AN EXAMINATION OF THE EFFECT OF HIDDEN CURRICULUM ON STUDENTS’ EQ

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ABSTRACT
This study was done aiming to examine the role of hidden curriculum in the EQ of high school male students in the sixth region of Tehran's education system. The statistical population of the study consisted of 400 male high school students from in non-profit schools in the sixth region of Tehran's education system. 322 students were selected as the sample size, using the list of the students' names and the method of extracting samples from the table of random figures. Data collection was done based on Fathi and Ejargah's (2007) curriculum questionnaires, and Shring's EQ (1996). After the distribution and collection of the questionnaires, the examination of data and the test for hypotheses were done using the "structural equation modeling" method and the "Smart PLS 2" software in two sections – "measurement model" section and "structure" section. In the first section, the technical characteristics of the questionnaire include the reliability, convergent validity and divergent validity (exclusive to the PLS) have been examined; and in the second section, the significance coefficients of the software were used to examine the study's hypotheses. Finally, the study's results approved of the effect of "hidden curriculum" and its dimensions (schools' social atmosphere, organizational structure, and interaction between teachers and students) on the students' EQ in the studied population.

KEYWORDS: hidden Curriculum, emotional quotient, social atmosphere.

INTRODUCTION
Any society tries to train and educate people according to its values in order to achieve its goals; many of these goals are accomplished through formal and informal educational systems. Today, all educational systems are attempting to convey all kinds of skills and knowledge to students and prepare them for taking responsibilities in real world by designing and setting up certain curriculums. In educational systems, students gain various valuable experiences many of which are not clear the planned curriculums. In fact, students learn more by hidden curriculums than by planned and organized lessons taught to them from teachers (Alikhani, 2007).

Every society's education system tries to convey, clear norms and attitudes to students; and their curriculums are not limited to a set of pre-planned experiences and lessons or a formal curriculum. In schools, students are exposed to clear and organized curriculums within which they gain experiences, during a long period which is the most sensitive period of personal development; the experiences gained by students are directly, indirectly and unknowingly their accepted culture (Hadad Alavi et al, 2008).

Such experiences together with curriculums affect experiences, the transference of thoughts, attitudes and values, and students' behavior and actions more extensively, more sustainably and more inensively, which affects the entire process of education (Alikhani and Mehr Mohammadi, 2005). So far, scholars and thinkers have introduced different definitions of hidden curriculum. Here, some of these definitions are presented: Anderson (2002) describes hidden curriculum as a formless, disorganized, and inappropriately-defined entity which has been introduced versus clear curriculum in a latent way, leading to the disclosure of interactions in an educational environment. Apple (2004) states that hidden curriculum is not usually discussed by teachers; it includes the transference of values and the induction of tendencies in students.

D'eon (2006) states that hidden curriculum is a kind of learning that is acquired by students within organizational structure and entity in addition to the behaviors and actions of professors and managers. McLaren, (2009) states that hidden curriculum deals with a figurative and guaranteed method which is used to produce skills and knowledge, i.e. the things that occur out of the formal planned curriculum; it's also part of managerial bureaucratic behavior of schools through which students have to follow dominating ideologies and social activities connected to behavioral power. According to the above-mentioned definitions, it can be concluded that hidden curriculum is known to include learning things other than the formal goals of educational systems, which is provided for students in schools. The many provided concepts for hidden curriculum make it possible to understand this term in different situations and views.
Based on the presented definitions, it can be said that hidden curriculum is the implicit and intangible teaching of values, norms and non-scientific aspects, which is subject to the whole education system and the structure of educational environment (Mehr Mohammadi, 2009).

