



ISSN: 0975-833X

Available online at <http://www.ijournalcra.com>

INTERNATIONAL JOURNAL  
OF CURRENT RESEARCH

International Journal of Current Research  
Vol. 13, Issue, 12, pp.19880-19884, December, 2021

DOI: <https://doi.org/10.24941/ijcr.42700.12.2021>

## RESEARCH ARTICLE

# IMPACT OF ORGANIZATIONAL JUSTICE ON THE PERFORMANCE OF HEALTH CARE WORKERS

<sup>1,\*</sup>Manal H. Alabdali and <sup>2</sup>Hussein M. Borie

<sup>1</sup>Department of Health Services and Hospital Administration, Faculty of Economics and Administration, King Abdulaziz University

<sup>2</sup>School of hospitals administration, University of KAU

### ARTICLE INFO

#### Article History:

Received 15<sup>th</sup> September, 2021  
Received in revised form  
18<sup>th</sup> October, 2021  
Accepted 20<sup>th</sup> November, 2021  
Published online 29<sup>th</sup> December, 2021

#### Keywords

Organization Justice, Distributive Justice, Procedural Justice, Interactional Justice, Healthcare workers' Performance.

#### \*Corresponding author:

Manal H. Alabdali

### ABSTRACT

**Background:** For the organization's success, it must work with employees who must behave faithfully and be committed to improving its performance. Justice is considered a sound investment in our organization, and no one can deny the fact that a just organization is where the employees are more engaged and productive. **Aim:** The study aimed to investigate the impacts of three dimensions of organizational justice (distributive, procedural, interactional) on health care workers' performance. **Method:** To achieve the aim of this study, the researcher adopted a descriptive analysis cross-sectional design. The study population was the workers in King Abdullah Medical City (KAMC), in Makkah, Saudi Arabia. In 2021, The questionnaire was used to collect the needed data, and the response rate was 100%. Data were analyzed by using SPSS, and Three hypotheses were tested based on data collected. **Result:** Results of the Chi-square analysis demonstrated that a significant relationship was found between healthcare workers' performance and the three dimensions of organizational justice (distributive justice, procedural justice, and Interactional justice) (P-value <0.05). **Conclusion and recommendation:** Organizational justice has an important influence on healthcare workers' performance. The recommendations made from this study are the following: Decisions must be based on accurate information and participation of employees in decisions related to their work. Also, hospital managers should openly describe the fair procedures they are using and explain decisions with dignity and respect

Copyright © 2021. Manal H. Alabdali and Hussein M. Borie. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Citation:** Manal H. Alabdali and Hussein M. Borie. "Impact of organizational justice on the performance of health care workers", 2021. *International Journal of Current Research*, 13, (12), 19880-19884.

## INTRODUCTION

Human resources are considered a significant factor for organizational effectiveness and efficiency. All organizations need active managers and employees to achieve their vision and objectives (Al-zu, 2010). Individual Employee performance is a crucial variable that positively or negatively impacts organizations' performance and contributes to the organization's success or failure (Ali, 2018). For the organization's success, it must work with employees who must behave faithfully and be committed to improving the organization's performance. Also, for organizational success, all managers in different positions must work together collaboratively and create a supportive work environment that promotes organizational justice and decreases workplace deviance (Alper & Ehtiyar, 2006).

Justice is considered a sound investment in our organization, and no one can deny the fact that a just organization is where the employees are more engaged and productive. Moreover, fairness in treating an employee may lead to increase loyalty and commitment to the organization and, thus, accept its rules and regulations (Rai, 2013). Organizational justice frequently means that satisfaction and success in the workplace. Therefore, justice is one of the best ways that leaders can increase trust between them and their employees. In turn, the employees' responsibility and performance will enhance organizational goals (Rai, 2013). Health care experts have long recognized the importance of organizational justice. However, many organizations are still affected by negative employees' perceptions about their jobs, which can frequently be traced by ineffective dealing.

Due to organizational justice deficiencies in healthcare organizations, the culture generally gives doctors great attention and priority more than others in healthcare organizations (Rai, 2013). Since healthcare is a specialized field and multiple categories of staff work together, the Application of justice theories and principles is not significantly tested in healthcare organizations (Özer *et al.*, 2017) or directed to a specific group like nurses (Rai, 2013).

