

The Effects of Family Social Capital on Student's School Achievements in Isfahan High Schools

M., Haghighatian, *Assistant Professor, Department of Social Sciences Islamic Azad University – Dehaghan Campus**

Abstract

In this paper, drawing on Coleman's concept of social capital and Bourdieu's concept of cultural capital, the effects of different components of family social and cultural capital (i.e. family expectations of student's academic aspirations, family involvement in student's academic activities,...) on academic achievement of high school students were studied. Using a questionnaire, data were gathered on the academic performance of 393 students who were selected (on the basis of cluster sampling) from different boys and girls high schools in the city of Isfahan in the academic year of 1385-86 (2006-7). Research findings showed that the coefficient of direct effect of capital (which included social and cultural capital) on academic achievement was 0.43 and that its difference from zero was statistically significant. Therefore, the major hypothesis of the study that family social and cultural capitals have a positive influence of academic performance was supported.

Key word: Family Social Capital, Academic Achievement, Family relationships, Parental Expectations, Parental Involvement, Family cultural capital

*Correspondent Author: 09131154449

Email: Mansour- Mansour Haghighatian@yahoo.com

Introduction and Statement of the Problem

In the competitive world of today, the acquisition of many occupations and social achievements is tied to the acquirement of higher levels of education; therefore, academic achievement and performance become particularly important. On the other hand, with regards to the issue of the effect of family background factors on children's academic performance, there is no consensus among researchers in this area. While some studies show that family background variables have a strong effect on student's school performance (Haveman, et. al., 1991:149), other studies have not reached such a conclusion (Kostakis, 1987:237). With regard to the influence of family background variables, most previous studies have focused on the effects of family economic and cultural capitals. Economic capital usually refers to family income or wealth and physical resources and facilities that enhance learning, while cultural capital refers to family members' level of education which can potentially provide a conducive educational environment for students (Buchmann and DiPrete, 2006:517). In 1988 James Coleman introduced a third factor named social capital which, as an intermediary factor, facilitates or enhances the effects of economic and cultural capitals. Family social capital refers to the quality of relationships between children and parents, such as the amount of time that parents spend on their children's academic work or that whether and to what extent, parents encourage their children to do their homework or be academically ambitious. Unfortunately, this aspect of social capital has not received much attention in Iran. Most of the studies on social capital that have been done in Iran, utilizing indices like interpersonal trust, institutional trust, participation in political elections or in social events, have focused on factors that enhance or bring about social capital (Azkia and Ghafari, 2004; Mazloom-Khorasani

and Asgharpour-masooleh, 2005), or using these same indices, have studied the effects of social capital on social identity (Fatehi, 2005), or on the reduction of social pathologies (Khakpour and Piry, 2005). In view of this situation and since contradictory results have been obtained (to be discussed in the following section), this study focuses on the effects of family social and cultural capitals on student's academic achievement.

Review of Literature

In a longitudinal project, Haveman, et. al. (1991) studied childhood events and circumstances that influence the academic performance of 1258 students in 1968 when they were four years old and then looked at them again in 1987 when they were 19, and found that parents' education and mothers' employment had positive and significant effects on students' academic performance. The positive effect of mothers' employment was attributed to the extra income which that employment contributed to the family income. Frequent residential moves and family poverty were negatively related to academic performance. It was thought that frequent residential moves weaken social ties with neighbors (p.151).

Useem (1992) studied the effects of parental involvement in children's placement in math groups. She interviewed the mothers of 86 students and differentiated family involvement into the following categories: (1) propensity of parents to be knowledgeable about their children's placement; (2) the extent to which parents are integrated into school affairs and parental information networks; (3) the extent to which parents intervene in educational decisions that school personnel make for their children; and (4) the extent to which they exert an influence over their children's preferences for courses. Their findings indicated that parental education had significant, positive influence on children's placement in mathematics and family involvement

had independent, positive effect on children's placement (p. 275).

Kostakis (1987) who studied the effects of family variables on 1712 Greek ninth-grade students achievements in physics and literature, found that family education and father's occupational prestige explained only about 5-6 percent of the variance of the dependent variable (i.e. students' score on physics and literature sections of the National Entrance Examination to the General Lyceum). School variables such as class size, school facilities, teachers' experience and specialization explained about 10 percent of the variance of the dependent variable. The author concludes that the fact that a large amount of the variance of the dependent variable remains unaccounted for implies that other factors such as students' ability, prior knowledge and achievements, attitude and other factors are also influential factors that can affect school performance (p. 237).

