Parent-Teacher-Student Discrepancies in Academic Ability Beliefs: Influences on Parent Involvement

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Abstract

Most studies examining influences on parent involvement focus on common demographic factors, such as social class or gender, and on elementary grades. In the present study, we investigated a more malleable influence, perceptions of ability, in the context of middle school. We examined how perceptions held by parents, teachers, and students concerning students' academic abilities affected parents' involvement and teachers' facilitation of school programs for involvement. We considered differences between parents who spoke Spanish or English in our sample drawn from two low-income, urban middle schools with a large Latino population. We also examined how involvement and programs are related to discrepancies in perceptions of children's academic abilities between parents, teachers, and students. In general, as discrepancies increased between parents and teachers or between parents and students, parents tended to be less involved and teachers tended to facilitate fewer programs for parent involvement. Furthermore, significant differences in involvement were found between Spanish- and English-speaking parents related to parent–teacher discrepancies in perceptions of students' general scholastic abilities and to parent-student discrepancies in students' math abilities. This study indicates that perceptions of student ability held by teachers, parents, and students have an influence on parents' and teachers' actions regarding family and school partnerships. It also underscores the importance of clarifying how beliefs are indirectly communicated in order to improve our efforts to promote collaboration.

Key Words: parents, teachers, students, beliefs, discrepancies, academic ability, perceptions, middle schools, practices, involvement, urban, programs, facilitation, Latino, Spanish, English, language, math, partnerships, communication, collaboration, family, families

Introduction

Overview

Educational practitioners and policymakers continually seek ways to increase and maintain parent participation and interest in their children's academics, stemming from decades of research supporting the benefits of such involvement. Benefits range from enhancing students' academic success (Fan & Chen, 2001; Jeynes, 2003; Juang & Silbereisen, 2002; Kenny, Gallagher, Alvarez, & Silsby, 2002) to creating more positive academic self-beliefs and behaviors (Hoover-Dempsey & Sandler, 2005; Juang & Silbereisen, 2002; Sanders, 1996). In order to successfully promote parent involvement, we need a better understanding of factors that facilitate or impede cooperation and collaboration by parents and teachers.

To date, much of the literature has focused on common demographic factors, such as social class, ethnicity, and gender (see Jeynes, 2003 meta-analysis) and on elementary grade levels (Boethel, 2003). In the present study, we investigated a more malleable influence, perceptions of ability, in the context of middle school. We examined how perceptions held by parents, teachers, and students concerning students' academic abilities affected parents' involvement and teachers' facilitation of school programs for involvement. We considered differences between Spanish- and English-speaking parents in our sample drawn from two low-income, urban middle schools with a large Latino population.

Going beyond the question of how perceptions affect parent involvement and school programs, we also examined how involvement and programs are related to discrepancies in perceptions of children's academic abilities between parents, teachers, and students. Exploring these differences is particularly intriguing given previous research revealing parents' tendency to overestimate their children's academic and developmental abilities (Pharis & Manosevitz, 1980 as cited in Miller, 1988), which often conflict with teachers' more accurate accounts (Miller & Davis, 1992). For example, Ames and Archer (1987) found mothers' judgments to be less accurate, especially if they did not hold performance-based goal orientations for their children, while Miller and Davis (1992) noted that though parents and teachers overestimated students' abilities, it was more pronounced among parents.

While these studies clearly illustrate the discrepancies between parents' and teachers' perceptions of students' abilities, they provide little insight into any actual effects of the perceptions, accurate or otherwise, on children's academic progress. In a more recent study, Msengi (2007) suggested that a lack of shared understanding among parents, children, and teachers regarding perceptions of students' reading abilities and activities was related to students' actual reading levels. When the families and teachers were in agreement, students' reading levels were at or above the class average. Our present research examined agreement among parents, children, and teachers regarding students' abilities, with a focus on its relationship to parents' participation in their children's education and to teachers' facilitation of programs for parents' participation. We expected that larger parent—teacher and parent—student discrepancies in beliefs would be related to greater social distance between the groups as measured by parents' reports of their involvement and teachers' facilitation of school programs.

Theoretical support for our research comes from Epstein's theory of overlapping spheres of influence (Epstein, 2001). Accordingly, parent involvement is a function of interinstitutional interactions between the family, school, and community and the philosophies, experiences, and practices embedded within each. The influences of these three spheres overlap and are integral to the development of the child. Time, the fourth factor, reflects an individual's age and grade level, as well as the historical time during which development occurs. At varying times, the forces will either become closer with more overlap or pull further apart resulting in less overlap.

The overlapping spheres are commonly drawn apart by individuals' familial practices and developmental characteristics, as well as historical and policy contexts, all of which create fewer opportunities and incentives for shared activities (Epstein, 1996). Consequently, rather than reinforcing shared goals, families and schools tend to be disconnected in their teaching (Epstein, 1990). Children often get lost in the discontinuity between the values and norms promoted at school and those which are supported by their families (Coleman, 1988). In contrast, greater family-school overlap in goals and practices creates more collaboration and partnerships by closing the social and psychological distance between family and school members (Epstein, 1996). Students are then more likely to receive common messages through common patterns of communication, reinforcing social norms associated with educational success and promoting academic success itself (Msengi, 2007). The congruity in values and sanctions on behavior increases the amount of information that can be shared among the social networks linking schools, families, and communities (Coleman, 1988; Epstein, 1996).

