



The Survey impact of organizational culture on the development of smart schools from teachers' perspective in secondary schools of Khoy city in the academic year 2013-14

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ABSTRACT

The present study aims to investigate the impact of organizational culture on the development of smart schools from teachers' perspective in secondary schools of Khoy city in the academic year 2013-14. This study is applied research in terms of purpose and is descriptive - survey in terms of nature. The statistical population of this study includes all teachers in secondary schools of Khoy city in the academic year of 91, who are 996 people. The sample of this study included 282 people who were selected using Morgan table through random clustering method. To collect data, a researcher made questionnaire was used which was designed based on Robbin's standard questionnaire of organizational culture in five-point Likert scale. Its validity was confirmed by experts and its reliability was confirmed by performing an experiment on 30 people and calculating Cronbach's alpha ($97/0 = \alpha$) which was greater than ($\alpha = 7/0$).

The results of data analysis using a binomial test showed that organizational culture, creativity and innovation, risk taking and attention to details, to outcomes, to organization members, to the outcomes of employees' decisions, to team work, to ambition and persistence plays a role in the development of smart schools.

Keywords: *organizational culture, the development of smart schools, educational system*

INTRODUCTION

Human presence in the era of science and technology has changed the life as the imagination of life without technology for 21st century man seems to be impossible. Considering the increasing development of information technology, its influence on the communication of people and its speed and power to achieve new goal, the potentials of this technology, its created capabilities and the way of Education system deals with it will underpin the foundation of our educational system in the future motion of the education system to deal with this [8]. No doubt today we're living in the most revolutionary course of the history and constant evolution has changed to a fundamental and undeniable reality of social life [11]. Organizational culture is considered as a key variable in any organization. The organization members and employees have a kind of subjective judgment about such factors as the degree of freedom, independence and structure type, rewarding style, intimacy, administrators' support as well as the extent to which management is open to conflict, these assumptions or judgments about organization cause the organizational culture takes a special form with its characters [15]. One of the most important and effective organizations in the world today is Education and Development Organization, an organization that creates a pattern for official institutions and has a inextricable bound with the development of each society according to the moral, political, social, cultural and economic aspects [16]. In 2005, David Perkins and et al. at Harvard University offered the plan of smart schools as a new experience in education programs using ICT. This project was implemented gradually in some schools and later expanded, so that nowadays countries developed in information technology area such as Malaysia use these schools in their development programs to train human force. Information Technology (IT) has been as the main focus of development in the world. The computerization of ordinary works, performing many routine affairs of bank through internet and communication networks, electronic and virtual training, no necessity to take part in schoolrooms and the promotion and development of electronic commerce are the main achievements of IT that play an important role in the welfare and convenience of people [4]. Organizational culture plays an Indispensable role in the success of businesses [14]. Organizational culture is a set of postulated values, basic beliefs, collective memory, expectations and definitions of

situation that exist in an organization and reflects a common ideology that people bear in their minds and represents employees' identity. Organizational culture often provides unwritten rules and untold guides to compromise with others in the organization and increase social stability of the system [3].

MATERIALS AND METHODS

The statistical population of this study (996 people) includes all female and male teachers in secondary schools of Khoy city in 92-91 academic year. The sample size (282 people) was selected based on Morgan table using a stratified cluster random sampling method [9].

Data collection tools:

Robbin's organizational culture questionnaire is in Likert's 5-point scale which includes 56 researcher made questions. In developing these questions the components of organizational culture including creativity, risk taking, attention to details, to outcomes, to organization members, to the results of employees' decisions, to team work, to ambition and persistence have been considered. To ensure the accuracy of questions, content and face validity were confirmed by experts. To determine reliability, Cronbach's alpha coefficient was used and the reliability coefficient of whole questionnaire was calculated 0.97.

Questions 1 to 9 measured creativity component, questions 10 and 16 measured risk-taking, questions 17 to 20 measured attention to details, questions 21 to 24 measured attention to outcomes, questions 25 to 30 measured attention to organization members, questions 31 to 35 measured the impact results of employees' decision, questions 36 to 46 measured attention to team work, questions 47 to 52 measured ambition and questions 52 to 56 measured persistence component. To be informed about the normality or non-normality of data distribution, Kolmogorov-Smirnov test was used. According to the values of Z scores, it is concluded that the distribution of scores is not normal, since significance level is less than 0.05. therefore, to test hypotheses, binomial ratio test is used.

RESULTS

Main hypothesis: organizational culture impacts on the development of smart schools from teachers' perspective in secondary schools of Khoy city in 2014.

