



The Relationship between the Hidden Curriculum Components and the Affective Attitudes of High School Students' Learning

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Abstract

The present study aimed to explore the relationship between the hidden curriculum components and the affective attitudes of students' learning in high schools, and to create a better learning and educational setting. The research adopted a quantitative method using a cross-sectional survey. The population consisted of 277 male high school students in District 1 of Bandar Abbas in the academic year 2019-2020. They were selected through cluster sampling method and randomly assigned to the experimental groups. Data were gathered by the Affective Attitudes of Learning Questionnaire and the Hidden Curriculum Components Questionnaire. Structural equation modeling, Pearson correlation coefficient and multiple regression analysis were used to analyze the data in the quantitative way. In the quantitative part, the results of multiple regression showed that there was a correlation (0.0627) between the components of the hidden curriculum with affective attitudes of learning that was significant at (0.095) confidence level. To compare the differences between the scores of the hidden curriculum components in different types of high schools, the quantitative findings showed the mean scores of most components in Exceptional Talents (SAMPAD) high school were significantly higher than the mean scores in public and non-public high schools ($P < 0.05$). Furthermore, the results showed that the components of the hidden curriculum have a profound and lasting impact on their affective attitudes toward school, textbooks, courses, and their academic self-concept.

Keywords: Affective attitude, hidden curriculum components, learning

Introduction

Schools in the third millennium possess the legacy of those ideas on which the glorious human civilization has been founded in science and technology areas. Appreciating such achievements and improving the treasure of human wisdom and knowledge is a mission that is closely linked to educational institutions in today's world (Ebadi, 2013). The school is the most important social institution that provides equal educational opportunities for individuals. Although, preparing children for adult life is a common goal of society and school, it is certainly not a simple task. It makes the task difficult due to conflicting visions of what adult life should be like. Achieving society's vision has been the responsibility of schools and that vision has been

translated into school goals. All school experiences presented to meet the needs of society make up a school curriculum (Thompson, 2020). The curriculum is one of the most important tools and elements for achieving educational goals and missions. Thus, it tries to transfer different types of knowledge and skills to learners through the design and development of a specific curriculum to prepare them to take on their roles and responsibilities in life (Parhizgar & Fathivajargah, 2018).

There are different types of curricula that educators have to address in the classroom. Elliot Eisner (2002) has stated that all schools teach three curricula: the explicit, the implicit, and the null. (Mehrmohammadi, 2016).

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Within the recent decades, a growing interest has arisen in grasping the implicit, tacit, invisible, unofficial, and non-academic aspects of school life, that is the "hidden curriculum" which is considered as an inevitable essential part of school activities (Mehrmohammadi, 2016). Curriculum planners and educators believe that schools often teach pre-defined goals that are an inevitable essential part of school activities besides intentional and guided learning. Historically, the notion of the hidden curriculum has had a range of definitions. Some scholars referred to the same concept using different names, such as: 'unstudied' curriculum, the 'covert' and 'latent' curriculum, 'non-academic outcomes of schooling', 'residues of schooling', and 'by-products of schooling' (Mehrmohammadi & Alikhani, 2003).

Vallance (1992) herself defined the hidden curriculum as a phenomenon that had 'non-academic but educationally significant consequences of schooling' and that occurred systematically but implicitly in schools (Gourchian, 2002). Mehrmohammadi (2016) pointed out that the hidden curriculum 'is classically defined as the unwritten, unofficial, and often unintended lessons, values, and perspectives that students learn in school (Mehrmohammadi, 2016).

The hidden-curriculum concept is based on the recognition that students absorb lessons in school that may or may not be part of the formal course of study—for example, how they should interact with peers, teachers, and other adults; how they should perceive different races, groups, or classes of people; or what ideas and behaviors are considered acceptable or unacceptable (Maleki, 2006). The hidden curriculum is described as "hidden" because it is usually unacknowledged or unexamined by students, educators, and the wider community, and because the values and lessons reinforced by the hidden curriculum are often the accepted status quo, it may be assumed that these "hidden" practices and messages don't need to change—even if they are contributing to undesirable behaviors and results, whether it's bullying, conflicts, or low graduation and college-enrollment rates, for example (Parhizgar & Fathi, 2018).

It should be noted that a hidden curriculum can reinforce the lessons of the formal curriculum, or it can contradict the formal curriculum, revealing hypocrisies or inconsistencies between a school's stated mission, values, and convictions and what students actually experience and learn while they are in school. Thus, the hidden curriculum should be considered as one of the conceptual capitals of the curriculum course. This concept has avoided looking at the curriculum as a superficial phenomenon and has considered it at the

implementation level with tracking its dynamics (Safaeimovahed, 2013).