In this study, Sailor, Alexander, and Louise's dimensions of hidden curriculum, because of more comprehensiveness and depth, are as follows:

1. **Schools' social atmosphere**

   Although schools' social atmosphere is an incisive factor in schools, it is rarely characterized by obvious actions. In the process of planning education, teachers must know about the complete set of informal conditions and the nature of interpersonal interactions existing between students and the education board. The culture existing between peers, especially between older school ages is an important factor in the education of youths. One of the attractive and serious subjects is the effect of school atmosphere and socializing processes on students from families that are financially and culturally underdeveloped. School employees may unconsciously try to transform students according to their lifestyle and attitude. As a result, children being exposed to schools' social atmosphere face adaptability challenges (Sailor et al., 2007).

2. **Organizational Structure**

   In an institute, the compressive set of regulations, methods, and hidden curriculum is one of the important elements of management systems. Retaining such a bureaucratic structure may be considered as a goal, which plays a role in the socializing of students. In each educational institute, there are regulations for the management of affairs; the regulations include classification system, evaluation methods, punishment and encouragement matters, group activities, and the participation of students in the management of affairs (Sailor, 2007).

3. **Interaction between teachers and students**

   The interaction between students and teachers in classes is affected by the structure of the institute and the social organization dominating it. These types of interactions can have a direct effect on learning. The effect of students' behavior on the responses of teachers has been shown in a number of studies. In the studies, they have recognized two general classes of students' behavior, which are necessary for educational success. They are as follows:

   Personal action skills such as helping, cooperation, positive talks with others, and controlling aggression. And skills that are related to tasks such as positive talks about educational elements, following teachers' rules, and consistency in doing. These skills represent the general goals in hidden curriculum. Students who consider these skills as hidden curriculum and become good at them make more efforts and are considered to be successful (Sailor et al., 2007). On the other hand, emotional quotient is referred to as a group of skills, talents and non-cognitive abilities, which enhance one's success-related abilities to confront environmental challenges. Consequently, emotional quotient is considered to be a crucial factor in one's success in life, which affects other dimensions such as efficiency and self-esteem. Teaching emotional quotient enhances one's knowledge about himself/herself and others, leading to proper interaction with others, and adaptability to surroundings. Therefore, the necessity of teaching EQ skills in order to confront everyday life's challenges has been known publicly (Austeen et al., 2005).

Mayer et al., (2004) consider EQ to be the ability to recognize the meanings of emotions and their relations based on which problem-solving is done. Baron and Parker (2000) consider EQ as a multi-agent array of emotional, personal and social skills which affect one's general abilities to effectively and actively confront stresses. These skills include accurate self-assessment, the ability to comprehend our own and others' emotions, the ability to build and maintain relationships with others, the ability to express and manage emotions, the ability to control oneself, the ability to authenticate intellect and emotion, and the ability to manage and solve problems. Austeen et al., (2007) believe that EQ is a combination of interpersonal and intrapersonal capacities which are beneficial for people with high EQ. EQ is an important factor in the determination of accomplishments and mental health, because it affects people's ability to effectively face stresses and environmental demands (Slaski, M., & Cartwright, S., 2002).

According to Goldman (1999), EQ both includes internal and external factors. Internal factors include self-awareness, Self-concept, the feeling of independence, Self-actualization, and decisiveness. External factors include interpersonal relationships, ease in sympathy, responsibility. In addition, EQ includes one's capacity to accept the reality, flexibility,
the ability to solve emotion-related problems, and the ability to confront stresses and tensions. Finally, Siaroughi (2006) states that if you have high EQ, you can face challenges better and control your emotions more effectively.

The review of the studies related to our subject, which have been gathered from different sources such as universities and centers that provide research and scientific sources, shows that the studies done in Iran on this subject are very scarce, but rather similar; but it can be said that because the discussions over the examination of the role of hidden curriculum in students' EQ, like many other discussions, are related to human and social sciences, in each of them, certain examinations related to the subject have been done and the corresponding results have been used at certain times and places.