Epstein posits that the interinstitutional interactions reflect six modes of parent involvement: parenting (developmental support), school–home communication, school-based volunteerism, home-based activities, participation in school governance, and the use of community resources. Parents are not expected to initiate all forms of involvement nor to participate in them in isolation. Partnerships require that schools, families, and communities work in conjunction with one another to ensure children's academic success (Epstein, 2001).

Parent Involvement in Middle School

The research on parent involvement and teacher communication in middle school is limited but generally suggests that both activities decline significantly from elementary school, creating greater social distance between families and schools. There is a greater likelihood for elementary school teachers to have strong communication practices in place and to demonstrate more effective inclusion of parents at school and at home with homework (Dauber & Epstein, 1993). On the other hand, middle school teachers use fewer specific communication practices and communicate less often and with fewer families (Epstein & Dauber, 1991, Vaden-Kiernan & McManus, 2005). They also provide more limited information regarding student expectations and how parents can help with homework (Van Voorhis, 2003), leading to a deficit of parent involvement (Epstein, 2001).

It appears that parents' perceptions of this lessening communication impacts their decisions to become involved, as noted in the framework of involvement by Hoover-Dempsey and Sandler (1995, 1997). In an example of this, Balli, Demo, and Wedman (1998) found that teachers could influence parents of middle-schoolers to become involved with homework by directly inviting them or by influencing students to invite parents. Their findings relating to math homework and middle school students indicated that families receiving prompts to be involved directly from the teacher or from the students were significantly more involved in math homework activities than those families receiving no prompts. Van Voorhis (2003) similarly reported significantly higher amounts of parent involvement from parents who received direct requests to interact with their children on their homework.

These studies reinforce the necessity for continuous and open communication on behalf of the schools to facilitate parent involvement. Fargnoli's (2004) study reinforces this as it also showed that parents recognized the need to be involved with their adolescent children and to support learning at home. They also wanted to maintain communication with their children's teachers and were willing to use alternative methods than those used at the elementary level.

Although research demonstrates that middle school teachers generally provide fewer invitations, we cannot draw a parallel with their actual beliefs about parent involvement. Pelco and Ries (1999) reported that elementary, middle, and secondary school teachers (99%) "agreed or strongly agreed that parent involvement is important for a good school and that parent involvement can help teachers be more effective with more students" (p. 269). However, elementary school teachers reported significantly higher levels of actual personal support for parent involvement than did middle school teachers. Despite the high expectations for parents to be supportive, the majority of teachers felt that parents provided only minimal to some support for family—school collaborative efforts, and that parents' roles in school decision-making needed to increase. The majority of the middle school teachers (60.5%) believed that parents did not want to be involved in their children's education more than they were currently.

To explain their results, Pelco and Ries (1999) used Hoover-Dempsey and Sandler's (1995) framework of why parents become involved in their children's education to propose a comparable model of why teachers involve parents. The framework includes the need for teachers to "perceive opportunities, invitations, or demands from their students, their students' families, their schools' administration, and/or the community for such initiatives" (p. 273). As Epstein's theory asserts, communication must stem from both the family and the school. It is important for both parents and teachers to receive invitations for collaboration (Hoover-Dempsey & Sandler, 1995, 1997; Pelco & Ries, 1999).

Parent Involvement and Ethnicity

When middle school teachers communicate less with parents, they also receive less information from parents. This can create misunderstandings about the ways by which parents can and do participate with their children. Consequently, parents' reports of actual family involvement are commonly inconsistent with school reports of family involvement. These inconsistencies are greater for schools with larger minority populations (Boethel, 2003).

Research shows that the vast majority of parents from all ethnic groups support their children's learning at home in a variety of ways, reflecting differing cultural patterns (Catsambis & Garland, 1997; Desimone, 1999; Onikama, Hammond, & Koki, 1998; Pena, 2000; Ramirez, 2003). While there are important differences in parenting styles among ethnic groups, the basic mechanism of support and scale of impact with regards to parental influences is constant across all ethnic groups (Desforges & Abouchaar, 2003). Despite prevalently cited research (Coleman, 1987; Delgado-Gaitan, 1991), minority families are repeatedly found to be highly interested in their children's

education and to hold high expectations for their academic success (Boethel, 2003; Mapp, 2002).

As Azmitia and Cooper (2002) explained, it is more common for White, higher-income parents to participate in activities held at school. Minority parents, who are less visible at school, are often perceived as not valuing or being interested in education. Consequently, their involvement is often underestimated by teachers who focus on direct school participation, such as volunteering. For instance, Azmitia and Cooper reported that teachers rated White parents as being significantly more involved than Latino parents even though both were equally involved at home. These results parallel other research showing that parents who are ethnic minorities are no less participatory than their White counterparts (Ho & Willms, 1996), and misconceptions related to this may be due to White parents' tendency to be more active in the school building (Griffith, 1998).