Learning is a multi-dimensional phenomenon, so personal activity and experiences are dimensions of learning through which an individual is trained by social and environmental experience (Shams Dolatabadi, Malek, Mozafar & Sadeghpour, 2018). Learning can occur in a formal (explicit) or informal (implicit) context. According to (Meyers, Erikson & Ruth, 2013), formal learning occurs in a structured and organized educational environments and is explicitly designed in terms of time, objectives, and resources from the learner's perspective, formal learning is intentional, which leads to degrees and certifications (Czerkawski, 2016). In contrast, informal learning occurs relatively in an unstructured and unorganized environment, mostly outside the formal classroom, and it does not have an object in terms of learning degrees (Czerkawski, 2016; & Meyers et al., 2013). In informal learning settings, the control of learning is in the learners' hands (Callanan, Cervantes, & Loomis, 2011), allowing them to have more control over the opportunity to learn, selecting what to learn, and evaluating themselves than formal learning setting (He & Li, 2019).

Based on Bloom's theory of school learning, if we can have a system of schooling which is virtually error free or with a significant reduction in error, we assume it would result in most of the learners attaining a high level of learning, a relatively small amount of variation in levels of learning achieved, and a very small amount of variation in the learning time required (Saif, 1996). Bloom (1982) has selected three interdependent variables which if properly attended to should enable schools to approximate an error-free system of education. The three interdependent variables which are central to this theory of school learning are; a: the extent to which the student has already learned the basic prerequisites to the learning to be accomplished (Cognitive Entry Behaviors); b: the extent to which the student is (or can be) motivated to engage in the learning process (Affective Entry Behaviors); c: the extent to which the instruction to be given is appropriate to the learner (Quality of Instruction). More specifically, the Bloom's theory deals with student characteristics, instruction, and learning outcomes (Saif, 1996).

One of the student characteristics which is believed to be central in determining student learning is the student's Cognitive Entry Behaviors—the prerequisite learning held to be necessary for the learning tasks on which instruction is to be provided. The second characteristics are the Affective Entry Characteristics—the student's motivation to learn the new learning tasks. Affective education is that part of the educational process, that deals with feelings, values, interests,

attitudes, and appreciation (Saif,1997). The affective characteristics of learning consists of three parts: Subject-Related Affect, School-Related Affect, and Academic Self- Concept.1-Subject-Related Affect: we regard subject-related affect as a resolution between the perception of past history (with what the individual believes to be related tasks) and perception of the relation between the present task and the prerequisite learning and future goals and purposes of the individual. What appears to emerge is a continuum ranging from positive views, likes, or positive affect toward a subject to negative views, dislikes, or negative affect toward the subject. The perception of what constitutes success or failure is determined by the individual against the background of evidence he has received from the tasks (which he believes to be similar or related), and from the people who are in any way connected with this task or similar tasks—teachers, parents, peers (Saif,1997).

2-School-Related Affect: by school-related affect we mean a general disposition to regard the school and school learning in a positive or negative way. If the student develops a negative (or positive) affect toward school, this affect may include the school subjects, the teachers and staff, and even the whole idea of school and school learning. We believe that different amounts of failure (or success) may be needed for different students to develop this negative or positive affect toward school (Saif,1997). 3-Academic Self- Concept: We should keep in mind that the academic self-concept is an index of the student's perception of himself/herself in relation to the achievement of the other learners in his/her school class. It is, undoubtedly, based on the feedback he/she receives from grades, tests, teachers, parents, and peers about his/her schoolwork. The more knowledge the student receives, the more likely it is that his/her academic self-concept will be predictive (and determinative) of his/her future academic achievement (Saif,1997).

In this study, all three dimensions (social, cognitive, and physical) of the hidden curriculum were addressed with an integrated approach. The researchers identified and formulated major components or categories which encompass the characteristics of the hidden curriculum. These components (categories) became the framework for the research conducted in this study and form the basis for a school's self-evaluation of its hidden curriculum. It is evident that these components (categories) are related one to another and to the school environment and the teachers & the staff. These components (categories) of the hidden curriculum were explained as follows: Teachers' interactions (relationships) with students: social relations between teachers and students and among students provide insight into a program's hidden curriculum. These messages may also affect relationships among students.

For example, if the teacher interrupts students continuously, the implicit message is that students' words and thoughts are less important than the teacher is. Also, because they are interrupted by the teacher, students may also assume that it is all right to interrupt one another. Teachers who model more courteous behavior not only send the message that it is inappropriate to interrupt others, but also that the teacher values what each student has to say and so should the students (Townsend,1995). Architecture and Physical Setting of Educational Center: the physical structure of the school and classroom can also evoke certain perceptions in students' minds. Several experts believe that nonverbal teaching and behaviors are more influential than other factors in transferring messages to learners. Imagine the classrooms that are rectangular in shape, the pupils' chairs are firmly bolted to the floor in straight rows, and the teacher s' desk is front and center. The form of the straight-row classroom was the curricular and pedagogical philosophy which emphasized discipline and the teacher s' gaining the attention of the pupils. The straight-rows tell the students to look ahead and ignore everyone except the only source of the learning experience, the teacher. This kind of classroom tells the pupil that he is an empty organism with a lack of knowledge. The pupil is learning through the operation of rewards and punishments at the command and under the control of the teacher (Kokko, & Hirsto, 2020).

