

Relation between Family Dynamics and Teachers' Practices with the Participation of Mothers in the Education of the Children

Angel Alberto Valdés Cuervo¹, Maricela Urías Murrieta¹, Teodoro Rafael Wendlandt Amezaga² & Gisela Margarita Torres Acuña¹

Abstract

The aim of the study was to determine the effects of family dynamics and the practices of teachers, in relation to the frequency with which the mothers reported to participate in activities related to the education of the children. For this purpose, an evaluation was carried out in four public primary schools of a municipality in the Northwest of Mexico, serving a population of low level economic income. As part of the study, 170 mothers were selected by means of a nonprobabilistic sampling. By using simple linear regression it was found that family dynamics, and the practices of teachers to involve the parents in education, explain a significant part ($R^2 = .67$) of mothers reporting participation in the education of the children. It was concluded that both variables exert a positive influence in the involvement of mothers in education.

Keywords: family; participation; education; and school

Introduction

Educational quality is a complex phenomenon that is related to the cognitive and socio-affective characteristics of the students as well as the particularities of their community, family and educational environments (Brunner & Elacqua, 2003; Cornejo & Redondo, 2007; Murillo & Román, 2011). One of the elements that relates to the effectiveness of an educational system is social participation, which refers to the intervention of individuals in the decision making with regard to the use of resources and the actions that are carried out by the different institutions and social organizations.

In Mexico, the importance of social participation is recognized as a tool to promote better functioning of the educational system, more accountability and greater quality in the students' learning. Since the legislation of the General Law of Education of 1993, the attention to social participation in education has been maintained as a constant in the different educational reforms carried out in the country, culminating in the signing of Agreement 535 published in the Official Journal of the Federation [Diario Oficial de la Federación] in 2010, where the general guidelines for the operation of the "School Council of Social Participation" (SCSP) were issued. Thus also, in the recent educational reform made by the current government (2012-2018), within the framework of the political movement called "The Pact for Mexico," the importance of social participation is recognized as a tool to strengthen the schools' autonomy.

The participation of families in education implies, on the part of these, to assume shared responsibilities with teachers, principals and other social members with the intention of creating conditions that facilitate the students to respond efficiently to the cognitive, affective, and social demands of schools (Ortiz, 2004; Epstein, 2011).

¹ PhD, Department of Education, Instituto Tecnológico de Sonora, calle 5 de febrero 818 sur, C.P. 85000, Ciudad Obregón, Sonora, México. Phone: +52 (644) 410-9000 ext. 2420, E-mail: angel.valdes@itson.edu.mx

² PhD, Department of Management, Instituto Tecnológico de Sonora, México.

This participation includes all those activities that families perform at home, at school and within the community to promote the academic success of their children and students in general (Daniel, 2011; Martiniello, 1999; Valdés & Urías, 2010).

Fantuzzo, McWayne, Perry & Childs (2004) describe three ways families participate in the education of their children: (a) focused at home, this category includes practices that, from within the household, seek to support the students' learning regarding the school's curricular contents; (b) focused at school, which includes the various ways in which parents support the functioning of the school, and (c) focused on communication, this category encompasses all the actions that are carried out by parents to improve their communication with teachers and other actors in the school context.

The importance of families' participation is associated to its relationship with the academic success of students. This is due to the fact that it favors a major intrinsic motivation towards learning, the development of verbal and reading skills, the persistence of attention in classes, a positive academic self-concept and less conduct problems in the classroom (Fan & Chen, 2001; Fantuzzo et al., 2004; Flouri, 2006; Hoover-Dempsey et al., 2005).

With regard to the study of factors associated with the participation of families in education, it is necessary to emphasize that although a large amount of work exists in the international domain, the situation is different in Mexico where it is an emerging issue in educational research. This was evidenced in a joint publication by the National Association of Universities and Institutions of Higher Education and the Mexican Council for Educational Research regarding the states of knowledge of Mexican research about "family, parenting and school performance" for the period 2002-2011, where only 12 publications relating to the participation of the families in education were identified (Valdés & Vera, 2013).

The studies realized in Mexico on the topic are mainly focused on the influence of aspects of a structural nature, such as the socioeconomic level and the schooling of fathers and mothers in their participation in education (Delgado, González, & Martínez, 2011; Moreno, Valdés, & Sánchez, 2008; Sánchez, Valdés, Reyes, & Carlos, 2010; Urías, Márquez, & Tapia, 2009; Valdés, Martín, & Sánchez, 2009). This despite the fact that the analysis of the effects on the participation of families of variables of a procedural nature is important because of the possibility of attenuating the negative effects of socioeconomic aspects and to be more susceptible to be modified by psychosocial interventions (Carlisle, Stanley, & Kemple, 2005; Epstein, 2011; Flouri & Buchanan, 2003; Knopf & Swick, 2008; Silas, 2008).

