

THE EFFECT OF SELF-EFFICACY AND PHILOSOPHICAL MINDSET ON THE SKILL OF DECISION MAKING BY PRINCIPALS OF ELEMENTARY SCHOOLS AT TEHRAN

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ABSTRACT

Management in Education Organization whether at school level or at the respective ministry level has a critical and determinant role in progressing and realizing education objectives. Investment on education principals in different classes particularly, schools' principals is the most profitable type of investment. If educational systems are appropriately designed and implemented, its effects on education quality will be determined by the management acts in which. Lack of decision-making skill in principals will induce irretrievable damages to the organization body which may lead the organization to be collapsed. Well and proper decision making directly relates to the principal's skills and qualification, i.e. the more principal is powerful in decision-making, decisions will be more reasonable. According to importance and location of decision-making skill in performing managerial tasks, the factors relating to this skill are discussed in this study. Tool of this research is questionnaire and according to data gathering method, descriptive method of correlative nature was used. In order to assess the research background and theoretical basics related to the subject of study, document and library method was used. The statistical methods used in this study are Pearson Correlation Coefficient and Multiple Regression methods. SPSS software package was used for analyzing data. In this research, the psychiatric variables i.e. self-efficacy and philosophical mindset were analyzed with respect to decision-making skill. The results indicated that the correlation coefficient for philosophical mindset and self-efficacy of principals on their decision-making skills was 0.632. Of course by use of determination coefficient value (0.4) we can conclude that only 40 percent of decision-making skill variance in this research may be predicted through philosophical mindset of principal's self-efficacy.

Keywords: *Self-efficacy, Philosophical Mindset, Decision-making Skill, Principals of Elementary School*

INTRODUCTION

Every day in our life, it is necessary to take small or large decisions. Decision making skill is an important skill in every one's life.

Good decision making depends on understanding the situation well, being aware of our choices and seeing the consequences of our choices. So it is an essential to develop Decision Making skill in children of all ages, particularly adolescents. An important developmental task during adolescence is learning to make decisions, experiencing the related positive and negative consequences (Halpern-Felsher and Bonnie, 2009).

If the information is excessively complex or incomplete, or the required data are not delivered at times, then the students are failing to make relevant decisions. But by and large schools tend to be successful in

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providing students with the knowledge competencies requisite to effective decision making (Ross, 1981). Children who express or show decision making skills are more likely to fit into place in positive, constructive behaviors and avoid negative, destructive behaviors (Syamala, 2014).

Implementation of a non-focused educational system requires redetermination of educational powers and responsibilities and it is required to deliberate some arrangements and infrastructures to this effect. One of the most important substructures is reinforcement of decision-making skill by the principals and officials. If educational systems are appropriately designed and implemented, its effects on education quality will be determined by the management acts in which. Lack of decision-making skill in principals will induce irretrievable damages to the organization body which may lead the organization to be collapsed (Mirkamali, 2002). Decision making greatly influences the organization structure. Well and proper decision making directly relates to the principal's skills and qualification, i.e. the more principal is powerful in decision-making, decisions will be more reasonable (Soltani, 2008). In the principal's literature, organizational decision-making is a process for recognizing and solving organization's problems. The more awareness of the principal from subject matter of decision-making, they will have the better decision making ability. Most decisions are relevant to the related information. You must know which kind of information you need. What is the best information source and how you must reach them? Some information is provided by analyzing them, some by extracting from external resources like books, people, etc. The main support of decision making is information. Therefore, by making information system, you can take an important step toward improvement of principals' decision making (Sajjadi, 2013). According to importance and location of decision-making skill in performing managerial tasks, the factors relating to this skill are discussed in this study. In this research, the psychiatric variables i.e. self-efficacy and philosophical mindset were analyzed with respect to decision-making skill.

Research Background

Matthew (2013) discussed rapid, timely and tactful decision making by principals of schools by having indices of principals' decision making skill concerning preparation of schools for satisfying students' needs while confronting with complex security challenges which is more than 21st century in his doctorate degree thesis entitled "assessment of necessary management education of schools principals' decision-making skill and their performance in special conditions". The results indicated that enforcing some factors like self-efficacy, self-confidence, self-esteem, creativity, and correct understanding of events is considered as a very necessary factor for schools principals and decision-makers in obtaining decision-making skills.

