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Validating the Healthy School Conceptual Model with an Emphasis on Organizational Health Dimension Using Structural Equation Modelling

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Abstract

The aim of this study is to identify the dimensions of a healthy school in an Iranian context. The study employed a mixed method approach to address the research questions. In the qualitative part, the study population consists of a number of experts in educational sciences using a Delphi technique, and the study samples were selected based on a purposive sampling method with a sample size of 20 experts. In the quantitative part, the study population involves all primary schools in Mazandaran Province, Iran. A multi-stage quantitative sampling method was applied to select the samples. A total of 210 primary schools were participated in the quantitative study. After three Delphi rounds, the most important dimensions of a health school are educational principal, educational leadership, teacher's attitude, school culture, organizational commitment, teacher's citizenship behavior, job satisfaction, educational achievement, and students' general health. The model obtained from the qualitative validation was tested in the quantitative study. Nine questionnaires were conducted to collect data in quantitative study. Confirmatory factor analysis was used to examine validity and reliability. Of 19 hypotheses, the results of the structural model support 10 hypotheses. This study suggests that both general and organizational health are key factors to achieve a healthy school.

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Introduction

There is great interest in healthy schools in recent years. Healthy school is an educational healthy organization which is capable of performing its own duty effectively (Hoy et al., 1991). It is a place which provides opportunities for promotion of health (American School Health Association, 2013). Teachers consider the healthy school to be a healthy place for learning. They feel principals as intimate and supporter ones and have confidence in the principals to set up a structure in which learning and emotional needs are taken into consideration simultaneously (Hoy et al., 1991). Healthy schools have a healthy climate and high organizational health. In addition, "a healthy school is one in which the technical, managerial, and institutional levels are in harmony; and the school is meeting both its instrumental and expressive needs as it successfully copes with disruptive external forces and directs its energies toward its mission" (Hoy et al., 1991, p. 154). In general, healthy organizations are seeking a balance between pressure, productivity and performance (Snyder & Anderson, 1986). Decision making and problem solving are necessary to keep an organization open and healthy (Frueauff, 1998). Healthy schools are protected from unreasonable community and parental pressures. The board of directors successfully resists all narrow efforts of vested interest groups in order to influence policy making (Hoy & Feldman, 1999).

Principal of a healthy school is a dynamic leader, and provides high standards for performance through supporting the teachers. In a healthy school, teachers have been committed to teaching and learning (Freiberg, 1999). They compile high but achievable goals for students, maintain high level standards of performance and develop a serious and orderly learning environment. Moreover, students work hard on their school work, are highly motivated and respect other students who achieve academically. Also, in the healthy schools, teachers like each other, trust in one another, are enthusiastic about the job as well and proud of

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being in the school (Hoy et al., 1991). Research has also indicated an indirect impact of the principal attitudes and a direct impact of teachers' commitment on school achievement (Hoy et al., 1990). In an Asian context, research has found high student achievements in healthy schools as compared to their counterparts (Alqarni, 2016). It can be concluded that the school climate can help improve student learning process and academic attainment by providing a healthy environment.

Based on the literature, studies have considered various measures to assess organizational health in school environments. The mixed results in this area of research regarding the key dimensions of a healthy school could be due to the use of inconsistent measures. Therefore, a more comprehensive conceptual model of the healthy school is required. Nevertheless, for tests of theory to be meaningful, 'it is essential that researchers correctly specify their measurement models to match their theoretical conceptualisations' (Jarvis et al., 2012, p. 140). A majority of previous studies linking the school characteristics to the healthy schools are Euro-centric. Rarely are such studies performed in Asian cultures. Healthy schools introduced and evolved in Western countries with communalities of cultures and built environment; transferring the determinants of healthy schools to other regions poses many challenges given the variations in culture and climate.

