

# Designing and Validating the Proposed Parent Involvement Model for Elementary Students

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## **Abstract**

*The purpose of this study was to design and validate the parental involvement model for elementary school students. The research method was used for model design stage, descriptive-analytical method with inductive content analysis approach and for descriptive model validation, descriptive survey method was used. The statistical population for the design of the proposed model consisted of extracted transcripts from interviews with 27 expert teachers, teachers and parents and all upstream documents, books, and articles (from 2000 to 2018) from subject databases, It was downloadable that, through sampling, in addition to the text of the interviews, 70 documents were selected for content analysis and then theoretical saturation was obtained. The statistical community was formed to validate the model including all teachers and faculty members and experts of the Organization of Education, Parents and Teachers. 26 were selected through purposeful sampling for interview. Data were collected through semi-structured interviews, fingerprints, and a 7-item Likert-scale questionnaire whose content validity was 0.89 using Cronbach's alpha. Data were analyzed using qualitative content analysis and Max Keyword software. Based on the inductive content analysis and continuous comparison of the obtained codes, five main components of analysis, decision making, family interaction and education, dimensions of family participation and evaluation and feedback, and 55 sub-components were extracted for the main components. After analyzing the content and extracting the codes, the components and sub-components were presented in a template format. First, the conceptual model that incorporated all of these elements was designed and then a process model that was applicable and applicable was designed. At the level of descriptive statistics, mean and standard deviation, and at the level of inferential statistics, one-sample t-test was used to answer the internal validity of the model. Validation findings from the experts' point of view showed that the characteristics of the proposed parental participation model elements for elementary school students were well-qualified and had a score above 3. Therefore, this model was evaluated by appropriate and practical experts. Therefore, it is suggested that this model be introduced as one of the executive strategies for one of*

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*the major goals in the document of fundamental transformation of education "increase of participation and public effectiveness especially of family in education excellence."*

**Keywords:** *Design, Validation, Educational Model, Parent Involvement, Students, Elementary.*

## **I. Introduction**

One of the approaches for confronting educational system against the probable challenges of globalization is redefining objectives, designing and reestablishing the schedules with a systemic perspective. One of the crucial steps in systemic programming is the comprehensive program of involving parents in the process of decision-making, execution, evaluating, and ameliorating the activities and programs performed in the educational system of the country (Hosick, 2018). Since the parents are of great enthusiasm for their children's scientific, educational, social and vocational development, they won't withhold any cooperation with the educational system if they are provided with appropriate grounds for making use of their abilities. It seems that in the current system of education, there is not any systematic scientific and professional involvement of the parents and whenever there is a talk about the parents' cooperation, the thoughts turn to their financial assistance leaving other dimensions of cooperation with negligence among the authorities and educational designers. Nevertheless, serious cooperation between the family and the school has always been addressed by the specialists of education as well as the parents (Topping, 2017).

In the Act of Fundamental Transformation of the educational system, training has been divided into two parts: formal and informal. The formal training which is regarded as a part of systematic, legal, just, universal, and crucial streams of thought is developed with a focus on Islamic organization but this responsibility is never a hinderence to the other elements of nurturing such as the notions of family, media, and nongovernmental organizations. In fact, arriving at an understanding of individual, familial, and social dimensions of pure lifestyle is only possible when all the effective elements on nurturing such as family is cognizant of their own status and role in the educational arena and take the responsibility with regard to such a role (Act of Fundamental Transformation, 1393, 43). Thus, the educational system as a social organization requires the involvement and cooperation of all elements in the system. Without an effective cooperation between the people and the employees in all scientific, cultural, economical and emotional aspects, the system cannot operationalize the process of education as effectually (Schaeffer et al, 2018). In fact, success in education is not obtainable without the cooperation of the family. Most of the psychologists believe that the initial years of the life of a child are of great importance in their growth periods. In fact, the importance of pre-elementary and elementary training are increasingly emphasized in the last few decades for the welfare of the students since the development of personality in the individuals takes place in this period mostly. Providing effective training in this period is of vital importance for the growth of a child (Meng, 2015, p.554). On the other hand, one of the specifications of successful schools belongs to those who make maximum use of the cooperation of the parents (Topping, 2017). On the basis of the researchers' findings (Bardou et al, 2012; Dumont et al., 2012; Epstein, 2005; Fan & Chen, 2001; Hill & Tyson, 2009; Kim & Fong, 2013; Patel et al., 2008; Prryman, Christian & Massengale,

2017; Takeuchi, 2018), the parents who cooperate in school programs, have more positive feelings towards school and education of their children.

According to the investigations performed so far, there is a clear difference in the amount of cooperation of the parents in different educational levels of their children. The amount of cooperation of parents in secondary level schooling period decreases normally. The scientists in the US National Center for Education Statistics (2013) found out that 0.89 of the parents regularly decrease their cooperation by their children entering grade five whereas it is 0.71 for those whose kids enter the grades 6 to 8 and 0.57 for those whose children enter the grades 9 to 12. In a cross-sectional investigation, the researchers have referred to the parents' style for giving assistance with their children's assignments: the parents provide less direct assistance for their children in high school compared to their assistance in elementary level for doing their assignments and mostly support their autonomy in this respect. Vertical examination of the students from two first-class and third-class schools in the cross-sectional investigation revealed that the cooperation of the parents decrease by increasing in age. Furthermore, in an investigation performed by Duan, Guan and Bu (2018) with the title "the effect of parents' involvement and their social and economical status on the students' educational progress and school conduct in a high school in China", it was concluded after technical analysis and investigation of the data that parents' cooperational activities is substantially useful for the students with poor economical and social families. Hosick (2018) dealt with the potentials of modern educational technologies in his dissertation titled "the involvement of parents in the year 2018: the challenges and future opportunities in a technological society" for making a connection and involvement for parents. The results of his study revealed that three elements namely family, school, and society have the most influential impact on the students' learning and success. Park, Stone, and Holloway (2017) in their study titled "the involvement of parents considering the school as predicting educational progress and a learning environment: an analysis of the level of primary schools" found out after investigation and analysis of the data that the schools with a good general cooperation of parents perform better in fulfilling the standards of mathematics as well as attaining educational progress in reading. Jeynes (2017) got the idea that there is a meaningful relationship between the involvement of parents and educational development in their investigation titled "the relationship between parents' involvement and the students' progress in learning latin". Based on their conclusions, it was realized that this mostly happens with elementary and pre-elementary students. In general, it could be concluded that parents' cooperation with schools culminates in improved learning and educational progress as well as better nurturing of the students (Nokali, Bachman & Votruba, 2010). Cooperation of the parents with school and their learning from the instructors has a direct relationship with the amount of learning scientific and cultural subjects and applying them in the social lives of children, juvenescents and the youth (Zanjanizadeh, Danayi & Saliminejad, 1390, p.73). That is why cooperation between parents and school has been considered as an integrated phenomena. These two constituents take the common responsibility of nurturing the children of a society by sharing their ideas, cooperation, and configuration (Macgregor, 2009).