In the study performed by Vartanian *et al.*, (2007), in assessment of the relationship between creativity, attention and speed of information processing, they concluded that the people with the more creativity capability, have the more speed reaction time for a responsibility and avoiding obtrusive information. And time of more speed reaction on a responsibility needs avoiding obtrusive information. These results were gained from students of Russian High School of two genders.

In the research performed by Tatyana (2014) entitled "assessment of creativity phenomenon in educational environment" according to the significant revolution in the modern world with some fluctuations like speed variety and changes, dissimilarity, etc. require the necessity for applying modern approaches in management and education and management will be followed by creativity based on nonlinear thought. This transformation moves toward a self-organization system and the schools officials act based on nonlinear thought and creativity by use of new form of education and management. The major objective of this research is assessment of attitude towards creativity phenomenon in educational environment. This research indicated results of a sociologic referendum from 350 teachers and principals about their attitude about possibility of education by use of creative technologies and established that the teachers and principals are effective in appearance of creativity by using education facilities and modern technologies.

Edward (2002), in his research, found that by teaching problem solving skills to the adolescents, their stress level will be reduced and thinking and proceeding for suicide when occurring stressful events have been significantly reduced.

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According to the overall objectives of this research, the researcher intends to assess detailed objectives:

- Assess self-efficacy, philosophical mindset, decision-making skill among principals of elementary schools of Tehran, Dist 8.
- Assess relationship between self-efficacy of principals of elementary schools of Tehran, Dist 8 and their decision-making skill.
- Assess relationship between philosophical mindset of principals of elementary schools of Tehran, Dist 8 and their decision-making skill.

Research Necessity and Importance

Most of the time, it is seen in schools that principals are faced with difficulties in solving problems and sometimes such problems continues up to the level that districts offices must necessarily interfere in schools affairs. Principals of schools, who suffer from decision-making skill, are running a system with numerous problems that most of them are arising from their inappropriate and untimely decision making. Therefore, recognizing contributing factors in decision making may remove all problems in this field. According to importance of the subject and its role in education growth and development of the country, the effect of these two factors i.e. self-efficacy and philosophical mindset on principals' decision-making was assessed in order to enhance management quality in education office particularly principals of elementary schools at Dist 8 of Tehran.

Research Main Question

How self-efficacy and philosophical mindset influence decision making skill of principals of elementary schools in Dist 8 of Tehran?

Variables

Decision Making Skills: Indeed means selecting one of the replacing modes which may have the most privileges or indeed it has the most feasibility (Fathi, 2006).

Self-efficacy: Self-efficacy means recognizing your intellectual, mental, rational and moral capabilities and growing them and forming you're believe to the mode that by applying your educated talents and capabilities you can take steps towards your elevation and elevation of the organization (Soltani, 2008).

Philosophical mindset: Prepares the people to recognize phenomena with an appropriate and logic thought (Mirkamali, 2002).

MATERIALS AND METHODS

In this research, according to data gathering method, descriptive method of correlative nature was used. Also, in order to assess the research background and theoretical basics related to the subject of study, document and library method was used.

Research Variables

In this research, decision making skill is considered as criterion variable and self-efficacy and philosophical mindset are considered as predicting variables.

Statistical Population

The statistical population of this research includes principals of elementary schools in Dist 8 of Tehran who are serving in school year 2013-. According to the report issued by Education Office, their number is 138 people. But due to failure of some of them in cooperation, 130 questionnaires were completed.

Determination of Sample Size and Sampling Method

Due to the limited size of statistical population, all subjects were studied.

Research Tools

According to the subject and objectives of the research, questionnaire was used for gathering the required data.

Tools Reliability and Validity

In order to make coordination in the questionnaire items with the population culture, the questionnaire was submitted to 6 professors and experts to give their comments. Upon taking their comments by use of Lawshe formula (1975) CVR was obtained for each sections including content of philosophical mindset (0.74), self-efficacy content: (0.73) and decision making skill content (0.71). Factors validity of different

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sections of this measurement tool was also computed and the results indicated that the factor validity of most of items was 0.7 and more.