There are several studies that addressed the hidden curriculum with their results. For instance, Eisner (2002) pointed to preferential valuations for various materials and subjects as one aspect of the hidden curriculum. For example, students evaluate school subjects such as, arts and physical education as less valuable or worthless compared to subjects such as mathematics and science. Examples and aspects of the hidden curriculum include creating or strengthening competition instead of camaraderie, cooperation and collaboration in the light of the educational evaluation system that governing the school, or creating and strengthening obedience and submission rather than the spirit of initiative in the light of the methods used in teaching (Mehrmoahadi, 2016).

The most influential curriculum planning researchers (Bombi, 2020; Denessen, 2020; & Tan, 2019) have paid special attention to the social dimensions of the hidden curriculum. The hidden curriculum refers to the student's learning of his relationships with other students, with the teacher and other school parents, as well as the school's overall atmosphere. These researchers consider the role of social and psychological interactions between students and individuals within the school, especially teachers, as one of the dimensions of the hidden curriculum and believe that the feelings, emotions,

attitudes, values and learning behavior are characteristics that are affected by this type of program. They believed that although this program is not clearly mentioned in the curriculum and educational policies, it forms an effective part of students' educational experiences, thus this program is an important source of non-academic and non-measurable learning.

Some prominent curriculum planning scholars and experts (such as Blomm, 1982; Clinton, 2020; Eisner, 2002; Smith, 2008; Ludig, 2019) have addressed the cognitive dimensions of the hidden curriculum and examined its effects on the content and images of textbooks in their research. They showed that the content and images of textbooks contain some implicit messages, such as sex discrimination, racial discrimination, and stereotypical treatment, which can sometimes run counter to the education system and curriculum goals.

Finally, researchers and theorists in the field of curriculum planning studies (Rogers, 2020; Barthes, 2018; & Ritchie, 2009) addressed the physical dimensions of the hidden curriculum in their research. They examined the various physical structures of schools and classrooms, the arrangement of desks and benches, sound or sound characteristics, the quality of light and brightness on students' motivation, feelings, emotions and perceptions. They showed that beautiful, decorated, bright classes with enough physical facilities to teach courses are among the factors of academic success.

A review of specialized and organized resources in the field of curriculum shows that no attempt has been made to document the relationship between the hidden curriculum components and the affective attitudes of learners in Iran so far. Therefore, the main purpose of this study is to identify the relationship between the hidden curriculum components and students' affective attitudes towards school, subjects and textbooks, as well as its impact on their academic self-concept in public, non-public and the exceptional talents (SAMPAD) high schools. The present study addressed the following questions as follows:

Q1: What is the relationship between the hidden curriculum components and the students' affective attitudes of learning?

Q2: Are there any differences between the hidden curriculum components in Public, Non-Public and Exceptional talents (SAMPAD) high schools?

Q3: Are there any differences between the affective attitudes of students' learning in Public, Non-Public and Exceptional talents (SAMPAD) high schools?

Method

The research adopted a quantitative method using a cross-sectional survey.

Participants

The statistical population of the present study consisted of all male high school students in District 1 of Bandar Abbas in the Academic Year 2019-2020. According to Morgan's table, 277 subjects were selected using cluster random sampling method. Out of all secondary level of high schools for boys in Bandar Abbas, seven high schools were selected including three Public high schools (138 students), three Noun-public high schools (76 students) and one Exceptional talent (Gifted) high school (63 students). The students were asked to complete and respond to the questionnaires. The questionnaires were based on the hidden curriculum components and students' affective attitudes chosen by the researchers to collect data and measure them.

Instruments

1. Hidden Curriculum Questionnaire: The hidden curriculum questionnaire consists of 29 closed-ended items created by (Shaykhei, 2008). It is scored based on a five-point Likert scale (very high, high, medium, low, and very low), so that "very high" get 5, and "very low" get 1. The Cronbach's Alpha Coefficient for the whole sample was 0.87. In this study, the Cronbach's Alpha Coefficient of this Questionnaire showed a total estimation of 0.84 indicating that the instrument enjoyed a good degree of reliability. In the current study fifteen experts confirmed the validity of this questionnaire (CVI=0.85, CVR=0.92).

2. Affective attitudes questionnaire: Affective attitudes questionnaire consists of 70 closed-ended items developed by (Saif, Dellavar & Maleki, 2007). It consists of five Likert items that are represented on a 5-point continuum (1=completely disagree to 5=completely agree). The Cronbach's Alpha Coefficient for the whole sample was 0.74. In this study, the Cronbach's Alpha Coefficient of this Questionnaire showed a total estimation of 0.72 indicating that the instrument enjoyed a good degree of reliability. In the current study fifteen experts confirmed the validity of this questionnaire (CVI=0.81, CVR=0.89).