In a brief consideration of the goals of the community of parents and teachers, we get to realize that the legislators take the responsibility of basic appropriate nurturing and education of the children, juvenescents, and the youth concerning the various dimensions of the relationship between home and school in accordance with the culture and the needs of an Islamic society. In addition, it considers family as one of the principles of appropriate nurturing

the children. Thus, attaining the aforementioned objectives is only possible with deep overall cooperation of the parents of the students in education. In other words, all the parents should be of influence in the affairs of the students (Nasiri, 1387, p.65). Concerning the Act of Fundamental Transformation, the Ministry of Education is in charge of education and nurturing in its all aspects, consolidation of the public culture, and elevation of the Islamic society on the basis of credentials of Islamic system by the cooperation of the families, institutions and governmental and non-governmental organizations. It is quite evident that the role of family cooperation has been taken seriously since there are families who put all the responsibilities of education of their children on the shoulders of the school and assume themselves as separate from it (The Act of Fundamental Transformation, 1392). Moreover, regarding macro-objectives in the Act of Transformation, increase in cooperation and public affectivity especially the family has been culminated in elevation of the education system (The Act of Fundamental Transformation, 1392).

Therefore, since the students spend most of their time at home and the fact that the learning-teaching process gets complete at home, it is required that parents and schools have more and better cooperations with each other in order to enable the education system take more important and effective steps in the development of the country. In this respect, designing and validating a native model of parents' involvement program plays a crucial role on the grade one primary school students' amount of learning. Hence, the goal of the current investigation was to design and validate a native model of parents' involvement program for the students. Regarding the foretold subject matters and considering an investigatory vacuum in this respect, we face the question that what the model of participation of the parents should include in terms of constituents in order to increase the students' learning. Besides, to what extent does the proposed model enjoy internal validity?

## **II. Methodology**

In the present investigation, use had been made of qualitative analysis with an inductive approach. In order to analyze the content qualitatively in this project, the transcripts of interviews with the specialists and the written resources (upper hand documents, books, articles, theses and other sources in this regard) were taken into consideration. In other words, the participants of the study included all the articles for developing a proposed native model of parents' involvement, which were downloadable from the relevant data bases such as Ebsco, Science direct, ProQuest, Eric, Springer, and Google Scholar as well as Persian data base such as MegIran, NourMagz, and Sivilika. In terms of sampling, use was made of objective sampling. In objective sampling, the sample is not selected on the basis of simplicity but the judgments of the researcher on the basis of previous information is the criteria for selecting the sample (Delavar & Koushki, 1396). In fact, this type of sampling continues to the extent that the new data does not contain new information about the subject of the research project or we reach theoretical saturation in this respect. Therefore, other than interview transcriptions, the sample size included 70 more documents, which were drawn from information resources and valid databases. After analyzing these documents, repetition of the data were detected and the researcher realized no need for reconsidering the data after consulting with his/her supervisor professors.

In addition, the sample, which was used for internal validation of the proposed educational model included professors and the specialists of Educational Technology, Educational Science, and Educational Psychology of whom 26 people were selected on the basis of objective methodology, which has been briefly outlined in Table 1.

**Table 1. The specifications of the samples in internal validation of the educational model**

Groups	Filed of study	Working place		Number
Faculty member	Educational technology	Alameh University	Tabatabai	5
		Kharazmi University		3
		Tarbiat University	Modares	1
		Bu Ali Sina University		1
	Educational psychology and educational science	Tehran University		2
		Alameh University	Tabatabai	6
		Shahid University	Beheshti	2
		Kharazmi University		2
		Tarbiat University	Modares	2
		Alzahra University		1
Ph.D students	Educational technology			
	Educational psychology and educational sciences	Tehran University		3
		Alameh University	Tabatabai	4
				2

	Shahid	Beheshti
	University	1
	Kharazmi University	2
	Tarbiat University	Modares

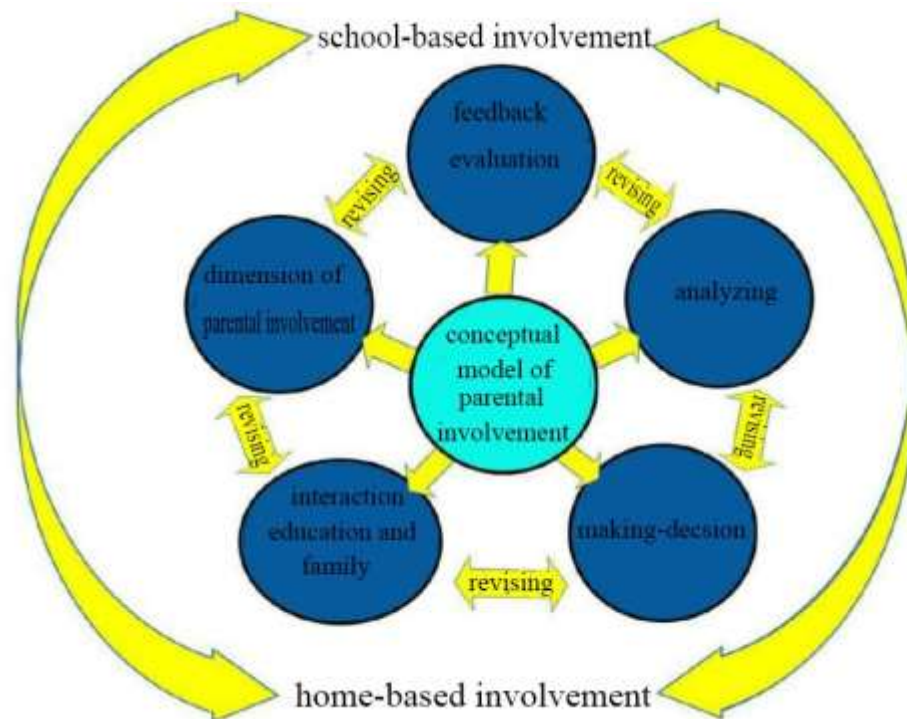
Use was also made of a questionnaire for internal validation of the model in a way that after specifying the constituents and primary elements of the model in relation to the primitively proposed model, a questionnaire with 7 questions was designed in likert scale and was delivered to the specialists and their opinions and improvement suggestions for the model were applied. The content validity of the questionnaire was approved by supervisor professors and advisors; and its stability was measured by Cronbach's test, which was 0.89. The analysis of the qualitative data was performed using inductive content analysis. For selection of the cases for analysis, first of all, some meaningful segments were read on the basis of the unit of content analysis; then, there was a code stipulated for each. Next, the relevant codes were categorically outlined and finally, the main categories or the main elements were recognized. In other words, this process included free coding, creation of categories, and drawing meaning. First, through free coding, the headings and the main points of the text were categorized desirably and the created categories were decreased through subsumption under more general categories meaning the categories were recategorized. In fact, the aim of reclassification is to decrease from the number of categories through grouping the common ones. The aim of this process is the primary classification and reclassification of the categorized items, drawing meaning from the phenomena under investigation and describing them in order to boost our understanding from the phenomena.