Meier (1999) studied the influence of social capital on school achievement and the decision to stay in or drop out of school among 9000 high school students. Social capital included (a) forms (family structure, going to religious school, and residential stability); (b) quality (intergenerational closure, extracurricular activity participation, and parental involvement in school); and (c) assistance (parent-child relationship and student-teacher relationship). School achievement was measured by grade point average, supervision from school in the past year and dropping out of high school. Results showed that all aspects of family social capital had positive effects on academic achievement. The negative impact of residential instability was somewhat nullified by strong parent-child relations and the negative impact of being from a single-parent family was somehow compensated for by parent-teacher relations (p.22).

The relationship between family social capital and children's school performance has not received

adequate attention in Iran. Most of the studies that have been done about educational achievement have studied the impact of socio-economic factors on educational performance (Pahlavani-sadegh, Farzad and Naderi, 2006; Jalali, 2007) or have considered personal and/or institutional factors as independent variable (Abedini, 2008; Jahanseir, et. al., 2007; Khalil-azar, 2007; Lotfi-azimi, 2006). Only a few number of studies are relevant to our subject. A review of these researches will follow.

Noghani (2007), utilizing a sample of 1667 male and female students attending public and private schools in Khorasan province in the academic year of 1380-81 (2001-2) studied the impact of family economic, social, and cultural capitals and also the student's academic background on the likelihood of passing the national university entrance exam. The findings showed that of the independent variables, only family social capital did not have a significant relation with the dependent variable ($p=0.15$) (p.93).

Samiei (2000) examined the effects of family social, economic, and cultural capitals on children's academic and occupational achievements of 157 male and female students in Tehran and found that respondents' social capital was relatively low (37.4 percent) and that the relationship between social capital and academic achievement was low (0.07) and insignificant.

Neisi, Najarian, and Pour-faraji (2001) compared the role of social support on the academic performance, mental and physical health of 200 students with and without father in the city of Ahwaz. The impact of social support from friends and from family were considered. The results showed that, if the impact of social support as an intermediary variable was not taken into account, there was no significant relationship between physical and mental health and academic achievement. But for students lacking a father, there was a significant relationship between

physical and mental health and academic performance (p.83).

In view of the contradictory results that have been found, it was believed that the present research might shed some light on the relationship between family social capital and academic achievement.

Theoretical Perspectives Social Capital

Social capital, as the totality of valuable resources which can potentially benefit the members of a group is a concept that has gained widespread acceptability in recent decades and includes positive social phenomena like honesty, cooperation, trust, and solidarity. It should be acknowledged that there is no consensus about the exact nature and the components of social capital. While some like Coleman (1998) and Putnam (1995) consider it as a collective phenomenon, some others like Astone, et. al. (1999) and Harpham, et. al. (2004) see it as basically an individual level phenomenon; whereas some like Coleman (1988) or Putnam (1995) view social capital as basically positive, some others like Portes (1998) and Fukuyama (1999) accept that social capital can also be negative. While many consider social capital as essentially a composite thing, some others like (Paxton, 1999) and Harpham, et. al. (2004) assert that social capital has a structural component (networks, associational life and civic participation) and a cognitive component (perceived support, trust, and social cohesion) which can analytically be differentiated from each other, and still, some others like Pawar (2006) believe that combining "social" with "capital" is essentially incorrect. Nonetheless, since many studies have found that groups and collectivities that have higher levels of social capital have lower rates of some social problems or have higher levels of development and progress, investigating the effects of family social capital on children's academic performance can be valuable. To avoid the complexities that

can arise from reviewing all viewpoints about social capital, only the views of Coleman and Bourdieu, which are germane to this study, will be briefly considered.

Coleman (1998; 1990) in criticizing studies that have looked at the effects of different variables on student academic achievements claims that family background is considered a single entity, while it is analytically separable into financial capital (family income or wealth), human capital (parents' education), and social capital which refers to the extent and quality of relations between parents and children which can facilitate the transfer of parental financial and human capital to children's academic achievements. In Coleman's view, parental human capital "may be irrelevant to outcomes for children if parents are not an important part of their children's lives, if their human capital is employed exclusively at work or elsewhere outside the home" (Coleman, 1988:s110). In his view, the number of children, parental supervision of and involvement in children's academic activities are aspects of family social capital that children can potentially utilize.