The present study was aimed at contributing to clarify the effect of procedural variables in the participation of parents in education, this within the context of Mexican public primary schools. In particular it was established as an objective to determine the effects of family dynamics and teachers' practices to involve the families in the frequency with which mothers reported to participate in activities related to the education of children.

Family dynamics comprise the ways in which the members of the family organize their interactions and integrate dimensions such as the parenting style, the processes of negotiation of family norms and the nature of the relationships between its members (Imaculada & Velasco, 2006; Mounts, 2002; Shamir, Schudlich, & Cummings, 2001; McHale, Waller, & Pearson, 2012). Research with respect to this variable shows the harmful effects of negative family dynamics in the cognitive and socio-emotional development of its members (DeDonno & Fagan, 2013; Sturge-Apple, Davies, & Cummings, 2010).

The teachers' practices involve parents in the activities that they perform to promote the relationship of parents with the school and to facilitate that they act as promoters of the children's learning. These actions of teachers lead to improve the relation with the families since they allow mutual understanding and generate confidence in parents, this because their involvement in children's education is perceived positively by schools and are taken into account in the decisions of the same educational institutions (Barnett, Gareis, & Brennan, 2010; Epstein, 2011).

The study is based on the assumption that family dynamics and teachers' practices to involve the families relate positively with the frequency of participation of mothers in the education of children and jointly explain a significant portion of the variance of this variable.

Method

Participants

For convenience, included in the study were four public primary schools from a municipality in Northwest Mexico. From a total of 300 students studying in the fourth, fifth or sixth-grades, 170 mothers who were married or living in a domestic partnership (*not married*) with the father of the student were selected by means of a nonprobabilistic sampling.

The average age of the mothers was 35.3 years ($SD = 4.3$), of which the majority (73.9%) did not have a higher level of studies. The reported average monthly income of these families was 8,890 Mexican pesos - around 665 U.S. dollars- ($SD = 3,500$).

Instruments

Parent participation in education. An adaptation was made to the original instrument developed by Valdés, Carlos and Arreola (2013) which in the end integrated 15 items by which to evaluate two forms of participation: (a) *focused at school*, where all the parents' activities to communicate and exchange information with the teachers were considered (e.g.: "You talk to the teacher about your child's learning"), and (b) *focused at home*, which integrates practices of parents aimed at strengthening the acquisition, from home, of learning the school's curriculum (e.g.: "You have conversations with your child about the exams at school").

The items were answered using a Likert-type scale with five options to respond, ranging from 1 (*never*) to 5 (*always*), where higher scores indicated greater participation. The reliability of the responses of the scales were measured by the Cronbach's alpha coefficient which obtained a value of .89, complying above the cut off limit of .70 required to be accepted.

Family dynamics. An adaptation to the instrument developed by Sánchez and Valdés (2011) was made, which measures the construct using two dimensions, each with six items: *authority*, which evaluates the agreement and the strategies used by parents to establish and enforce the rules (e.g.: "Both parents care about enforcing the agreed rules"), and *family relations*, which measures the quality of the interactions between the parents as a couple (e.g.: "I feel confident in my partner to talk about the children's problems").

The items were answered using a Likert-type scale with five options to respond, ranging from 1 (*never*) to 5 (*always*), where higher scores indicated higher quality of family dynamics. The reliability of the responses was measured using the Cronbach's alpha coefficient, which obtained a value of .92.

Teachers' practices to involve parents in education. To measure this construct, the instrument developed by Wendlandt, Valdés, Carlos, Urías and Tanori (2014) was used, which integrated 10 items grouped into three factors: (a) *parenting*, which is the teacher's actions aimed to improve the parenting practices of the parents (e.g.: "You provide guidance to parents about discipline methods"); (b) *communication with the school*, including all activities that are focused on promoting the interaction with the parents (e.g.: "You deliver reports about difficulties and academic achievements"); and (c) *collaboration with the school and community*, which includes promoting parents' participation in decision-making and the use of community services in support of the child's learning (e.g.: "It develops projects for volunteer parents to support the school and other parents").

