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Examining the impact of managerial support on the performance of healthcare organizations – the mediating role of employee autonomy

Испитивање утицаја подршке руководилаца на перформансе здравствених организација – медијаторска улога аутономије запослених

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SUMMARY

Introduction/Objective This paper aims to examine the influence of managerial support and employee autonomy on the performance of healthcare organizations. Additionally, it seeks to investigate the mediating influence of employee autonomy on the relationship between managerial support and organizational performance.

Method The study involved 165 employees from four healthcare organizations in the Braničevo District in the Republic of Serbia. Independent variable - Managerial support and mediating variable - employee autonomy was measured using Corporate Entrepreneurship Assessment Instrument (CEAI) scale. For dependent variable - organizational performance, a scale adapted from previous research was utilized, consisting of financial results, quality of service delivered, productivity, employee satisfaction, patient satisfaction, reputation, and adaptability to change dimensions. Employees of healthcare facilities were surveyed regarding their attitudes on a five-point Likert scale to statements designed to measure the aforementioned variables. The analysis employed descriptive statistics, internal reliability tests, normality distribution tests, correlation, and regression analysis.

Results The scales used for measurement achieved a high level of internal consistency, with Cronbach's alpha coefficients ranging from 0.870 to 0.937, indicating strong reliability. A high level of Cronbach's alpha coefficients was defined based on established thresholds, where scores above 0.7 were considered high. The regression analysis reveals a statistically significant and positive influence of managerial support and autonomy on organizational performance ($\beta = 0.539$, $p < 0.000$; $\beta = 0.301$, $p < 0.000$, respectively). Additionally, a mediating effect of autonomy in the relationship between managerial support and organizational performance was identified ($\beta = 0.5579$; $p < 0.0397$).

Conclusion Managerial support significantly impacts the performance of healthcare organizations, with this effect being further enhanced by granting employees autonomy. Therefore, managers in these organizations can enhance organizational performance by improving support and fostering the development of employee autonomy.

Keywords: managerial support; employee autonomy; organizational performance; healthcare organizations

САЖЕТАК

Увод/циљ Циљ рада је испитати утицај подршке руководилаца и аутономије запослених на учинак здравствених организација. Додатно, циљ рада био је испитати медијаторски утицај аутономије запослених на утицај подршке руководилаца на учинак здравствених организација.

Методе У истраживању је учествовало 165 запослених из четири здравствене организације Браничевског округа у Републици Србији. Независна варијабла – подршка руководилаца и медијаторска варијабла – аутономија запослених, мерене су помоћу Инструмента за процену корпоративног предузетништва (ЦЕАИ). За зависну варијаблу – организациони учинак, коришћена је скала прилагођена претходним истраживањима, а која се састоји од димензија финансијских резултата, квалитета пружене услуге, продуктивности, задовољства запослених, задовољства пацијената, репутације и прилагодљивости променама. Запослени у здравственим установама анкетирани су у погледу својих ставова на петостепеној Ликертовој скали према тврдњама које су дизајниране за мерење поменутих варијабли. Анализа је подразумевала коришћење дескриптивне статистике, тест интерне конзистентности поузданости, тестове дистрибуције нормалности, корелацију и регресиону анализу.

Резултати Скале коришћене за мерење варијабли остварile су висок ниво интерне конзистентности, са Кронбаховим алфа коефицијентима у распону од 0,870 до 0,937, што указује на високу поузданост. Висок ниво Кронбах алфа коефицијента дефинисан је на основу утврђених прагова, при чему се резултати изнад 0.7 сматрају високим. Регресиона анализа показује статистички значајан и позитиван утицај подршке руководилаца и аутономије на организациони учинак ($\beta = 0.539$, $p < 0.000$; $\beta = 0.301$, $p < 0.000$, респективно). Поред тога, идентификован је медијаторски ефекат аутономије у односу између подршке руководилаца и организационог учинка.

Закључак Подршка руководилаца остварује утицај на учинак здравствених организација, а тај ефекат је појачан давањем аутономије запосленима. Руководиоци ових организација могу унапређењем подршке, кроз развој аутономије запослених, унапредити организациони учинак.

