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The Mediating Role of Corporate Communication in the Effect of Motivation Levels of Pharmaceutical Representatives on Job Performance: A Study

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Abstract:

When employees understand and commit to the goals of the business, they tend to have higher levels of motivation and job performance. Corporate communication has a critical role in the relationship between motivation, job performance and the success of businesses. This research has been conducted to examine the mediating role of corporate communication, determine the factors that affect the motivation levels of pharmaceutical representatives working at pharmaceutical companies in Turkey, and understand the impact of these factors on job performance. Books, theses, journals and articles were used for the literature review of the study. A survey has been used as the data collection method, and the data was collected by distributing surveys to the participants. Participants answered the survey questions via Google Forms, and the collected data were analyzed using the SPSS 22.0 package program. Within the framework of the research model, the normal distribution and distribution properties of the data were examined with tests such as the Shapiro-Wilk Test, and t-test and ANOVA analyses were carried out to compare the means. Additionally, the Pearson Correlation coefficient was used to evaluate the relationship between variables.

Keywords: Pharmaceutical representatives, motivation, job performance, corporate communication

1. Introduction

Motivation is an important factor that affects the behavior of employees in the business world. Motivated employees are more committed, more productive, and more satisfied with their jobs. Motivated employees can provide a significant competitive advantage for businesses because they tend to perform higher and contribute more effectively to the goals of the business.

There are a number of challenges in the pharmaceutical industry, including intense competition, stringent regulations, and ever-changing market conditions. These challenges can be a significant source of stress for pharmaceutical representatives. A high level of motivation is important in dealing with these challenges and maintaining success. Employees working in the pharmaceutical industry have to perform their jobs in a fiercely competitive environment. Tasks such as introducing new products, maintaining effective relationships with doctors, and meeting sales targets require working under constant pressure. This situation may decrease the motivation levels of the representatives and negatively affect their performance. Motivation is an important tool to cope with such challenging business conditions. Motivated representatives can be more resilient in the face of challenges and put in more effort to achieve their goals. Additionally, motivated employees can cope with stress better and manage unfavorable conditions more effectively. Therefore, ensuring employee motivation is vital for both personal and corporate success in the pharmaceutical industry. Motivated representatives can better manage challenging working conditions and contribute to the company in achieving its goals. Therefore, it is important that pharmaceutical companies make efforts to increase employee motivation and provide the necessary support mechanisms. Corporate communication is considered an important factor in the relationship between motivation and job performance. Healthy corporate communication ensures the establishment of effective communication channels among employees. With the right channels, managers can establish clearer communication with employees, conveying their expectations and receiving feedback. This can increase employees' commitment to their jobs and increase their motivation.

When employees understand and commit to the goals of the business, they tend to be more motivated and have higher job performance. For these reasons, corporate communication has a critical role in the relationship between

motivation and performance and is important for the success of businesses. In this context, the main purpose of this research is to examine the factors that affect the motivation levels of pharmaceutical representatives and the mediating role of corporate communication to understand the impact of these factors on job performance.

In the second part of the study, the conceptual foundations and importance of motivation are discussed. Motivation is defined, its role in the business world and its effect on employee performance are explained. Additionally, the process of motivation and basic concepts related to motivation are discussed in detail. Various approaches to factors that provide employee motivation and manager behavior are examined.

The third part of the study focuses on the importance of measuring job performance in businesses. The concept of performance is defined, and its importance for businesses, employees, and managers is discussed. By examining the historical development and purpose of performance evaluation, the evaluation process and criteria are examined. In addition, performance evaluation methods and problems encountered in this process are examined in detail.

In the fourth part of the study, the foundations and importance of communication and corporate communication are examined. The concept of communication is defined, and its role and functions in businesses are explained. The basic concepts and communication models, as well as interpersonal distance and obstacles, are discussed. The concept of corporate communication is defined, and its importance and purpose are emphasized. The development process of corporate communication, its functions and the communication tools used are examined in detail.

In this context, the research aims to examine the mediating role of communication in the effect of motivation on productivity in businesses. For this purpose, answers to the following questions were sought:

- What is the effect of the motivation levels of employees on their job performance?
- What is the effect of the motivation levels of employees on their communication?
- What is the effect of the communication styles of employees on their job performance and motivation levels?

The hypotheses to be tested in line with the answers to the research questions are as follows:

- H1: Motivation has a positive and significant effect on performance.
- H2: Motivation has a positive and significant effect on communication.
- H3: Communication has a mediating role in the effect of motivation on performance.

2. Motivation

Motivation is the desire or energy that directs individuals' behavior to achieve certain goals. In the business world, motivation is a key factor that affects job performance. Motivated employees are more committed to their jobs and have higher levels of productivity and job satisfaction. At the same time, motivation can reduce conflict and stress in the workplace by keeping employees focused on goals. Therefore, businesses develop various strategies to increase motivation and offer certain incentives to motivate their employees.