Organizational Justice is defined as the employee's perception towards the fairness of resources' allocation in the organizational authorities. Three dimensions of organizational justice are widely mentioned in the organizational research literature: distributive, procedural, and interactional justice (Kalay, 2016). The term distributive justice can be defined as equal distribution of resources and fairness in the organization's outcome allocation (Bt & Ahmad, 2016). In other words, the distribution of rewards according to individual contribution, and employees are punished for what they are doing (Imamoglu *et al.*, 2019).

Procedural justice is about the truth in the decision-making process, and all decisions regarding the fair distribution of rewards and punishments are justified (Choudhry *et al.*, 2011). In other words, justice in the procedures is related to the organization's methods to distribute the outcomes among their employees (Kalay, 2016). While Interactional justice is how the superiors treat their employees inside the organization, including respect, honesty, and understanding (Kalay, 2016). Task performance can be defined as the ability to fulfill an employee's job tasks and responsibilities, as described in the job description, and meet the required level in terms of quantity and quality (Kalay, 2016). Employees' performance can be measured by their contribution to achieving organizational goals during a specific time. It is also measured by their ability to perform the task and creativity in performing duties (Nurak & Riana, 2017). Workers who neglect to carry out their responsibilities may not receive appropriate rewards or face punishment.

## METHODS

The method applied in this study was a descriptive analysis cross-sectional method. The researcher describes all variables included in this study: organizational justice (distributive, procedural, and interactional justice) and healthcare workers' Performance. It also detects the relation between all variables. This study was conducted in King Abdullah Medical City, located in Makkah. After reviewing the number of healthcare workers in King Abdullah Medical City. The estimated number is 3467 (1089 nurses, 591 Physicians, 478 Specialists, 480 Technicians, and 829 Admins). The significance level was set at 5%, the Confidence interval was 95%, the alpha error was 5%, the problem prevalence was 50%, and the sample size was (346), representing 10% of the total number 3467 workers. From each position, 10% or more must be included. The questionnaire consisted of 24 items using a five-point Likert-type scale ranging from 1 for strongly disagree and 5 for strongly agree. Data was collected after getting approval from Research Committee on King Abdullah Medical City. The questionnaire started with a brief explanation for the participants regarding the purpose of the research. Then, they informed that their responses would be kept anonymous and used for academic research purposes only.

Data was entered into a personal computer, and it was analyzed using (SPSS) Statistical Package for Social Sciences Version 23 to gain the result. A descriptive analysis was conducted and presented in a table to describe the demographic of the respondent. A Suitable statistical test was applied according to the type of data. Chi-square was used for comparing two or more qualitative variables. In addition, the Pearson correlation test was performed to assess the correlation's direction and strength between independent and dependent variables. A p-value of less than 0.05 and a Confidence interval of 95% were considered significant.

## RESULTS

This study included 346 participants, of which 165 (47.7 %) were male, and 181 (52.3 %) were female. Table (1) shows that two-thirds 233 (67.3 %) of participants were from Saudi, and 32.7 % are non-Saudi. According to the participant's age, the large group were 25-40 years old 253 ( 73.1%), 21.7 % is 41-50 years old, 2.3% is less than 25 years old, and 2.9 % is more than 50 years old. According to the level of education, more than half 188 (54.3%) had bachelor's degree, 13.6 % had Doctoral degree, 17.6% had master's degree, and 13.6 % had a diploma. Our sample consist of almost one-third (31.5 %) were nurses, 24 % were admins, 17.1% were physicians, 13.9% were technicians, and 13.6 % were specialists. Finally, more than a third of the participants, 135 (39.0%), were from the group (5-10 years experience and more), 60 (17.3%) were from the group (less than 5 years experience), 76 (22.0%) were from the group (11- 15 years), 47 (13.6%) were from the group (16- 20 years experience), and only 28 (8.1%) were from the group (more than 20 years experience).