Data from the *Parent and Family Involvement in Education Survey of the* 2003 National Household Education Surveys Program (weighted sample size 51,394,188) indicated that, in fact, there are differences in school communication practices and opportunities for parent involvement between English-speaking and Spanish-speaking households. A greater percentage of students in English-speaking households than in Spanish-speaking households had parents who reported receiving personal notes or emails about the student (50% versus 40%) and newsletters, memos, or notices addressed to all parents (92% versus 82%). They also reported more opportunities to volunteer (88% versus 58%) and to attend general meetings (97% versus 89%) and school events (78% versus 65%). Differences were still apparent after taking poverty status into account (Enyeart, Diehl, Hampden-Thompson, & Scotchmer, 2006).

Research Purpose and Hypotheses

The purpose of our research was to examine how parents', teachers', and students' perceptions of the students' abilities affect parents' reports of their involvement and of school programs to facilitate their involvement. This went beyond the commonly measured demographic characteristics, although we also examined our results by language groups. Extending our investigation further, we explored how parent involvement and school programs were related to discrepancies in perceptions of abilities. We based our research on the theoretical framework of overlapping spheres developed by Epstein (2001). Using this theory, we suggested that discrepancies in perceptions of students' abilities may result in less overlap between the family and school and thus less involvement and fewer school programs for parents.

Our first set of hypotheses was derived from research that suggests that English- and Spanish-speaking parents are involved in distinctive ways (Catsambis & Garland, 1997) and that schools interact differently with parents of diverse cultures (Enyeart et al., 2006). Furthermore, we considered the research suggesting that as students increase in grade level, parent involvement declines (Epstein & Dauber, 1991; Vaden-Kiernan & McManus, 2005; Van Voorhis, 2003). Therefore, we hypothesized that differences would exist between English- and Spanish-speaking parents' reports of their involvement and that parent involvement may vary as a function of their children's grade level. In a parallel manner, we hypothesized that differences would exist between English- and Spanish-speaking parents' reports of school programs for involvement and that school programs may vary as a function of children's grade level.

Our second set of hypotheses was based on research suggesting that parents' and teachers' estimations of students' abilities are often conflicting (Miller & Davis, 1992), which result in less collaboration (Epstein, 1996). We hypothesized that greater parent—teacher differences and parent—student differences would predict less involvement by parents and fewer school programs facilitated by teachers.

Our final set of hypotheses built upon the first two. We hypothesized that discrepancies in perceptions of students' abilities by parents, teachers, and students would be correlated with more specific types of involvement practices: volunteerism, parenting, and learning at home on the part of the parents, and communication, invitations to volunteer, and facilitation of learning at home on part of the teachers. More specifically, we hypothesized that these correlations would vary for English- and Spanish-speaking parents.

Methodology

Participants

We recruited participants from sixth, seventh, and eighth grade regular education classes in two K-8 public schools in a large, urban area in the Southwest. Both are designated as Title I schools and serve ethnically diverse student populations. We invited 437 parents/guardians and their children to participate. We received an overall return rate of 41%. Thirty-nine percent of those were completed in Spanish. Frequency distributions are represented in Table 1. Additionally, 12 teachers, 6 self-contained sixth grade teachers as well as 3 math and 3 English/language arts (ELA) teachers at the seventh and eighth grade levels, were asked and agreed to participate.

Measures

School and Family Partnerships: Survey of Parents in Elementary and Middle Grades

We administered the School and Family Partnerships Survey (SFPS), created by the Center on School, Family, and Community Partnerships at John's Hopkins University (Epstein & Salinas, 1993), to obtain parents' reports of their involvement and of school programs to facilitate their involvement, such as communication and invitations from teachers. The survey included ten broad questions, each with multiple items. We utilized only two questions for a total of 32 Likert-style items. The content areas addressed by the two questions were (1) parent involvement, and (2) parents' reports of school programs. Parent involvement questions offered a four-level Likert response set ranging from disagree strongly to agree strongly. Parents' reports of school program items offered a three-level Likert response set including "does not do," "could do better," and "does well."

Reliability estimates of the factors were calculated by the questionnaire developers using the Cronbach alpha formula, which was appropriate given the Likert-style items. Parent involvement reflected four distinct factors: collective parent involvement (α = .77), parenting activities (α = .44), volunteering activities (α = .49), activities for learning at home (α = .73); as did facilitation of school programs: collective school programs (α = .83), school programs for volunteering (α = .56), school programs for communication (α = .66), and school programs for learning at home (α = .71).

Following the predefined subscales provided by the developers of the SFPS, we measured collective parent involvement (α = .83), parenting activities (α = .42), volunteering activities (α = .68), activities for learning at home (α = .79), collective school programs (α = .86), school programs for volunteering (α = .62), school programs for communication (α = .68), and school programs for learning at home (α = .76) for the sample utilized in this study.