Кључне речи: подршка руководилаца; аутономија запослених; организациони учинак; здравствене организације

INTRODUCTION

The provision of quality healthcare and the attainment of performance within healthcare organizations are predominantly influenced by the knowledge possessed by healthcare workers [1]. Performance refers to the extent to which the organization has accomplished its predefined objectives. It's essential to recognize that performance encompasses not only financial outcomes but also factors such as innovation, quality, employee behavior, and patient satisfaction [2]. It is a multidimensional concept that reflects the level of efficiency of employees, their knowledge, ability to solve problems and behavior [3, 4]. Improving performance often requires management intervention to increase social support [5].

Managerial support within an organization can manifest in various ways, but its core lies in fostering idea generation among employees, allocating resources, fostering knowledge development, and similar initiatives [6]. Employees perceive managerial support as the extent to which managers care about their needs, value their ideas, and ensure their well-being [7]. Chatterjee et al. [8] point out that management support has three types. Firstly, transitional leadership entails a hierarchical decision-making structure within the organization. Secondly, empowerment leadership involves employee participation and empowerment. Lastly, laissez-faire leadership is a form of leadership where employees take the initiative in action. Consequently, managerial support entails equal treatment of all employees, effective communication, support in problem-solving, ensuring safety and security at work, and sharing of resources, among other aspects [7]. If we consider employee empowerment and laissez-faire leadership, it becomes crucial to emphasize the autonomy of healthcare workers. Autonomy refers to the extent to which employees can independently make decisions during work, aligning with their knowledge, skills, and experience [9]. Healthcare workers possess valuable knowledge that they actively apply in delivering healthcare services. Granting them autonomy

allows for the utilization of this knowledge, thereby enhancing their human capital. Moreover, autonomy positively impacts their motivational needs and job satisfaction [10]. Managers of healthcare organizations play a crucial role in ensuring autonomy among their staff. They can achieve this by providing support in various forms, such as offering resources and knowledge, communicating clear goals, fostering teamwork, and encouraging collaboration. These efforts contribute to creating an environment where healthcare workers feel empowered to make independent decisions and take ownership of their work [11]. To ground the discussion in established theory, research in the field of human resources management and motivation is important. For instance, Deci and Ryan's Self-Determination Theory (SDT) emphasizes the importance of autonomy and intrinsic motivation in enhancing employee engagement and performance [12]. Similarly, Herzberg's Two-Factor Theory highlights how recognition and rewards contribute to job satisfaction and motivation [13]. These theoretical perspectives underscore the significance of managerial support as not just a set of actions but as a fundamental component of effective human resources management.

Howell and Avolio [14] state that management support is crucial for innovation within an organization. Besides fostering autonomy, managerial support should be viewed in the broader context of organizational performance. Employees who receive strong support from managers often demonstrate increased levels of discretionary effort, that goes beyond the basic requirements of the job and can significantly contribute to organizational success and effectiveness [15], which in the context of healthcare organizations is of great importance for maximizing the quality of healthcare. Positive attitudes and increased engagement among employees, fostered by managerial support, are conducive to higher productivity levels. This enhanced productivity, in turn, contributes to the overall improvement of organizational performance [7, 16]. Diamantidis and Chatzoglou [17] state that manager support is one of the factors that determines organizational performance and that it is actually one of the most

important factors. Also, the literature states that autonomy during work has a positive impact on organizational performance, due to increased efficiency and engagement of employees [10, 11, 18].

Given the lack of research in the mentioned subject area, this paper aims to investigate the influence of managerial support and employee autonomy on the performance of healthcare organizations. Additionally, it seeks to explore the mediating effect of employee autonomy on the relationship between managerial support and organizational performance. This study builds upon previous theoretical positions to address these research aims [1, 2, 9, 15, 16], and accordingly the following hypothesis can be defined:

H_1: There is a statistically significant and positive impact of managerial support on the performance of healthcare organizations.

Cho et al. [11] and Imam et al. [9] point out simultaneously the positive influence of employee support and autonomy on organizational performance. Bearing in mind the above, as well as the previous theoretical positions [10, 11, 18], the following hypotheses can be defined:

H_2: There is a statistically significant and positive influence of the autonomy of healthcare workers on the performance of healthcare organizations.