## DISCUSSION

The main aim of this study is to investigate the impacts of three dimensions of organizational justice on healthcare workers' performance to help increase the experience and knowledge of weakness and strength areas to improve performance and professional growth. The study's main findings revealed that organizational justice dimensions (distributive justice, procedural justice, and Interactional justice ) have an essential influence on healthcare workers' performance, which affects the whole vision of the performance. Regarding hypothesis one, the results showed a significant positive relationship between distributive justice and workers' performance where  $X^2=6.898$  and  $P\text{-value}=0.009$ , which means that distributive justice has an important role and influence on the healthcare workers' performance. Where distributive justice refers to perceived fairness and evaluation of decisional outcomes such as performance appraisal, pay, rewards, and recognitions. (Srivastava, 2015) When employees perceive distributive injustice, they react against the results of the decisions taken by the organization. (Cihangiroğlu, Şahin, & Naktiyok, 2012) This finding is consistent with Kalay's (2016) study. They reported that the employee finds the results of this comparison unequal with others.

**Table 1. Distribution the population according to gender, nationality, age, level of education, profession and year of experience**

Variable		Frequency	Percent
Gender	Male	165	47.7
	Female	181	52.3
Nationality	Saudi	233	67.3
	Non-Saudi	113	32.7
Age	less than 25	8	2.3
	25_40 Years	253	73.1
	41_50 Years	75	21.7
	More than 50	10	2.9
Level of Education	Diploma	50	14.5
	Bachelor's degree	188	54.3
	Master's degree	61	17.6
	Doctoral degree	47	13.6
Profession	Admin	83	24.0
	Technician	48	13.9
	Specialist	47	13.6
	Nursing	109	31.5
	Physician	59	17.1
Year of Experience	Less than 5	60	17.3
	5_10 Years	135	39.0
	11_15 Years	76	22.0
	16_20 Years	47	13.6
	More than 20	28	8.1

**Table 2. The relation between distributive justice and workers' performance**

		Workers' performance							
		Poor		Moderate		High		Total	
		N	%	N	%	N	%	N	%
Distributive justice	Poor	69	68.3%	80	43.2%	31	51.7%	180	52.0%
	Moderate	15	14.9%	73	39.5%	11	18.3%	99	28.6%
	High	17	16.8%	32	17.3%	18	30.0%	67	19.4%
	Total	101	100%	185	100%	60	100%	346	100%
Chi-square	X <sup>2</sup>							6.898	
	P-value							=0.009*	

The employee will attempt to change their performance to equalize that equation (Kalay,2016). Also, in a 2018 study, the author reported that distributive justice is considered to be the most influential contributor to employee performance. (Krishnan *et al.*, 2018). Where distributive justice affects performance when efficiency and productivity are involved (Cohen-Charash and Spector,2001).In other words, distributive justice affects attitudes about specific events (e.g., satisfaction with pay, satisfaction with one's performance appraisal) (Ambrose *et al.*, 2007) and deals with ends (Lambert *et al.*, 2008) Regarding hypothesis two, the results showed a significant positive relationship between procedures justice and workers' performance where  $X^2=7.391$  and  $P\text{-value}=0.007$ , which means that procedures justice has a significant role and influence on the healthcare workers' performance. Where procedures justice refers to the perceived fairness of policies and procedures used to make decisions in the workplace. (Srivastava, 2015) When employees perceive procedural injustice, they may react against the entire organization. (Cihangiroğlu, Şahin, & Naktiyok, 2012) This finding is consistent with Mohamed's study (2019), where the author reported a significant positive correlation between organizational justice perception of nurses and quality performance components. Higher levels of organizational justice, particularly procedural justice, are related to more positive quality performance. (Mohamed SA, 2019). Also, in agreement with Özer and colleagues' study (2017), the authors reported that the regression model revealed that the most substantial effect on work engagement level is created by procedural justice followed by distributive and interactional justice (Özer *et al.*, 2017).

Where procedural justice affects performance due to its impact on employee attitudes. (Cohen-Charash and Spector, 2001) in other words, procedural justice affects attitudes about the system (Ambrose *et al.*, 2007) and deals with perceptions of the means (Lambert *et al.*, 2008). Regarding hypothesis three, the results showed a significant positive relationship between interactional justice and workers' performance where  $X^2=3.225$  and  $P\text{-value}=0.005$ , which means that interactional justice has a great role and influence on the healthcare workers' performance. Where interactional justice refers to the perception of the quality of treatment an employee receives when policies and procedures are implemented in the workplace (Srivastava, 2015). When employees perceive interactional injustice, they may react against their administrators. (Cihangiroğlu, Şahin, & Naktiyok, 2012) the study result is consistent with Lee's (2015) study, where the authors reported that that interactional justice has a significant impact on performance, and to motivate employees to increase their performance, the managers must provide a clear explanation of responsibilities at work and the benefits related to their performance (Lee *et al.*, 2015). Also, it is consistent with the Imamoglu study (2019), where the author reported that employee behaviors are considered a critical key to organizational success and maintaining the organization's existence. (Imamoglu *et al.*, 2019) Where interactional justice refers to how one person treats another (Cropanzano *et al.*, 2007) affects attitudes about the system. The results of this study differ from some other studies, such as that of Srivastava (2015), which aimed to examine and compare the influence of different dimensions of organizational justice (of distributive, procedural, interpersonal (or relational), and informational