Evidence suggests that most studies in this area of research focused on the level of organizational health in the school environment, rarely are such studies examined validity and reliability of the measurement scale using a comprehensive conceptual model. The purpose of this study is to develop and validate a more comprehensive model for organizational health in an Asian setting based on two stages: verification and validation of the healthy school measurement model using a qualitative approach, and empirical examination of the structural model using a quantitative approach. Therefore, our research model contributes to the literature by incorporating the integral roles of the most effective dimensions into the healthy school measurement. In addition to extending previous research into the concept of healthy school, the study contributes to the existing body of knowledge by examining the multidimensional healthy school construct, using a mixed method approach.

Literature review

Theoretical Basis for the Study

The conceptual definition of the model used in this study focuses on healthy schools. Pretorius and Villiers (2009) stated that in a healthy school committed professionals cooperate naturally and are in basic agreement about the task at hand. They also found a strong association between the openness and health of schools. Evidence suggested that various factors have been employed to assess the level of health in the healthy schools. Based on the literature, the key dimensions of the healthy schools are educational principal, educational leadership, school culture, physical environment, psychosocial environment, school characteristics and teacher's attitude (American School Health Association, 2013; Alqarni, 2016; Berry, 2002; Blum, 2007; Buluc, 2015; Dixon, 2014; Harris, 2002; Hoy & Feldman, 1987; Hoy et al., 1991; Kakia, 2009; Kellner, 2007; Leithwood & Jantzi, 2009; MacNeil et al., 2009; Pretorius & Villiers, 2009; Ramdass & Lewis, 2012; Sergiovanni, 1995; SSLHPE, 2014; Wang et al., 1993). Based on the aforementioned studies, the key dimensions of healthy schools and the respective indicators are shown in Table 1.

Table 1. The key dimensions of the healthy schools

Key indicator	Dimensions
Educational principal	Educational affairs and teaching, students, educational employees, social relationships in the school, facilities and equipment, and financial tools.
Educational leadership	Viewpoints and values, leadership distribution, investment in employee development, human relationships, community-making.
School culture	Normative expectations, relationships between students and teachers, relationships among students, educational opportunities.
Physical environment	Preparation of the basic needs, protection against bio-environmental threats, protection against physical hazards, protection from the chemical hazards, protection from erosion, providing of the beauty features.
Psychosocial environment	Desirable inter-individual interaction, propagation of participation, prohibition of violence, security feeling, empathy and intimacy feeling, leader students.
School characteristics	Size/dimension of school, kind of school, geographical situation, economic-social condition, gender of manager.
Teachers' attitude	Respect and establishment of social sense, intimate, accessible, compassionate and sympathetic, regulation of high-level expectations, love and interest in learning, modification and flexibility, professional relationships with colleagues, protection of the professional fields/ grounds.

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Numerous investigations suggested that the school principal is general responsible for providing appropriate learning environment, healthy climate and particularly instructional excellence (Elliott & Clifford, 2014; American School Health Association, 2013). Over the past three decades, researchers have confirmed that principals matter to school improvement and student learning. On the other hand, a healthy school would contribute to high academic achievements and develop positive relationships between students and teachers (Ramdass & Lewis, 2012; MacNeil et al., 2009). Evidence suggested that principal leadership behavior is vital tool in academic achievement (Elliott & Clifford, 2014; Harris, 2000). Learning-centered leadership behaviors of principals have routinely underscored as a critical characteristic for those principals who conducting successful school improvement work (May & Supovitz, 2011). In addition, effective leadership behaviors are imperative in contributing to student achievement and the overall culture of a school (Moffitt, 2007), indicating the importance of simultaneous effects of these dimensions. These leadership behaviors include establishment of a compelling school mission, teacher evaluation and feedback, and management of organizational resources (Elliott & Clifford, 2014). Therefore, both educational leadership and educational principal are important dimensions to achieve a healthy school.

Furthermore, the principal needs a good understanding the complexities of the school culture and be able to establish support for student achievement. Stolp and Smith (1994) defined school culture as "the historically-transmitted patterns of meaning that include the norms, values, beliefs, ceremonies, rituals, traditions and myths understood, maybe in varying degrees, by members of the school community". Therefore, the school culture consists of norms, values, students' observance of regulations, the quality of relationships among students, the relationship between students and teachers, and facility equality.

