



Mediating Role of Self-Efficacy in the Relationship between Psychological Capital and Innovative Job Performance of Teachers

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ABSTRACT

Background and Aim: Education, as one of the most important and broadest social organizations, plays a very important role in the process of socialization and socialization of the society. Therefore, the current research was conducted to determine the mediating role of self-efficacy in the relationship between psychological capital and innovative job performance of primary school teachers in Karaj. **Methods:** This research is practical in terms of purpose; In terms of the type of data, little; In terms of the nature of the research, it was descriptive-correlational. The socio-statistics of the research were all primary school teachers in Karaj city. 242 people were selected based on the calculation of the sample size in structural equations and the stepwise cluster random sampling method. Data collection tools were the researcher-made questionnaire. Data analysis was carried out in descriptive statistics (mean, standard deviation, etc.) and inferential (Pearson correlation and structural equation modeling) through Spss-V23 and LISREL-V8.8 software. **Results:** It showed that there is a relationship between psychological capital (0.63) and self-efficacy (0.57) on innovative job performance; Also, self-efficacy plays a mediating role in the relationship between psychological capital and self-efficacy (0.74). **Conclusion:** It can be concluded that self-efficacy plays a mediating role in the relationship between psychological capital and innovative job performance of teachers.



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Introduction

Education, as one of the most important and broadest social organizations, plays a very important role in the process of socialization and socialization of the society. This issue is especially important in primary education. The reason is that primary education is part of the cognitive, biological and social development of students. By transferring beliefs, ethics, customs, norms, values and skills to the new generation and providing a suitable environment for the development of students' talents and potential abilities, it will lead to the flourishing of their talent and increase in their academic performance (Mehramaz et al., 2017). Among these, the most important factor in the success and failure of education programs is the ability of teachers. No matter how well the policy makers do their job, it is the responsibility of the teachers to fulfill the goals and ideals of society's education. It is a heavy and risky responsibility for the teacher, who accomplishes this task by relying on his knowledge, awareness and experience, which can be considered the teacher's knowledge (Safaei Fakhri and Masanabadi, 2019). Teaching is considered one of the important and basic jobs of any society, and the responsibility of guiding and nurturing a generation rests with the society's teachers. The innovative work performance of teachers is one of the variables that has received much attention in many developed countries. The innovative job performance of a teacher refers to his desire to produce, promote and realize a new idea in school (Rangos and Seren, 2019). Innovative job performance shows to what extent an employee creates creative and valuable ideas in the organization and is necessary to help organizations in designing and developing a sustainable competitive advantage. (Santro et al., 2020; Fredriksen & Knudsen, 2017). However, it has also been found that innovative job performance leads to intrinsic pleasure and costs and benefits for colleagues (Lefbro et al., 2016). Therefore, innovative job performance plays an important role in promoting organizational innovation, and there are evidences of the relationship between innovation and organizational performance (Kaya et al., 2020). Midgley and Dowling (1978) discussed innovation as a way to understand the behavior of people who seek solutions to problems at work and are willing to change. Innovative people in

the workplace are critical to the success of an organization. Because nowadays organizations are dependent on innovative people due to their dynamic situation, innovative behavior is valuable as a resource for long-term survival of organizations (Shankar et al., 2017). Based on Bass et al.'s (2017) research, innovative behavior is a dynamic behavior aimed at creating, introducing and implementing new and useful ideas at work. Previous research on the relationship between psychological capital and innovative behaviors has shown that employees with high levels of psychological capital often exhibit stronger innovative behaviors (Abbas & Raja, 2015; Slåtten et al., 2019). Maharloi et al. (2013) also concluded in their research that psychological factors influence innovative behaviors more than organizational factors.

Today, innovations are important and beneficial for any organization to gain and maintain a competitive advantage (Ghardashi et al., 2021). This matter is more important in elementary school because in this period teachers are the best and main role models for students. Therefore, an organization that cannot continuously have innovative measures will face failure, and since innovative behavior is influenced by various factors, and the employees' sense of belonging is one of the most influential factors, the lack of sense of belonging causes the loss and destruction of students' motivation. And finally, it manifests itself with academic decline, and for this reason, students at this stage are heavily influenced by teachers, which causes a negative approach in the fields of education and continuing education, and has destructive effects in their future, because this feeling causes the society to decline. which eventually leads to economic corruption and lack of development. Therefore, paying special attention to innovative behaviors encourages students to be creative and develop their talents (Jahangir et al., 2022).

Schools are especially in dire need of innovation in order to gain a competitive edge over others. Teachers also play a significant role in the success of such educational organizations by increasing the success of students and are the most important factor in promoting the academic and social success of schools (Balker, 2022). But as the number of schools moving toward a technology-based learning environment steadily increases, teachers have more access to technology. However, teachers do not use this

opportunity to optimize and effectively integrate technology into the curriculum (Gomez et al., 2022).