Table 1. Results of ratio test to examine the role of organizational culture in the development of smart schools.

	Cut-off point	number	Observed ratios	Determined ratio	Sig
The role of organizational culture in the development of smart schools	Less impact and very less impact	<= 168	150	.53	.31 1
	High impact and very high impact	> 168	132	.47	
	sum		282	1.00	

To determine the cut-off point, $M = 5K + 1 K / 2$ formula is used. Considering that the number of questions were 56 and the number of options were 5, then the cut-off point will be $M = 5 \times 56 + 1 \times 56 / 2 = 168$. According to the above formula, the cut-off point is calculated 168. Those subjects whose score was above 168, stated that the impact of organizational culture on the development of smart schools is high and very high and those subjects whose score was 168 or less, stated that the impact is low and very low. In Table 4-10 the results of ratio test has been reported. 150 people (or 53 percent) stated that the components of organizational culture have a less and very less impact on the development of smart schools and 132 people (or 47 percent) expressed that this impact is high and very high. Since the difference between these two ratios is no statistically significant, therefore it can be concluded that in general the components of organizational culture does not impact on the development of smart schools.

Hypothesis 1: creativity impacts on the development of smart schools.

Table 2. The results of ratio test to examine the role of creativity in the development of smart schools.

	Cut-off point	number	Observed ratios	Determined ratios	Significance value
The role of creativity in the development of smart schools	Less impact and very less impact	<= 27	147	0.52	0.50 0.513
	High impact and very high impact	> 27	135	0.48	
	sum		282	1.00	

In Table4-12, the results of ratio test are reported. 147subjects (or52%) stated that creativity has a less impact and very less impact on the development of smart schoolsand135 subjects(or 48%) stated that it has a high and very high impact on the development of smart schools. Since the difference between two

observed ratios is not significant, therefore it can be concluded that creativity has no impact on the development of smart schools.

Hypothesis 2: Risk-taking impacts on the development of smart schools.

Table 3. The results of ratio test to examine the role of risk-taking in the development of smart schools.

		Cut-off point	number	Observed ratios	Determined ratio	Significance level
The role of risk-taking in the development of smart schools	Less impact and very less impact	<= 21	166	0.59	0.50	0.003
	High impact and very high impact	> 21	116	0.41		
	sum		282	1.00		

In Table 2, the results of ratio test are reported. 166 subjects (or 59%) stated that risk-taking has a less and very less impact on the development of smart schools and 116 subjects (or 41%) stated that it has a high and very high impact on the development of smart schools. Since the difference between two observed ratios is significant in the significance level of 1% ($P=0.003 < 0.01$), therefore it can be concluded that risk-taking impacts on the development of smart schools but its impact is less and very less.

Hypothesis 3: Attention to details impact on the development of smart schools.

Table 4. The results of ratio test to examine the role of attention to details in the development of smart schools.

		Cut-off point	number	Observed ratios	Determined ratios	Significance level
The relationship between attention to details and the development of smart schools	Less impact and very less impact	<= 12	184	0.65	0.50	0.000
	High impact and very high impact	> 12	98	0.35		
	sum		282	1.00		

In Table 4-16, the results of ratio test are reported. 184 subjects (or 65%) stated that attention to details has a less and very less impact on the development of smart schools and 98 subjects (or 35%) stated that this component has a high and very high impact on the development of smart schools. Since the difference between two observed ratios is significant in the significance level of 0.1 ($P=0.003 < 0.01$), therefore it can be concluded that attention to details has a less and very less impact on the development of smart schools as the majority of subjects i.e. 65% confirmed its less impact.

Hypothesis 4: Attention to outcome impact on the development of smart schools.

Table 5. The results of ratio test to examine the role of attention to outcome in the development of smart schools.

		Cut-off point	number	Observed ratios	Determined ratios	Significance level
the relationship between attention to details and the development of smart schools	Less impact and very less impact	<= 12	151	0.54	0.50	0.258
	High impact and very high impact	> 12	131	0.46		
	sum		282	1.00		

In Table 5, the results of ratio test are reported. 152 subjects (or 54%) stated that attention to outcome has a less and very less impact on the development of smart schools and 131 subjects (or 46%) stated that this component has a high and very high impact on the development of smart schools. Since the difference between two observed ratios is not in the significance level, therefore it can be concluded that attention to outcome has no impact on the development of smart schools.

Hypothesis 5: attention to organization members impact on the development of smart schools.

Table 6. The results of ratio test to examine the role of attention to organization members in the development of smart schools.