Healthy environments, either physical or psychological, are important dimensions for healthy schools (Berry, 2002). These factors can turn a school into a place for generating activities and enhancing the level of health. As mentioned earlier, the school characteristics also play important role in creating a healthy school (Ramdass & Lewis, 2012).

In recent years, the debate about the school characteristics has focused on school size. There are mixed discussions regarding whether small schools work better than large schools. Evidence suggested that small school teachers feel more committed and connected to their work. Smaller schools can solve their problems better than large schools because there exists a higher intimacy and social sense in such schools (Gettys, 2003)

Other influential school characteristics have been introduced as the gender of schools and its geographical location. Research has also suggested teacher's characteristic as an important dimension for creating healthy schools, as its great impact on students' performance (Soleimani, 2011).

Regarding the outcomes of healthy schools, a large body of studies have indicated that the most important consequences of organizational health in the school environment refer to an increase of job satisfaction of teachers, increasing teachers' sense of efficacy, fostering organizational citizenship behavior, increasing organizational trust, enhancing organizational commitment, reducing job burnout, educational achievement and general health (Abdullah & Arokiasamy, 2016; Alqarni, 2016; American school health association, 2013; Berry, 2002; Blum, 2007; Brosnahan, 2011; Farahani et al., 2014; Hayat et al., 2015; Hoy et al., 1991; Lee, Cheng & Legar, 2005; Pretorius & Villiers, 2009; Ramdass & Lewis ,2012; Rezaei & Zainabadi, 2012; Shirazi & Ahmadi, 2015; SSLHPE, 2014; Zamora & Hernandez, 2016).

Increasing job satisfaction is related to an increase of sense of belonging to the workplace. Job satisfaction can affect a person's commitment to the organization and consequently, the level of performance (Grant et al., 2011). Increasing teachers' sense of efficacy means an improvement of teacher's judgment regarding his/her ability to achieve desirable results. Citizenship behavior is also related to optimal and voluntary behaviors in order to assist students, other teachers and principals. Organizational trust refers to an increase of teachers' tendency toward confidence in actions of others, while organizational commitment refers to the degree of an individual's relations as a sense of loyalty toward one's organization. In addition to loyalty, organizational commitment encompasses an individual's willingness to extend effort to further an organization goal (Mowday et al., 1979). Finally, organizational health of the schools promotes ability and power of learning and memorizing the materials included in the educational plan and facilitates academic achievement of the students.

general health is a key consequence of the healthy schools. It is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1946). In fact, health is a desirable and optimum well-being which contributes to enhance the quality of human life. Health is a multi-dimensional concept, consisting emotional, intellectual, physical, social and spiritual health

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(Corbin et al., 2008). As shown in Table 2, three major outcomes can be identified for organizational health of the schools, including satisfaction of teacher's organizational life, academic achievement and general health.

Table 2. The outcomes of organizational health of the schools

Consequences	Dimensions
Satisfaction of teachers organizational life	Increasing job satisfaction; increasing efficiency feeling; enhancing organizational-citizenship behavior; fostering organizational trust; Enhancing organizational commitment; reducing job burnout.
Academic achievement	Improvement of educational performance; Academic success
General health	Mental, emotional, intellectual, physical, social and spiritual

Conceptual framework of the Study

Based on the literature, some direct and indirect causal relationships can be considered in the conceptual model. It should be noted that organizational trust and job burnout have not been considered in the study model due to less frequency and lack of establishment of the causal relationships. Figure 1 depicts the initial conceptual model developed for this study. The following sections focus on two main sections: qualitative and quantitative studies. Firstly, procedures of the qualitative study were reported, followed by quantitative validation of the study.