H_3: The autonomy of healthcare workers has a statistically significant mediating influence on the relationship between manager support and organizational performance.

METHODS

Study design

To examine the research goals and test the hypotheses, a study was conducted in health centers located in the Republic of Serbia. The research utilized survey methods and questionnaire techniques in four health centers operating within the Braničevo District. The survey was administered using a traditional approach, involving the distribution of written surveys. For the purposes of research in the health center, a form for the informed consent of the respondents was used insted of The Approval of the Commitee on ethics. This form confirmed that the respondents had read the research notification document and received information about the type, method, and purpose of the research, as well as their obligations. The respondents agreed to participate in the research and to cooperate with the researchers. The cooperation requested from respondents involved completing the questionnaire thoroughly and honestly, but no further interaction or identification was required. Also, they agreed that the research results could be made available to professional bodies and published in scientific journals or presented at scientific meetings. The respondents confirmed that they had received all the necessary information about the research and that they agreed to participate by filling out the questionnaire. Besides that, they also understood that participation was voluntary and that they could withdraw at any time without consequence. Research standards are aligned with the Helsinki Declaration on Human Rights and legal norms of the Republic of Serbia, especially the Law on personal data protection ("Official Gazette of RS" No. 87/2018), as well as the General Data Protection Regulation of the European Union. The research was anonymous, so the consent did not contain the respondent's signature.

Instruments

The independent variable in the model is managerial support, measured using statements from the *Corporate Entrepreneurship Assessment Instrument* (CEAI) scale. Additionally, the CEAI scale was employed to measure the autonomy, serving as the moderator variable in the model. The scale encompasses dimensions beyond managerial support, including autonomy, reward, time availability, and organizational obstacles [6]. The selection of this scale is justified by its ability to capture the essence of the findings, particularly regarding managerial support and autonomy, which are intrinsic factors in rewarding and motivating health workers. This scale provides a comprehensive framework for assessing these crucial aspects, enabling a thorough examination of their impact on organizational outcomes in healthcare settings [19].

The dependent variable was observed through organizational performance. As previously pointed out, organizational performance is often a multidimensional construct [2, 3, 4]. Therefore, the dependent variable was constructed to encompass not only financial results and costs but also the quality of service delivered, productivity, employee satisfaction, patient satisfaction, reputation, and adaptability to change. As a result, it was designed based on the research model applied by Savović in her work, which comprehensively addresses these various aspects of organizational performance [20]. The absence of a universal model for measurement and the multidimensional nature of organizational performance justifies the application of this research method. The Quality of Services dimension examines improvements in the quality of services provided by the organization compared to the previous period, using 1 item (*The organization enhances the quality of services provided compared to the previous period*). The Cost Reduction dimension measures the organization's ability to reduce operational costs over time, also assessed with 1 item (*The organization reduces costs compared to the previous period*). For Employee Productivity, the focus is on changes in

productivity levels among employees, evaluated with 1 item (*Employee productivity has risen compared to the previous period*). The Employee Satisfaction dimension gauges the overall job satisfaction of employees, using 1 item (*Employee satisfaction has been enhanced compared to the previous period*). The Patient Satisfaction dimension measures the level of satisfaction among service users (patients) with the organization's services, also assessed with 1 item (*The satisfaction of service users (patients) has improved compared to the previous period*). Finally, the Organizational Reputation and Responsiveness dimension includes two aspects: the organization's reputation (*The organization's reputation has seen improvement compared to the previous period*) and its ability to adapt quickly to changes, evaluated with 2 items (*The organization demonstrates the ability to promptly respond to changes in the environment* and *The organization quickly adapts to changes in technology*). Respondents also expressed their views on the above-mentioned statements on a five-point scale.