Family Involvement in Children Academic Work

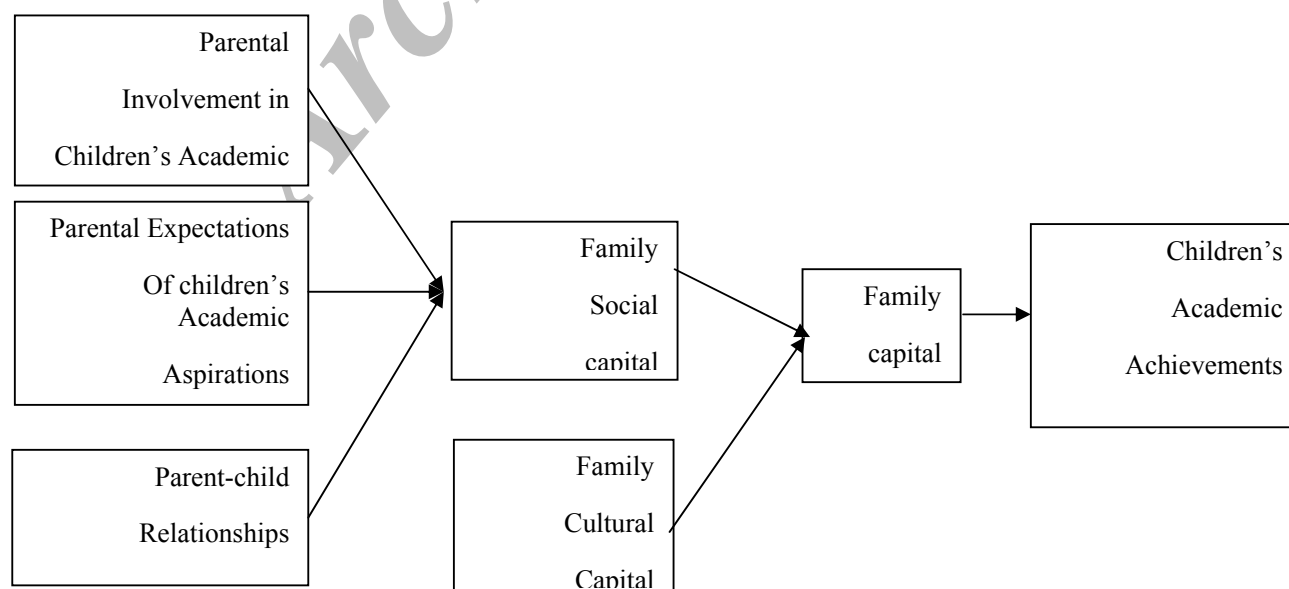
There are two general perspectives concerning the difference among families in getting involved in and being sensitive to their children's academic activities. The proponents of "culture of Poverty" claim that the lower-class and working-class families do not value education as highly as middle-class families and in word and deed, do not encourage their children to be academically ambitious and do not spend much of their time and energy in involving themselves in their children's academic activities (in Lareau, 1987:73).

The other perspective draws on Bourdieu's (1983) concept of cultural capital and states that different institutions of society, including educational ones, play an important role in the reproduction of the status quo. Bourdieu asserts that there are four forms of capital: economic, cultural, social and symbolic. Cultural capital refers to ways of thinking, dispositions and habits that are acquired through socialization and schooling and are manifested in three forms. (1) The embodied form refers to skills and abilities of the individual like social skills and/or knowledge in math, (2) the objectified form refers to cultural goods such as books, dictionaries, pictures, etc. that are the traces or realization of theories, problematics, etc.; and (3) the institutionalized form which refers to educational qualifications and certificates that are legally sanctioned (Bourdieu, 1983:244-48; Zanjani-zaded, 2004:36). Bourdieu (1983:243) asserts that the different forms of capital are convertible to each other and that the content of the dominant schooling is the culture that corresponds to the dominant classes of the

society. Furthermore, and this is what informs this article, some norms like that parents can and should involve themselves in the academic activities of their children or that parents can and should be in touch with school officials are in fact part of the culture that middle and upper classes of society acquire through pursuing higher education and then pass it on to their children.