All over the world today, teaching creative and innovative learning (innovative teaching) has become a mandatory part of the education program for children, and people's passion for the subject of creativity and innovation and teaching it is expanding day by day. Nevertheless, the research conducted in this field shows that many teachers still spend most of their class time presenting materials or asking questions that only require simple scientific facts. They allocate only one percent of the time spent in the classroom to tasks that require innovative behaviors (Safaei Fakhri & Mesenabadi, 2020).

How psychological capital and self-efficacy can lead to the emergence of innovative behaviors in teachers is an issue that has been addressed in this research. The current research tries to have a comprehensive and detailed look at the issue of psychological capital and innovative job performance of teachers with the mediating role of self-efficacy; Since the innovative behavior and psychological capital in the education system has various dimensions and components, and its identification can be useful for policy makers and education specialists; Therefore, the main goal of the current research is to determine the mediating role of self-efficacy in relation to psychological capital with innovative job performance of primary school teachers.

Method

The research method was quantitative according to the type of data, quantitative and cross-sectional according to the time of data collection, and descriptive correlation according to the method of data collection or the nature and method of the research. The statistical population of the present study included all primary school teachers in Karaj. The sample size of the present study, taking into account the number of parameters estimated in the model, was 252 elementary school teachers in Karaj city, the questionnaire was distributed among these people, 10 questionnaires were left out due to incompleteness, and statistical operations were performed on 242 subjects. The sampling method used in this research was cluster random sampling due to the geographical distribution of primary schools in Karaj city. In this way, four schools from each district and three schools from each district were randomly selected from among the elementary schools, and finally the questionnaire was distributed among the teachers.

Materials

1. Researcher-made questionnaire: This questionnaire was taken from the standard psychological capital questionnaires of Luthans et al. (2010), innovative job performance by Scott and Brass (1994) and self-efficacy by Riggs and Knight (1994) in addition to the standard questionnaire for assessing the validity of the model. The dimension of psychological capital included four components: self-efficacy (6 items), hope (6 items), optimism (6 items) and flexibility (6 items). Job self-efficacy dimension includes individual self-efficacy beliefs (10 items), expectation of individual consequences (8 items), collective efficacy beliefs (7 items) and expectation of collective consequences (6 items). Innovative behavior also included 8 items. In order to determine the validity of the questionnaire, face, content and construct validity were used. The face validity of the questionnaires was checked before distribution by the researcher, some members of the sample and some academic experts and officials of Azad University. In terms of content validity, in the form of a Delphi method and with the help of CVR and CVI forms and with the help of ten experts, the content of the questionnaire was examined in terms of additional questions or questions modification. The CVI form showed that all the questions of comprehensive quality management and its consequences have a good status from the point of view of simplicity, clarity and relevance (the rate of this coefficient was higher than 0.79 for each of the questions); Considering that the CVR value for all questions was above 0.62, no question needed to be deleted. Regarding construct validity, two types of convergent and divergent validity were used with the help of Smart-Pls 3 software. In the convergent validity analysis, the findings showed that the significance coefficients of all factor loadings were greater than 2.58 (t-statistic), which means that all factor loadings were significant with 99% confidence. The values of all factor loadings were above 0.5 (relationship between manifest and latent variables). The average extracted variance (AVE) of all components was above 0.5, and the combined reliability of all components was greater than the average extracted variance; Therefore, it can be said that the convergent validity of the model structures is confirmed. For the analysis of divergent validity, the Fornell and Larcker test and

the cross-sectional test were used (this test measures the divergent validity at the level of observable variables by the module defined in the Smart-Pls3 software). In the Fornell and Larker test, the findings showed that the root mean of the extracted variance of each hidden variable was higher than the maximum correlation of that variable with other hidden variables of the model. The results of cross-sectional loading test showed that the factor loadings of each of the research variables were higher than the factor loadings of other measurement models included in the model. On the other hand, the factor loading of each observable variable on its corresponding hidden variable was at least 0.1 higher than the factor loadings of the same observable variable on other hidden variables; Therefore, the results of these two tests showed divergent validity. In this research, reliability is calculated through Cronbach's alpha coefficient and composite

reliability. The values of these two coefficients for all research variables were above 0.7, which indicated the reliability of the measurement tool.

Implementation

First, the statistical sample of the research was selected and the questionnaires were distributed. After completing and collecting the questionnaires, mean, standard deviation, skewness and kurtosis were used to describe the research variables. In the inferential part, tests such as Pearson's correlation, one-sample t-test and confirmatory factor analysis were used to answer the research questions using SPSS-v23, Smart Pls-v3 and Lisrel V8.8 software.