justice) on work-related outcomes of job satisfaction and organizational commitment with particular reference of healthcare professionals., however, the current study aimed to investigate the impacts of three dimensions of organizational justice on healthcare workers' performance. In addition, the present study differs from Abou Hashish's (2019), where the cross-sectional study focused on investigating nurses' perception of organizational justice and workplace deviance in their hospital and on determining the relationship between perceived organizational justice and workplace deviance. Also, it was different from Bostan & Kilic (2017), where they aimed to investigate the effect of organizational justice perceptions on the sub-dimensions of organizational citizenship perceptions in the hospital sector.

### Conclusion and Recommendation

According to the study results, organizational justice has a positive and significant influence on healthcare workers' performance. These results highlighted hospital managers' important role in creating and maintaining a healthy and supportive work environment that promotes organizational justice and decreases workplace deviance. So, Organizations should encourage their managers encourage a culture of respectful communication, discussing the implications of decisions with employees and treating them fairly, justice in policies, and a proper procedure for allocating resources, workload, and rewards. Organizations that ignore organizational justice's role on their employees' run the risk of negative outcomes, employees' non-compliance with rules and procedures, and lower their satisfaction in some instances.

### Recommendations

- decisions must be based on accurate information and participation of employees in decisions related to their work
- hospital managers should openly describe the fair procedures they are using and explain decisions with dignity and respect
- leadership should focus on creating a positive environment by applying open door policy and providing rewards for achievements future studies should go beyond to assess the possible reasons and effects of the relationship between organizational justice and quality performance.

### Acknowledgement

After thanking Allah for giving me the strength, courage, and motivation, the completion of this study is due to such a great deal of guidance and assistance from my people, and I would not forget to thank them. First, I would like to thank my supervisor, Professor Hussein Borie for his insightful feedback that brought my work to a higher level. In addition, I would like to thank my great family and my lovely husband for their wise counsel and sympathetic ear. Lastly, my thanks to the whole class of 2019 for the moments and intellectual experiences we shared while in the program.

### REFERENCES

Abou Hashish EA. Nurses' perception of organizational justice and its relationship to their workplace deviance. *Nurs Ethics*. 2019 Apr 14;969733019834978. doi:

- 10.1177/0969733019834978.
- Ali, A. R. & B. (2018). *Advance Research Design Research Paper Assignment Organizational Culture and Performance Lecturer: Kalimullah Khan Submitted by: Alimadad Rasoli & Barat Ali, Registration No: 902-170 4041, 902-170 4042 Course: MBA – Business Date of Submission: 05. 1–9.*
- Alper, F., & Ehtiyar, R. (2006). Organizational Justice Perceptions in WorkLife: Research on Accommodation Firms. *Tourism and Hospitality Management*, 12(2), 1–14.
- Al-zu, H. A. (2010). *A Study of Relationship between Organizational Justice and Job Satisfaction*. 5(12), 102–109. <https://doi.org/10.5539/ijbm.v5n12p102>
- Bemisal, A., Cheema, S., & Khokhar, M. F. (2015). Exploring the relationship of organizational justice with employee satisfaction and employee's commitment. *International Journal of Sciences: Basic and Applied Research*, 24(6), 156–167. <http://gssrr.org/index.php?journal=JournalOfBasicAndApplied>
- Banerjee A and Chaudhury s. Statistics without tears: Populations and samples. *Ind Psychiatry J*. 2010 Jan-Jun; 19(1): 60–65. BOSTAN, S., & KILIÇ, T. (2017). Do Organizational Justice Perceptions Influence Healthcare Workers' Organizational Citizenship Behavior? *International Journal of Health Services Research and Policy*, 2(1), 21–28. <https://doi.org/10.23884/ijhsrp.2017.2.1.04>
- Bt, U. N., & Ahmad, U. (2016). Organizational Justice And Employee Performance: Evidence From Higher Education Sector In Pakistan. *Jurnal Kemanusiaan*, 25(2), 48–56.
- Choudhry, N., Philip, P. J., & Kumar, R. (2011). *Impact of Organizational Justice on Organizational Effectiveness*. 1(3), 18–25.
- Commitment, O. (2009). *Organizational Justice Perceptions as Predictor of Job Satisfaction and Organizational Justice Perceptions as Predictor of Job Satisfaction and Organization Commitment*. June 2016. <https://doi.org/10.5539/ijbm.v4n9p145>
- Cihangiroğlu, N., Şahin, B., & Naktiyok, A. (2012). A study on physicians' perceptions of the organizational justice. *ZKU Journal of Social Sciences*, 6(12), 67–82.
- Cropanzano, R., Bowen, D. E., & Gilliland, S. W. (2007). The management of organizational justice. *Academy of Management Perspectives*, 21(4), 34–48. <https://doi.org/10.5465/AMP.2007.27895338>
- Demirkiran M, Taskaya S, and Dinc M. A Study on the Relationship between Organizational Justice and Organizational Citizenship Behavior in Hospitals. *International Journal of Business Management and Economic Research(IJBMER)*. 2016; 7(2): 547-554
- Diab S. The Impact of Organizational Justice on the Workers Performance and Job Satisfaction in the Ministry of Health Hospitals in Amman. *International Business Research*. 2015; 8(2)
- Elamin, A., & Alomaim, N. (2011). Does Organizational Justice Influence Job Satisfaction and Self-Perceived Performance in Saudi Arabia Work Environment? *International Management Review*, 7(1), 38.
- E. G. Lambert, N. L. Hogan, and M. L. Griffin(2008). Being the Good Soldier: Organizational Citizenship Behavior and Commitment Among Correctional Staff *Criminal Justice and Behavior*, 2008, <http://cjb.sagepub.com/content/35/1/56.short>.
- Federico, B. (2013). The Scientific World Journal. *The*