In this article, drawing on the ideas of Bourdieu that families try to reproduce their own advantages for their children and drawing on Coleman's concept of social capital as the mechanism through which this reproduction occurs, the influence of some components of family social and cultural capitals on children's academic achievement is examined. In this regard, it is hypothesized that family education, good parental relations with children, parental involvement in children's academic activities and having high academic expectations of children will have positive effects on children's academic performance. Figure (1) shows this relationship schematically.

Figure (1): Analytical model of the paper



Research Methods

The research population of the study consisted of all male and female students who attended high school in the city of Isfahan during the academic year 1385-86 (2006-7) of which (based on Cochran's formula with $p=0.3$ derived from a pilot study of 30 students and by using cluster sampling) 203 girls and 190 boys were selected. Two male and two female schools were selected from each of the five school districts of Isfahan and then the questionnaires were randomly distributed among different class levels and majors. The first part of the questionnaire contained some background and demographic questions and the second part contained Likert-type questions concerning the different components of social and cultural capitals. Social capital consisted of the following three components: (1) Parental involvement in children's academic activities which was measured by 11 questions like "How often do your parents visit your school to become informed of your school activities?" or "my parents supervise the kinds of books and material that I read". Cronbach alpha for this item was 0.68. (2) Family expectations concerning children's educational aspirations that was measured using 5 questions such as "How far do your parents

expect you to continue your education?" or "my parents encourage me to continue my education". Cronbach alpha for this item was 0.78. (3) The quality of parent- children relations which was measured by 12 questions like "when facing a problem, I can communicate that with my parents" or "In our family, we can easily consult with our parents". Cronbach alpha for this item was 0.79. Family cultural capital was measured using 6 questions that included father's education, mother's education, availability of a library at home, and having an independent room for study. Cronbach alpha of this item was 0.69. The overall alpha of the questionnaire was 0.84 and its validity was assessed by consulting some experts on the issue. Academic achievement was measured by students' grade point average. Structural equation modeling, using Amos:18 was utilized to test the relations between independent and the dependent variables.

Findings

Table (1) shows frequency distribution and percent of respondents by some variables to present a descriptive picture of the families of the sample .

Table (1) Distribution of Respondents by Certain Variables

Variable	Items	F	%	Variable	Items	F	%
Who to turn to in tims of trouble	Father	37	9.4	Mother's Education	Less than high school	193	49.1
	Mother	179	45.5		high school Diploma and Associate deg.	153	38.9
	Brother or sister	50	12.7		B.S.	32	8.1
	Friends	77	19.6		M.S. and above	2	0.5
	Others	50	12.8		No Response	13	3.3
Parents living together	Yes	371	94.4	Mother's occupation	Home - maker	349	88.8
	No	22	5.6		Employed	44	11.2
Number of children in the family	1	64	16.3	Family monthly income (in thousand Tumons)	Less than 200	73	18.6
	2	110	28		201-350	136	34.6
	3	91	23.2		351-500	87	22.1
	4	48	12.2		501-700	40	10.2
	5	34	8.7		700 and above	34	8.6
	6 and above	36	9.1		No Response	23	5.8
Parents visiting school	Twice a month	19	4.8	Father Education	Less than high school	147	37.4
	Once a month	57	14.5		high school Diploma and Associate deg.	183	46.5
	Once every two month	67	17.0		B.S.	39	9.9
	two or three times a yaer	147	37.4		M.S. and above	14	3.6
	No visits	101	25.7		No Response	10	2.6
majors	Humanities	51	13				
	math	115	29.3				
	Sciences	143	36.4				
	No response	84	21.4				