The items were answered using a Likert-type scale with five options to respond, ranging from 1 (*never*) to 5 (*always*), where higher scores indicated higher frequency of teachers' practices to involve the parents. The reliability of the responses was measured using the Cronbach's alpha coefficient, which obtained a value of .88.

Procedure

Informed consent from school authorities was requested; subsequently, an invitation letter was sent to mothers through students where the objective of the study was explained and their voluntary participation requested, while ensuring the confidentiality of their responses. In a sealed envelope, the instruments were sent to the mothers who agreed to participate, which could be returned personally or be sent back with the children.

For the analysis of the results, a multiple linear regression model was used; this was conducted with support of the SPSS software, version 21.

Results

Relation between Family Dynamics, Disposition of the School and Participation of the Mothers in the Education of Children

Initially in the analysis, the existence of significant correlations was found between the perception of the mothers about family dynamics and teachers' practices to involve them, this with the frequency which was reported to participate in activities related to the education of children (see Table 1).

Table 1: Correlation between the Variables Involved in the Study

	Family dynamics	Teachers' practices
Participation of the mothers in education	.796*	.428*

* $p \leq .05$.

The general model resulting from the multiple regression analysis was significant, which allows us to affirm that the variables of "family dynamics" and "teachers' practices to involve families" are directly related to the frequency with which the mothers reported development activities that indicate their participation in the education of their children (see Table 2).

Table 2: Results of the Regression Model

Model	Sum of squares	df	F
Regression	9.417	2	33.61*
Residual	4.202		
Total	13.619		

* $p \leq .05$.

The results show that the participation of mothers in activities related to the education of children is positively related with the perception of positive family dynamics and the frequency of teachers' practices to involve families.

The coefficient of determination (R^2) presented a value of .67, which implies that the two independent variables involved, "family dynamics" and "teachers' practices to involve families," explained 67% of the dependent variable "participation of mothers in the education of children." In addition, it was observed that family dynamic explained the largest amount of variance of the dependent variable (see Table 3).

Table 3: Explained Variance of the Participation of Mothers by the Independent Variables of the Model

	Standardized Beta	t	95% CI
Constant		2.23*	[0.186 , 0.812]
Family dynamics	.735	7.03*	[0.515 , 0.937]
Practices of teachers	.248	2.37*	[0.132 , 0.428]

Note. $R^2 = .67$ ($N = 170$, $p < .01$); CI = Confidence Interval; *Durbin-Watson* = 1.536;

$F = 33.6$.

* $p \leq .05$.

Conclusions

The results made it possible to corroborate the hypothesis set for this research, in the sense that both family dynamics as well as the teachers' practices to involve the families, relate positively with the participation of mothers in the education of children, which is consistent with the findings of other studies on the subject (Barnett et al., 2010; Epstein, 2011; Newland, Chen, & Coyl-Sheperd, 2013). These findings show the need to focus on the study of the factors affecting the participation of families in education from an ecological perspective that considers the effects of the same variables relative to their family and school environments (Hoover-Dempsey et al., 2005; Hornby & Lafaele, 2011; Raty, Kasanen, & Laine, 2009).

The study suggests that the effects of family dynamics in the participation of mothers in the education relates to the fact that this affects the organization of the roles and the satisfaction with the interactions that occur within this context.

Although it is necessary to conduct further studies to establish solid statements regarding this situation, this may be originating due to the little support that mothers receive from other family members to meet the activities of supporting the learning of the child, and therefore their confidence and satisfaction therewith (Mo & Singh, 2008; Sturge-Apple et al., 2010).

Moreover, the findings regarding the positive influence of the teaching practices in the families' participation in the education of children reaffirm the findings reported in previous studies (Anderson & Minke, 2007; Barnett et al., 2010). This shows that schools possess powerful tools to strengthen participation in education, particularly when these actions are directed to develop parents in effective parenting.

It can be concluded that there are family and school factors that facilitate the participation of mothers in the education of their children, which means that interventions must be performed in the two systems if we are to broaden and make more effective families' participation in education. We believe that school should play an active role in this purpose, implementing actions to involve parents, and in particular, so that they develop skills to be able to participate effectively in the education of their children.

This study presents limitations concerning the size and location of the sample, which implies that its results should not be generalized to families living in other cultural and sociocultural contexts. Finally, it is important to recognize that due to the purpose of this research some personal characteristics of the students and mothers were not considered within the study, which leaves the possibility that they be taken into account in subsequent studies.

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