Perceived Competence Scale for Children (PCSC)

We administered the Perceived Competence Scale for Children (PCSC) to measure students' general scholastic abilities. Harter (1982) designed the PCSC to measure children's ability to make distinct evaluations concerning their ability in a particular domain: cognitive competence, social acceptance, physical competence, and general self-worth. We utilized only the six-item subscale measuring school-related cognitive competence. Each item in the scale contained two conflicting statements. Each student had to determine which statement is more indicative of himself/herself. For example, item number

one includes two statements: "Some kids feel that they are very good at their schoolwork" and "Other kids worry about whether they can do the schoolwork assigned to them." After a decision has been made, the participant then marked if that statement is "really true" or "sort of true" for himself/herself, highlighting distinct evaluations concerning ability (Harter, 1982).

In order to measure parents' and teachers' perceptions of students' general scholastic abilities, we used a teacher-rating version of the cognitive competence subscale. Harter constructed this parallel teacher-rating scale as a secondary goal to examine the relationship between pupils' perceived competence and the perceptions of their teachers. Items were reworded to obtain the teachers' best judgment of their students' competence. We employed the cognitive competence subscale from this version of the PCSC in the present study to measure parents' and teachers' perceptions of students' general scholastic abilities. The results of this measure were averaged into a parental perceptions variable (α = .82) and a teacher perceptions variable (α = .95). The discrepancy factor for general scholastic abilities was derived by calculating the absolute difference scores between parents and teachers and between parents and students. The measures of general scholastic abilities by the math and ELA teachers were first averaged together for one teacher factor before examining the discrepancy between parents and teachers.

Letter Grades

We measured parents' perceptions of their children's abilities in math and ELA by asking parents to state the grade they believe their children should have earned in math and ELA given their ability. Teachers reported the students' actual grades earned on their most recent report card. Grades reported were converted into numerical scores based on a 4.33 scale, equivalent to an A+. Difference scores (absolute) were calculated between parents' perceptions and teachers' actual reports to derive the discrepancy factor. The same was done for parents and students. The teacher reports of math and ELA grades were left separate.

Procedures

Upon IRB approval, we collected data at the end of the first grading period in the academic year. At School A, questionnaires were hand delivered to parents who attended parent—teacher conferences. The remaining parents at School A and all of the parents at School B were provided the questionnaires in an envelope taken home by their children. Students and their teachers decided whether they would take home a Spanish or English version of the questionnaire. The accompanying consent form relayed the focus of the study, stressed

the voluntary nature of participation, and requested permission for parents' children to participate in the study. Participating parents were asked to return the questionnaire to the school in the provided envelope, sealed, along with the signed consent form. Questionnaires and consent letters were sent home on 2 separate occasions.

Participating students were asked by the principal to gather in the school cafeteria. We read a verbal script explaining the study and the participants' role. Students were then asked to sign an assent form. Completed questionnaires were then collected. Teachers were asked to complete their surveys within the following weeks. Consequently, for each parent who returned both an involvement and perceived competence measure there was a correlating measure of perceived competence from each student's math teacher, ELA teacher, and from the student himself/herself. Although all participants were asked to include their names so that the researchers were able to match parent, teacher, and student surveys, a coding page was utilized for all surveys so that names could be removed after the data were collected to ensure confidentiality.

Statistical Analyses

To determine if levels of collective parent involvement and parents' reports of collective school programs differed across parents' language and grade level, we conducted multiple one-way analyses of variance (ANOVA). Secondly, we conducted linear regression analyses to examine the predictive ability of descrepancies in perceptions of abilities on collective parent involvement and parents' reports of collective school programs. We further specified the analyses of discrepancies by examining their correlational relationships with more particular forms of parent involvement and school programs. We examined these separately for English- and Spanish-speaking parents. Fisher z transformations were used to make direct comparisons between the two groups where differences appeared.

Results

We conducted two one-way between groups ANOVA to determine if levels of collective parent involvement varied across students' grade level and across parents' language. See Table 1 for means and standard deviations. With respect to grade level, differences in amounts of parents' participation in collective forms of involvement significantly varied (see Table 2). Follow-up post hoc tests conducted using the Bonferroni method to control for Type 1 error indicated that the significant differences occurred between parents of sixth and eighth graders with the former being more involved. Parents of seventh graders

were no more or less likely to be participatory than parents' of sixth and eighth graders. With respect to parents' language, Spanish-speaking parents were significantly more involved than English-speaking parents (see Table 2).