Motivation is a crucial concept in understanding human behavior. The word motivation, derived from "Movere," means to activate. Therefore, motivation can be defined as an internal state that directs individuals towards a goal. In other words, it is a force that mobilizes individuals around a certain purpose (Güney, 2023:425).

Human behavior stems from various factors. Some of these factors are needs, desires, beliefs, and instincts. Motivation can also be defined as individuals acting to achieve a certain goal in line with their own wishes and desires (Koçel, 2005:633). According to these definitions, motivation is the process that makes a person take action, make an effort, and achieve a certain goal. Motivation refers to the sum of continuous efforts made to achieve a certain goal. (Küçüközkan, 2015:105). Motivation is finding answers to questions about the methods by which the individual will be activated (Ruthankoon & Ogunlana, 2003:333). Motivation can be defined as individuals acting to achieve a certain goal in line with their own desires and desires. (Koçel, 2005:633). The motivation process is not a sudden and spontaneous process; rather, it is a long process consisting of six stages: need, environment search, desire, option search, testing, and satisfaction (Tunçer, 2013:103).

Motivation is defined as a process of interaction between the individual and the environment; this process involves the selection, initiation, and maintenance of goal-directed behaviors. In this context, motivation stands out as a fundamental factor that determines and sustains the learner's behavior. (Svinicki and Volgler, 2003:58).

Motivation is considered a driving force that leads the individual to take action to meet their needs, desires, and goals. (Morgan, 2016:66)

Ultimately, motivation is a complex interaction of internal and external factors that direct people toward a specific goal. This process identifies individuals' needs, allows them to set goals, and takes action to achieve those goals.

3. Performance

The concept and definition of performance play an important role in the process of measuring and evaluating success in business. The performance of an employee or an organization reflects the ability to achieve certain goals. Accurately defining and measuring performance is critical for businesses to achieve their strategic goals.

Performance refers to the level of success and behavior under certain conditions. The performance involves work-related results obtained within a certain period of time, and it is generally a quantitative or qualitative measure of purposeful and planned activity (Akal, 2000: 1). This definition provides a basic criterion for evaluating the performance of employees in businesses and constitutes an important tool for management. Performance is measured by the goods, services, and products generated according to predetermined standards in a certain period. This concept expresses how the skills of employees and the relations between the means of production and the amount of production affect each other with terms such as efficiency, effectiveness, and output. (Çolak, 2010:7) The concept of performance has a close

relationship with various factors such as strategic goals of organizations, customer satisfaction, and financial results. The fact that performance is so multi-dimensional that it is strongly tied to the strategic goals of organizations, customer satisfaction, and financial results indicates that employees should be managed effectively, and their performance should be constantly improved.

Definitions of performance can be listed as follows:

- Performance is a measurable concept that shows how effectively an individual or organization performs a specific task. (Carlson, 2013:66)
- Performance is the level of success an individual achieves by using their abilities and available resources. (Morgan, 2010:90)
- Performance expresses the ability of an employee or a team member to achieve certain job results, goals, and expectations. (Öztürk, 2006:13)
- Performance measures an individual's competence and effectiveness in performing certain tasks or functions. (Zhu, 2009:146)
- Performance refers to the level of success and the behavior of employees under certain conditions. This definition is used as a fundamental concept in the measurement and management of performance in the business world. (Çolak, 2010:7)
- According to the definitions above, performance is an evaluation tool that expresses the effectiveness and efficiency in the process of achieving the strategic goals of an organization and an individual.

4. Communication

Communication is a complex process that enables the transfer of information, feelings, and thoughts between people. This process is carried out through verbal and non-verbal channels and constitutes the foundation of human behavior.

Communication is a fundamental and indispensable factor in human life. From the moment humans are born, they are in a state of constant communication, whether consciously or unconsciously, with other individuals around them. People convey various meanings to other people around them in various ways, such as through speech, silence, looks, sitting, and posture. Humans are social beings, which means they need to communicate with other people in order to survive. (Sezer, 2020:7) This communication process not only meets the emotional, social and functional needs of individuals but also gains certain meanings in the cultural and social context.

Zillioğlu defines communication as the process of transferring emotions, thoughts, and information (Zillioğlu, 1993:5). Oskay explains communication as attitudes, judgments, and emotional statements made within the community or social life, where people express similar feelings and thoughts arising from common experiences by giving information to each other about the objects, events, and phenomena in their environment (Oskay, 1992:15). These definitions help us understand the different dimensions of communication and its importance in human relations.

5. Corporate Communication

Corporate communication is a strategic process that manages the interactions within an organization among its internal and external stakeholders. This process shapes the organization's image, protects its reputation, communicates its goals and values, and ensures understanding and harmony among stakeholders.