Procedure

This study was performed in two phases. In the first phase, the participants were asked to respond to both questionnaires. In order to ensure confidentiality and reduce the effects of response bias, participants were provided with a cover letter that had a written description

of the purpose of the study. They were informed that participation in the study was voluntary and their responses would not be personally identifiable. In the second phase, the analysis of the collected data from questionnaires was calculated in the descriptive and inferential statistics sections.

Findings

Structural equation analysis was used to investigate the relationship between the hidden curriculum components and the affective attitudes of students' learning. The studied model along with the indicators related to the model fit are presented below.

Figure 1. Significance of the Coefficients of the Model Related to the Relationship between the Hidden Curriculum Components and the Affective Attitudes of Learning

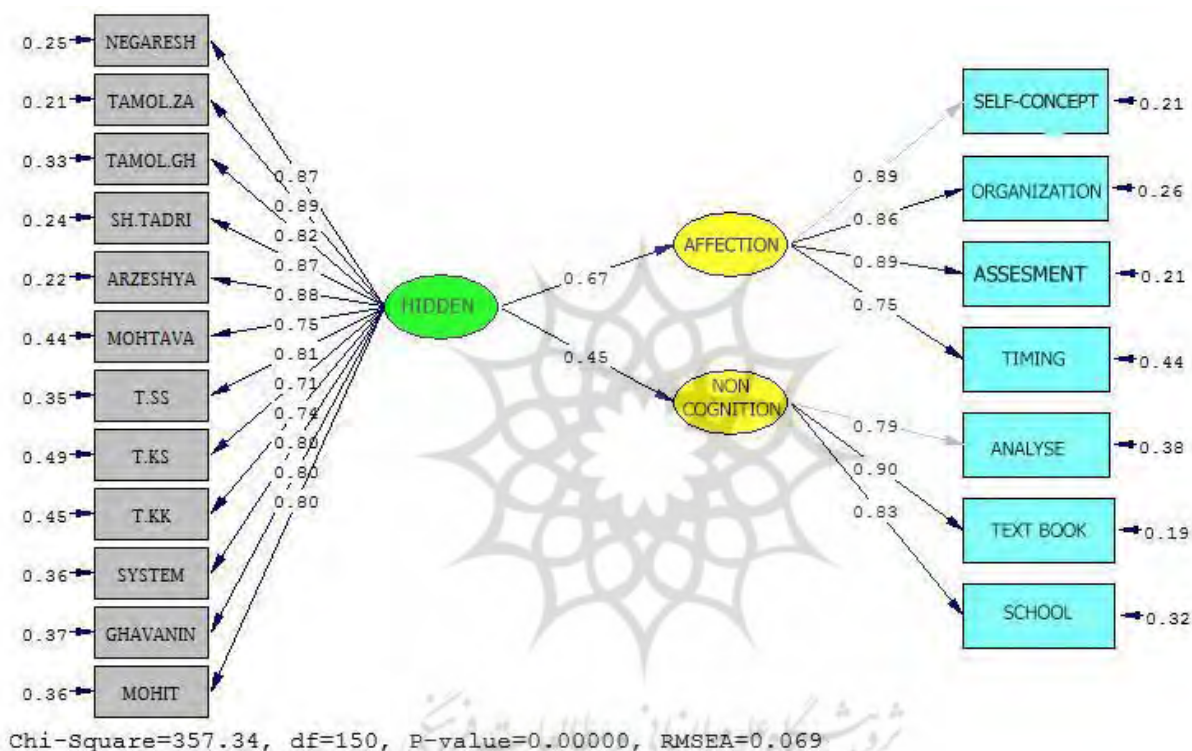


Figure 1 shows the significance coefficients of the model related to the relationship between the hidden curriculum components and the affective attitudes of learning. Based on the obtained results, all coefficients related to the factor loads of the measurement models are greater than 2.58 and are significant at the alpha level of 0.01 ($P < 0.01$). The strength of the relationship between the hidden curriculum components and the affective attitudes variables by the

factor load showed that the factor load of more than 2.58 was a strong relation, therefore, accuracy in the operating load of these variables showed that all factor loads and their output were more than 2.58 which indicated that all items were acceptable and the fitness of the structural model was confirmed.