The results are as follows:
Rogers et al., (2014), in their study using hidden curriculum, have focused on professional education for interns. They have concluded that over 75 percent of interns emphasize on the effect of hidden curriculum; they have also stated that the role of hidden curriculum in professional, ethical and behavioral development is significant. Lee (2014) has focused on hidden curriculum in English-to-Japanese books, and stated that hidden curriculum has positive impacts on students' learning. Jerusalem, M., Klein Hessling, J. (2009) found that the individualization of tasks and necessary functions and efficiency feedback well supports people, and is also an evaluation criterion for the efficiency of useful people.

Boiks et al., 2008, concluded that the main consequences of hidden curriculum in schools which have a less open social atmosphere are: 1- An increase in obedience, mere imitation, a decrease in critical thinking when facing scientific matters. 2- An increase in students' tendency towards doing learning activities individually, and their negative attitude towards team work. 3- A decrease in students' confidence and self-esteem, and an increase in negative self-concept among them. 4- Obedience, criticism, and tendency towards doing learning activities individually in schools for male students have been higher than in schools for female students. The decrease in female students' confidence has been greater than the decrease in male students' confidence. In schools with open atmospheres, the decrease in confidence has been nearly the same.

Rathi and Rastogi's study (2008) showed that EQ has a positive relation with job self-efficiency; and EQ is one of its important predictors. In addition, those with high EQ, compared to those with low EQ, are more efficient. Glicken et al., 2007, in their study, concluded that students within learning in school acquire hidden curriculum which is on the opposite direction of scientific spirit indexes such as: creating an imitation spirit and obedience to innovation, curiosity and creativity, producing fear and inaction instead of critical thinking, creating negative competition for scores instead of cooperation and team work.

Norouzi et al., 2014, showed that there is a relation between hidden curriculum and students' national identity. There is a relation between schools' social atmosphere, schools' organizational structure, the interaction of teachers and students, schools and class's physical structure, and students' national identity. In addition, their findings showed that any increase in these elements can affect national identity, and the strongest relation corresponds to the interaction between teachers and students.

Heidari, 2013, showed that the impact of hidden curriculum on the studied dimensions (regulations, social relations, physical environment, human resources, sports and training equipment, cultural variables, and social problems) in the behavior of students is significantly big. In addition, there is a difference between hidden curriculum correlation (in the dimensions of physical environment, human resources, sports, training and cultural equipment) and behavior in terms of gender.

Pashazadeh, 2013, found that there is a significant relation between hidden curriculum and social adaptability. Reysahhri zadeh, 2012, showed that, in teachers and managers' viewpoint, hidden curriculum has a significant impact on the behavior of citizens. In the study of hidden curriculum, the results showed that in the viewpoint of teachers and managers, variables such as social atmosphere, schools' structure, and the interaction between students and teachers can affect students' citizenship-related behavior.

Ghaderi, 2011, states that there is a significant relation between hidden curriculum and students' disciplinary behavior.
Ahadi et al., 2009, believe that there is a positive and significant relation between EQ, self-efficiency and happiness. Finally, according to the fact that male high school students in Tehran's sixth region's education have suffered from many materialistic and non-materialistic losses because of not examining the role of hidden curriculum on their EQ, this has been considered as a weakness and challenge the development of education; and we have decided to do a scientific and educational research as the social pathology of the above-mentioned subject and to offer scientific methods for solving this education challenge. Hence in this work, we are aiming to realize if hidden curriculum affects male students' EQ in Tehran's sixth region's education. Therefore, the main and subsidiary hypotheses of the research are as follows:

Main hypothesis: hidden curriculum has an effect on the EQ of male high school students in Tehran's sixth region's education.

Subsidiary hypothesis 1: Schools' social atmosphere has an effect on the EQ of male high school students in Tehran's sixth region's education.

Subsidiary hypothesis 2: Organizational structure has an effect on the EQ of male high school students' in Tehran's sixth region's education.

Subsidiary hypothesis 3: the interaction between teachers and students has an effect on the EQ of male high school students in Tehran's sixth region's education.