Corporate communication refers to the communication between employees within an organization, the resulting exchange of information, and the regular functioning of business processes. Corporate communication enables the exchange of information, ideas, instructions, and feedback between individuals within the organization. With this process, managers can give instructions to employees, and employees can convey their problems or suggestions to managers. Corporate communication also helps the transfer of organizational culture and values, increases employee motivation, and contributes to a collaborative environment (Tanrıverdi, Adıgüzel and Çiftçi, 2010:105). This process is critical in increasing the effectiveness and efficiency of the organization.

The process of corporate communication enables the organization to communicate with its various stakeholders, such as employees, customers, investors, media, government, and society. Corporate communication is not limited to just transferring information; it also aims to manage the institution's reputation, shape its image, support its strategic goals and fulfill its social responsibilities. (Goodman, 2012:3-19) This process strengthens the corporate identity of the institution by integrating its internal and external communication strategies and contributes to the creation of trust and understanding among stakeholders.

6. Method

In this research, a questionnaire was used as the data collection method. Participants were given detailed information about the subject and purpose of the research through the Informed Consent Form, and it was stated that the participants' institutional information would be kept confidential and their answers would only be used for research purposes. With these explanations, it was ensured that the participants answered the survey questions peacefully and sincerely.

The questionnaire form consists of four main sections. The first section includes demographic information (such as age, gender, marital status, and education level) about the participants. In the second section, there are motivation-related statements to measure the motivation levels of the participants. In the third section, there are performance-related statements to measure the participants' perceptions of job performance. Finally, the fourth section includes questions

about corporate communication to evaluate participants' perceptions of corporate communication. Likert-type expressions used in the scales are as follows: 1- Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree, 5- Strongly Agree. The population of the research consists of representatives of Turkish pharmaceutical companies operating in Turkey. Since it was not possible to reach all employees, 500 representatives working in various companies were reached to represent the population, and the analyses were conducted with 431 valid surveys.

7. Findings

All data were analyzed using the SPSS 22.0 package program. The representation of continuous data (mean, standard deviation) is presented below. The compliance of the data with a normal distribution was tested with the skewness and kurtosis coefficient. T-test and ANOVA were used to compare the means, and the Pearson Correlation test was used to examine the relationship between variables. The correlation shows a relationship between variables. Regression analysis was used to examine the effect of independent variables on the dependent variable. The statistical significance level was determined as 0.05.

Scales	Cronbach's Alpha	Number of Questions
Motivation	0.959	16
Communication	0.926	6
Job Performance	0.945	4

Table 1: Reliability Analysis Results of the Scales

A scale is considered reliable when the internal consistency coefficient is .70 and above. When table 1 is examined, it is seen that Cronbach's Alpha coefficients were found to be higher than the lower limit value of 0.70 for the general scale; the coefficients calculated for the scales were found to be between 0.93 and 0.96, and the obtained coefficients indicate that the reliability of the scale based on internal consistency is sufficient.

Variable	n	%
Workplace		
Public	6	1.4
Private	425	98.6
Total	431	100
Gender		
Female	138	32.0
Male	293	68.0
Total	431	100
Marital Status		
Married	315	73.1
Single	85	19.7
Divorced/Widowed	31	7.2
Total	431	100
Education Level		
High School	29	6.7
Associate's Degree	79	18.3
Bachelor's Degree	264	61.3
Master's Degree and higher	59	13.7
Total	431	100
Age		
21-25	8	1.9
26-30	48	11.1
31-35	98	22.7
36-40	107	24.8
41-45	96	22.3
46 and above	74	17.2
Total	431	100
Employment Duration at the Current Institution		
Less than 1 year	70	16.2
1-3 years	127	29.5
4-6 years	90	20.9
7-9 years	56	13.0
10-12 years	31	7.2
13-15 years	22	5.1
16 years and above	35	8.1
Total	431	100

Number of Workplaces		
First	35	8.1
Second	108	25.1
Third	108	25.1
Fourth	108	25.1
Fifth or more	72	16.7
Total	431	100
Monthly Salary		
25,000-35,000 TL	168	39.0
35,000-50,000 TL	187	43.4
50,000 TL and above	76	17.6
Total	431	100

Table 2: Analysis of Demographic Information

When table 2, containing descriptive statistics of the participants, is examined, it is seen that: 6 (1.4%) participants work in the public sector, and 425 (98.6%) work in the private sector. 138 (32.0%) participants are female and 293 (68.0%) are male. 315 (73.1%) participants are married, 85 (19.7%) are single, and 31 (7.2%) are divorced/widowed. 29 (6.7%) participants have an education level of high school, 79 (18.3%) have an associate's degree, 264 (61.3%) have a bachelor's degree, and 59 (13.7%) have a master's degree or higher. 8 (1.9%) participants are 21-25 years old, 48 (11.1%) are 26-30 years old, 98 (22.7%) are 31-35 years old, 107 (24.8%) are 36-40 years old, 96 (22.3%) are 41-45 years old, and 74 (17.2%) are 46 years old or above. 70 (16.2%) participants have been working at the current institution for less than 1 year, 127 (29.5%) for 1-3 years, 90 (20.9%) for 4-6 years, 56 (13.0%) for 7-9 years, 31 (7.2%) for 10-12 years, 22 (5.1%) for 13-15 years, and 35 (8.1%) for 16 years or more. 35 (8.1%) participants are currently working at their first workplace, 108 (25.1%) at their second, 108 (25.1%) at their third, 108 (25.1%) at their fourth, and 72 (16.7%) at their fifth or more. 168 (39.0%) participants have a monthly salary of 25,000-35,000 TL, 187 (43.4%) of 35,000 - 50,000 TL, and 76 (17.6%) of 50,000 TL or above.