### III. Findings

***The first research question: What are the elements and constituents of the proposed native model of parents' involvement with the students of grade one in primary school?***

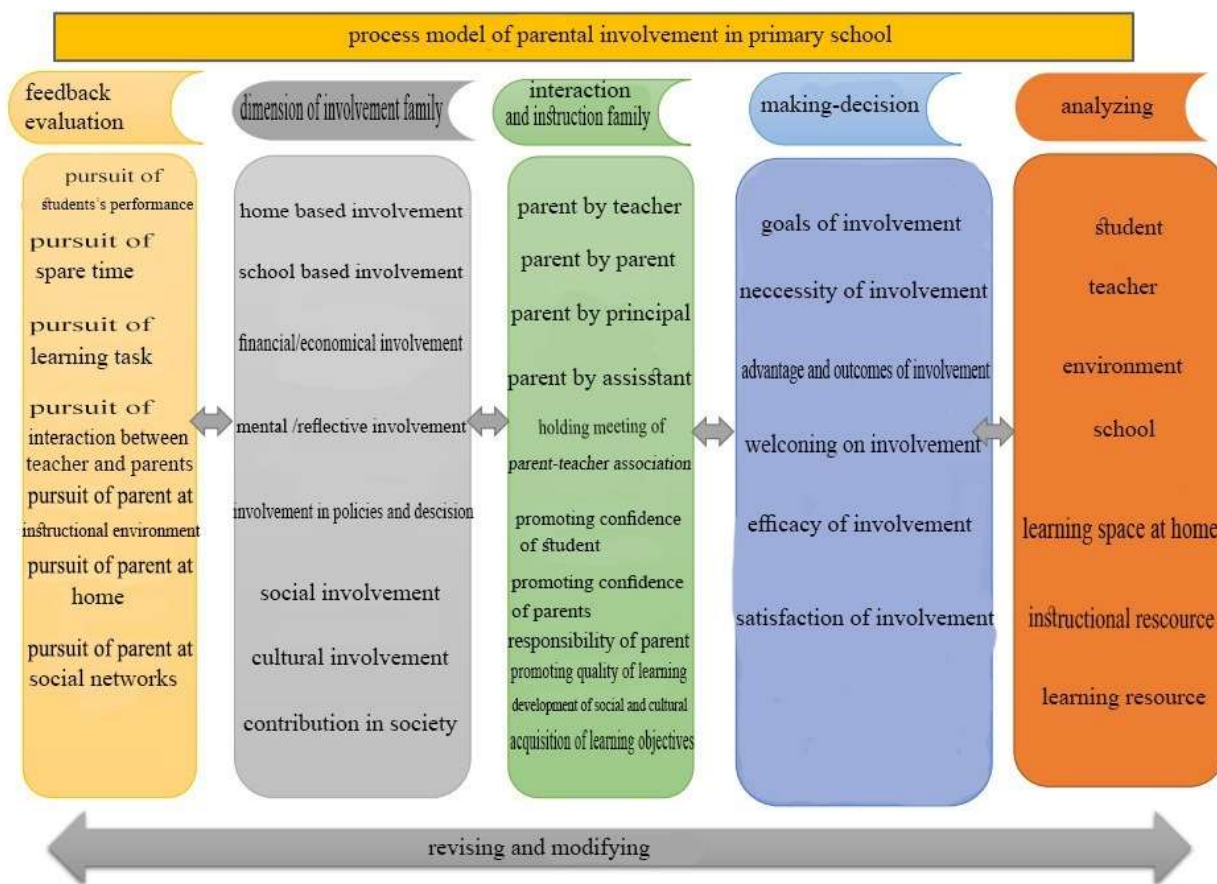
In order to answer this question, use was made of inductive content analysis. First, the theoretical and investigatory principals related to parents' involvement were taken into consideration. The transcript of the documents, books, articles, and the texts extracted from the interview with 27 specialist professors, teachers, and parents were concisely studied and the primary codification were taken place. The unit of content analysis was also included in the research in a way that a paragraph, sentence or a part of it was utilized and numerical or textual codes were designated to them. After free coding, pivotal coding took place. In this stage, the similar codes in terms of meaning were classified. After the classification of the codes, 5 main categories (analysis, decision-making, cooperation of and training the family, the dimensions of parents' involvement, evaluation, and feedback) and 55 sub-categories were identified. Extracting the categories and subcategories by supervisor professors and advisors were taken into

consideration and their primary validity were approved of. After extracting constituents and sub-constituents, the relationship among them in qualitative content analysis was presented as a model, which has been illustrated in Figure 1.



**Figure 1: The proposed conceptual model of parents' involvement in primary schools**

As shown in the conceptual model, five main categories (analysis, decision-making, cooperation of and training the family, the dimensions of parents' involvement, evaluation, and feedback) had to be taken into consideration. These factors were composed of sub-constituents, which formed the trendy model of parents' involvement. According to the conceptual model of the effectual elements on parents' involvement as well as for the sake of prescribing the training, a trendy model along with all its sub-constituents of these procedures were included in the model presented in Figure 2 as crucial elements



**Figure 2: The proposed trendy model of parents' involvement in primary schools**

To continue, every element has been explained and applied in designing the proposed pattern of parents' involvement in the primary schools.