Finally, the study's conceptual model has been presented in the figure below:

Figure 1: conceptual model of the study

MATERIALS AND METHODS

METHODOLOGY

The method used in this study was practical in terms of purpose, and it was descriptive-causal in terms of data collection. It was also quantitative in terms of the obtained data; hence certain questionnaires were given to male high school students in Tehran's sixth region's education in order to collect their comments; and the results have been included. Since in this study a cause-and-effect relation is examined, the study's method is a causal method in terms of
the relation between variables, which is used to do a complete investigation for the study's conceptual model from the structural equation model. This model is the best tool for analyzing researches in which observed variables have measurement error, and the relation between variables is complex. Using this method, on the one hand, it is possible to measure the accuracy of the observable indexes and variables; on the other hand, it is possible to examine the causal relations between latent variables and the level of the expressed variance. The structural equation model is composed of two sections: measurement model and structural model; and the variables of the model are divided into two groups: latent variables and observed variables; hidden curriculum and EQ are latent variables, whose dimensions are observed variables.

The statistical population of the study consisted of 4000 junior high school (grade three) students in non-profit boys' schools in Tehran's sixth region's education. 322 students were selected as the sample size, using the list of the students' names and the method of extracting samples from the table of random figures.

In order to collect data, certain questionnaires were used. In the present study, two instruments were used to collect data: Fathi and Ejargah's (2007) hidden curriculum questionnaire: This instrument is a questionnaire which is a new survey of hidden curriculum. This questionnaire has 35 questions which evaluate social atmosphere, organizational structure, and the interaction between teachers and students. In the questionnaire, there are 14 items related to social atmosphere, 14 items related to organizational structure, and 7 items related to the interaction between teachers and students. Items 1 to 14 introduce the micro scale of social atmosphere. Items 15 to 28 refer to the micro scale of organizational structure, and items 29 to 35 refer to the micro scale of the interaction between teachers and students.

Shringer's 33-question questionnaire for EQ, 1996, according to Mansuri, 2001, evaluates dimensions such as self-awareness, self-control, empathy, social skills and self-motivation; The reliability of the questionnaires was measured using the obtained data from the questionnaires and the statistical SPSS and SmartPLS 2 software. In the PLS method, reliability is measured by measuring composite reliability; and in SPSS method, reliability is measured by measuring the value of Cronbah's alpha. 0.7 about these two variables shows acceptable reliability. In the present study, the results corresponding to these two variables are presented in the table below. As it can be seen, all of the values are greater than 0.7, which shows the proper reliability of this study's questionnaires.

Table 1: Cronbach's alpha values and composite reliability

<table>
<thead>
<tr>
<th>Students' EQ</th>
<th>Hidden Curriculum</th>
<th>variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-motivation</td>
<td>Social skills</td>
<td>empathy</td>
</tr>
<tr>
<td>0.801</td>
<td>0.871</td>
<td>0.912</td>
</tr>
<tr>
<td>0.901</td>
<td>0.990</td>
<td>0.929</td>
</tr>
</tbody>
</table>

The validity of the questionnaires was examined by two variables: Convergent Validity and Divergent Validity. In the section of convergent validity, the AVE variable was used. The expected value for the acceptable value of AVE is 0.5 (Hulland, 1999), finally, the findings showed that all AVE values related to structures are greater than 0.5; and this shows that the convergent validity is acceptable. In the section of divergent validity, the difference between the
indexes of a structure is compared with the indexes of other structures in the model. To do the comparison, a matrix should be formed, in which the values of the main diagonal are the square of each structure's AVE coefficients; and the values below and above the main diagonal are the correlation coefficients between each structure and other structures. The findings showed that the AVE square of each structure from its correlation coefficients with other structures (values in the same line and column) has become greater, which shows the acceptability of the structures' divergent validity.

RESEARCH FINDINGS
In this step, the cause and effect relation between hidden curriculum and students' EQ has been examined in structural model section. As it can be seen in the figure below, the relation of hidden curriculum and its dimensions with students' EQ is significant and positive.