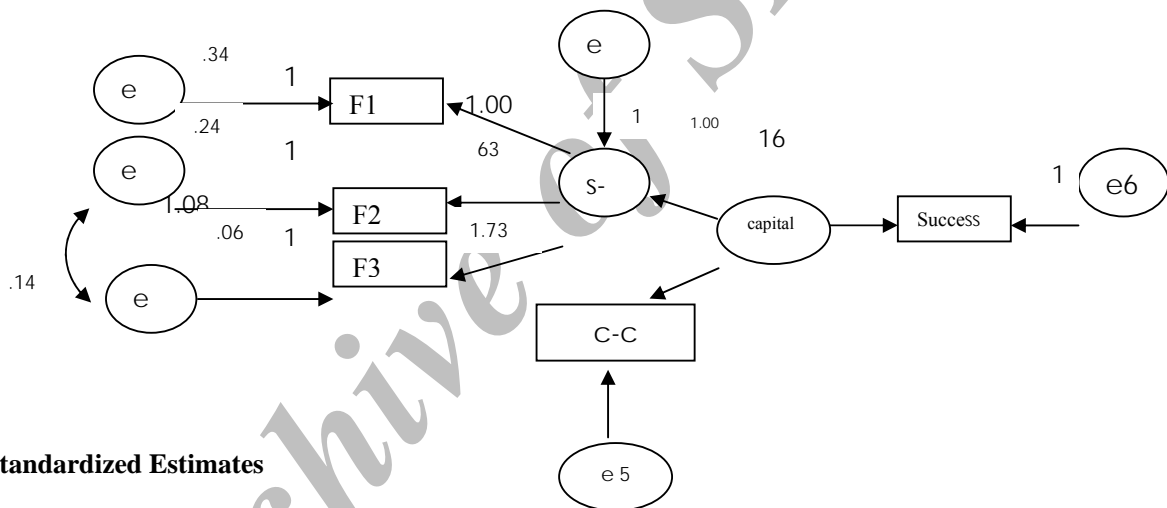
came mainly from middle to lower class families. That is, considering the requirements of modern day societies, a high percentage of parents have relatively low levels of education and income. More than half of the families had a monthly income of 350 thousand tumans (approximately \$380) which does not amount to much for a large city like Isfahan. Most families were intact and relatively small (more than 44 percent of the families had only two children).

In this model, capital as the exogenous construct that affects educational achievement as the endogenous variable. The construct of capital included four sub-scales (parental involvement; family expectations; parent-children relations; and family cultural capital). Capital was defined as a second-order factor model such that it assumed a more fundamental role than social capital and cultural capital. Figure (2) shows the two variants of this model.

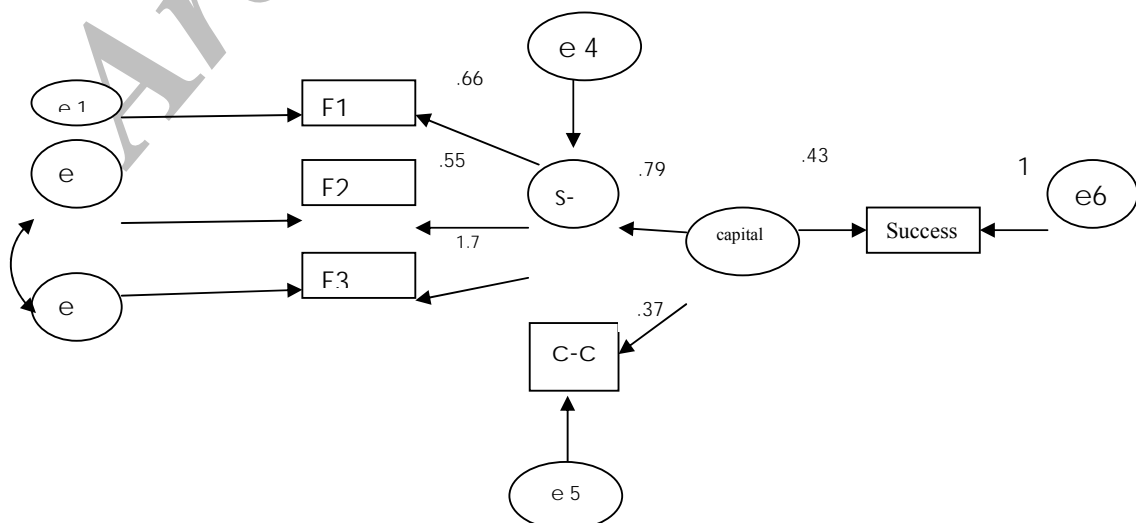
Structural Equation Model

Figure (2): Structural Equation Model for the Determination of Student's Academic Achievement

A) Non – standardized Estimates



B) Standardized Estimates



The results indicate that the major hypothesis of the study, that family social and cultural capitals positively affect academic achievement was supported. Amos numbers in section B of Figure (2) show that: a) of the three items of social capital, parent-children relations ($\lambda = 0.74$), parental involvement ($\lambda = 0.66$), and parental expectations ($\lambda = 0.55$) respectively, had the most weight in defining social capital; b) the construct social capital ($\lambda = 0.79$) had more weight than cultural capital ($\lambda = 0.37$) in defining the construct of capital, and c) the impact of family capital on

academic achievement was relatively strong ($\gamma = 0.43$).