### **First element: analysis**

The age, sex, literacy level, language or culture, social- economic factors, intrinsic motivation level, education level, current knowledge and skill, attitude, interest and motivation to involvement are of most important features which can be used in designing the pattern of parents' involvement in the primary schools, the studies done by Ito, Baumer, Bittanti & Cody (2019), Nikken & Jansz (2014), Sonck et al. (2013), and Liu (2016) reveal that the level of parents' involvement depends on the variables such as age, sex and parents' education and some familial variables such as the parents' media literacy skills, number of family members and marital status. Therefore, the age is a significant factor in the children's use of media. In addition, the education and economic condition of the families are effective in this case. For instance, the parents with high education and income may suppose that these media can act as a mental capital for the children and accordingly they provide these media for them. Or the parents with lower media literacy may restrict their children in use of these media (Ito et al., 2019).



The parents' motivation and interest in involvement is an important factor, too. The motivation can be regarded as a form of recognition and emotional excitation which causes our tendency toward doing some works or obtaining a result (Erten, 2014). The motivation means the tendency and need to doing a work (Ikemoto, S., Yang, C., & Tan, A., 2015). For having a higher level of motivation, the parents should be able to imagine the results and outcomes of their works and to believe that their effort would alter the existing condition of their children's school and progress (Frank, Enkawa, Schvaneveldt, & Torrico, 2015).

### **Second element: decision making**

The sub-elements obtained for the decision making element by the content analysis are: involvement goals, involvement necessity, advantages and outcomes of involvement, reception of involvement, sense of efficiency from involvement, sense of satisfaction with involvement and importance of children's occupational future for the parents. The studies reveal that the parents can play four role in their children's learning: 1) as a teacher; 2) as a supporter, 3) as a patron; 4) as a decision maker (Fan & Williams, 2010). Therefore, the parents' involvement in policy makings and decision makings is one of the radical elements of involvement (Kaya & Bicen, 2016). Epstein's model (2004) also has obviously referred to participation of the parents in the decision makings (including parents and family members' involvement with any background as the agents and leaders of schools associations). That is the parents' involvement in making decision about the manner of management of school affairs, different activities of school by the consultants systems or different institutes and committees and the organization of parents in different specialized associations. On one side, the use of parents' viewpoints and opinions in the school- related decisions is one of the most important features of successful schools' managers (Kaya & Bicen, 2016).

Indeed, one of the reason of decentralization in the education system and curriculum is that the education quality is increased by assigning the decision making right and responsibility to the schools; since, accordingly, the directors, teachers and parents would have considerable share in the selection of curriculum content and improvement of education quality (Khandaghi & Dehghani, 2010). One of the most important cases in which the parents involve is making decision about the manner of school management. The parents can help the school director in making decisions about the school by holding the parent- teacher association by the director's invitation. The parents who have participated in this affair make their full effort for the fulfilment and execution of adopted decisions (Vollmuth, A. J., 2015). The sense of efficiency and satisfaction with the involvement can be referred as one of the advantages of parents' decision making about the school affairs. In fact, one of the personal motivations for the parents' involvement is the sense of self- efficiency and belief in individual's abilities in case of behaviors which produce the intended outcomes (Diseth, 2011).

### **Third element: family interaction and education**

The education as the most important social system requires the involvement and interaction of all its components. The education is one of the entities the involvement of all its elements and agents is necessary due to the

nature of activities (Jahanian, 2009). The effective involvement requires a reciprocal interaction between the parents and experts (Brien & Stelmach, 2013). Indeed, the interaction between the home and school provides the possibility of using the parents' potential mental, scientific, skill and specialized knowledge and prevents the educational conflicts and damages resulting from different factors (Abaszadeh, 2007). The experts and researchers believe that the interaction is a key element in the learning (Zhao & Sullivan, 2017). For instance, Kabir & Akter (2014) studied in a research the parents' interaction, challenges and its development methods and categorized the parents' involvement in students' learning into three domains: key experiences created at home by the parents; parents' involvement in creation of motivation and children's progress; and parents' interaction with the school. Furthermore, to create a strong interaction between the home and school, they suggest the school to apply different methods together. In addition, studies of Boonk., Gijsselaers, Ritzen, & Brand-Gruwel (2016) and Wentzel (2014) concluded in their study about the relationship between the family performance and educational performance of the guidance school students that the educational performance is increased by the increase of parent- children interaction, too.

The interaction of parents with children or student is one of different types of interactions, while Epstein's (2005) parental involvement pattern and Desimone's (1991) pattern obviously have referred to the parents by children interaction about the school- related issues (Epstein & Sanders et al., 2008). Therefore, this interaction causes the increase of involvement and sense of belonging to learning population (Scagnoli & Willging, 2001). The parent-teacher interaction is the other type of interactions. This type is mostly appeared in the teachers' sessions with the parents (Epstein & Sanders et al., 2018). The interactions and opportunities provided by the child for the parents' involvement can be completed by the effect of teacher- parent sessions as well (Ho & Kwong, 2013). The parent-school director, secretary or cadre interaction is the other type of interaction. The most important role of parents in the children and teenagers' education is communication and interaction. The communication is the radical center of this role and the variety and difficulty of this role should be taken into account (Gündüz, 2018). The teachers can regard this matter by regular communication with the parents by new communicational technologies such as website, E-mail, multi-media or text message, weblog, video communication, chat and social networks.

#### **Fourth element: dimensions of family participation**

Attention to the main framework of proposed pattern of parents' involvement reveals that the parents should select a specific form of involvement after making decision about their involvement. It means that the parents select the type of their involvement with regard to their perception of opportunities or temporal restrictions and their energy and also their knowledge and skill. According to Hoover- Dempsey and Sandler' (2001) model. The activities related to the parents' involvement are categorized into two general categories of home- based involvement and school- based involvement. The home- based (home- centered) involvement refers to the child- parent interaction at home that aims to improve the learning and performance of child's school. The home- centered involvement requires the provision of a rich learning environment for the student at home. A rich learning environment is an environment which consists of different educational courses and positive improvement by the parents to achieve the educational goals and correct growth of children during all their life (Melhuish, Sammons, Siraj-Blatchford & Taggart, 2008). The contextual

variables such as the parents' attitudes, parents' involvement in child's learning activities at home, parents' education, their social and economic condition and family size are of factors effective on the home environment (Cole, 2011). With regard to the accomplished studies, the parents' involvement in children's learning activities is important than the other recognized factors (Emerson, Fear, Fox & Sanders, 2012).