		Cut-off point	number	Observed ratios	Determined ratios	Significance level
the relationship between attention to organization members and the development of smart schools	Less impact and very less impact	<= 18	173	0.61	0.50	0.000
	High impact and very high impact	> 18	109	0.39		
	sum		282	1.00		

In Table 6, the results of ratio test are reported. 173 subjects (or 61%) stated that attention to organization members has a less and very less impact on the development of smart schools and 109 subjects (or 39%) stated that it has a high and very high impact on the development of smart schools. Since the difference

between two observed ratios is significant in the significance level of 0.01 ($P=0.001 < 0.01$), therefore it can be concluded that attention to organization members has a less and very less impact on the development of smart schools as the majority of subjects (69 %) confirmed that.

Hypothesis 6: The outcomes of employees' decisions impact on the development of smart schools.

Table 7. The results of ratio test to examine the impact of employees' decisions outcomes on the development of smart schools.

	Cut-off point	number	Observed ratios	Determined ratios	Significance level
the relationship between employees' decisions results and the development of smart schools	Less impact and very less impact	<= 15	180	0.64	0.000
	High impact and very high impact	> 15	102	0.36	
sum		282	1.00		

In Table 7, the results of ratio test are reported. 180 subjects (or64%) stated that the outcomes of employees' decisions has a less and very less impact on the development of smart schools and 102 subjects (or 36%) stated that it has a high and very high impact on the development of smart schools. Since the difference between two observed ratios is significant in 0.01 level ($P=0.001 < 0.01$), therefore it can be concluded that the outcomes of employees' decisions has a less and very less impact on the development of smart schools as the majority of subjects (64 %) confirmed that.

Hypothesis 7: Attention to team work impact on the development of smart schools.

Table 8. The results of ratio test to examine the impact of attention to team work on the development of smart schools.

	Cut-off point	number	Observed ratios	Determined ratios	Significance level
the relationship between attention to team work and the development of smart schools	Low impact and very low impact	<= 33	160	0.57	0.027
	High impact and very high impact	> 33	122	0.43	
sum		282			

In Table4-24, the results of ratio test are reported. 160 subjects (or57%) stated that attention to team work has a low and very low impact on the development of smart schools and 122 subjects (or 43%) stated that it has a high and very high impact on the development of smart schools. Since the difference between two observed ratios is significant in the level of 0.01 ($P=0.027 < 0.05$), therefore it can be concluded that attention to team work has a low and very low impact on the development of smart schools as the majority of subjects (57 %) selected these two options.

Hypothesis8: Ambition impact on the development of smart schools.

Table 9. The results of ratio test to examine the impact of ambition on the development of smart schools.

	Cut-off point	number	Observed ratios	Determined ratios	Significance level
the relationship between ambition and the development of smart schools	Low impact and very low impact	<= 18	164	0.58	0.07
	High impact and very high impact	>18	188	0.42	
sum		282	1.00		

In Table 9, the results of ratio test are reported. 164 subjects (or58%) stated that ambition has a low and very low impact on the development of smart schoolsand118 subjects (or 42%) stated that it has a high and very high impact on the development of smart schools. Since the difference between two observed ratios is significant in the level of 0.01 ($P=0.027 < 0.05$), therefore it can be concluded that ambition has a low and very low impact on the development of smart schools as the majority of subjects (58%) confirmed that.

Hypothesis9: persistence impacts on the development of smart schools.

Table 10. The results of ratio test to examine the impact of persistence on the development of smart schools.

		Cut-off point	number	Observed ratios	Determined ratios	Significance level
the relationship between persistence and the development of smart schools	Low impact and very low impact	<= 12	163	0.58	0.50	0.01
	High impact and very high impact	> 12	119	0.42		
	sum		282	1.00		

In Table 10, the results of ratio test are reported. 163 subjects (or 58%) stated that persistence has a low and very low impact on the development of smart schools and 119 subjects (or 42%) stated that it has a high and very high impact on the development of smart schools. Since the difference between two observed ratios is significant in the level of 0.01 ($P=0.01 < 0.05$), therefore it can be concluded that persistence has a low and very low impact on the development of smart schools as the majority of subjects (58%) confirmed that.

DISCUSSION AND CONCLUSION

The obtained results in relation to general Hypothesis of study in Table 4-10 doesn't suggest a significant relationship between the components of organizational culture and the development of smart schools. And it can be concluded that the components of organizational culture doesn't impact on the development of smart schools. Joyani (2007) who studied the difference between the organizational culture of male and female employees in Azad University of Ardabil, didn't find a significant difference between the organizational culture of male and female employees [10]. To justify this, he considered the same management style, the same job opportunities and the same environment as the lack of difference between two. In the results of Hosseini-Nasab's study (2006) the presence of cultural differences in different academic levels indicates the lack of a significant difference between groups with different education levels.