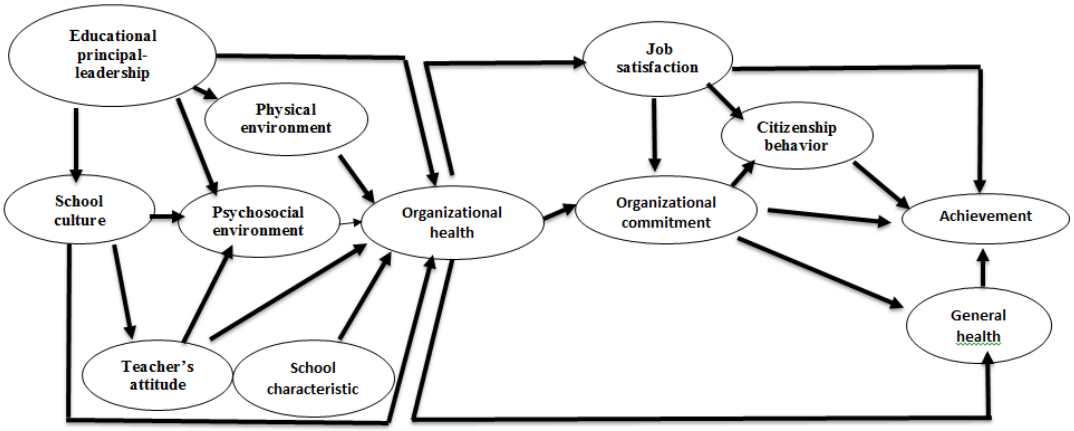

Figure 1. Initial conceptual model of the study

Research Methodology

In this research, Delphi technique was used for qualitative validation and structural equation modeling (SEM) approach was used for quantitative validation.

Qualitative Procedure

A Delphi technique was employed for initial screening of the identified factors. In order to determine the rate of agreement among panel members, Kendall's W was calculated to assess the reliability of the measurement. Kendall's W is an important coefficient that reveals a significant level of concordance between raters in the evaluation process. This coefficient is a measure of the agreement among several judges who are assessing a given set of objects (Buchweitz et al., 2005).

Purposive stratified sampling was used to establish the panel members in the Delphi technique. Experts in educational field were selected to obtain their expertise on healthy schools based on their knowledge and practical experiences. The criteria for the recruitment of experts included positions above the associate professor level, engagement in educational management for at least 10 years, and being a faculty member. The panel members were required to be knowledgeable about and familiar with the healthy schools, as well as credible within their profession. Regarding the sample size, there is a lack of agreement around the expert

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sample size in Delphi method. The sample size varies based on the scope of the study as well as available resources (Powell, 2003). Contrary to quantitative study, the sample size in a Delphi study does not depend on statistical power, but rather on panel dynamics for arriving at consensus among experts; therefore, a sample size of 10-20 experts was recommended in the literature (Okoli & Pawlowski, 2004; Powell, 2003). Therefore, 20 experts were selected in this study.

Quantitative Procedure

The research method in quantitative approach is based on SEM. SEM is a comprehensive approach to test the hypothesized relationships between the latent variables, as well as among observed and latent variables (Byrne, 1998). This approach can be used for either predictive applications or theory testing. Path analysis using Lisrel was employed to analyze the relationships between variables (Jöreskog & Sörbom, 1993). Several indices were employed to judge whether the model tested fits the data, such as Chi-square/degree of freedom ratio, and goodness-of-fit indices (i.e., CFI, GFI, IFI and RMSEA). Table 3 depicts acceptable cut-off values for fir indices.

Table 3. Cutoff criteria for fit indices in SEM

Goodness-of-fit indices	Good fitting	Reference
Comparative Fit Index (CFI)	CFI>0.9	Hu & Bentler, 1999
Goodness of Fit Index (GFI)	GFI>0.9	Hu & Bentler, 1999
Incremental Fit Index (IFI)	IFI >0.9	Hu & Bentler, 1999
Root Mean Squared Error of Approximation	RMSEA<0.08	Browne & Cudeck, 1993
Relative/normed Chi-square	χ^2/df<3	Kline, 2005