Table 1. Descriptive Statistics for Collective Parent Involvement and School Programs by Parents' Language and Students' Grade Level

		Collective Parent Involvement		Collective School Programs			
Parents' Language	Students' Grade Level	N	M	SD	N	M	SD
English	6	28	3.00	.40	29	2.54	.40
	7	45	2.90	.45	44	2.51	.42
	8	36	2.75	.53	36	2.32	.51
	Total	109	2.88	.47	109	2.45	.45
Spanish	6	26	3.11	.41	26	2.69	.29
	7	33	2.96	.44	34	2.49	.43
	8	11	3.06	.42	10	2.63	.41
	Total	70	3.03	.42	70	2.59	.39
Total	6	54	3.06	.40	55	2.61	.36
	7	78	2.93	.44	78	2.50	.42
	8	47	2.82	.52	46	2.39	.50
	Total	179	2.94	.46	179	2.51	.43

Table 2. ANOVA Results for Collective Parent Involvement and School Programs by Students' Grade Level and Parents' Language

Dependent Variable	Factor	SS	df	MS	F	
Collective parent involvement						
	Grade level Between	1.37	2	.68	3.36*	
	Within	36.01	177	.20		
Collective school programs						
	Parents' language Between	1.32	1	1.32	6.5*	
	Within	37.08	183	.20		

^{*}p < .05

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We then conducted bivariate linear regressions to examine the ability of discrepancies to predict collective parent involvement and collective school programs for involvement. We used absolute differences, meaning the analyses did not distinguish between whether the parents or the teachers reported higher ratings of children's ability. Instead, it explored the effect of the magnitude of the discrepancy and its relation with parent involvement and school programs for involvement. For each dependent variable, there were a total of six regressions performed, each including one of the following factors: discrepancy in math ability between parents and math teacher, discrepancy in ELA ability between parents and ELA teacher, discrepancy in general scholastic ability between parents and students, discrepancy in ELA between parents and students, and discrepancy in general scholastic ability between parents and students, and discrepancy in general scholastic ability between parents and students.

The results of the bivariate regression analyses for the variables predicting collective parent involvement revealed only one significant relationship: parent–student discrepancy in perceptions of students' general scholastic ability predicted collective parent involvement activities; as the parent–student discrepancy increased, the amount of parent involvement generally increased. Although none of the discrepancy variables regarding ELA or math ability were significant predictors, they were negatively related to the measure of collective parent involvement.

Regression results predicting parents' reports of collective school programs revealed two significant relationships. Parent—teacher discrepancies in ELA ability and in math ability predicted parents' negative reports of collective school programs for facilitating their involvement. Although the other measures of discrepancy were not statistically significant, they were negatively related to parents' collective involvement and reports of collective school programs. This suggests that, in general, as parent—teacher or parent—student discrepancies increased, parents tended to be less involved and the school offered fewer opportunities for involvement. Table 3 summarizes the results of the regression analyses.

Our following analyses examined the correlational relationships of the discrepancy variables with more specific types of involvement activities and school programs. We also examined these separately by language. To make direct comparisons of statistical significance in the correlations between English- and Spanish-speaking parents, Fisher's r to z-transformations were conducted.

PARENT-TEACHER-STUDENT DISCREPANCIES

Table 3. Summary of Bivariate Regression Analysis

Dependent Variable	le Factor	B	SE B	β	t	R^2
Collective parent	Parent-teacher discrepancy in					
involvement	perceptions of students'					
	Model 1					
	Intercept	3.01	.05		58.98	
	Math ability	08	.04	15	-1.82	.02
	Model 2					
	Intercept	2.98	.06		51.44	
	ELA ability	02	.04	04	45	.00
	Model 3					
	Intercept	2.91	.06		47.12	
	General scholastic ability	.08	.08	.09	.99	.01
	Parent-student discrepancy in					
	perceptions of students'					
	Model 4					
	Intercept	2.96	.05		64.31	
	Math ability	02	.05	04	46	.00
	Model 5					
	Intercept	2.97	.05		56.90	
	ELA ability	04	.05	07	84	.01
	Model 6					
	Intercept	2.85	.06		45.26	
	General scholastic ability	.17	.08	.18	2.02*	.03
Collective school	Parent-teacher discrepancy in					
programs	perceptions of students'					
	Model 7					
	Intercept	2.59	.05		56.57	
	Math ability	09	.04	20	-2.42*	.04
	Model 8					
	Intercept	2.55	.05		47.60	
	ELA ability	05	.04	10	-1.07	.01
	Model 9					
	Intercept	2.50	.06		45.56	
	General scholastic ability	.03	.07	.04	.45	.00
	Parent-student discrepancy in					
	perceptions of students'					
	Model 10					
	Intercept	2.56			62.02	
	Math ability	07	.04	14	-1.70	.02
	Model 11					
	Intercept	2.59			57.13	
	ELA ability	10	.04	20	-2.44*	.04
	Model 12					
	Intercept	2.53			44.93	_
	General scholastic ability	.02	.07	.02	.21	.00

*p < .05

Parent-Teacher Discrepancy

General Scholastic Ability

The first set of analyses focused on parent—teacher discrepancies with respect to students' general scholastic ability. For both English- and Spanish-speaking parents, a significant correlation was found between the discrepancy and parents' reports of school programs for volunteering. This correlation was negative for English-speaking parents, and positive for Spanish-speaking parents. A discrepancy between teachers' and Spanish-speaking parents' perceptions of general scholastic abilities also correlated positively with school programs related to learning at home. This correlation was not significant for the English-speaking parents. The difference in the correlations for the two groups on this variable was significant (Fisher's z = -2.12, p = .04).