According to Table (2), the critical values ($C.R. > 1.96$) for all estimated parameters show that all parameters including factor loadings for latent constructs as well as the coefficient of direct effect of the independent variable on the dependent variable were significantly different from zero and that the obtained results, can be generalized with a confidence interval of 0.95 to the research population.

Table (2) : standardized and non-standardized Estimates for free parameters of the model

	Estimate	S.E.	C.R.	p	label
Social capital	1000	Referent Variable for construct "capital"			0.79
Involvement	1000	Referent variable for construct "social capital"			0.66
Expectation	0.631	0.109	5.814	0.000	0.55
Relationship	1.733	0.228	7.603	0.000	1.043
Cultural capital	0.542	0.181	2.993	0.003	0.375
Academic Achievement	1.079	0.356	3.029	0.002	0.428

And finally, fitness indices that were used for the hypothesized model that are presented in Table

(3) indicate that the research data strongly support the theoretical model.

Table (3) : selected Indices for Goodness of fit

Symbols	Indices of fit	Quantity Amount Value	Acceptable range
CMIN/DF	Relative χ^2	3.104	Less than 5
GFI	Goodness of fit Index	0.990	0.95-1
AGFI	Adjusted Goodness of fit Index	0.952	0.95-1
TLI	Tucker – Lewis Index	0.948	0.95-1
CFI	Comparative fitness Index	0.985	0.95-1
RMSEA	_____	0.073	0.0-0.08

Discussion

The results of this study show that good parent-children relations as well as involvement in and having supervision of children's academic activities will have positive and significant effects on their academic achievements. It seems that mothers play a more important role. The fact that 88.8 percent of mothers were homemakers (note too that more than half of the mothers had finished high school or were college educated) means that they could have enough time to involve themselves in their children's school work. Furthermore, the fact that 45.5 percent of the respondents had stated that they would turn to their mothers in case of having a problem (compared to 9.4 percent who would turn to their fathers and 19.6 percent that would turn to a friend) is indicative of the role that mothers can play. These results confirm Useem(1992:265) findings that eighth grade students consult more with their mothers than with their teachers, fathers, or school counselors about academic matters. These also correspond with Azad-

armaki(2005:580) findings that "according to [our] statistics, of the three generations that were studied, the third generation members usually turn to their mothers for empathy and problem-solving".

Family expectations regarding children's academic aspirations, according to Coleman, is among the important components of family social capital. That is, families that expect their children to pursue higher levels of education would encourage their children to study "harder" subjects like math and the sciences, and also supervise their studies and provide them with more learning related facilities and opportunities. The findings of this study are in line with those of Useem (1992:264) in supporting this assertion. Also in this regard, Lareau (1987:81) found that "In the working-class community, parents turned over the responsibility for education to the teacher. Just as they depended on doctors to heal their children, they depended on teachers to educate them. In the middle-class community, parents saw education as a shared enterprise and scrutinized, monitored,

and supplemented the school experience of their children".

In this study, social capital exerted more influence on academic achievement than cultural capital. This contradicts Noghani's (2007:94) findings that when family economic capital, cultural capital, and student's prior academic achievements are sufficiently available, family social capital plays no important role in the likelihood of passing the national university entrance exam.

Conclusions and Suggestions

The findings of the present research support the notion that social capital, in the forms of cultural practices of encouraging children to be academically ambitious, persevering, and hard working, can have positive influence on their achievements. Also important in this regard is getting involved in and having supervision over children's academic performance. In this study, 25.7 percent of parents did not visit their children's schools at all and 37.4 percent only visited "two to three times a year". Given that 88.8 percent of mothers were homemakers; this does not seem to be adequate. Considering the fact that many studies have shown that teachers would, usually unknowingly, pay more attention to and call upon the students whose parents are more in contact with schools, it would be appropriate that school officials arrange for meetings in which the results of such researches are brought to the attention of parents and also pave the way for more parent-teacher relations. Also in this regard, school officials could play an active role in the activities of Parent-Teachers Associations where parents can get to know each other and share their experiences. And finally, given that contradictory results have been found regarding the association of family social capital and children's school performance, more work should be done to find out the exact relationship between these variables.

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