The Study Sample and the Survey Contents

The study population were all elementary schools (n=2078) of the Mazandaran Province, Iran in academic year of 2015-2016. In the quantitative study, the unit of study was a school. A multi-stage cluster sampling was used to select the samples with a sample 210 schools. At the first stage, the province was divided into 4 non-overlapping clusters, including 29 educational districts. Of each educational district, three regions were considered, and 18 schools were selected from each region. Of each school, the principal and the teachers of Grade 6 were approached. It needs to be noted that for the schools with more than a Grade 6 class, the average scores of the teachers were used. The measurement used in this study consists of six standardized questionnaire (i.e., organizational health, performance of educational principal, school culture, organizational commitment, job satisfaction and organizational citizenship behavior) as well as three self-designed questionnaires (i.e., educational leadership, teachers' attitude and general health). Furthermore, the average scores of the Grade 6 students were used to assess educational achievement. The interpretations of the questionnaire surveys are presented below.

Organizational Health: This study used a standardized questionnaire developed by Hoy et al. (1991) and consists of 7 indicators. However, to assess the internal consistency of the scale, Cronbach's alpha coefficient (α) was calculated. The resulting alpha value was 0.974, which is above the acceptable cut-off value of 0.7.

Performance of Educational Principals: The standardized questionnaire consists of 6 indicators and firstly developed by Alaghehband (2007). The validity of the questionnaire has been confirmed in this study. The alpha value for this set of measures was 0.971.

School Culture: The four items to measure this variable were developed by Higgins-D'Alessandro & Sadh (1998).The results of the factor analysis confirmed the validity of the measures. The alpha value for this variable was 0.959.

Organizational Commitment: The items for this variable were developed by Allen and Meyer (1990). This variable contains three dimensions, including affective, continuous and normative. The validity of the items were confirmed and the alpha value for this variable was 0.947.

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Job Satisfaction: The Minnesota Job Satisfaction Questionnaire (MSQ), developed by Weiss et al. (1967), was used. This variable measures internal, external and public job satisfaction on the basis of 20 items. The alpha value for this variable was 0.902.
Organizational Citizenship Behavior: The items of this variable was developed by Dipaola et al. (2001) and later was modified by DiPaola et al. (2005). The reliability coefficient of this variable was 0.894.
Educational Leadership: There are 5 items to measure this variable. The content validity of the items were confirmed by the experts. The confirmatory factor analysis (CFA) was also confirmed the construct validity of the items (GFI=0.91, IFI=0.90 and RMSEA=0.65). The alpha value for this variable was 0.953.
Teachers' Attitude: The content validity of the 7 items was confirmed by the experts. Based on the expert opinions, minor modifications were made. The results of CFA (GFI=0.98, IFI=0.92 and RMSEA=0.062) also confirmed the construct validity. The alpha value for this variable was 0.963.
General health: Five items were used to measure this variable. The study assessed both content and construct validity of the survey items. The results of CFA (GFI=0.96, IFI=0.97 and RMSEA=0.065) shows adequate validity of the measures. The alpha value for this variable was 0.969.
Academic Achievement: In order to measure educational achievement, the average score of the students in Grade 6 class/classes in the academic year of 2015-2016 was used.

Results

The Results of Qualitative Analysis

In the first round, the panel (n=20) was sent a questionnaire containing a list of the extracted factors. Experts considered the importance of each item. The experts were also asked whether there were additional items not mentioned in the list. They could add items to further improve the tool. After analyzing the first round, the researchers revised the tool and formulated the second round questionnaire sending it to the same expert panel. The same expert panel was used for all Delphi rounds, with three persons discontinuing after the first round and five persons discontinuing after the second round. In all rounds, the scores were based on a nine-point Likert-scale format, and the factors with the average rate of 7 or higher were accepted. Thus, nine factors (namely educational leadership, educational principal, school culture, teachers' attitude, job satisfaction, organizational commitment, organizational citizenship behavior, educational achievement and general health) with the average scores of more than 7, were accepted. In order to assess consensus of the panel, Kendall's W was calculated.