The school- based (school- centered) involvement is related to the parents' interaction or participation in the school activities. Such involvement can be stated as the school- home involvement, too. The interaction and cooperation between home and school provides the possibility of using the parents' potential mental, scientific, skill and specialized knowledge and prevents the educational conflicts and damages resulting from different factors (Topping & Voltendal, 2017). The parents' involvement and participation in the school activities plays an important role in the students' learning and educational success and can affect the other factors, too; in such a way that its influence on children's learning is considerable even without regarding the social and economic condition and parents' education level. The findings reveal that the parents' involvement and participation has a positive and meaningful effect on the students' educational development (Emerson, Fear, Fox, & Sanders, 2012).

The involvement is thematically categorized into political, economic, social involvements and so forth. But it should be considered that the exact separation of them is impossible due to their interrelation and overlap and it is usually discussed in a general form or combined form such as the political- social and economic involvement (Goodall, 2017). The mental involvement is one of involvement dimensions. The mental participants are widely linked to the educational entities for the purpose of increasing the education authorities' scientific quality and practical abilities. In this involvement, the knowledge and recognition is the basis of involvement. The cultural and politic involvements are the other dimensions of involvement. The cultural involvement means the voluntary, volitional and conscious participation of individuals, groups and society organizations in different dimensions of cultural life of that society for the increase of sustainable, balanced and comprehensive development of the cultural life. But the political involvement is the individual's participation in different levels of activity in the political system from non-involvement to having a formal politic authority (Witte, 2015). The other instance of parents' home- based involvement is their social involvement or cooperation with the neighborhood aggregations which refer to the resources outside the home and school such as different organizations existing in the society, universities and groups effective on planning that can play effective role in children's learning. The support of organizations outside the home and school can improve the students' learning and parents' involvement (Akhter, 2016).

#### **Fifth element: evaluation and feedback**

In parental involvement model, the evaluation and feedback has been regarded as an element which comprises the other mentioned components. This property indicates that these activities are constantly applicable and include the persecution of student's performance, free time, learning tasks, parent- teacher interaction, educational environment and parents' persecution of using the social networks. The informational feedback is one of the most important feedbacks which can be effective on parents' involvement. This feedback means the presentation of any type of information about the learning activity outcomes received by the individual. This type of feedback has two radical

effect in the individual's learning: first, it organizes optimally the learner's learning procedure. Second, it increase the motivation for learning (Hasani, 2010: 16). Sharing the experiences is one of the most important informational feedbacks. This feedback, in addition to creation of motivation, increases the sense of belonging and meaningfulness of subject matter, since the individual interests in learning the experiences of real world (Lefevre & Cox, 2016).

The peer assessment is the other significant feedback which can be effective on the parents' involvement. During the recent years, a special attention has been paid to the peer assessment as an evaluation method. The term 'peer' in the subject of parental involvement is the parents' evaluation from each other in the school- related activities. This method paves the way for the parents to present valuable feedbacks to each other (Sadler & Good, 2006). The significance of peer assessment is emphasized because the parents should evaluate their peer's performance and provide an effective feedback for them to improve the involvement and this feedback leads to the increase of their involvement in the school (Bhardwaj, Bhardwaj, Mahdi, Mahmood, & Srivastava, 2013).

The constant persecution of using the media and virtual social networks is one of important sub- elements of parental involvement model in the case of evaluation and feedback. Using the internet and some websites causes the individuals' interaction in a specific framework. If this use of internet be along with the control and knowledge, it would have positive effects and improve the communications. If the parents do not have enough knowledge and supervision of these media, the risk of mental damages would be increased and the children and society would be seriously damaged (Badri, Alnuaim, Al Rashedi, Yang, & Temsah, 2017). The study done by Marsh, Brooks, Hughes, Ritchie, Roberts, & Wright (2005) revealed that the parents' opinion about the children's use of media and virtual social networks depends of their strategies and viewpoints about the influence on the children. On one side, the parents feel that the educational media can provide the leaning opportunities and they use these opportunities and capabilities for their learning (Sonck et al, 2013). The studies of Ito et al. (2019), Nicken & Jonsez (2014), Sonck et al. (2013), and Liu (2016) show that the amount of parents' guidance of children in their use of media and strategies applied by them depends on some variables such as age, sex, parents' education and familial variables such as parents' media literacy skills, number of family members and marital status.

The parental involvement in students' homework is the other important sub-element of parental involvement model in the case of evaluation and feedback. The parental involvement in homework is one of aspects of parents' involvement in the school that has considerable influence on the students' educational development, motivation and welfare. On one side, the parental involvement in students' homework causes the students' development, since it improves the students' motivation and persuades their commitment (Hill & Tyson, 2009; Bordeaux et al., 2012; Dumont et al., 2012; Kim & Fong, 2013; Takeuchi, 2018; Perryman, Christian, & Massengale, 2017: 3). The parents who participate in the school programs have more positive feeling toward the children's school and education.

***The second research question: Does the model of parents' involvement enjoy enough internal validity for improving the students' learning?***

In order to answer this question as well as investigating the internal validity of the model, the images of the model including the necessary remarks on its elements were delivered to the specialists in this respect and the equivalent questionnaire on finding the internal validity was completed. This questionnaire evaluates the criteria of congruence in accordance with the principals of designing global validity, applicability, integrity, comprehensiveness, innovation, and appealability of the model. Then the primary version of the conceptual and trendy model along with the model questionnaire for measuring validity were delivered to 26 particular specialists of the realms of Educational Technology, Educational Sciences, and Psychology. It was demanded that they evaluate the status of each extracted element of the model in the 5-option likert scale questionnaire. The statistical analysis of the answers to the questionnaires was performed by single-sample T-test. The reason for using this statistical test was that the researcher was determined to make a comparison between the obtained average score for each question and the theoretical average score. Since the theoretical average score for the questions of the questionnaire was not available, the researcher, due to the responses of the questions being a 5-option one, assumed score 3 as the mean score and made a comparison with the observed score. Table 2 has reported the descriptive statistics of the respondents to every question of the questionnaire delivered to the professors with regard to the proposed model.