Figure 2: causal effect coefficients of the study's model

Figure 2 shows the causal effect coefficient of the study's model and the relation of the main variable and its dimensions on students' EQ. The PLS output proves the main hypothesis and subsidiary hypotheses, which are presented in the table below. Since all "t" values are greater than 1.96, all hypotheses are approved.
DISCUSSION AND CONCLUSION

Generally, today's world is full of complexities which have caused problems for education systems, educational institutes, and schools in terms of sublimation and development; they have also caused many challenges for educational managers who work as planners, organizers, and education leaders in all levels. Therefore, using hidden curriculum in order to dominate problems occurring in the process of EQ development in students can be a solution. In the next section of data analysis in the present study, and by testing each hypothesis of the study, certain results were obtained; in the following, we try to correctly and accurately interpret the obtained results by mentioning each hypothesis and comparing them with the results of the previous studies.

Subsidiary hypothesis: Schools’ social atmosphere has an effect on the EQ of male high school students in Tehran's sixth region's education. The findings approve the effect of Schools' social atmosphere on the EQ of male high school students in Tehran's sixth region's education. It seems that although schools' social atmosphere is an incisive factor in schools, it is rarely characterized by observed actions. The culture available between peers, especially between older school ages is considered to be an important factor in youths' education, which can have different effects on social beliefs and even students EQ. One of the attractive and serious subjects is the effect of schools' social atmosphere and socializing processes on students' EQ. As we know, EQ has a significant impact on the society and students' social life, in addition to the effect on personal life. Therefore, schools’ social atmosphere plays a considerable role. Finally, these findings are in line with the results obtained from the studies conducted by scholars such as Jerusalem, M., Klein Hessling, J. (2009), Boiks et al (2008), Gliken et al, (2007) and Pashazadeh (2013).

Subsidiary Hypothesis 2: Organizational structure has an effect on male high school students’ EQ in Tehran's sixth region's education. The findings approved the effect of organizational structure on male high school students’ EQ in Tehran's sixth region's education. It seems that in a school, the complex set of regulations and methods and hidden curriculum is an important element of managerial systems in that school. Retaining such a bureaucratic structure may be considered as a goal; and in fact it plays a role in students' socializing process. In each educational institute, there are different regulations for managing affairs; these regulations include classification system, evaluation methods, disciplinary-encouragement-punishment matters, group activities, and learners' participation in the process of management, which can play a dissuasive and stimulating role in students’ EQ. If schools' structure continuously supports social skills, self-control, self-awareness, empathy and self-motivation, it will definitely have increased willingness and morale; in fact, organizational structure is a facilitating tool in schools; and if organizational structure does not contribute to the improvement of students’ EQ, it will cause many negative consequences. The findings are in accordance with the results presented by Rogers et al, 2014, Boiks et al, 2008, and Rey Shahri Zadeh, 2012.

Subsidiary hypothesis 3: the interaction between teachers and students has an effect on the EQ of male high school students in Tehran's sixth region's education. The findings approved of the effect of the interaction between teachers and students on the EQ of male high school students in Tehran's sixth region's education. It seems that the interaction between teachers and students is influenced by the structure of the institute and its social organization. These types of relations have a direct effect on EQ and its dimension. The effect of learners’ behavior on the responses of teachers has been shown in a number of studies. In these studies, two groups of learners' social behavior have been identified, which are necessary for personal success. These two groups include: 1. personal action skills such as cooperation, positive talks with others, and aggression control. 2. And skills related to tasks such as presence, positive talk about educational materials, following others' rules, and consistency in doing tasks. These skills represent the overall goals in hidden curriculum; in addition to these skills, we should also pay attention to students’ EQ. learners who have acquired these skills as hidden curriculum have made more efforts and are considered successful people in the society.