Variables	n	Mean	Std. Deviation	Median	Min	Max	Skewness	Kurtosis
PSETM	431	3.76	0.83	4.00	1.00	5.00	-0.99	1.04
ESSIW	431	3.48	1.02	3.75	1.00	5.00	-0.60	-0.40
OMTMGWCS	431	3.46	1.13	4.00	1.00	5.00	-0.61	-0.66
Motivation	431	3.62	0.87	3.88	1.00	5.00	-0.76	0.27
Communication	431	3.44	1.03	3.67	1.00	5.00	-0.68	-0.19
Performance	431	3.67	1.24	4.00	1.00	5.00	-1.13	0.02

Table 3: Descriptive Values of Scores from Motivation, Communication and Performance Scales

- PSETM: Psycho-Social, Economic Tools in Motivation,
- ESSIW: Employee's Search for Security and Independence at Work,
- OMTMGWCS: Organizational and Managerial Tools in Motivation - Good Working Conditions and Status

Within the scope of the research, some assumptions were checked before conducting the analyses to test the hypotheses. First, the distributions of the scores of the motivation, communication, and performance scales were examined. In this direction, the skewness and kurtosis coefficients of the mean scores of the measurement tools were calculated. The skewness and kurtosis coefficients in the range of ± 2 indicate that the mean scores have a normal distribution. The skewness and kurtosis coefficients of the scores obtained from the measurement tools are presented in table 4. The results show that the data are normally distributed.

Variables	Workplace	n	Mean	Std. Deviation	t	p
PSETM	Public	6	3.96	0.81	0.590	0.555
	Private	425	3.76	0.83		
ESSIW	Public	6	3.63	0.85	0.347	0.729
	Private	425	3.48	1.03		
OMTMGWCS	Public	6	3.89	1.07	0.937	0.349
	Private	425	3.45	1.13		
Motivation	Public	6	3.90	0.75	0.800	0.424
	Private	425	3.62	0.87		
Communication	Public	6	3.42	1.15	-	0.961
	Private	425	3.44	1.03		
Performance	Public	6	3.75	1.18	0.165	0.869
	Private	425	3.67	1.24		

Table 4: Mean, Standard Deviation and T-Test Results of Motivation, Communication and Performance Scores by Type of Workplace

In table 4, it was observed that the mean scores of motivation, communication and performance do not differ by the type of workplace. ($p > 0.05$)

Variables	Gender	n	Mean	Std. Deviation	T	p
PSETM	Female	138	3.81	0.83	0.928	0.354
	Male	293	3.74	0.82		
ESSIW	Female	138	3.56	1.06	1.123	0.262
	Male	293	3.44	1.01		
OMTMGWCS	Female	138	3.49	1.20	0.399	0.690
	Male	293	3.44	1.10		
Motivation	Female	138	3.68	0.92	0.929	0.354
	Male	293	3.59	0.84		
Communication	Female	138	3.49	1.01	0.707	0.480
	Male	293	3.41	1.03		
Performance	Female	138	3.77	1.14	1.203	0.230
	Male	293	3.62	1.28		

Table 5: Mean, Standard Deviation and T-Test Results of Motivation, Communication and Performance Scores by Gender

In table 5, it was observed that the mean scores of motivation, communication and performance do not differ by gender. ($p > 0.05$)

Variables	Marital Status	n	Mean	Std. Deviation	F	p	Difference
PSETM	Married	315	3.77	0.83	0.804	0.448	
	Single	85	3.79	0.77			
	Divorced/Widowed	31	3.58	0.98			
ESSIW	Married	315	3.49	1.01	0.469	0.626	
	Single	85	3.52	1.03			
	Divorced/Widowed	31	3.31	1.15			
OMTMGWCS	Married	315	3.47	1.11	0.080	0.923	
	Single	85	3.42	1.23			
	Divorced/Widowed	31	3.45	1.15			
Motivation	Married	315	3.63	0.85	0.440	0.644	
	Single	85	3.63	0.86			
	Divorced/Widowed	31	3.48	1.02			
Communication	Married	315	3.42	1.04	1.054	0.349	
	Single	85	3.56	0.93			
	Divorced/Widowed	31	3.27	1.15			
Performance	Married	315	3.66	1.29	0.018	0.982	
	Single	85	3.68	1.09			
	Divorced/Widowed	31	3.69	1.07			