The indicators related to the model fit are presented in the table below:

Table 1.
Model of Fit Indices

Fit Index	Acceptable Domain	Observed Value	Fit Index Valuation
$Df \chi^2$	< 3	2.38	Appropriate
IFI	>0.9	0.97	Appropriate
RFI	>0.9	0.95	Appropriate
RMSEA	<.08	0.069	Appropriate
SRMR	<.08	0.063	Appropriate
CFI	>0.9	0.97	Appropriate
NFI	>0.9	0.96	Appropriate

Table 1 presents fitness indices of the model which confirm appropriate of the model with the results of the research. The degree of freedom for Chi-square ratio confirmed the fitness of the model $Df/2\chi$, which was less than 3, and means that the model fits the data. The Root Mean Square Error of Approximation (RMSEA) was 0.069 and the Root Mean Square Residual (SRMR) was 0.063, which was less than the criterion (0.08), thus confirming the fitness of the model. Finally, IFI, CFI, NFI and RFI indices were also larger than the desired criterion (0.9). In general, considering the total calculated fit indices, the fitness of the structural model was confirmed.

The present study aimed to explore the relationship between the hidden curriculum components and the

ffective attitudes of students' learning in Public, Non-Public, and Exceptional Talents (SAMPAD) high schools. In the present section, the data collected from the studied subjects through the hidden curriculum components and the non-cognitive (affective attitudes) questionnaires were analyzed using appropriate statistical techniques and the research questions were tested. To this end, the descriptive statistics indices were used to describe and classify the collected data. Also, the multivariate analysis of covariance was used to test the questions.

Q1-What is the relationship between the hidden curriculum components and the students' affective attitudes of learning?

Table 2.
Path Coefficient of the Relationship Between Hidden Curriculum Components and the Affective Attitudes of Learning

Path	Standard Coefficient	Statistics (T)	Level of Significance
Hidden curriculum → → Affective Attitudes of Learning	0.45	6.93	0.01

According to the results in Table 2, the standard coefficient value is equal to 0.45 and the test statistics value is greater than 1.96. Considering the small significance level obtained from the value of 0.01, the research hypothesis on the relationship between the

hidden curriculum components and the affective attitudes of students' learning is confirmed.

Multiple regression test was used to investigate the relationship between the hidden curriculum components on students' affective attitudes of learning.

Table 3.*Statistics Related to Model Fitness*

Durbin-Watson Statistics	Standard Error of the Estimate	R-Square	R	Model
2.073	14.800	0.219	0.468	1

Table 3 shows a summary of fit statistics model. According to the results of the table, the multiple correlation coefficient between the variables is equal to 0.468. In addition, the coefficient of determination (Square R) is 0.219 indicating the extent of explanation of variance and changes in students' affective attitudes toward the subjects, textbooks, school and their

academic self-concept by the hidden curriculum components. Durbin-Watson statistics were used to investigate the independence of the residues. According to the results of the table, the statistic value of Watson-Durbin is equal to 2.073 considering that its value is in the range of 1.5 to 2.5, we can say that the presumption of independence of the residues has been observed.

Table 4.*Test Results Related to Analysis of Variance*

Level of Significance	F	Mean Squares	Degree of Freedom	Sum of Squares
Regression	6.148	751.722	12	9020.664
Residues		62.959	264	16621.213
Total			276	25641.87

In Table 4, the results of analysis of variance are presented to investigate the regression model. Based on the results of the table, the obtained F value is 6.148, which is significant at the alpha level less than 0.01, which shows that hidden curriculum components can explain the changes in students' affective attitudes of learning and shows the suitability of the proposed regression model.

Q2-Are there any significant differences between the hidden curriculum components of Public, Non-

Public and Exceptional Talents (SAMPAD) high schools?

Based on the quantitative method, the Multivariate Analysis of Variance (MANOVA) Test was utilized to compare the hidden curriculum components among students of Public, Non-Public and Gifted (SAMPAD) high schools. The results of this test along with the study of its assumptions were presented below.

Table 5.*Statistical Description of the Scores of the Hidden Curriculum Components of Public, Non-public and Gifted (SAMPAD) High school*

Statistical Index	Average	Public	Non-public	Gifted (SAMPAD)		
		Standard Deviation	Average	Standard Deviation	Average	Standard Deviation
Teachers' interactions Students	51.69	9.161	56.18	8.926	82.34	8.775
Staff's interactions With students	21.43	4.761	58.75	7.828	76.72	7.129
The content of the textbooks	22.22	4.359	23.49	4.474	38.34	6.491
Methods of teaching and teachers' evaluation	52.48	9.229	62.21	10.977	78.00	11.955
Physical facilities	55.15	10.34	70.9	12.14	79.88	12.881

Based on the quantitative method, the Bonferroni post hoc test was applied to compare the differences between the scores of the hidden curriculum components in students of Public, Non-Public, and exceptional talents (SAMPAD) schools. The results of quantitative findings in (Table 5) showed that the mean scores of the Teachers' interactions with students in exceptional talents (SAMPAD) high school (82.34) are

significantly higher than the mean scores in Public (51.69) and Non-Public (56.18) high schools ($P < 0.05$).