Study sample

Respondents expressed their views on the aforementioned statements using a five-point Likert scale, where Grade 1 indicated complete disagreement and Grade 5 indicated complete agreement with the stated position. Additionally, the questionnaire included a section to collect demographic information about the respondents. The study involved healthcare professionals, including general practitioners, specialists, nurses, and medical technicians. It encompassed employees of various genders, ages, educational backgrounds, and lengths of service, as well as those in managerial roles. The research was conducted across four healthcare organizations in the Braničevo district, all operating at the primary level of care: the health centers in Golubac, Veliko Gradište, Malo Crniće, and Žabare. To collect data, a convenience sampling was employed. Convenience sampling offers the benefits of reduced effort in participant

selection, low cost, minimal time investment due to easy accessibility of the target population, the absence of a need to list all population elements, and the ability to generate a satisfactory and qualitative sample in various situations [21]. The convenience of the sampling in this case lies in the selection of health organizations within the same region, allowing the researcher easy access to the participants.

Respondents were approached through organizational HR departments. Human resource managers distributed the questionnaires to employees. To maintain anonymity, respondents were not asked for any personal information or identifiers. Each questionnaire was placed in a separate envelope, which respondents used to return their completed forms. Additionally, a secure, closed box was provided for respondents to submit their questionnaires, with access restricted to the researcher via a special unlocking code. Out of 250 distributed questionnaires, 165 were completed, resulting in a response rate of 66%. According to Holtom et al. [22], academic research response rates have been steadily increasing, averaging 68% over the past five years making the response rate in this study quite comparable to the recent average.

The collected data were processed in the statistical software SPSS V25. Among statistical techniques, descriptive statistics (mean and standard deviation-SD), internal reliability test, distribution normality test, correlation and regression were applied.

RESULTS

In the total sample of 165 respondents, 28.5% were male and 71.5% were female. Regarding age distribution, 44.2% were aged 41-50 years, 26.7% were aged 31-40 years, 17% were aged 51-60 years, followed by respondents over 60 years old with 6.7%, while the smallest proportion was aged 20-30 years (5.5%). In terms of education, 64.2% had completed

secondary school, 23.6% had a university degree, and 12.1% had postgraduate education. Regarding length of service, 37.6% of respondents had worked in the existing organization for 21-30 years, 24.2% had worked for 11-20 years, 17% had more than 30 years of service, 12.7% had worked for 6-10 years, and 8.5% had 1-5 years of service. Furthermore, 80.6% of respondents worked in medical positions, while 19.4% worked in non-medical positions. Finally, 9.7% of respondents held managerial positions, while 90.3% held non-managerial positions.

The initial stage of the analysis involved applying descriptive statistics, starting with the independent variable. The results are presented in the following Table 1.

The highest mean is achieved by the statement "My organization is quick to use improved work methods" (3.8182), indicating strong managerial support for implementing changes and adopting new work methods. Conversely, the item "Individuals with successful innovative projects receive additional reward and compensation for their ideas and efforts beyond the standard reward system" has the lowest mean (2.8061), suggesting that management does not consistently reward employees for their innovative contributions. However, the standard deviation of 1.1364 indicates some variability in attitudes from the mean. The highest homogeneity (SD=0.9280) is observed with the item "People are often encouraged to take calculated risks with new ideas around here," indicating consistent encouragement from management for employees to be creative and innovative, even when it involves taking risks. Table 2 presents the descriptive statistics for the dependent variable - organizational performance.

According to the results in Table 2, the item "The organization quickly adapts to changes in technology" (3.9212) has the highest mean, indicating that the organization effectively embraces technological advancements. This aligns with earlier findings suggesting that

management supports changes, including the adoption of new technologies, in the workplace. All other items also achieve relatively high results, with values greater than 3 on a five-point scale, indicating favorable perceptions of organizational performance. The highest homogeneity is observed with the item "The organization reduces costs compared to the previous period" (SD=0.9666), suggesting a consensus among respondents regarding the organization's ability to achieve cost efficiency over time. The results of descriptive statistics for the mediator variable, employee autonomy, are shown in the Table 3.

According to the results in Table 3, statement 7, "It is basically my own responsibility to decide how my job gets done" (4.1576), indicates that healthcare workers perceive their tasks and the quality of healthcare within their own sphere of responsibility, allowing them to decide how to carry out their duties. This statement also achieved the highest level of homogeneity of attitudes (SD=1.0118), suggesting a strong consensus among respondents regarding this aspect of autonomy. On the other hand, the least favorable statement is statement 1, "I feel that I am my own boss and do not have to double check all of my decisions" (2.8). This statement reflects a sense of autonomy among healthcare workers, as they perceive themselves as having the authority to make decisions without needing validation from managers.