Reliability (Validity)

Cronbach's Alpha Coefficient was used for assessment of internal consistency reliability of items. Therefore, before distributing the final questionnaire among sample population, the initial questionnaire was distributed among 50 principals. Then Cronbach's Alpha Coefficient was individually assessed for different parts of questionnaire whose results are shown in Table 1:

Table 1: Results of Cronbach's Alpha coefficient for different parts of questionnaire

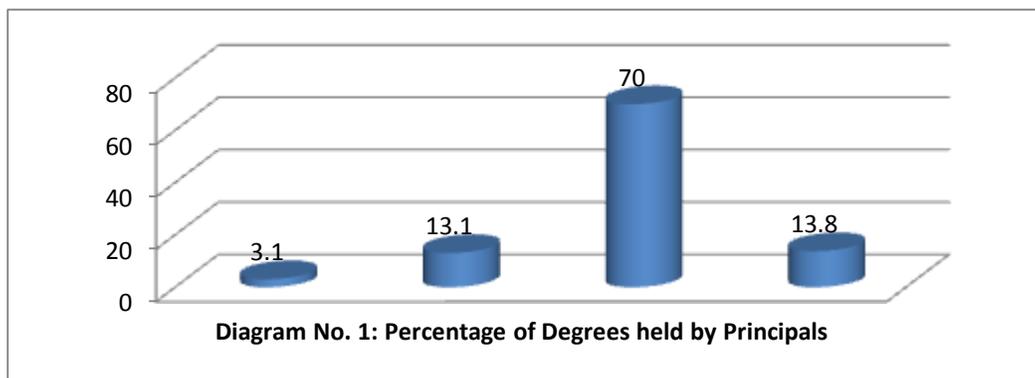
Scales	Number of Items	Calculated Reliability Coefficient
Philosophical Mindset Content	12	0.72
Self-efficacy Content	15	0.75
Decision-making skill Content	20	0.83

The results in table indicated high amount of internal consistency between the items.

Statistical Methods

According to the assessment level of the considered variables central and distribution determinants as well as statistical tests including one sample T test, Pearson correlation coefficient and multiple regression coefficient were used. Of course for analyzing data SPSS software package was used.

Demography and Occupational Specifications of Respondents



According to the above diagram, from all principals 3.1 % of them hold High School Diploma, 13.1 % of them hold Associate's Degree Diploma, 70 % of them hold Bachelor's Degree Diploma, and the remaining hold Master's Degree Diploma. The results indicated that approximately three fourth of statistical population holds Bachelor's Degree Diploma. Of them 65.4% were female and 34.6 % were male.

RESULTS AND DISCUSSION

Results

Studied Indices Analysis

Indices i.e. self-efficacy, philosophical mindset, principals' decision-making skill were analyzed in this research whose results are set forth as follows:

Self-efficacy Index

In this research, the aspects of self-efficacy index were assessed and measured from four respects i.e. risk management, creativity, positive attitude to oneself and others, and motivation for achieving success. Therefore, in this research principals' self-efficacy index was assessed and by preparing a questionnaire for self-efficacy we tried to individually measure and assess aspects of self-efficacy through fifteen 4-option items (whose options are almost always, sometimes, rarely and never). For measuring this factor 4

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points was allotted to almost always, 3 points to sometimes, 2 to rarely and 1 to never. Then components were obtained. The highest and lowest points for each person in this index are 60 and 15, respectively. Furthermore, the highest point indicates the more recognition of principals to their self-efficacy. The results of this measurement include:

Table 2: Mean, Standard Deviation, Skewness and Kurtosis of Self-efficacy and its aspects

Self-efficacy and its aspects	Mean	S.D.	SK	K	Min	Max
Risk management	12.9	3.925	0.016	0.434	5	20
Positive attitude to oneself and others	6.23	1.539	0.046	0.422	3	10
Motivation for success	5.07	1.428	0.451	0.436	3	9
Self-efficacy	31.51	5.725	0.327	0.238	20	48

The results in Table 2 indicate that from the point of view of all principals mean of risk management is 12.9 with a standard deviation of 3.925; mean of Positive attitude to oneself and others is 6.23 with a standard deviation of 1.539; mean of motivation for success is 5.07 with a standard deviation of 1.428. Also mean of self-efficacy is 31.51 with a standard deviation of 5.725.