Table 2: Investigation of the hypotheses of the study

<table>
<thead>
<tr>
<th>result</th>
<th>t-value statistics</th>
<th>Standardized coefficients</th>
<th>hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>accepted</td>
<td>17.3</td>
<td>0.70</td>
<td>Hidden curriculum ← students’ EQ</td>
</tr>
<tr>
<td>accepted</td>
<td>13.25</td>
<td>0.51</td>
<td>Schools' social atmosphere ← students’ EQ</td>
</tr>
<tr>
<td>accepted</td>
<td>15.05</td>
<td>0.44</td>
<td>Organizational structure ← students’ EQ</td>
</tr>
<tr>
<td>accepted</td>
<td>16.11</td>
<td>0.54</td>
<td>Interaction between students and teachers ← students’ EQ</td>
</tr>
</tbody>
</table>

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who have reasonable EQ, this also has a significant effect on students' performance and activities. Finally, the findings of the study done by Ratti and Rastugi, 2008, Gliken et al., 2007, and Ghaderi, 2011, approved of the present study.

Main hypothesis: hidden curriculum has an effect on the EQ of male high school students in Tehran's sixth region's education. The findings approved of the effect of hidden curriculum on the EQ of male high school students in Tehran's sixth region's education. Regarding this hypothesis's results that are understandable from the three subsidiary hypotheses, it seems that the essence of hidden curriculum influences the expression of the consequences which we expect from it. A positive attitude towards hidden curriculum turns it into a tool for making students sociable; it is believed that hidden curriculum can have consequences such as health habits, fealty, respect for regulations, and values, which are socially acceptable. The findings in connection to the more influential role of schools' social atmosphere the interaction between teachers and students are considered to be logical results, because EQ is a social matter and is greatly influenced by students' understandings and perceptions. Social atmosphere and the relation of students with other students, teachers and other school employees has a significant effect on their EQ; but the less significant effect of schools' organizational structure is because in connection to EQ, it is not possible to achieve goals by formalizing and systematizing activities. However, the role of organizational structure as a facilitating tool in students' EQ processes cannot be ignored. Finally, the above-mentioned findings are in line with the results obtained from the studies conducted by scientists such as Rogers et al. (2014), Jerusalem, M., Klein Hessling, J. (2009), Boiks et al. (2008), Ratti and Rastugi (2008), Gliken et al (2012) and Ghaderi (2011).

Generally, the results of the main hypothesis and the three subsidiary hypotheses have shown that hidden curriculum and its dimensions, including schools' social atmosphere, interaction between teachers and students, organizational structure, have had a positive effect on the EQ of male high school students in Tehran's sixth region's education (2013 to 2014 school year).

Recommendations on the basis of research findings
According to the results of similar studies and the present study, hidden curriculum can make it possible for students to gain higher EQ. Education systems must apply hidden curriculum in schools and among teachers; and they must select leaders and managers suiting schools' structures and educational systems in order to make it possible for students to increase and reach reasonable EQ. Since the relation between hidden curriculum and the EQ of male high school students in Tehran's sixth region's education was approved, recommendations have been proposed.

In the process of planning hidden curriculum, managers should learn about students’ EQ, informal conditions, and the nature interpersonal relations existing between teachers and students.

According to the application of the concepts and principles of hidden curriculum and EQ in different situations in books' contents, it is recommended that the designers of school books include more EQ-related concepts and principles in them.

The designers of books and curriculum must pay more attention to the attractiveness of books in terms of contents, so books can cover main principles as well as being attractive, leading to EQ growth in students. Holding training sessions for school managers in order to identify the importance, goals, and approaches of hidden curriculum and students' EQ. Holding these sessions, the managers' awareness of the subject increases, and managers' commitment to this approach is guaranteed, leading to the allocation of sufficient organizational resources and the elimination of organizational hurdles in the education system. Allocating of sufficient financial and organizational sources in order to make hidden curriculum goals progressive, and showing its importance among managers and teachers.

Modifying the structure of the education system to be coordinated with students’ EQ in order to achieve more success.

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