The Cronbach alpha test was used to assess internal reliability. The value of this coefficient should be at least 0.7 for the variable to be considered reliable [23]. As the results in Table 4 show, all variables achieve a very high reliability level, which indicates a high internal consistency of the used variables, which justifies the further process of analysis.

Before applying correlation analysis, it is necessary to analyze the distribution of the data, in order to assess whether they follow a normal distribution. For these purposes, the Kolmogorov Smirnov and Shapiro Wilk tests were used (Table 5).

The results of the Kolmogorov Smirnov and Shapiro Wilk tests show that the variables managerial support and organizational performance follow a normal distribution, as well as the Shapiro Wilk test for autonomy ($p<0.05$). Kolmogorov Smirnov for the specified variable is statistically significant at the 0.1 level. Accordingly, it is necessary to apply the Pearson correlation coefficient, the results of which are shown in Table 6.

Cohen [24] states that the correlation coefficient at the level of -/+ 0.5-1 can be considered high. Accordingly, it can be stated that there is a high direct correlation between managerial support and organizational performance, as well as autonomy and organizational performance. An identical correlation coefficient is also present in the relationship between managerial support and autonomy.

The results of the regression analysis in Table 7 show a statistically significant and positive influence of managerial support on organizational performance ($\beta=0.734$, $p<0.001$). The coefficient of determination (R^2) is 0.539, as a result of which it can be stated that 53.9% of the variability of the dependent variable is explained by the independent one. When it comes to the second regression model, autonomy achieves a statistically significant and positive impact on organizational performance ($\beta=0.549$, $p<0.001$). The coefficient of determination (R^2) in this case is 0.301, which means that 30.1% of the variability of the dependent variable is explained by the independent one. The value of the VIF factor is less than 5, i.e. 1,000 in both models and as such shows the absence of multicollinearity problems [25]. In order to examine the moderator effect, a moderator analysis was applied, using the Hayes process approach in SPSS [26]. Mediator analysis starts from the position that the influence of the independent variable on the dependent variable is modified by the influence of the third, i.e. mediator variable [27, 28], where in this research, the starting point is that this influence is strengthened. Figure 1 shows the research model. The results of the mediator analysis are shown in Table 8.

If mediator analysis is included in the regression model, the results are statistically significant at the $p<0.001$ level. The coefficient of determination is (R^2) 0.5579, which means that the independent and mediator variables explain 55.79% of the dependent variable. Int-1 in Table 8 represents the mediator model (Figure 1). As can be seen, the result is statistically significant at the $p<0.05$ level, and the coefficient of determination (R^2) has increased from the previous 0.539 to 0.5579, as a result of which it can be said that the increased effect of managerial support on organizational performance has been achieved. In other words, there is a statistically significant mediating effect of autonomy on the relationship between managerial support and organizational performance.

DISCUSSION

In healthcare organizations, the analysis revealed that managerial support peaks when implementing new work methods, aiming to enhance clarity and efficiency in healthcare delivery. Managers actively encourage and welcome innovative ideas from employees, fostering a culture of open communication and knowledge exchange. Leveraging their expertise, managers facilitate multi-sector collaboration, enhancing organizational flexibility and responsiveness to change. Employees are empowered to make independent decisions on project tasks, promoting innovation without rigid processes. While financial incentives are common, there's room for managers to further motivate employees with promotions, knowledge development, and recognition, which have proven impactful in healthcare settings [17, 19].

The performance of healthcare organizations reflects a positive response to change, particularly in adopting new technologies, supported by managerial encouragement. This commitment to innovation translates into high-quality healthcare services, fostering patient satisfaction and

employee morale. As a result, healthcare workers exhibit heightened productivity, contributing to the organization's stellar reputation and financial success. Within healthcare organizations, autonomy empowers employees to take ownership of their work, promoting efficiency and quality in healthcare delivery. Employees are afforded flexibility to devise optimal solutions, underpinned by managerial support for their knowledge and skills. However, amidst the emphasis on autonomy, the importance of adherence to established protocols cannot be overlooked. To mitigate potential shortcomings, ongoing managerial guidance and support are essential, ensuring optimal outcomes in healthcare provision.