- Scientific World Journal*, 7–13.
- Ghasi, N.C., Ogbuabor, D.C. & Onodugo, V.A. Perceptions and predictors of organizational justice among healthcare professionals in academic hospitals in South-Eastern Nigeria. *BMC Health Serv Res* 20, 301 (2020). <https://doi.org/10.1186/s12913-020-05187-5>
- Huang, L. C., Gao, M., & Hsu, P. F. (2019). Effects of organizational justice on organizational climate and organizational performance in ecology industry. *Ekoloji*, 28(107), 237–241.
- Imamoglu, S. Z., Ince, H., Turkcan, H., & Atakay, B. (2019). ScienceDirect ScienceDirect ScienceDirect The Effect of Organizational Justice and Organizational Commitment on Organizational Knowledge Sharing and Firm Performance The Effect of Justice and Organizational Commitment on Knowledge Sharing and A Performanc. *Procedia Computer Science*, 158, 899–906. <https://doi.org/10.1016/j.procs.2019.09.129>
- Kalay, F. (2016). The Impact of Organizational Justice on Employee Performance: A Survey in Turkey and Turkish Context. *International Journal of Human Resource Studies*, 6(1), 1. <https://doi.org/10.5296/ijhrs.v6i1.8854>
- Krishnan, R., Loon, K. W., Ahmad, N. A. F. binti, & Yunus, N. A. S. (2018). Examining the Relationship between Organizational Justice and Job Performance. *International Journal of Academic Research in Business and Social Sciences*, 8(3), 466–477. <https://doi.org/10.6007/ijarbs/v8-i3/3942>
- Lee, Y. K., Kim, S., Son, M. H., & Kim, M. S. (2015). Linking Organizational Justice to Job Performance: Evidence from the Restaurant Industry in East Asia. *Asia Pacific Journal of Tourism Research*, 20, 1527–1544. <https://doi.org/10.1080/10941665.2015.1016052>
- Mansour, M. (2014). Organization Justice, Support and Trust: Evidence from Saudi Companies. *Journal of Economics, Business and Management*, 2(1), 22–25. <https://doi.org/10.7763/joebm.2014.v2.92>
- Mengstie MM. Perceived organizational justice and turnover intention among hospital healthcare workers. *BMC Psychol*. 2020; 8: 19. doi: 10.1186/s40359-020-0387-8
- Mete, Y. A., & Serin, H. (n.d.). *Effect of Perceived Organizational Justice and Organizational Trust on Organizational Commitment Behavior I*.
- Mohamed SA . The Relationship between Organizational Justice and Quality Performance among Healthcare Workers: A Pilot Study. *Scientific World Journal* .2014. ID 757425, <http://dx.doi.org/10.1155/2014/757425>
- M. Ambrose, R. L. Hess, and S. Ganesan(2007).The relationship between justice and attitudes: an examination of justice effects on event and system-related attitudes. *Organizational Behavior and Human Decision Processes*, vol. 103, no. 1, pp. 21–36, 2007.
- Nurak, L. A. D., & Riana, I. G. (2017). Effect of Organizational Justice on Job Satisfaction and Employee Performance. *Journal of Management and Marketing Review*, 2(3), 30–37. [https://doi.org/10.1007/978-3-319-71225-3\\_18](https://doi.org/10.1007/978-3-319-71225-3_18)
- Nuruzzaman, Md., & Talukder, H. K. (2016). Organizational Justice and Employee's Service Behavior in the Healthcare Organizations in Bangladesh: An Agenda for Research. *Bangladesh Journal of Bioethics*, 6(3), 10–24. <https://doi.org/10.3329/bioethics.v6i3.27614>
- Özer, Ö., Uğurluoğlu, Ö., & Saygılı, M. (2017). Effect of Organizational Justice on Work Engagement in Healthcare Sector of Turkey. *Journal of Health Management*, 19(1), 73–83. <https://doi.org/10.1177/0972063416682562>
- Rai, G. S. (2013). Impact of organizational justice on satisfaction, commitment and turnover intention: Can fair treatment by organizations make a difference in their workers' attitudes and behaviors? *International Journal of Human Sciences*, 10(2), 260–284. <http://library.gcu.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=90596083&site=ehost-live&scope=site>
- Rivai HA, Reza DY, and Lukito H. Distributive Justice, Job Satisfaction and Organizational Commitment as Antecedents of Employee Performance: A Study in Indonesia National Health Insurance Workers. *Advances in Economics, Business and Management Research*.2019; 100:670-6
- Seyrek H and Ekici D. Nurses' Perception of Organisational Justice and its Effect on Bullying Behaviour in the Hospitals of Turkey. *Hosp Pract Res*. 2017 Sep;2(3):72-78
- Srivastava, U.R. (2015) Multiple Dimensions of Organizational Justice and Work-Related Outcomes among Health-Care Professionals. *American Journal of Industrial and Business Management*, 5, 666-685. <http://dx.doi.org/10.4236/ajibm.2015.511067>
- Topbas, E., Bay H., Turan B.B., Cıtlak U., Emir A.H., Erdogan T.K., Akkaya L. The effect of perceived organisational justice on job satisfaction and burnout levels of haemodialysis nurses. *Journal of Renal Care* 2019; 45(2):120-28
- Williams, L. J., & Anderson, S. E. (1991). *Williams Anderson JoMan 1991 OCBs.pdf* (pp. 17, 601–617).
- World, T., & Report, H. (2006). working together for health. *WHO Library Cataloguing-in-Publication Data*.
- Yean, T. F., & Yusof, A. A. (2016). Organizational Justice: A Conceptual Discussion. *Procedia - Social and Behavioral Sciences*, 219, 798–803. <https://doi.org/10.1016/j.sbspro.2016.05.082>
- Y. Cohen-Charash and P. E. Spector(2001). The role of justice in organizations: a meta-analysis. *Organizational Behavior and Human Decision Processes*, vol. 86, no. 2, pp. 278–321, 2001.
- Zainalipour, H., Fini, A. A. S., & Mirkamali, S. M. (2010). A study of relationship between organizational justice and job satisfaction among teachers in Bandar Abbas middle school. *Procedia - Social and Behavioral Sciences*, 5, 1986–1990. <https://doi.org/10.1016/j.sbspro.2010.07.401>
- Zikmund WG. *Research Methods: Basic Data Analysis: Descriptive Statistics*.2003. Health Economics Research Method (<http://www.businessdictionary.com>).