Table 6: Mean, Standard Deviation and ANOVA Results of Motivation, Communication and Performance Scores by Marital Status

In table 6, it was observed that the mean scores of motivation, communication and performance do not differ by marital status. ($p > 0.05$)

Variables	Education Level	n	Mean	Std. Deviation	F	p	Difference
PSETM	High School	29	3.66	0.82	0.412	0.745	
	Associate's Degree	79	3.77	0.91			
	Bachelor's Degree	264	3.75	0.81			
	Master's Degree and higher	59	3.85	0.80			
ESSIW	High School	29	3.41	1.02	1.217	0.303	
	Associate's Degree	79	3.61	1.06			
	Bachelor's Degree	264	3.42	1.03			
	Master's Degree and higher	59	3.63	0.95			
OMTMGWCS	High School	29	3.41	1.04	1.423	0.236	
	Associate's Degree	79	3.43	1.11			
	Bachelor's Degree	264	3.41	1.18			
	Master's Degree and higher	59	3.74	0.94			

Variables	Education Level	n	Mean	Std. Deviation	F	p	Difference
Motivation	High School	29	3.53	0.86	0.788	0.501	
	Associate's Degree	79	3.65	0.92			
	Bachelor's Degree	264	3.59	0.87			
	Master's Degree and higher	59	3.77	0.79			
Communication	High School	29	3.50	1.10	0.342	0.795	
	Associate's Degree	79	3.35	1.11			
	Bachelor's Degree	264	3.47	0.97			
	Master's Degree and higher	59	3.38	1.15			
Performance	High School	29	3.69	1.24	0.862	0.461	
	Associate's Degree	79	3.64	1.23			
	Bachelor's Degree	264	3.72	1.21			
	Master's Degree and higher	59	3.44	1.38			

Table 7: Mean, Standard Deviation and ANOVA Results of Motivation, Communication and Performance Scores by Education Level

Table 7 shows that the mean scores of motivation, communication and performance do not differ by education level. ($p>0.05$)

Variables	Age	n	Mean	Std. Deviation	F	p	Difference
PSETM	21-25	8	3.81	0.95	0.844	0.519	
	26-30	48	3.87	0.83			
	31-35	98	3.86	0.83			
	36-40	107	3.73	0.76			
	41-45	96	3.72	0.88			
	46 and above	74	3.65	0.83			
ESSIW	21-25	8	3.88	1.08	0.953	0.447	
	26-30	48	3.51	1.14			
	31-35	98	3.62	1.00			
	36-40	107	3.46	0.97			
	41-45	96	3.42	1.02			
	46 and above	74	3.34	1.05			
OMTMGWCS	21-25	8	3.83	1.39	1.179	0.318	
	26-30	48	3.46	1.17			
	31-35	98	3.65	1.11			
	36-40	107	3.46	1.11			
	41-45	96	3.35	1.16			
	46 and above	74	3.30	1.10			
Motivation	21-25	8	3.82	1.01	1.004	0.415	
	26-30	48	3.68	0.89			
	31-35	98	3.75	0.86			
	36-40	107	3.60	0.83			
	41-45	96	3.56	0.89			
	46 and above	74	3.49	0.87			
Communication	21-25	8	2.83	0.68	4.477	0.001	2,3,4>5
	26-30	48	3.78	0.78			
	31-35	98	3.55	1.02			
	36-40	107	3.56	0.95			
	41-45	96	3.10	1.21			
	46 and above	74	3.40	0.92			
Performance	21-25	8	2.63	1.28	4.782	0.000	2,4>5; 2>1
	26-30	48	4.04	0.75			
	31-35	98	3.71	1.30			
	36-40	107	3.84	1.15			
	41-45	96	3.26	1.45			
	46 and above	74	3.75	1.08			

Table 8: Mean, Standard Deviation and ANOVA Test Results of Motivation, Communication and Performance Scores by Age

Table 8 shows that the mean scores of communication and performance differ by age ($p<0.05$). The communication mean scores of employees in the 26-30, 31-35, and 36-40 age groups were found to be statistically and

significantly higher than those in the 41-45 age group. This finding indicates that employees in the young and middle age groups can use their corporate communication skills more effectively and this can positively affect their performance.

It was also observed that the performance mean scores of employees in the 26-30 and 36-40 age groups are statistically and significantly higher than those in the 41-45 age group. In my thesis, I observed that the performance scores of employees in the 26-30 and 36-40 age groups are statistically significantly higher than those in the 41-45 age group. I have considered various factors to explain this situation. First, as age increases, employees generally gain more experience, and this experience can positively affect their job performance. In addition, it has been observed that employees in the middle age and older age groups generally have more advanced leadership and management skills, which can help them manage business processes more effectively. In addition, employees' problem-solving abilities and work discipline generally increase as they age, which can positively affect their performance. As a result, in my thesis, I will examine these issues in detail and support them with data by stating that factors such as experience, leadership skills, problem-solving abilities and work discipline play a role in the performance differences between age groups.