English/Language Arts (ELA)

In the content area of ELA, there were no significant correlations between the discrepancy factors and types of parent involvement and also none with school programs for involvement. This was true for both the English- and Spanish-speaking parents. This suggests that differences in parents' perceptions of their children's abilities in ELA and the children's actual reported grades did not increase or decrease parents' types of involvement, nor their reports of the schools' programs to facilitate their involvement.

Math

As for math, results indicated that for English-speaking parents, the discrepancy with teachers was significantly negatively correlated with parents' involvement in volunteering activities as well as parents' reports of schools' facilitation of communication and volunteering activities. Although these same correlations did not achieve statistical significance for the Spanish-speaking parents, Fisher's *z*-transformations did not reveal any significant difference between the two groups of parents (Fisher's z = -.24; z = -1.68; z = -.42) for parental volunteering, schools' programs for communication, and schools' programs for volunteering, respectively, all p > .05.

Parent-Student Discrepancy

General Scholastic Ability

Parent–student discrepancy in perceptions of students' general scholastic abilities was significantly positively related to parent volunteering activities for the Spanish-speaking parents. Although this was not a significant correlation for the English-speaking parents, the magnitude of the correlations for both groups were not significantly different from each other (Fisher's z = -1.91, p > .05).

English/Language Arts (ELA)

Parent involvement in parenting activities was significantly negatively correlated, for English-speaking parents only, with parent–student discrepancy in perceptions of students' ELA abilities. There was not a significant correlation for Spanish-speaking parents; however, the correlations for the two groups were not significantly different from each other (Fisher's z = .75, p > .05).

Math

In the content area of math, there were four significant negative correlations for the Spanish-speaking parents. These were for parents' volunteering activities and parents' reports of school programs for communication, volunteering, and learning at home. There were no significant correlations for the English-speaking parents; however, Fisher's z scores indicated that there were only significant differences between the correlations of the English- and Spanish-speaking parents in cases of parents' involvement in learning at home activities (Fisher's z = 2.22, p = .03) and reports of school programs for learning at home activities (Fisher's z = 2.22, p = .03). No significant differences existed between the groups for parents' reports of school programs for communication and volunteering, Fisher's z = 1.62 and z = 1.44, respectively, both p > .05.

Summary of Correlation Results by Language

For participating parents who responded to the English questionnaire, five significant correlations appeared. The first four involved parent—teacher discrepancies. As the discrepancy in perceptions of students' general scholastic abilities increased, parents reported fewer school programs to facilitate their volunteering. Similarly, as the discrepancy increased in parents' perceptions of the students' abilities in math and the teachers' reports of actual grades, parents reported less participation in volunteering activities, fewer school programs to facilitate their volunteering, and fewer school programs to facilitate communication with the school. The final correlation involved the parent—student discrepancy in perceptions of the students' abilities in ELA. As the discrepancy increased, parents reported less participation in parenting activities.

There were seven significant correlations for the parents who completed the Spanish questionnaire. Only two of those correlations involved a discrepancy between the parents and the teachers. As the differences in their perceptions of the students' general scholastic abilities increased, parents reported more school programs to facilitate their volunteering and more programs to facilitate their learning at home activities. The remaining five significant correlations involved parent—student discrepancies. As the discrepancy in perceptions of the students' general scholastic abilities increased, parents reported more participation

in volunteering activities. However, as the discrepancy in perceptions of the students' math abilities increased, parents reported less involvement in volunteering activities and fewer school programs to facilitate communication, volunteering, and learning at home.

The significantly correlated variables were different according to the language of the questionnaire. When differences occurred, we used Fisher's r to z transformations to make direct comparisons for actual significant differences between the two groups. These transformations revealed two real differences between the Spanish- and English-speaking parents: (1) in the case of parent–teacher discrepancies in students' general scholastic abilities, and (2) in the case of parent–student discrepancies in students' math abilities.

Discussion

Although most parent involvement literature demonstrates that a lack of English fluency is often a barrier to involvement (Pena, 2000), it did not appear to be the case here. Our results indicated that the Spanish-speaking parents of middle-schoolers were more involved in collective activities related to their children's education than were the English-speaking parents. The Spanish-speaking parents also reported more collective school programs to facilitate their involvement. Despite language being a significant factor, it only accounted for a small portion of the variance.

Our results emphasize that language alone is not a sufficient criterion for predicting parents' and teachers' activities. Instead, it remains an important factor to consider within the context of the school and its community. For example, the school district from which we gathered our sample population has placed increasing importance on serving the Latino community due to the rapidly changing demographics of the area. However, such school policies and practices were not measured or taken into consideration in the analysis to explain what could be facilitating the more active involvement of Spanish-speaking parents over the English-speaking parents. We suggest that this is likely not a function only of their language, but a reflection of the social ties between the community and the schools. This creates greater overlap between schools and the community to promote more collaboration and partnerships between parents and teachers (Epstein, 1996).