The mean scores of the Methods of teaching and Teachers' evaluation of exceptional talents (SAMPAD) high school (78.00) are significantly higher than the mean scores in public (52.48) and non-public (62.21) high schools ($P < 0.05$). The mean scores of physical environments and facilities in exceptional talents

(SAMPAD) high school (79.88) are considerably higher than the mean scores in public (55.15) and non-public (70.93) high schools ($P < 0.05$). Other pairwise comparisons were not significant ($p > 0.05$).

Table 6.
Result of Covariance Matrix Homogeneity Test (Box)

Box's M	F	df1	df2	Significance Level
39.793	1.027	234	362401.853	0.151

Table 7.
Statistical Description of the Scores of the Affective Attitudes of Learning in Public, Non-public and Gifted (SAMPAD) High Schools

Statistical Index	Average	Public	Non-public	Gifted (SAMPAD)		
		Standard Deviation	Average	Standard Deviation	Average	Standard Deviation
Students' Attitudes toward Textbooks	51.33	14.190	57.66	15.414	67.54	16.901
Students' Attitudes Toward School	56.78	15.971	68.84	16.121	78.25	16.164
Students' Academic Self- concept	53.37	14.273	67.83	14.636	75.56	16.139

Based on the quantitative method, the Bonferroni post hoc test was applied to compare the differences between the scores of affective attitudes of learning in students of public, non-public, and exceptional talents (SAMPAD) high schools. The results of quantitative findings in Table 7 showed that the mean scores of students' attitudes toward subjects and textbooks in exceptional talents (SAMPAD) high school (67.54) are significantly higher than the mean scores in public (51.33) and non-public (57.66) high schools ($P < 0.05$). The mean scores of students' attitudes to

school in exceptional talents (SAMPAD) high school (78.25) are significantly higher than the mean scores in public (56.78) and non-public (68.84) high schools ($P < 0.05$). The mean scores of students of academic self-concept in in exceptional talents (SAMPAD) high school (75.56) are significantly higher than the mean scores in public (53.37) and non-public (67.83) high schools ($P < 0.05$).

Table 8.
Result of Covariance Matrix Homogeneity Test (Box)

Box's M	F	df1	df2	Significance Level
41.191	1.319	18	46790.194	0.124

In Table 8 the significance level of the box test is equal to 0.124. Since this value is greater than the

In Table 6 the significance level of the box test is equal to 0.151. Since this value is greater than the significance level (0.05), it is said to be confirmed

based on Covariance's Homogeneity Matrix, indicating a statistically significant difference between students' hidden curriculum components.

Q3: Are there any significant differences between the affective attitudes of students' learning in Public, Non-Public and Exceptional talents (SAMPAD) high schools?

significance level (0.05), it is said to be confirmed based on Covariance's Homogeneity Matrix,

indicating a statistically significant difference between students' affective attitudes of learning in different schools.

Discussion

The study aimed to investigate the relationship between the hidden curriculum components and the affective attitudes of learning in public, non-public and exceptional talents (SAMPAD) high schools. Non-cognitive characteristics (affective attitudes) of learning included the students' attitudes toward the subjects, textbooks, school and academic self-concept. Given the findings, the total indices of fit via structural equation modeling indicated acceptable goodness of fit in the model. This research was conducted in the quantitative way. The results of findings indicated that the hidden curriculum components are significant positively correlated to the students' affective attitudes toward subjects, textbooks, school and their academic self-concept. Overall, students' attitudes toward subjects, textbooks, school, and their academic self-concept were positive. In order to compare the differences between the scores of the hidden curriculum components in different high schools, the quantitative findings section (Table 5 & Table 7) showed that the mean scores of most components in Exceptional Talents (SAMPAD) high school are significantly higher than the mean scores in Public and Non-Public high schools ($P < 0.05$). Based on

the quantitative findings section (Table 7), the textbooks content has a direct and significant correlation with the affective attitudes of students' learning. In public high schools where students showed less interest in the textbooks content, the researcher observed their negative attitudes toward the subjects and textbooks. In Exceptional talents (SAMPAD) and Hormozgan University high schools (non-public), students' attitudes towards the textbooks content were positive. The results of the findings obtained by the researcher with the findings of (van den et al., 2020; Mulder et al., 2019; & Smith, 2008) and theories derived from the books written by Eisner (2002) were consistent. In their studies, (Mulder et al., 2019) showed that the hidden curriculum is in the form of a set of social values, norms and expectations that are unconsciously transmitted through teaching methods, teacher evaluation practices and the characteristics of educational institutions. According to the research of (Ludwig et al., 2018) affective engagement with the content is more effective than other learning techniques, and students' academic performance and achievement increase when they are interested in the curriculum. The results of quantitative findings showed that teachers' teaching methods in many high schools were not satisfactory. According to the results of findings section (Table 5), teachers' teaching and evaluation methods in the Exceptional Talents (SAMPAD) high school (78.00) were more desirable than all schools, and in the public high schools (52.48) were weaker. In most schools, the researcher observed the traditional teaching methods, memorization and repetition of the curriculum. They did not use the teaching and evaluation methods proposed by theorists in educational psychology and learning in academic situations. The results of the findings obtained by the researcher with the findings of (Bombi et al., 2020; Denessen et al., 2020; & Tan et al., 2019), and theories derived from the books written by Bloom (1982) were consistent. Findings of (Denessen et al., 2020) showed that high emphasis on students' weaknesses without considering individual differences is one of the factors underlying their academic failure that reduces their positive emotional attitude in learning. Van Den et al., (2020) argued that a better teaching method not only leads to more learning and academic achievement but also develops a more positive attitudes towards subjects, textbooks, and schools, thereby increasing students' academic self-concept.