Finally, it was observed that the performance mean scores of employees aged 26-30 are statistically and significantly higher than those aged 21-25. In my thesis, I found that the performance mean scores of employees aged between 26 and 30 are statistically and significantly higher than those aged between 21 and 25. I considered various factors to explain this situation. First, it is possible that employees aged between 26 and 30 generally have more work experience and are more adaptable to the work environment. This experience can increase their work performance because it allows them to manage work processes more effectively. In addition, it is possible that employees aged between 26 and 30 may have more advanced problem-solving skills than younger age groups. These skills can help them solve the challenges encountered more quickly and effectively. However, it is also possible that employees aged between 26 and 30 may have a higher level of motivation and be more committed to their work. As a result, in my thesis, I will explain why the performance of employees aged between 26 and 30 is higher than those aged between 21 and 25 by examining these factors in detail and supporting them with data.

Variables	Employment Duration at the Current Institution	n	Mean	Std. Deviation	F	p	Difference
PSETM	Less than 1 year	70	3.85	0.75	1.494	0.179	
	1-3 years	127	3.74	0.86			
	4-6 years	90	3.78	0.76			
	7-9 years	56	3.61	0.92			
	10-12 years	31	3.88	0.72			
	13-15 years	22	3.43	1.05			
	16 years and above	35	3.95	0.73			
ESSIW	Less than 1 year	70	3.55	0.99	0.650	0.690	
	1-3 years	127	3.50	1.00			
	4-6 years	90	3.41	1.00			
	7-9 years	56	3.39	1.18			
	10-12 years	31	3.55	1.03			
	13-15 years	22	3.24	1.18			
	16 years and above	35	3.69	0.89			
OMTMGWCS	Less than 1 year	70	3.50	1.14	0.835	0.543	
	1-3 years	127	3.45	1.09			
	4-6 years	90	3.38	1.11			
	7-9 years	56	3.55	1.19			
	10-12 years	31	3.34	1.24			
	13-15 years	22	3.15	1.34			
	16 years and above	35	3.74	0.98			
Motivation	Less than 1 year	70	3.68	0.83	0.871	0.516	
	1-3 years	127	3.62	0.88			
	4-6 years	90	3.60	0.79			
	7-9 years	56	3.54	0.98			
	10-12 years	31	3.67	0.86			
	13-15 years	22	3.33	1.06			
	16 years and above	35	3.82	0.75			
Communication	Less than 1 year	70	3.28	1.01	2.636	0.016	5>6
	1-3 years	127	3.58	0.93			
	4-6 years	90	3.52	1.00			
	7-9 years	56	3.34	1.13			
	10-12 years	31	3.75	0.76			
	13-15 years	22	2.90	1.12			
	16 years and above	35	3.22	1.26			

Variables	Employment Duration at the Current Institution	n	Mean	Std. Deviation	F	p	Difference
Performance	Less than 1 year	70	3.67	1.19	1.661	0.129	
	1-3 years	127	3.86	1.09			
	4-6 years	90	3.74	1.22			
	7-9 years	56	3.33	1.36			
	10-12 years	31	3.65	1.35			
	13-15 years	22	3.65	1.26			
	16 years and above	35	3.34	1.51			

Table 9: Mean, Standard Deviation and ANOVA Test Results of Motivation, Communication and Performance Scores by Employment Duration at the Current Institution

Table 9 shows that the communication mean scores differ by employment duration at the current institution ($p < 0.05$). The mean communication scores of the employees with 10-12 years of service were found to be statistically significantly higher than those with 13-15 years of service. The reason for this may be that those who started working later have higher energy and motivation for work. After a certain number of years, decreases in these rates can be observed.

Variables	Number of Workplaces	n	Mean	Std. Deviation	F	p	Difference
PSETM	First	35	3.98	0.73	0.901	0.463	
	Second	108	3.68	0.80			
	Third	108	3.77	0.87			
	Fourth	108	3.76	0.85			
	Fifth or more	72	3.77	0.80			
ESSIW	First	35	3.72	0.73	0.751	0.558	
	Second	108	3.42	1.05			
	Third	108	3.54	1.01			
	Fourth	108	3.45	1.07			
	Fifth or more	72	3.41	1.05			
OMTMGWCS	First	35	3.80	0.88	1.082	0.365	
	Second	108	3.36	1.14			
	Third	108	3.46	1.10			
	Fourth	108	3.49	1.20			
	Fifth or more	72	3.39	1.16			
Motivation	First	35	3.87	0.66	0.924	0.450	
	Second	108	3.55	0.85			
	Third	108	3.64	0.88			
	Fourth	108	3.61	0.91			
	Fifth or more	72	3.60	0.88			
Communication	First	35	3.49	1.18	1.035	0.389	
	Second	108	3.48	1.04			
	Third	108	3.53	1.01			
	Fourth	108	3.43	0.96			
	Fifth or more	72	3.23	1.05			
Performance	First	35	3.66	1.23	0.037	0.997	
	Second	108	3.68	1.21			
	Third	108	3.63	1.25			
	Fourth	108	3.69	1.28			
	Fifth or more	72	3.68	1.26			

Table 10: Mean, Standard Deviation and ANOVA Results of Motivation, Communication and Performance Scores by Number of Workplaces

Table 10 shows that the mean scores of motivation, communication and performance do not differ according to the number of workplaces ($p > 0.05$).