**Table 2: The descriptive statistics of the questions of the internal validity of parents' involvement model questionnaire**

Criteria	Row	The model's validating questions	Frequency	Mean	Standard deviation
<b>Congruance with the principals of global designing</b>	1	To what extent are the constituents of the proposed model relevant to the subject matter of the research?	26	4.58	0.51
	2	To what extent do you consider the dimensions, sorting, and succession of the elements of the model as appropriate?	26	4.28	0.60
<b>Applicability</b>	3	To what extent do you consider the relation among the elements of the model as applicable and crucial?	26	4.38	0.69
	4	Are the educational programs in accordance with the Act of Fundamental	26	4.27	0.66

Transformation appropriate for education?					
<b>Innovation</b>	5	To what extent does the proposed model for designing educational programs enjoy innovation?	26	4.15	0.83
<b>Validity</b>	6	To what extent could this model be applied for effectuating the learning environment or participatory approach?	26	4.38	0.74
<b>Acceptability</b>	7	To what extent are the model and its constituents comprehensive enough?	26	4.19	0.91

Since the scoring of the questionnaire was based on likert scale, the least score for a single criteria was 1 and the maximum was 4. The results of the table 4-9 revealed that the mean score in all criteria were higher than average (3). Therefore, it could be concluded that the specialists have been right in evaluating the proposed model of parents' involvement. Moreover, in order to investigate if the mean score of the answers of the respondents has been significantly higher than the mean scores for each question, use was made of a single-sample t-test, the results of which were delineated in Table 3. The observed mean score in making use of the single-sample t-test equaled 3 (the average score).

**Table 3: Single-sample T-test for comparing mean scores with average score**

Question	Theoretical value=3			
	t	df	Significance level	Mean deviation
1. To what extent are the constituents of the proposed model relevant to the subject matter of the research?	15.95	25	0.001	1.57
2.To what extent do you consider the dimensions, sorting, and succession of the elements of the model as appropriate?	10.71	25	0.001	1.26

3.To what extent do you consider the relation among the elements of the model as applicable and crucial?	10.12	25	<i>0.001</i>	1.38
4.Are the educational programs in accordance with the Act of Fundamental Transformation appropriate for education?	9.70	25	<i>0.001</i>	1.15
5.To what extent does the proposed model for designing educational programs enjoy innovation?	7.05	25	<i>0.001</i>	1.38
6.To what extent could this model be applied for effectuating the learning environment or participatory approach?	11.78	25	<i>0.001</i>	1.19
7.To what extent are the model and its constituents comprehensive enough?	5.78	25	<i>0.001</i>	1.38

As demonstrated in Table 3, the reported results revealed that the amount of t-test for all questions were positive and significant. This result suggested that the proposed model of parents' involvement for primary school level included sufficient criteria in views of the specialists, since there was a significant deviation, statistically, between observed score and the mean score. In other words, the proposed educational model enjoyed high internal validity.

#### IV. Discussion and Conclusion

With due attention to the findings of the present study and the experiences resulted from the procedures of execution of the parents' involvement model in primary schools, it is possible to make use of this model as one of the executionary approaches toward attaining one of the macro-objectives in the Act of Fundamental Transformation of education namely "increasing cooperation and public efficiency, especially family, in enhancing education system". Furthermore, considering the content analysis of the documents, the framework and developmental programs as well as national and international experiences in the field of standards of global designing principals, it is recommended that the administrator organizations, particularly The Ministry of Education and The Community of Teachers and Parents put into practice the views of parents in the decisions related to school as well as involving them in school activities and assume spiritual awards for the cooperation of parents.

Generally, the proposed parental involvement model has the features such as:

1- Concordance with upper hand national documents, specially fundamental reform document. One of the most radical features of this model is the concordance with fundamental reform document of education and the strategy presented for the goals of this document. With regard to fundamental reform document, the education ministry is the most important entity of formal public education, proctor of education process in all education structures, binder of

public culture and elevator of Islamic society based on Islamic system criteria with the participation of families, entities and state and non- state organizations. It is obvious that the role of family's involvement in this matter has been regarded as a significant factor; because there are families who consider the school responsible for their children's education and know themselves separate from the school (fundamental reform document, 2<sup>nd</sup> chapter, 2013: 43) and also, with regard to great goals of reform document, has caused the increase of involvement and public efficiency specially the case of family in the education system development.

2- Comprehensiveness: the comprehensiveness of model is based on the key elements required for an educational model. In this model, all the elements needed for the parents' involvement have been regarded. Furthermore, all the components have been taken into account in every element and their interactional and logical relationship has been represented with regard to the fundamental reform document (with regard to this matter that the fundamental reform document of education emphasizes on the improvement of family status and its educational role, improvement and installation of responsibility and its effective involvement in the educational system).

3- Being applied: this proposed model is an effort for specifying the reason of parents' participation (involvement) in the children's education and manner of involvement influence on their children's educational outcomes. Accordingly, it can be applied in the parents' involvement; since the parents' cooperation with the school authorities can lead to the development of educational and physical performance of the school. The research in second chapter of this dissertation revealed that the learners the parents of whom participate in the school are more active and have more tendency toward continuing the education.

4- Variety and innovation: the introduced model has been designed and proposed for the first time in the country that can help the fulfillment of the goals 2 and 5 of fifth chapter (great goals) of fundamental reform document of education that supervises the increase of public efficiency and involvement specially the case of family in the development of formal public education system.

5- Attention to one of crucial challenges of education system: the parents' non- involvement and omission of parents and specially mothers' role in students' learning has been one of the most crucial challenges of our education system; while the family's involvement in formal and public education system is an inseparable element in the education process which has encountered some challenges from the past to present. The studies have revealed that the familial experiences have considerable effect on the individual's evolution during his childhood and adolescence and after that and the familial relationships influence the individual's other aspects of life such as the educational development and success.