Philosophical Mindset Index

In this research, the aspects of philosophical mindset index were assessed and measured from three respects i.e. generality, adjustability, and deliberation. Therefore, in this research principals' philosophical mindset index was assessed and by preparing a questionnaire for philosophical mindset we tried to individually measure and assess aspects of philosophical mindset through twelve 4-option items (whose options are almost always, sometimes, rarely and never). The highest and lowest points for each person in this index are 48 and 12, respectively. Furthermore, the highest point indicates the more recognition of principals to their philosophical mindset. The results of this measurement include:

Table 3: Mean, Standard Deviation, Skewness and Kurtosis of philosophical mindset and its aspects

Philosophical mindset and its aspects	Mean	S.D.	SK	K	Min	Max
Generality	5.31	1.188	0.476	0.467	4	8
Adjustability	9.30	2.34	0.318	0.345	6	16
Deliberation	6.82	1.865	0.212	0.374	4	13
Philosophical mindset	21.44	3.368	0.130	0.343	15	31

The results in Table 3 indicate that from the point of view of all principals mean of generality is 5.31 with a standard deviation of 1.188; mean of adjustability is 9.30 with a standard deviation of 2.34; mean of deliberation is 6.82 with a standard deviation of 1.865. Also mean of philosophical mindset is 21.44 with a standard deviation of 3.368.

Decision Making Skill Index

In this research, decision making index was assessed and by preparing a questionnaire for decision making skill we tried to individually measure and assess aspects of decision making skill through twenty 4-option items (whose options are almost always, sometimes, rarely and never). The highest and lowest points for each person in this index are 80 and 20, respectively. Furthermore, the highest point indicates the more recognition of principals to their decision making skill. The results of this measurement include:

Table 4: Mean, Standard Deviation, Skewness and Kurtosis of decision making skill and its aspects

Decision making skill and its aspects	Mean	S.D.	SK	K	Min	Max
Creative and critical thinking	13.36	3.74	0.283	0.425	5	20
Self-awareness	19.02	5.79	0.425	0.441	7	36
Consequences assessment	24.71	2.953	0.052	0.073	15	30
Problem solving	6.74	2.238	0.393	0.449	3	18
Information gathering and evaluating	5.20	1.68	0.448	0.459	2	11

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The results in Table 4 indicate that from the point of view of all principals mean of creative and critical thinking is 13.36 with a standard deviation of 3.74; mean of self-awareness is 19.02 with a standard deviation of 5.79; mean of consequences assessment is 24.71 with a standard deviation of 2.953, mean of problem solving is 6.74 with a standard deviation of 2.238. Also mean of information gathering and evaluating is 5.20 with a standard deviation of 1.68.

Research Hypotheses Assessment and Analysis

Now we inferentially assess research data by use of statistical tests and indices, and assess whether the existing relationship are statistically significant or are arising from sampling error?

Therefore, according to the assessment level of the considered variables, one sample T test, Pearson correlation coefficient and multiple regression coefficients were used, whose results are as follows:

For responding the question of how is the self-efficacy status among principals of elementary schools in Dist 8 of Tehran? one sample T test was used. Theoretical mean of principals' self-efficacy index was compared with the reached mean. The results are shown in table 6:

Table 5: Results of one sample t test concerning self-efficacy status

T test criterion	Theoretical mean	Computed mean	Degree of freedom	Significance level
11.765	37.5	31.51	129	0

The results shown in table 5 indicate that there is a significant difference between theoretical mean of self-efficacy for 1%. So that theoretical mean of self-efficacy (37.5) was higher than the reached mean (31.51).

In other words, principals in this research have observed their self-efficacy content at schools lower than the supposed/theoretical self-efficacy.