Variables	Monthly Salary	n	Mean	Std. Deviation	F	p	Groups
PSETM	25,000 - 35,000 TL	168	3.60	0.86	5.771	0.003	2.3>1
	35,000 - 50,000 TL	187	3.82	0.83			
	50,000 TL and above	76	3.95	0.68			
ESSIW	25,000 - 35,000 TL	168	3.26	1.09	7.257	0.001	2.3>1
	35,000 - 50,000 TL	187	3.57	0.98			
	50,000 TL and above	76	3.74	0.89			
OMTMGWCS	25,000 - 35,000 TL	168	3.23	1.18	6.221	0.002	2.3>1
	35,000 - 50,000 TL	187	3.57	1.11			
	50,000 TL and above	76	3.69	0.99			
Motivation	25,000 - 35,000 TL	168	3.43	0.88	7.563	0.001	2.3>1
	35,000 - 50,000 TL	187	3.70	0.87			
	50,000 TL and above	76	3.85	0.73			
Communication	25,000 - 35,000 TL	168	3.39	0.96	3.135	0.045	2>3
	35,000 - 50,000 TL	187	3.56	1.01			
	50,000 TL and above	76	3.23	1.19			
Performance	25,000 - 35,000 TL	168	3.74	1.13	1.138	0.321	
	35,000 - 50,000 TL	187	3.68	1.27			
	50,000 TL and above	76	3.48	1.39			

Table 11: Mean, Standard Deviation and ANOVA Results of Motivation, Communication and Performance Scores by Monthly Salary

Table 11 shows that the PSETM, ESSIW, OMTMGWCS, motivation, and communication mean scores differ by monthly salary ($p < 0.05$). PSETM, ESSIW, OMTMGWCS, and motivation mean scores of employees with a monthly salary of 35,000 - 50,000 TL and 50,000 TL and above were found to be statistically and significantly higher than those with a monthly salary of 25,000-35,000 TL. The communication mean scores of employees with a monthly salary of 35,000 - 50,000 TL were also found to be statistically and significantly higher than those with a monthly salary of 50,000 TL and above. The reason for this could be that employees with a higher salary usually take on higher responsibilities and more complex tasks. This can increase their motivation and help them feel more independent and secure in their jobs. Therefore, they may have higher scores in variables such as ESSIW and OMTMGWCS.

In addition, it is possible that higher-paid employees generally have better working conditions and higher status. These factors may also positively affect their job performance by increasing their PSETM and motivation. Higher communication scores support the idea that higher-paid employees may have more advanced communication skills, which can make it easier to work collaboratively and communicate effectively within an organization.

Variables	PSETM	ESSIW	OMTMGWCS	Motivation	Communication	Performance
PSETM	-----					
ESSIW	.822**	-----				
OMTMGWCS	.668**	.749**	-----			
Motivation	.944**	.932**	.838**	-----		
Communication	.277**	.278**	.188**	.284**	-----	
Performance	.097*	.129**	.114*	.119*	.521**	-----
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 12: Pearson Correlation Coefficients of Scores from Motivation, Communication and Performance Scales

When the statistically significant relationships in the table are examined, a low-level positive relationship was found between the variables PSETM and communication ($r = 0.277$; $p < 0.01$). A low-level positive relationship was found between the variables PSETM and performance ($r = 0.097$; $p < 0.05$).

A low-level positive relationship was found between the variables ESSIW and communication ($r = 0.278$; $p < 0.01$). A low-level positive relationship was found between the variables PSETM and performance ($r = 0.129$; $p < 0.01$).

A low-level positive relationship was found between the variables OMTMGWCS and communication ($r = 0.188$; $p < 0.01$). A low-level positive relationship was found between the variables PSETM performance ($r = 0.114$; $p < 0.05$).

A low-level positive relationship was found between the motivation and communication variables ($r = 0.284$; $p < 0.01$). A low-level positive relationship was found between the variables PSETM and performance ($r = 0.119$; $p < 0.05$).

A low-level positive relationship was found between the communication and performance variables ($r = 0.521$; $p < 0.01$).