The obtained result in relation to Hypothesis 1 of Table 3 doesn't suggest the difference between two observed ratios in the significance level. And it can be concluded that creativity and innovation doesn't impact on the development of smart schools. The results of this section are in line with the research results of Sheikh Alizadeh Herris (2007), Abraham Zadeh who studied the relationship and the impact of organizational culture on the extent of administrators' creativity and they also concluded that the creativity impacts on the development of smart schools [17,2].

The obtained results of Hypothesis 2, Table 5 indicates a significant relationship between risk-taking and the development of smart schools. Therefore it can be concluded that risk-taking impacts on the development of smart schools, but its impact is low and very low, since the majority of respondents stated that that risk-taking has a low and very low impact on the development of smart schools [9]. These results are in line with Alizadeh's study (2007) who examined the relationship between organizational culture and the improvement of secondary schools quality in Isfahan" and found that there is a positive and significant relationship between the risk-taking and the improvement of secondary schools quality [1]. They also concluded that risk-taking can impact on some dimensions of management.

The obtained results of Hypothesis 3, Table 7 indicates a significant relationship between attention to details and the development of smart schools. Therefore, it can be concluded that attention to details can impact on the development of smart schools, but its effect is low and very low, since the majority of respondents (65%) confirmed that. The results of Razavi's study (2000) also showed that there is a significant relationship between administrators' power and their efficiency. But the results of this hypothesis are not in agreement with bureaucratic culture which is derived of forced organizational character [14].

The obtained results of Hypothesis 4, Table 5 doesn't suggest a significant relationship between attention to outcome and the development of smart schools. Thus it can be concluded that there is not any relationship between attention to outcome and the development of smart schools. Ghafari (2009) in his study titled "encouraging teachers to use IT" found a significant relationship between attention to outcome and its results in the use of IT, this result is in contradiction to our hypothesis. Perhaps a change of attitude within last years is the reason for the inconsistency of different research results [7].

The obtained results of Hypothesis 5, Table 6 indicate a significant relationship between attention to organization members and the development of smart schools. Hence, it can be concluded that attention to the members of organization impacts on the development of smart schools but its effect is low and very low, since the majority of respondents (69%) confirmed that. Bakhtiar Naserabadi and Noruzi (2007) studied the factors effecting on the emergence of new areas in the field of Education and Development and

found that there is a significant relationship attention to organization members and the factors effecting on the emergence of new methods[13].

The obtained results of Hypothesis 6, Table 7 indicate a significant relationship between the outcomes of employees' decision and the development of smart schools. Therefore, it can be concluded that the outcomes of employees' decision impacts on the development of smart schools, but its effect is low and very low, since the majority of respondents (64%) confirmed that. Armon (2007) conducted a study titled "determining the feasibility of information and communication technology use in the education process of secondary schools". The findings of this study are consistent with our results and there is a significant relationship the outcomes of employees' decision and information technology in education process [2].

The obtained results of Hypothesis 7, Table 8 indicate a significant relationship between the attention to team work and the development of smart schools. Therefore, it can be concluded that attention to team work impacts on the development of smart schools, but its effect is low and very low, since the majority of respondents (57%) confirmed that. Alizadeh (2007) investigated the relationship between organizational culture and the components of quality improvement and concluded that there is a positive and significant correlation between organizational culture and harmony among employees [1].

The obtained results of Hypothesis 8, Table 9 indicate a significant relationship between ambition and the development of smart schools. Therefore, it can be concluded that ambition impacts on the development of smart schools, but its effect is low and very low, since the majority of respondents (58%) confirmed that. Fazli (2007) in a study titled "the investigation of the relationship between the organizational culture and the efficiency of school administrators in Khoy city" concluded that there is significant relationship between ambition (BOLD) and the efficiency of administrators and this is consistent with our hypothesis [6].

The obtained results of Hypothesis 9, Table 10 indicate a significant relationship between persistence and the development of smart schools. Therefore, it can be concluded that persistence impacts on the development of smart schools, but its effect is low and very low, since the majority of respondents (58%) confirmed that.

Hakimi (2004) in a research titled "investigating the factors which cause teachers not to use information technology", examined this issue and found that there is positive and significant relationship between persistence and information technology [8].

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