Conclusion

Overall, the findings of this study confirmed the relationship between the hidden curriculum components and the students' affective attitudes toward the content

and organization of high school textbooks and the teachers' methods of teaching and evaluation as well as the significant correlation between them. Therefore, we can find solutions to reduce negative impacts and design curricula with more desirable quality. According to the findings, among the factors involved in developing the hidden curriculum in teaching methods and evaluation of teachers with destructive and anti-educational effects are the outdated knowledge of teachers due to having multiple jobs. This has caused lack of motivation to keep in touch with students. Teachers consider students as knowledge- learners instead of knowledge- seekers. Teachers are influenced by this dominant mentality and emotional view that they can solve the students' problems through granting good marks to their students. Therefore, it is suggested to help teachers not to think of themselves as merely transmitters of knowledge and textbooks content by adopting various methods to change attitudes and improve the level of knowledge and skills of their profession. Instead, they should be reminded that they play a more inclusive role as a facilitator and guide, meeting the needs of the audience and students. Research findings on the content and organization of the textbooks showed that outdated content, its inconsistency with students' real needs, and the lack of a horizontal or vertical connection between content and subject matters are main issues and concerns unresolved. It is suggested that education administrators and educational planners consider the practical components of the hidden curriculum identified in this study and introduce the hidden curriculum concept by conducting in-service training courses for teachers and school staff. To reduce the negative consequences of the hidden curriculum, school administrators should consider students' psychological characteristics, individual differences, and their psychological needs in the design of curricula. At the sociological level, parents should be encouraged to actively participate in their children education to strengthen an effective relationship between them and the school. Parent presence as a partner at school will help their children develop positive cognitive and emotional attitudes, leading to increased academic achievement, and consequently, reduced destructive impacts of the hidden curriculum. This research is considered important from two aspects, namely theoretical foundations and practical foundations. In terms of theoretical foundations, the proposed model was adopted from the theories of learning, management, and curriculum design and planning. Scrutinizing the results of this research can serve as an educational tool for those involved in education. In this way, they will know the desired and approved goals of the education system can be achieved only by modifying the curriculum. The researchers were

very careful in conducting the present study; however, some factors may have been out of the researchers' control which have caused some limitations in the research. The results of this study are limited to the male high school students, and it is neither appropriate nor recommended to the students of other levels such as primary or guidance schools and the second limitation is the geographical diversity of the participants, so the findings and the results should be generalized.

Conflicts of Interest

No conflicts of interest declared.