		β	
		C	P
M	Test1		
	M		0.17*
	R ²		0.02
	F		6.12*
	Test2		
	M	0.33***	
	R ²	0.08	
	F	37.62***	
	Test3		
	M		0.41***
	C		0.73***
	R ²		0.35
	F		114.54***
	Sobel Test (z)		3.5***
	*p≤.05 ** p≤.01 *** p≤.001		

Table 13: The Mediating Role of Communication in the Effect of Motivation on Performance

Regression analysis was conducted to reveal the direct relationships between variables, in other words, the explanatory power of independent variables on the dependent variable. In the regression analysis, performance was considered as the dependent variable. Communication, which was also assumed to be the mediator variable, and motivation were considered independent variables, and their effects on the dependent variable were examined (Table 13).

In order to explain the effect of motivation (M) on performance (P) and the mediating role of communication (C) in this effect, a three-stage regression analysis was performed as suggested by Baron and Kenny (1986: 1179). According to this method, the independent variable should have an effect on the dependent variable and the mediating variable. When the mediating variable is included in the regression analysis along with the independent variable, the regression coefficient of the independent variable on the dependent variable should decrease, while the mediating variable should continue to have a significant effect on the dependent variable (P). In this context, in order to determine the mediating role of communication (C), the relationships between M-C-P were examined through hierarchical regression analyses and Sobel tests were performed. The findings regarding the mediation test are presented in the table above.

Within the scope of the mediation test, the relationships between motivation, the independent variable, and performance were examined. In the first step, it was seen that M significantly affected P ($\beta = .17, p < .05$). In the second step, the effect of M on C, the mediator variable, was examined. As a result of the analysis, it was found that M significantly affected C ($\beta = .33, p < .001$). In the last step of this stage, M and C, the mediator variable, were analyzed together, and their effects on P were examined. As a result of this analysis, with the inclusion of M in the analysis along with C, the effect on P continued and increased ($\beta = .41, p < .01$), and the effect of C on P continued. ($\beta = .73, p < .01$) After these conditions were met, the Sobel test was performed in order to confirm the mediation effect and Sobel(z) was found to be significant ($z = 3.5, p < .001$). This finding shows that C plays a partial mediating role in the effect of M on P. As a result of the analyses in this section, H₁, H₂ and the mediation hypothesis H₃ are supported.

8. Conclusion and Recommendations

In this research, the relationship between the motivation and performance levels of pharmaceutical representatives and the mediating role of corporate communication in this relationship was examined. No significant differences were found in the mean scores of motivation, communication and performance by the workplace, gender, or education level. However, the mean scores of communication were found to be statistically and significantly higher in the 26-30, 31-35, and 36-40 age groups compared to the 41-45 age group. This finding indicates that young and middle-aged employees may have more effective corporate communication skills, and this situation may positively affect their performance.

In addition, the performance mean scores were found to be statistically and significantly higher in the 26-30 and 36-40 age groups compared to the 41-45 age group. This indicates that young and middle-aged employees may have higher work experience, adaptation skills, problem-solving skills, and motivation levels. Considering that young employees can adapt to innovations and changes in business processes more quickly, it is understood that this situation positively affects their performance.

However, it has been observed that factors such as the employment duration at the current institution and monthly salary also have an effect on motivation, communication, and performance. For example, higher-paid employees were found to have higher motivation, communication, and performance scores in general. This shows that a higher salary can positively affect employee motivation and performance by increasing the sense of responsibility and job independence.

This research can be replicated in different sectors. For example, it is possible to understand sectoral differences by examining the relationship between the motivation levels and performance of employees in finance, technology, or service sectors. Comparing the relationships between the motivation factors and performance criteria of employees in different sectors can make important contributions to understanding the effects of sectoral characteristics.

Likewise, this research can be replicated in different countries. For example, the relationships between motivation levels and the performance of representatives operating in the pharmaceutical sector in developed and developing countries can be examined. Evaluating the effects of cultural, economic and social differences on these relationships will allow generalizations to be made through international comparisons.

Thirdly, this study can be extended to representatives working in global pharmaceutical companies operating in Turkey. Comparing the effects of different working conditions, cultural adaptation, management approach, and work processes on motivation and performance between local and global companies is important in terms of evaluating the compliance of local practices with global standards.

In addition, focusing on employees working in different positions in pharmaceutical companies, similar research can be conducted to compare the motivational profiles and performances of employees in different roles, such as managers, sales representatives, and research and development specialists. Understanding how the relationships between motivation and performance differ by the job functions of employees in different positions is important for understanding internal career management and positional expectations.

Finally, this study can be integrated into human resources performance interviews for data measurement. Understanding how motivational factors are reflected in performance evaluations and how these evaluations can be improved can strengthen the relationship between employee satisfaction and company performance. Such data-based approaches for human resources departments can support strategic decision-making processes and ensure that employees achieve individual and corporate goals.

In conclusion, this research provides important findings to understand the effect of pharmaceutical representatives' motivation levels on their performance and to examine how corporate communication plays a mediating role in this relationship. By analyzing these factors in more detail, future research can help develop effective strategies to increase the performance of employees in the pharmaceutical sector.

9. References

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