Furthermore, the results of tables 2 and 3 reveal that the mean of all the criteria has been obtained more than the average level (3). With regard to the mean and standard deviation of criterion of concordance with global design disciplines related to the first question (SD= 0.51, M= 4.58), second question (SD= 0.60, M= 4.28), applicability related to third question (SD= 0.69, M= 4.38), applicability related to fourth question (SD= 0.66, M= 4.27), innovation related to fifth question (SD= 0.83, M= 4.15), validity related to sixth question (SD= 0.74, M=4.38), acceptability related to seventh question (SD= 0.91, M= 4.19), it can be said that the criteria of concordance with global design



disciplines, applicability and validity respectively obtained the most mean and the criterion of innovation gained the least score.

In other words, from the experts' viewpoint, a conceptual model and proposed procedure have been evaluated for the parents' appropriate involvement. To clarify this finding, it can be said that the parents play an important role in their children's success. This matter is acknowledged in the case of children who are at early years of their education; since they correspond to their new environment and their personality is gradually formed (Castro, Expósito, Lizasoain, López, & Navarro, 2015). Accordingly, the parents' involvement in this period seems to be effective more than the other periods; since the family is like a network of information in which the parents and children reciprocally affect and interact with each other. The improper relationships between the child and parent and lack of interaction in the family and tensional events of life can affect the child and play an important role in the beginning or continuation of behavioral problems, or their control and modification. On one side, the behavior of children with behavioral disorders acts as a tensional actuator and influence the parents' behavior and child's interactions. With regard to the findings of research and experiences resulted from the execution of model of parents' involvement in primary schools, this model can be used as one of the executive strategies to achieve one of the great goals of fundamental reform document of education, i.e. "increase of public efficiency and involvement specially the case of family in development of education system". In addition, with regard to the content analysis of documents, framework, developmental programs and national and international experiences in the case of global design standards, the related organizations specially the education department and parent- teacher association are suggested to consider the parents' opinions in the decision makings related to the school and involve them in the school activities and regard some virtual rewards for their involvement.

## References

1. Abbaszadeh, M. & Yazdkhasti, B. (2007). Exploration of the elements effective in the students' parents involvement in school affairs of the high school students of East Azarbayjan. *Educational and Psychological Sciences Magazine of Shahid Chamran University of Ahvaz*, 3(4), 45-62.
2. Act of Fundamental Transformation in Public Official Educational System of Islamic Republic of Iran in Perspectives (2013). Tehran: High Council of Education Secretariate.
3. Akhter, N. (2016). Parent Teacher Interaction in Elementary Schools: Current Status and Issues. *Journal of Elementary Education*, 26(2), 01-13.
4. Amin Khandaghi, M., & Dehgani, M. (2010). Reflection on concentration, deconcentration, and return to concentration and investigating their denotations with regard to Iran's curriculum development system: A new perspective. *Educational Sciences and Psychology*, 11(2), 165-184.
5. Badri, M., Alnuaimi, A., Al Rashedi, A., Yang, G., & Tamsah, K. (2017). School children's use of digital devices, social media and parental knowledge and involvement—the case of Abu Dhabi. *Education and Information Technologies*, 22(5), 2645-2664.

6. Bardou, E., Roussel, N. O., Safont-Mottay, C., Lescarret, O., Deslandes, R., & Rousseau, M. (2012). Predictive factors of adolescents' parental involvement in homework: A comparative study France-Quebec. *Pratiques psychologiques*, 18(3), 283-298.
7. Bhardwaj, P., Bhardwaj, N., Mahdi, F., Mahmood, S. E., & Srivastava, J. P. (2013). MEDICAL STUDENTS' PERCEPTION ON PEER ASSESSMENT: AN INNOVATIVE METHOD OF STUDENT CENTRED LEARNING. *National Journal Of Medical And Allied Sciences*, 2(1), 10-14.
8. Boonk, L., Gijssels, H. J., Ritzen, H., & Brand-Gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement. *Educational Research Review*, 24, 10-30.
9. Brien, K., & Stelmach, B. L. (2009). Parent-teacher interactions with schools and schooling: Legal and cultural contexts.
10. Castro, M., Expósito-Casas, E., López-Martín, E., Lizasoain, L., Navarro-Asencio, E., & Gaviria, J. L. (2015). Parental involvement on student academic achievement: A meta-analysis. *Educational research review*, 14, 33-46.
11. Cole, J. (2011). A Research Review: The Importance of Families and the Home Environment. National Literacy Trust.
12. Delavar, A. & Kooshki, S. (2017). Mixed method research. Tehran: Virayesh.
13. Desimone, L. (1999). Linking parent involvement with student achievement: Do race and income matter?. *The journal of educational research*, 93(1), 11-30.
14. Diseth, A. (2011). Self-efficacy, goal orientations and learning strategies as mediators between preceding and subsequent academic achievement. *Journal of Learning and Individual Differences*, 21(2), 191-195.
15. Duan, W., Guan, Y., & Bu, H. (2018). The Effect of Parental Involvement and Socioeconomic Status on Junior School Students' Academic Achievement and School Behavior in China. *Frontiers in psychology*, 9.
16. Dumont, H., Trautwein, U., Lüdtke, O., Neumann, M., Niggli, A., & Schnyder, I. (2012). Does parental homework involvement mediate the relationship between family background and educational outcomes?. *Contemporary Educational Psychology*, 37(1), 55-69.
17. El Nokali, N. E., Bachman, H. J., & Votruba-Drzal, E. (2010). Parent involvement and children's academic and social development in elementary school. *Child development*, 81(3), 988-1005.
18. Emerson, L., Fear, J., Fox, S., & Sanders, E. (2012). Parental engagement in learning and schooling: Lessons from research. A report by the Australian Research Alliance for Children and Youth (ARACY) for the Family-School and Community Partnerships Bureau: Canberra.
19. Epstein, J. L. (2005). Attainable goals? The spirit and letter of the No Child Left Behind Act on parental involvement. *Sociology of education*, 78(2), 179-182.
20. Epstein, J. L., Sanders, M. G., Sheldon, S. B., Simon, B. S., Salinas, K. C., Jansorn, N. R., ... & Hutchins, D. J. (2018). School, family, and community partnerships: Your handbook for action. Corwin Press.
21. Erten, İ. H. (2014). Interaction between academic motivation and student teachers' academic achievement. *Procedia-Social and Behavioral Sciences*, 152, 173-178.