References

- Avci, S., Yuksel, A., Soyer, M., & Balikcioglu, S. (2009). The cognitive and affective changes caused by the differentiated classroom environment designed for the subject of poetry. *Educational Sciences: Theory and Practice*, 9(3), 1069-1084. <http://www.eric.ed.gov>.
- Barthes, A. (2018). The hidden curriculum of sustainable development: The case of curriculum in France. *Journal of Sustainability Education*, 18(4), 75-101.
- Bazargan, A. (2016). *Introduction to qualitative and mixed methods researcher*. Tehran: Aghah Publication.
- Bentham, S. (2006). *Psychology and education* (4th ed.). East Sussex, UK: Routledge Moduiar.
- Bloom, B. S. (1982). *Human characteristics and school learning*. New York: McGraw-Hill.
- Bombi, S., Cannoni, E., & Galli, F. (2020). The relationship between teachers and students: Children' pictorial representation and teachers' evaluation. *Current Psychology*, 5(7), 43-57. <https://doi.org/10.1007/s12144-020-00702-7>
- Bronfenbrenner, U. (2000). *Ecological theory*. Oxford: Oxford University Press.
- Callanan, M., Cervantes, C., & Loomis, M. (2011). Informal Learning. *WIREs Cognition Sciences*, 2(5), 641-655. <https://doi.org/10.1002/Wcs.143>
- Clinton, V., & Khan, S. (2019). Effects of open textbook adaption on learning performance and course withdrawal rates: A meta-analysis. *AERA Open*, 4(3), 1-20. <https://doi.org/10.1177/2332858419872212>
- Czerkawski, B. (2016). Blending formal and informal learning networks for online learning. *International Review of Research in Open and Distributed Learning*, 17(3), 138-156. <https://doi.org/10.191732344>
- Denessen, E., Annelies, L., Van Den Bergh, L., & Van Den Broke, P. (2020). Do teachers treat differently? An observational study on teacher-student interactions as a function of teacher expectations and student achievements. *Educational Research International Journal*, 5(2), 73-92. <https://doi.org/10.11552020>.
- Ebadi, H. (2013). Hidden curriculum: An apparent challenge or an unexpected opportunity? *International Journal of Academic Research*, 2(3), 67-75.
- Eisner, E. V. (2002). *Cognition and Curriculum Reconsidered* (2nd ed.). New York: Teacher College Press.
- Fathi Vajargah, K., & Vahed Chokadeh, S. (2013). Identifying the harms of citizenship education in the hidden curriculum. *Quarterly Journal of Educational Innovation*, 5(7), 45-56.
- Ghorchian, N. (2002). An analysis of the hidden curriculum: A new discussion on the unknown dimensions of the educational system. *Quarterly Journal of Planning in Higher Education*, 1(1), 48-68.
- He, T., & Li, S. (2019). A comparative study of digital information learning: The effects of digital competence and technology expectancy. *British Journal of Educational Technology*, 50(6), 1744-1758. <https://doi.org/10.1111/bjet.12778>
- Kokko, A., & Hirsto, L. (2020). From physical spaces to learning environments: Processes in which physical spaces are transformed into learning environments. *Journal of Learning Environments Research*, 4(2), 25-39. <https://doi.org/10.1007/s10984-020-09315-0>
- Ludig, B., Turk, B., & Seitz, T. (2018). The search for attitude: A hidden curriculum assessment from a central European perspective. *Wien Klin Wochenschr*, 13(2), 134-140. <https://doi.org/10.1007/s00508-018-1312-5>
- Maleki, H. (2006). *Curriculum Guide to Action*. Tehran: Payam Andishah Publication.
- Mehram, B., Saketi, P., Masoudi, A., & Mehrmohammadi, M. (2008). The role of the hidden curriculum components in students' scientific identity. *Journal of Curriculum Studies*, 3(1), 20-37.
- Mehrmohammadi, M., & Alikhani, M. (2003). Investigation of unintended consequences (hidden curriculum) due to the social environment of Isfahan high schools. *Journal of Educational Sciences and Psychology*, 3(1), 121-146.
- Mehrmohammadi, M. (2016). *Curriculum: Theories, approaches and perspectives*. Tehran: Nashr Daneshgahi Publication.
- Mulder, H., Braak, E., Chen, H., & Tencate, O. (2019). The hidden curriculum in the clinical workplace: A practical tool for trainees and faculty. *Medical Teacher Journal*, 41(1), 36-43. DOI: 10.1080/0142159x.143676
- Meyers, M., Erickson, I., & Ruth, V. (2013). Digital literacy and informal learning environments. *Learning, Media and Technology*, 38(4), 355-367. DOI: 10.1080/17439884-2013.783579
- Parhizgar, L., & Fathi Varjagah, K. (2018). Teachers' perception of the environmental curriculum in Tehran's Secondary schools: A phenomenological approach. *Research in School and Virtual Learning Journal*, 6(1), 87-102.
- Piaget, J. (2012). *To Understand is not to Invent: The Future of education* (25th ed.). New York: Grossman.
- Ritchie, S., Clifford, M., & Crawford, M. (2009). *First school learning environments: Supporting relationships*. Issues in PreK-3rd education. Chapel

- Hill. The University of North Carolina, FPG Child Development Institute, First School.
- Rogers, K., & Kali, S. (2020). The effects of classroom seating layouts on participation and performance in the 4th grade classroom. *Journal of Learning Spaces*, 9(1), 96-107.
- Safaei Movahed, S. (2013). Towards another meta-theory for understanding the hidden curriculum. *Research in Curriculum Planning Journal*, 10(37), 75-95.
- Santrock, J. W. (2008). *Educational psychology*, New York: McGraw-Hill Publication, Inc.
- Shams Dolatabadi, H., Malek, N., Mozafar, F., & Sedghpour, B. (2018). Principles of open school design based on emotional intelligence model and enhancing learning. *Iranian Journal of Learning and Memory*, 1(1), 55-67. DOI: 10.23034/iepa.2018.77430
- Smith, A., & Montgomery, A. (2008). Values and hidden curriculum. [http:// Cain Web Service](http://CainWebService).
- Townsend, B. (1995). *Is there a hidden curriculum in higher education doctoral programs?* Presentation for the Association for the Study of Higher Education, Orlando, FL (ERIC Document Reproduction Service No-ED460663)
- Van Den Beemt, A., & Thurlings, S. (2020). Towards an understanding of social media use in the classroom: A literature review. *Technology, Pedagogy and Education Journal*, 29(1), 35-55. DOI: 10.1080/1475939X.2019.1695657



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