Table 4. Kendall agreement coefficient

	No. of indexes	Number of experts	Kendall's W coefficient	df	p value
Round 1	14	20	0.624	13	0.000
Round 2	9	17	0.703	8	0.000
Round 3	9	12	0.765	8	0.000

Kendall's W in this study was 0.624 in the first round, 0.703 in the second round, and 0.765 in the third round (Table 4), indicating good agreement in the panel. Therefore, the results shows a substantial agreement and score concordance between raters at significant levels of $p<0.01$ (Table 4). The results of the Delphi study are presented in Table 5.

Table 5. A summary of the results of the Delphi study

Factor	Round 1		Round 2		Round 3	
	Mean	S.D	Mean	S.D	Mean	S.D
Educational principal	7.60	0.94	7.29	0.46	7.83	0.39
Educational leadership	8.35	0.67	8.11	0.33	8.16	0.39
School culture	8.10	0.64	8.23	0.43	8.16	0.39
Teachers' attitude	8.45	0.82	8.82	0.39	8.83	0.39
Job satisfaction	7.90	0.78	7.11	0.33	7.19	0.39

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Organizational commitment	7.80	0.83	7.23	0.43	7.25	0.45
Organizational citizenship behavior	8.40	0.50	7.76	0.43	7.75	0.45
Educational achievement	7.30	0.47	7.23	0.43	7.08	0.28
General health	7.05	0.82	7.17	0.39	7.08	0.28

The number of Delphi rounds varies from one to six and depends on the scope of the study (Skulmoski et al., 2007). The increase in Kendall coefficients observed in the second (0.08) and the third (0.062) rounds as compared to the previous rounds. With regard to standard deviation, it was reduced in the second (0.40) and the third (0.37) rounds as compared to the first round (0.61). Thus, the results of three rounds of Delphi shown that consensus amongst the panel members was obtained and can terminate the repetition of rounds.

The Results of Quantitative Analysis

On the basis of qualitative validation,the conceptual model of the study was developed, as shown in Figure 2.

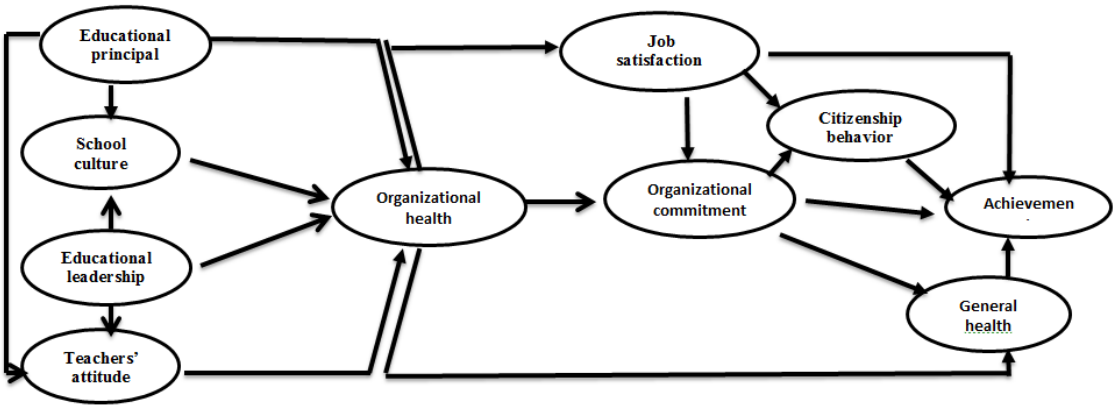

Figure 2. The conceptual model of the validated healthy school

The data were analysed using Lisrel version 8.5 to validate the conceptual model of healthy school. Path analysis was employed to examine the relationships between the variables. The results of the path analysis is depicted graphically in Appendix A with the standardized path coefficients. The goodness of fit indices used showed that the observed normed chi-squared (χ^2) value is 2.75 < 3. The findings further show that RMSEA=0.075, CFI=0.97, GFI=0.99, NFI=0.99, and IFI=0.99, indicating that the model fit the data very well. In evaluating the model fit, the overall goodness of fit of the final model was completely satisfied. Table 6 shows the results of the path analysis and the relationships between the main variables of the study. Table 6 indicates that out of 19 relationships in the conceptual model, 10 relationships are significant.