Relationships between parents and teachers are an integral factor in the creation of productive social ties between the community and school. We hypothesized that if parents and teachers have differing views regarding students' general scholastic competence and subject specific abilities, then their relationships and social ties may be weakened. In other words, as the discrepancy

increases between the two groups, involvement on the part of parents and the facilitation of programs on the part of teachers may decline. We examined these relationships in terms of collective forms of parent involvement and collective forms of teacher facilitation of involvement. As expected, as discrepancies increased, reports of parent involvement and schools' facilitation of involvement declined. However, it is difficult to accurately measure the effects of discrepancies on parent involvement and school programs for involvement using one collective variable for each. Parent involvement is a term that encompasses a wide range of activities, including direct participation with children on educational pursuits such as homework and studying for exams, communicating with children about the importance of education, providing support, having high academic expectations, communicating with the school, and visiting the school to participate in programs, volunteer, and attend meetings (Epstein, 1995; Jordan, Orozco, & Averett, 2001). Additionally, it is difficult to accurately describe involvement among different cultures (Trumbull, Rothstein-Fisch, & Hernandez, 2003). Therefore, separately for English- and Spanish-speaking parents, we continued our analysis by examining correlations of parent-teacher and parent-student discrepancies with parent involvement across three specific activities: parenting, volunteering, and learning at home. Similarly, programs facilitated by the school were grouped into three categories: communication programs, volunteering programs, and learning at home programs.

For the English-speaking parents, it appears that parent—teacher disagreements are more prevalent than parent—student ones. For the Spanish-speaking parents, disagreements were more prevalent between parents and students. The disagreements between the English-speaking parents and teachers about their children's abilities generally lead to less interaction with the school, particularly for volunteering, whether initiated by the parents or the school. Overall, parents reported receiving less facilitation of parent involvement by the school. When parents disagreed with their children, they helped them less in educational pursuits at home. These results are not surprising, assuming that parent—teacher disagreements about children's abilities could lead to discomfort for both parties. Their children's ability is likely a sensitive topic for parents and as past research shows, parents tend to rate their child's abilities higher than the teacher would rate the child. Recognizing that the teacher feels less confident in one's child would logically be related to less interaction.

Despite the seemingly logical relationships found for the English-speaking parents, we were surprised by the results for the Spanish-speaking parents. For the cases in which parents and teachers disagreed, reports of parent involvement facilitated by the school increased, contradicting the results of the English-speaking parents, whose involvement decreased. We will discuss this

further, but at this point it is important to mention that upon viewing the results and recognizing our surprise, we also acknowledge the many underlying assumptions we hold based on our own experiences in the mainstream culture of the education system that are likely different than the experiences of recent immigrants to the United States. What seems logical and what seems surprising is a matter of lived experiences within specific contexts.

In order to make more direct comparisons for actual significant differences between the two language groups, we used Fisher's r to z transformations. These transformations revealed two real differences between the Spanish- and English-speaking parents: (1) in the case of parent—teacher discrepancies in students' general scholastic abilities, and (2) in the case of parent—student discrepancies in students' math abilities. We will begin with discussing the first case. Spanish-speaking parents reported more learning at home activities when there was a discrepancy between parents and teachers while there was no significant correlation for the English-speaking parents, and Spanish-speaking parents reported more school programs to volunteer while English-speaking parents reported fewer programs. Thus, when parents and teachers disagree, Spanish-speaking parents seemed to be more connected with the school through programs to volunteer and learn at home, while English-speaking parents appeared to be more distant.

Of consideration here is the fact that data on school programs were collected by parental report only; we cannot be sure whether the relationships existed because teachers actually provided fewer invitations to volunteer to Englishspeaking parents and more invitations to Spanish-speaking parents or if it is the parents' perceptions of invitations to volunteer that rose or declined with larger discrepancies in beliefs about students' general scholastic abilities. Either way, the results of this study suggest that the communication of invitations is not as effective for English-speaking parents if there are differing views about the students' general scholastic abilities. The inconclusiveness of the results also demonstrates that a future study needs to help clarify how teachers' perceptions of their students may be reflected in their actions and words and thus be communicated to the parents. Moreover, additional data should be gathered on how teachers' actions and words are interpreted differently by parents and how parents then decide to respond to a situation in which discrepancies occur. Of great importance is also how these interpretations and decisions are based in cultural beliefs and values.

The second case of significance occurred with discrepancies between parents and students regarding students' math abilities. For this discrepancy, the Spanish-speaking parents were significantly negatively correlated, reporting fewer learning at home activities and reports of school programs for learning at

home. These were not significantly correlated for the English-speaking parents. As opposed to the parent-teacher discrepancies, which seemed to lead to more involvement by Spanish-speaking parents through learning at home, parentstudent discrepancies seemed to decrease the amount of involvement with learning at home. As with the previous results, these findings are also inconclusive and we can only make assumptions as to their causes. These results may be related to parents' views of teachers versus children. Parents may be more apt to recognize children's needs when discrepancies are noted between them and their children's teachers. Being that parent involvement increased with the parent–teacher discrepancies, this may further support the notion that teachers communicated more clearly to the Spanish-speaking parents about what their children needed in terms of parental support. Meanwhile, a decrease in homebased involvement when parents and children disagree on ability level may be a consequence of poor communication between parents and their children with respect to the latter's academic progress. In this case, parents have a less accurate picture of their children's abilities and, therefore, would be unaware of the specific needs of the children.