Results

In terms of the demographic characteristics of the present study, 128 (53%) of the participants were male and 114 (47%) of them were female. In terms of age, 39 people (16%) were 20 to 30 years old, 97 people (40%) were 31 to 40 years old, 87 people (36%) were 41 to 50 years old, and 19 people (8%) were over 50 years old.

Table 1. Statistical indices of research variables

Variable	Component	Mean	SD	Skewness	Kurtosis
psychological capital	self-efficacy	3.38	0.77	0.24-	0.05
	Hope	3.18	0.87	0.19	0.56-
	optimism	3.16	0.80	0.11	0.08-
	flexibility	3.30	0.72	0.02-	0.17-
self-efficacy	Individual self-efficacy beliefs	3.20	0.70	0.02-	0.31
	Expect individual consequences	3.26	0.76	0.02	0.27
	Collective efficacy beliefs	3.43	0.74	0.23-	0.28
	Expect collective consequences	3.12	0.77	0.17	0.65
Innovative performance	-	3.35	0.72	0.33-	0.74

The information in the above table shows the descriptive statistics indicators of the research variables. According to the values of skewness and kurtosis which are in a reasonable range (-2 and +2) for guessing the normality of the data, the assumption of the normality of the data can be raised and accepted.

In order to check the hypothesis in a model, the confirmatory structural equation model was used. For this purpose, after drawing the structure in LISREL software, adding model constraints and choosing the maximum likelihood method, the implemented model and the fitting path diagram of Figures 1 and 2 were obtained:

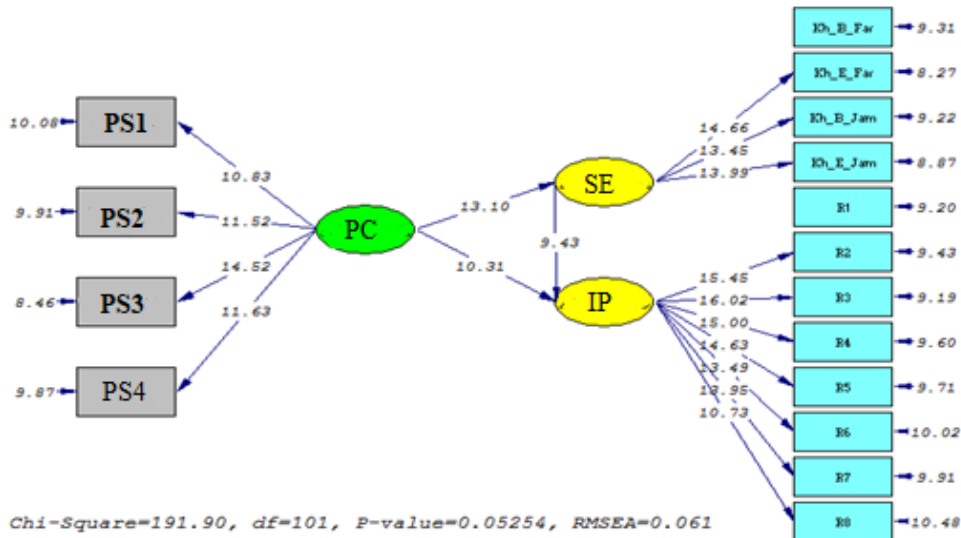


Figure 1. t-Value related to the main hypothesis model

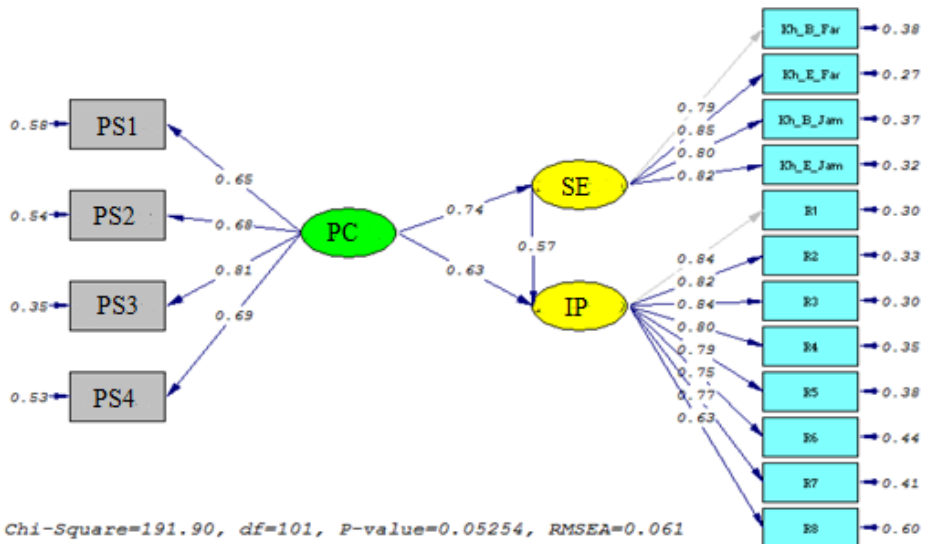


Figure 2. Path coefficients and factor loadings of the main hypothesis model

As can be seen in the above graphs, considering that the significance coefficient of t is higher than 2.58, the causal relationships between the variables were confirmed with 99% confidence. Individual self-efficacy beliefs affect the job performance of primary teachers in Karaj with a coefficient of 0.53. The expectation of side effects has a 0.60 coefficient on the job performance of primary teachers in Karaj city. Collective self-efficacy beliefs affect the job