Table 6. Results of the path analysis

	The relationships			Standardized coefficient	T-value
1	Educational principal	→	Organizational health	0.41	4.82**
2	Educational principal	→	School culture	-0.3	-0.29
3	Educational principal	→	Teachers' attitude	0.20	2.01*
4	School culture	→	Organizational health	-0.04	-0.71
5	Educational leadership	→	Organizational health	0.16	1.84
6	Educational leadership	→	School culture	0.26	2.60**
7	Educational leadership	→	Teachers' attitude	0.10	0.98
8	Organizational health	→	Job satisfaction	0.26	3.98**
9	Organizational health	→	Organizational commitment	0.26	4.31**
10	Organizational health	→	General health	0.08	1.23

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11	Job satisfaction	→	Organizational commitment	0.39	6.29**
12	Job satisfaction	→	Organizational citizenship behavior	0.05	0.70
13	Organizational citizenship behavior	→	Educational achievement	0.24	3.64**
14	Job satisfaction	→	Educational achievement	0.14	1.86
15	Organizational commitment	→	Organizational citizenship behavior	0.19	2.51*
16	Organizational commitment	→	Educational achievement	-0.03	-0.39
17	Organizational commitment	→	General health	0.13	1.78
18	General health	→	Educational achievement	0.19	2.95**
19	Teachers' attitude	→	Organizational health	0.14	2.36*

Note. ** p<0.01; * p<0.05

Discussion

It is clear that the school is a fundamental organization in building the wealth and health of countries, and education plays a key role in narrowing the differentiating between poor and rich (St Leger, 2001). The main purpose of the schools refers to facilitating learning for students. Schools are also essential in achieving health literacy (St Leger, 2001). Hoy et al. (1991) have defined a healthy school as a school with high organizational health and to be an enjoyable place for learning; therefore, it can be concluded that making a healthy school could be a way to achieve the school goals.

Evidence suggested that health and academic achievement in schools can be facilitated by a number of factors, including educational principal, educational leadership, school culture and teachers' attitude, healthy physical environment, healthy psychosocial environment and finally the school characteristics. Subsequently, health achievements in schools would contribute to organizational commitment, job satisfaction, organizational citizenship behavior, educational achievement and general health of student.

Educational principals play key roles to make the schools healthy. Their responsibilities may refer to establishment a healthy environment of school, establishment of a positive culture of learning, setting up the relationships among school, family and society, educational program, students' affairs, educational employees' affairs, preparation of facilities and equipment, and administrative and financial affairs. Principals of schools must be equipped with educational leadership behaviors. Educational leadership is another important factor, and defined as the ability of a principal to initiate school improvement, to establish a learning oriented educational environment, and to stimulate teachers to work as effectively as possible (Grift & Houtveen, 1999). Educational leaders seek to create a healthy climate and put emphasis on enhancing social interactions. They act in a friendly and supportive manner towards their subordinates. The results of this study is consistent with a large body of literature (American School Health Association, 2013; Blum, 2007; Dixon, 2014; Harris, 2002; Ramdass & Lewis, 2012).

Based on the study findings, it was confirmed that the school characteristics, either physical or social environment, can contribute to an increase of organizational health and general health. There are a number of factors affecting health promotion in schools, such as provision the basic needs, protection against physical dangers, lighting, aesthetic characteristics such as architecture, landscaping, color, art work, flexible spaces, movable furniture, promotion of healthy food stuffs, protection from the celebrations like birthday celebration, and friendship and positive social relationships among others. Therefore, the results of the current work is in line with the literature (American School Health Association, 2013; Berry, 2002; Ramdass & Lewis, 2012; SSLHPE, 2014).