For responding the question of how is the philosophical mindset status among principals of elementary schools in Dist 8 of Tehran? one sample T test was used. Theoretical mean of principals' philosophical mindset index was compared with the reached mean. The results are shown in table 6:

Table 6: Results of one sample t test concerning philosophical mindset status

T test criterion	Theoretical mean	Computed mean	Degree of freedom	Significance level
28.143	30	21.44	129	0

The results shown in table 6 indicate that there is a significant difference between theoretical mean of philosophical mindset for 1%. So that theoretical mean of philosophical mindset (30) was higher than the reached mean (21.44). In other words, principals in this research have observed their philosophical mindset content at schools lower than the supposed/theoretical philosophical mindset.

For responding the question of whether the philosophical mindset and self-efficacy of principals affect decision-making skill? For assessment of the extent of effect of philosophical mindset and self-efficacy on decision-making skill, multiple-variable regression method was used. The results are shown in the following table:

Table 7: Results of correlation and determination coefficient between philosophical mindset, creativity and self-efficacy of principals on decision making skill

Model	Correlation Coefficient R	Determination Coefficient R2	Corrected Determination Coefficient	Corrected Determination Coefficient Standard Deviation
1	0.632	0.4	0.386	6.708

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The results shown in table 7 indicate that correlation coefficient for philosophic mindset, creativity and self-efficacy of principals on their decision making skill was 0.632. Of course by use of the determination coefficient value (0.4) we can conclude that, only 40 percent of variance of decision making skill may be predicted through philosophic mindset, creativity and self-efficacy of principals.

Table 8: Table of variance analysis between philosophical mindset and self-efficacy of principals on their decision making skill

Model	SS	DF	MS	F Test	Sig.
Regressive variations source	3780.265	3	1260.088	28.003	0
Error variations source (the rests)	5669.805	126	44.998		

The results shown in table 8 indicate results of calculation of variance analysis between the considered variables. According to F test (28.003) and DF 3 and 126 and significance level 0 we can say that a significant difference is observed between philosophical mindset and self-efficacy of principals with their decision making skill.

Table 9: Regression coefficient between philosophical mindset and self-efficacy of principals on their decision making skill

Model	Non-Standardized Coefficients		Standardized Coefficients	T Test	Sig.
	B	Standard Error	Beta		
Intercept	13.431	4.288		3.132	0.002
Philosophical mindset	0.055	0.201	0.002	0.271	0.787
self-efficacy	0.801	0.128	0.535	6.277	0

As it is shown in table 9, the value of calculated Beta for index of self-efficacy of principals is significant. Therefore, the decision-making skill may be predicted by extent of self-efficacy of principals.

Discussion

The results indicated that from all principals participated in the research 54.6 percent were female and the balance i.e. 45.4 percent were male. According to the findings from all principals participated in the research 3.1 % of them hold High School Diploma, 13.1 % of them hold Associate's Degree Diploma, 70 % of them hold Bachelor's Degree Diploma, and the remaining hold Master's Degree Diploma. The results indicated that approximately three fourth of statistical population holds Bachelor's Degree Diploma. About two third of them have years of service for education office for 20 years and the more.

Main Question of Research: Whether philosophical mindset and self-efficacy of principals may affect decision making skill?

For responding this question, multiple regression method was used whose results indicated that correlation coefficient for philosophical mindset and self-efficacy of principals on their decision making skill was 0.632. Of course by use of the determination coefficient value (0.4) we can conclude that, only 40 percent of variance of decision making skill may be predicted through the considered variables. Also, by calculating variance analysis between the considered variables, we can say that a significant difference is observed between philosophical mindset and self-efficacy of principals with their decision making skill. By observing Beta coefficient value, we can say that the decision-making skill may be predicted by extent of self-efficacy of principals. The results of this research are consistent with the results of researches performed by Vartanian *et al.*, (2007), Dehghanizadeh (2005), Ebrahimi (2011), Mohammadi (2012), Seifhashemi (2005), Bahari (2006), and Yadgari (2008).

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Proposal

We propose that by implementing the components of philosophical mindset, decision-making skill and self-efficacy on principals and teachers in a selected form you can determine and recognize existing potentials on sample people and recommend them for running the schools.

Research Restrictions and Problems

Individual differences (such as their interest in research) between principals of schools caused that some of them patiently and carefully completed the questionnaire and some of them do it with fewer patient and attention.

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