performance of primary teachers in Karaj with a coefficient of 0.63. The expectation of collective consequences has a 0.45 coefficient on the job performance of primary teachers in Karaj. The highest level of influence related to the expectation of individual outcomes and the lowest level of influence was assigned to the expectation of collective outcomes.

Table 2. A selection of important fit indices of the graphical model

Indicator	index name	Abbreviation	Value	Acceptable fit
Absolute fit indices	Chi-square	-	191.90	
	goodness of fit index	GFI	0.96	> 0.8
	Adjusted goodness of fit index	AGFI	0.92	> 0.8

Comparative indices	fit	Comparative fit index	CFI	0.98	> 0.9
Indices of parsimonious fit		The root mean square of the estimation error	RMSEA	0.061	< 0.1

According to the chi-square and RMSEA criteria, this model provides a good fit to the data. In Table 2, the most important and most common fit indices are given. As seen in Table 2, all

indicators have statistical adequacy. Therefore, it can be confidently concluded that the researcher has achieved a relatively perfect fit regarding these indicators.

Table 3. Path coefficients and t-values for the main hypothesis

Path		Path coefficient	t	Condition
psychological capital	<-- self-efficacy	0.74	13.10	Approved
self-efficacy	<-- innovative performance	0.57	9.43	Approved
psychological capital	<-- innovative performance	0.63	10.31	Approved

Table 3 shows the path coefficients along with the t values for the above hypothesis. As it is known, the tested routes were accepted. In order to check the direct and indirect effect of independent variables on the dependent variable,

it is necessary to present the total, direct and indirect effects for the endogenous variable of the model, which can be seen in the following table:

Table 4. Direct and indirect effects

Independent variable	Dependent variable	Effect		
		Direct	Indirect	Total
psychological capital	self-efficacy	0.74	----	0.74
self-efficacy	innovative performance	0.57	-----	0.57
psychological capital	innovative performance	0.63	0.42 = 0.57 * 0.74	1.05

As can be seen in the table above, the impact of psychological capital on innovative job performance through self-efficacy is 1.05; Therefore, it is concluded that there is a relationship between psychological capital and innovative job performance with the mediating role of self-efficacy in Karaj primary school teachers.

Conclusion

There is a relationship between psychological capital and innovative job performance of primary school teachers in Karaj according to the mediating role of self-efficacy. Based on the obtained results, the results of the total effect study showed that the effect of psychological capital on innovative job performance through

self-efficacy is 1.05. As a result, the main research hypothesis was confirmed. Considering positive attitudes and constructive thinking patterns, psychological capital is expected to play a large role in all stages of innovative work behaviors, including problem diagnosis, idea creation, generalization, and idea application. Innovative work behaviors require more effort, risk acceptance, and ability and self-confidence in the face of uncertainty and obstacles. Considering this issue, resilience makes people have more energy to come back from unfavorable situations so that they can focus more on goals. The possible reason for this effect could be that creative self-efficacy helps experts to provide sufficient psychological resources to

implement innovative processes. Therefore, the advantages and benefits of the innovation atmosphere can have a significant impact on the innovative behavior of experts if they have a high level of creative self-efficacy. In this regard, Khosravi et al. (1400) and Kumar et al. (2022) achieved similar results in their research.

According to the obtained results, it is suggested that school administrators should focus on the positive aspects of teachers' work in order to increase optimism in order to improve innovative work activities. In this regard, it is suggested that teachers who perform well should be encouraged. In addition, it is suggested that in order to increase hope in employees, organization managers should support the people under their supervision and create an atmosphere full of trust. Employees must believe that the organization pays attention to their needs and responds to them. Employees should know that they are involved in setting goals, and if the goals of the organization are achieved, not only the upstream people will benefit, but the employees also participate in it and benefit from the results of their efforts. Finally, it should be mentioned that useful competition is one of the ways to create self-efficacy in employees. In this regard, school administrators are suggested to focus on motivational factors in order to increase the sense of self-efficacy in employees. In this way, teachers' performance is evaluated periodically and teachers who perform better are encouraged and appreciated. This makes teachers focus more on strengthening and improving their abilities.

Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

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