Examining the set hypotheses, the results of the analysis showed that there is a statistically significant and positive influence of managerial support on organizational performance, as a result of which hypothesis H_1 can be accepted. In accordance with the previous views, managers who provide support to employees in terms of encouragement to generate new ideas, share knowledge and information, as well as adequate rewards for such efforts, leads to positive attitudes and individual productivity. At the organizational level, such employee behavior improves overall organizational performance. Such results have been confirmed in similar studies conducted around the world [1, 3, 7]. The analysis has shown a statistically significant and positive influence of employee autonomy on the achieved performance of healthcare organizations, which is the expected result confirmed in other studies as well [9, 10, 11, 18]. Adequate managerial support leads to job satisfaction of healthcare workers, where job satisfaction is often a determinant of achieved performance [29, 30]. Accordingly, the H_2 hypothesis can also be confirmed. Finally, the results of the mediation analysis showed a statistically significant mediating influence of employee autonomy in the relationship of managerial support to organizational performance, thus confirming the H_3 hypothesis. When autonomy is included in the relationship between managerial support and organizational performance, a stronger effect is achieved.

Research of this nature is notably scarce within academic circles in the Republic of Serbia, underscoring the significance of this study in laying the groundwork for further inquiry. Moreover, healthcare organization managers stand to gain practical insights into enhancing organizational performance through the provision of managerial support and autonomy. However, the study is not without limitations, which warrant consideration in future research endeavors. Important among these limitations is the size and composition of the sample. Future studies would benefit from an expanded sample size encompassing a broader array of healthcare organizations, both within Serbia and internationally. Employing representative sampling methods will be essential to ensure the sample's optimal composition. While the utilization of scales in this study is justified, future research could benefit from incorporating measurement scales designed to assess managerial support, autonomy, and organizational performance in healthcare. Additionally, employing robust statistical techniques such as factor analysis or structural equation modeling (SEM) can yield more objective insights into the influence of latent variables, further enhancing the research's rigor and validity. It is useful to apply tests for comparing means, in order to determine whether some of the socio-demographic factors, such as gender, age, education, etc., affect the perception of managerial support, autonomy, organizatonal performance, etc.

CONCLUSIONS

Managerial support and autonomy play pivotal roles in driving organizational performance within healthcare organizations, as evidenced by their statistically significant and positive impact. Moreover, autonomy serves as a significant mediating factor in the relationship between managerial support and organizational performance. Effective management within healthcare entails fostering an environment where employees are encouraged to innovate, take

risks, share knowledge, and are provided with resources and rewards. By doing so, healthcare organizations can enhance their performance across financial and non-financial metrics, ultimately fostering success in their operational endeavors.

Conflict of interest: None declared.

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Table 1. Results of descriptive statistics: managerial support

Items	Mean	SD
1. My organization is quick to use improved work methods.	3.8182	1.0947
2. My organization is quick to use improved work methods that are developed by workers.	3.6242	1.1600
3. In my organization, developing one's own ideas is encouraged for the improvement of the corporation.	3.7879	1.1934
4. Upper management is aware and very receptive to my ideas and suggestions.	3.8061	1.1092
5. Promotion usually follows the development of new and innovative ideas.	3.1576	1.1993
6. Those employees who come up with innovative ideas on their own often receive management encouragement for their activities.	3.5152	1.1402
7. The ''doers'' are allowed to make decisions on projects without going through elaborate justification and approval procedures.	3.1697	1.1022
8. Senior managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.	2.8121	1.2424
9. Many top managers have been known for their experience with the innovation process.	3.5636	1.0435
10. Money is often available to get new project ideas off the ground.	3.2182	1.2050
11. Individuals with successful innovative projects receive additional reward and compensation for their ideas and efforts beyond the standard reward system.	2.8061	1.1364
12. There are several options within the organization for individuals to get financial support for their innovative projects and ideas.	3.3212	1.1841
13. Individual risk takers are often recognized for their willingness to champion new projects, whether eventually successful or not.	3.0182	1.0328
14. People are often encouraged to take calculated risks with new ideas around here.	3.1030	0.9280
15. The term ''risk taker'' is considered a positive attribute for people in my work area.	2.9573	1.0529
16. This organization supports many small and experimental projects realizing that some will undoubtedly fail.	3.0667	1.1105
17. A worker with a good idea is often given free time to develop that idea.	3.1273	1.1695
18. There is considerable desire among people in the organization for generating new ideas without regard to crossing departmental or functional boundaries	3.2909	1.1316
19. People are encouraged to talk to workers in other departments of this organization about ideas for new projects	3.4121	1.2590