Another important factor in measuring the healthy school refers to school culture. School culture is a basic element of organizational health which allows the members to control and affect the decisions. It is believed that educational leaders play a vital role in forming the school culture that may lend to student achievement. The results of this study are consistent with the results of studies conducted by Ramdass and Lewis (2012) and MacNeil et al. (2009).

Teachers' attitude also contributes to foster student achievement. Teachers who encourage students, redesign instructional programs with regards to teaching elements such as grouping, apply new teaching methods, and those who motivate the students will change the quality of classrooms. The results of the study indicate a

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significant and positive relationship between teachers' attitude and organizational health. This is in line with the studies conducted by Blum (2007), Ramadss and Lewis (2012), and Pretorius and Villiers (2009).

The results further show that organizational health has a significant impact on job satisfaction. It can be concluded that a healthy climate can contribute to increase teachers' job satisfaction. Organizational health will lead to enhance efficiency feeling, satisfaction feeling, organizational citizenship behavior, organizational commitment, job attachment and reduce teachers' job exhaustion. This set of variables entering into organizational living of teachers can be known as 'satisfaction of teachers' organizational life'. Based on the qualitative study, organizational health is correlated to academic achievement and general health of students. Even, when we propound economical-social conditions, a healthy climate can be considered as the best predictor of success and achievement in the school. These results are consistent with Brosnahan (2011), Ramdass and Lewis (2012), Rezaei and Zainabadi (2012), and Farahani et al. (2014).

Based on the identified indicators, the conceptual model of the healthy school was first validated qualitatively using a Delphi study. In the first round, nine factors (namely, educational principal, school culture, teachers' attitude, job satisfaction, organizational commitment, organizational citizenship behavior, educational achievement and general health) have the average score of 7 or higher with the coefficient of agreement of 0.624. This suggests a good agreement among the raters. In the second and third rounds, the same factors got the average scores of 7 or higher. Kendall coefficients of concordance were 0.703 and 0.765 in the second and third rounds, respectively.

The results of the structural model indicated that there are significant and positive relationships between the following variables: educational principal and organizational health, educational principal and teachers' attitude, educational leadership and school culture, organizational health and job satisfaction of teachers; organizational health and organizational commitment; job satisfaction and organizational commitment; organizational citizenship behavior and academic achievement; organizational commitment and organizational citizenship behavior; general health and academic achievement; and teachers' attitude and organizational health. These findings are consistent with the results of the studies conducted by Alqarni (2016), American School Health Association (2013), Ramdass and Lewis (2012), and Rezaei and Zainabadi (2012).

Inconsistent with Alqarni (2016), and Ramdass and Leiwas (2012), the current study found no significant relationships between the following variables: educational principal and school culture, school culture and organizational health, educational leadership and organizational health, educational leadership and teachers' attitude, organizational health and general health, job satisfaction and organizational citizenship behavior, job satisfaction and academic achievement, organizational commitment and general health, and organizational commitment and academic achievement.

It should be noted that limited studies have conducted such comprehensive studies on examining the healthy school conceptual model. There are very limited studies in this area of research, especially in the context of Iran. A total of 210 primary schools were participated in the quantitative study. The current work is pioneer in using a mixed method approach to validate the healthy school conceptual model.

Limitations of the Study

The current study has a number of limitations. The large number of observed and latent variables could affect the results of the analysis in the quantitative approach. Therefore, the current work employed the path analysis to examine the relationships between variables. One possible recommendation for future investigation would involve a structural model using both observed and latent factors, suggesting that further research would benefit from a more comprehensive model in the quantitative study. It is suggested that further research is needed to examine the validity of this study model in other contexts.

Despite these limitations, the study contributes to the existing body of knowledge on the subject matter both theoretically and methodologically. By studying the relationships amongst organizational health, and the school environment, the principal and teachers' attitudes, the research provides support for a direct positive effect of the role of principal and teachers in achieving healthy schools. This study suggests that professionals in this area of research need to pay attention to both organizational health and general health simultaneously. The findings of this study partly support the literature and show that the schools leaders (principals) are critical to student achievement in primary schools. Furthermore, healthy schools play important roles in student achievement.

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