	130	130

There is a strong relationship between work satisfaction and performance ($r:0.65, p<0.01$). As employees' work satisfaction rises, their performance rises as well. There is a moderate relationship between ergonomic work conditions and work satisfaction ($r:0.39, p<0.01$).

This shows that when the workplace is improved, the satisfaction of the staff will also improve. There is a relationship between ergonomic work conditions and performance ($r:0.21, p<0.05$). This shows that the more ergonomically designed the workplace, the higher performance levels.

Results

Pharmacists are important people due to their knowledge about health and their assistance for the patients. In this study which was carried out in the city of Erzurum, when demographic features are considered, it is seen that the pharmacists are mostly

aged between 28-33, university graduate and married males. It can also be seen that, most of these pharmacists have been working for more than 6-11 years, have an income more than 3000 €.

It was determined that private pharmacists have more work stress while they are more satisfied with their job. They also have higher performance levels than public pharmacists. Anticipated relationships between work satisfaction and performance, and ergonomic work conditions and work satisfaction were confirmed. In addition, there is a relationship between work conditions and performance.

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