22. Fan, W., & Williams, C. M. (2010). The effects of parental involvement on students' academic self-efficacy, engagement and intrinsic motivation. *Educational psychology*, 30(1), 53-74.
23. Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational psychology review*, 13(1), 1-22.
24. Frank, B., Enkawa, T., Schvaneveldt, S. J., & Torrico, B. H. (2015). Antecedents and consequences of innate willingness to pay for innovations: Understanding motivations and consumer preferences of prospective early adopters. *Technological Forecasting and Social Change*, 99, 252-266.
25. Goodall, J. (2017). *Narrowing the achievement gap: Parental engagement with children's learning*. Routledge.
26. Gündüz, G. F. (2018). The Investigation of Parents' Interactions and Their Children's Learning Levels at Parental Coaching Carried out over Social Network. *Universal Journal of Educational Research*, 6(3), 491-518.
27. Hasani, M. (2010). Guidelines for descriptive-qualitative evaluation in classrooms. *Abed*.
28. Hill, N. E., & Tyson, D. F. (2009). Parental involvement in middle school: a meta-analytic assessment of the strategies that promote achievement. *Developmental psychology*, 45(3), 740.
29. Ho, E. S. C., & Kwong, W. M. (2013). *Parental involvement on children's education: what works in Hong Kong*. Springer Science & Business Media.
30. Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education?. *Review of educational research*, 67(1), 3-42.
31. Hoover-Dempsey, K. V., Battiato, A. C., Walker, J. M., Reed, R. P., DeJong, J. M., & Jones, K. P. (2001). Parental involvement in homework. *Educational psychologist*, 36(3), 195-209.
32. Hosick, N. (2018). *Parent/Caregiver Involvement in 2018: Past Challenges and Future Possibilities in a Technology-rich Society* (Doctoral dissertation, University of Pittsburgh).
33. Ikemoto, S., Yang, C., & Tan, A. (2015). Basal ganglia circuit loops, dopamine and motivation: a review and enquiry. *Behavioural brain research*, 290, 17-31.
34. Ito, M., Baumer, S., Bittanti, M., & Cody, R. (2019). *Hanging out, messing around, and geeking out: Kids living and learning with new media*. MIT press.
35. Jahanian, R. (2009). Approaches on developing cooperations in educational units out of the perspectives of the principals of Tehran schools. *Educational Management Researches*, 1(1), 113-130.
36. Jaynes, W. H. (2017). A meta-analysis: The relationship between parental involvement and Latino student outcomes. *Education and Urban Society*, 49(1), 4-28.
37. Kabir, A. H., & Akter, F. (2014). Parental Involvement in the Secondary Schools in Bangladesh: Challenges and a Way Forward. *International Journal of Whole Schooling*, 10(2), 1-18.
38. Kaya, T., & Bicen, H. (2016). The effects of social media on students' behaviors; Facebook as a case study. *Computers in Human Behavior*, 59, 374-379.
39. Kim, S., & Fong, V. L. (2013). How parents help children with homework in China: Narratives across the life span. *Asia Pacific Education Review*, 14(4), 581-592.
40. Lefevre, D., & Cox, B. (2016). Feedback in technology-based instruction: Learner preferences. *British Journal of Educational Technology*, 47(2), 248-256.

41. Liu, D. (2016). Parental involvement and university graduate employment in China. *Journal of Education and Work*, 29(1), 98-113.
42. Marsh, J., Brooks, G., Hughes, J., Ritchie, L., Roberts, S., & Wright, K. (2005). # Digital beginnings: Young children's use of popular culture, media and new technologies.
43. Melhuish, E. C., Phan, M. B., Sylva, K., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2008). Effects of the home learning environment and preschool center experience upon literacy and numeracy development in early primary school. *Journal of Social Issues*, 64(1), 95-114.
44. Meng, C. (2015). Classroom quality and academic skills: Approaches to learning as a moderator. *School Psychology Quarterly*, 30(4), 553-563.
45. Nasiri, M. (2008). Parents' involvement in educational development and nurturing. *Peyvand educational periodical*, 342, 64-68.
46. Nikken, P., & Jansz, J. (2014). Developing scales to measure parental mediation of young children's internet use. *Learning, Media and technology*, 39(2), 250-266.
47. Nikken, P., & Schols, M. (2015). How and why parents guide the media use of young children. *Journal of child and family studies*, 24(11), 3423-3435.
48. Park, S., Stone, S. I., & Holloway, S. D. (2017). School-based parental involvement as a predictor of achievement and school learning environment: An elementary school-level analysis. *Children and Youth Services Review*, 82, 195-206.
49. Patel, S., Pelletier, J., & Bertrand, J. (2008). The Early Development Instrument as an evaluation and improvement tool for school-based, integrated services for young children and parents: the Toronto First Duty Project. *Early Education and Development*, 19(5), 773-794.
50. Perryman, K. L., Christian, D. D., & Massengale, B. D. (2017). The impact of a two-day child parent relationship therapy training on attitude, knowledge, and skills. *International Journal of Play Therapy*, 26(4), 218.
51. Sadler, P. M., & Good, E. (2006). The impact of self-and peer-grading on student learning. *Educational assessment*, 11(1), 1-31.
52. Scagnoli, N., & Willging, P. (2001). WEB-LIBRARY. In *Society for Information Technology & Teacher Education International Conference* (pp. 2791-2795). Association for the Advancement of Computing in Education (AACE).
53. Schaeffer, M. W., Rozek, C. S., Berkowitz, T., Levine, S. C., & Beilock, S. L. (2018). Disassociating the relation between parents' math anxiety and children's math achievement: Long-term effects of a math app intervention. *Journal of Experimental Psychology: General*. Advance online publication.
54. Sonck, N., Nikken, P., & de Haan, J. (2013). Determinants of Internet mediation: A comparison of the reports by Dutch parents and children. *Journal of Children and Media*, 7(1), 96-113.
55. Takeuchi, M. A. (2018). Power and identity in immigrant parents' involvement in early years mathematics learning. *Educational Studies in Mathematics*, 97(1), 39-53.
56. Topping, K. (2017). Parental involvement in reading: Theoretical and empirical background. In *Parental involvement in children's reading* (pp. 17-31). Routledge.

57. Vollmuth, A. J. (2015). Parental decision making and satisfaction regarding school choice programs in suburban districts.
58. Wentzel, K. R. (2014). Family functioning and academic achievement in middle school A social-emotional perspective. *The Journal of Early Adolescence*, 14(2), 268-291
59. Witte, A. (2015). Parent-teacher relationships across community types.