Table 2. Results of descriptive statistics: organizational performance

Items	Mean	SD
1. The organization enhances the quality of services provided compared to the previous period.	3.9030	1.0944
2. The organization reduces costs compared to the previous period.	3.5091	0.9666
3. Employee productivity has risen compared to the previous period.	3.7091	1.0122
4. Employee satisfaction has been enhanced compared to the previous period.	3.5273	1.1559
5. The satisfaction of service users (patients) has improved compared to the previous period.	3.7212	1.0156
6. The organization's reputation has seen improvement compared to the previous period.	3.7455	1.0339
7. The organization demonstrates the ability to promptly respond to changes in the environment.	3.7818	1.0304
8. The organization quickly adapts to changes in technology.	3.9212	1.0417

Table 3. Results of descriptive statistics: employee autonomy

Items	Mean	SD
1. I feel that I am my own boss and do not have to double check all of my decisions.	2.8000	1.3122
2. Harsh criticism and punishment result from mistakes made on the job.	3.1455	1.2747
3. This organization provides the chance to be creative and try my own methods of doing the job.	3.1091	1.2098
4. This organization provides freedom to use my own judgment.	3.5939	1.1523
5. This organization provides the chance to do something that makes use of my abilities.	3.7879	1.1883
6. I have the freedom to decide what I do on my job.	3.1697	1.3598
7. It is basically my own responsibility to decide how my job gets done.	4.1576	1.0118
8. I almost always get to decide what I do on my job.	3.2788	1.2126
9. I have much autonomy on my job and am left on my own to do my own work.	3.5758	1.1694
10. I seldom have to follow the same work methods or steps for doing my major tasks from day to day.	3.8000	1.0998

Table 4. Results of the Cronbach alpha test

Variable	Cronbach alpha
Managerial support	0.937
Organizational performance	0.933
Employee autonomy	0.870

Table 5. Normality distribution test

Variable	Kolmogorov–Smirnov			Shapiro–Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Managerial support	0.086	165	0.005	0.981	165	0.026
Organizational performance	0.070	165	0.046	0.959	165	0.000
Employee autonomy	0.064	165	0.093	0.982	165	0.031

Table 6. Results of correlation analysis

Variables	Managerial support	Organizational performance	Employee autonomy
Managerial support	1	0.734**	0.659**
Organizational performance	0.734**	1	0.549**
Employee autonomy	0.659**	0.549**	1

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

Table 7. Results of regression analysis

Regression model	R^2	β	F	Sig.
1. Managerial support→ Organizational performance	0.539	0.734	190.251	0.000
2. Employee autonomy → Organizational performance	0.301	0.549	70.190	0.000

Table 8. Mediator analysis results

Model	R^2	t	Sig.
X: Managerial support	0.5579	74.6072	0.000
Y: Organizational performance		9.1958	0.000
W: Job autonomy		1.4278	0.1553
Int-1		-2.0739	**0.0397**

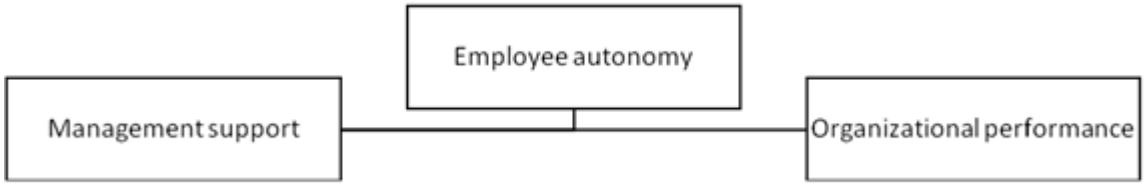

Figure 1. Mediaton model