Implications

Overall, this study can support two general findings: one, that perceptions of students' abilities held by teachers, parents, and students are related to parents' and teachers' actions regarding family and school partnerships, and two, that differences between language groups remains an important factor but we need to look beyond the language itself. A closer examination of these two findings underscores the need to clarify the mechanisms of more indirect communication.

Middle schools and teacher training programs should consider the results of this study carefully. First, the fostering of involvement should not focus on parents alone; it is necessary to consider the role of teachers and administrators in this process. More importantly, however, is the need to understand parents' and teachers' conceptualizations of student ability. In order for parent involvement to be fostered, active, and productive, it is necessary that those involved in the process understand the role of perceptions. It is not enough to provide parents with specific opportunities to be involved, for instance, as a chaperone for a school dance. Instead, productive involvement must begin with a conversation about parents' and teachers' views of students, the purpose of schooling, and the role of all stakeholders involved.

This endeavor is difficult to say the least. As such, it cannot be expected that new teachers, or veteran teachers for that matter, will miraculously have an understanding of these processes or the skill set to address them. Instead, it

falls on the shoulders of teacher education programs and those planning professional development to better prepare individuals in this area.

References

- Ames, C., & Archer J. (1987). Mothers' belief about the role of ability and effort in school learning. *Journal of Educational Psychology*, 79(4), 409-414.
- Azmitia, M. C., & Cooper, C. R. (2002). *Navigating and negotiating home, school, and peer linkages in adolescence.* Santa Cruz, CA: Center for Research on Education, Diversity, & Excellence.
- Balli, S. J., Demo, D. H., & Wedman, J. F. (1998). Family involvement with children's homework: An intervention in the middle grades. *Family Relations*, 47(2), 149-157. doi:10.2307/585619
- Boethel, M. (2003). *Diversity: School, family, and community connections*. Austin, TX: National Center for Family & Community Connections with Schools, SEDL.
- Catsambis, S., & Garland, J. E. (1997). Parental involvement in students' education during middle school and high school (Report 18). Baltimore, MD: Johns Hopkins University, Center for Research on the Education of Students At Risk (ERIC Document Reproduction Service No. ED423328). Retrieved from http://www.csos.jhu.edu/crespar/techReports/Report18.pdf
- Coleman, J. S. (1987). Families and schools. *Educational Researcher*, 16(6), 32-38. doi:10. 3102/0013189X016006032
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*(supp), S95-120. Retrieved from http://links.jstor.org/pss/2780243
- Dauber, S. L., & Epstein, J. L. (1993). Parents' attitudes and practices of involvement in inner-city elementary and middle schools. In N. F. Chavkin (Ed.), Families and schools in a pluralistic society (pp. 53-71). Albany, NY: State University of New York Press.
- Delgado-Gaitan, C. (1991). Involving parents in the schools: A process of empowerment. American Journal of Education, 100, 20-46
- Desforges, C., & Abouchaar, A. (2003). The impact of parental involvement, parental support, and family education on pupil achievement and adjustment: A literature review. London, UK: Department for Education and Skills. Retrieved from http://www.dcsf.gov.uk/research/data/uploadfiles/RR433.pdf
- Desimone, L. (1999). Linking parent involvement with student achievement: Do race and income matter? *The Journal of Educational Research*, 93, 11-30. doi:10. 1080/00220679909597625
- Enyeart, C., Diehl, J., Hampden-Thompson, G., & Scotchmer, M. (2006). School and parent interaction by household language and poverty status: 2002-03 (NCES 2006-086). Washington, DC: National Center for Education Statistics, U.S. Department of Education. Retrieved from http://nces.ed.gov/pubs2006/2006086.pdf
- Epstein, J. L. (1990). School and family connections: Theory, research, and implications for integrating sociologies of education and family. In D. G. Unger & M. B. Sussman (Eds.), *Families in community settings: Interdisciplinary perspectives* (pp. 99-126). New York, NY: Haworth Press.
- Epstein, J. L. (1995). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappan*, 76(9), 701-712.

- Epstein, J. L. (1996). Perspectives and previews on research and policy for school, family, and community partnerships. In A. Booth & J. F. Dunn (Eds.), *Family-school links: How do they affect educational outcomes?* (pp. 209-246). Mahwah, NJ: Erlbaum.
- Epstein, J. L. (2001). School, family, and community partnerships: Preparing educators and improving schools. Boulder, CO: Westview Press.
- Epstein, J. L., & Dauber, S. L. (1991). School programs and teacher practices of parent involvement in inner-city elementary and middle schools. *The Elementary School Journal*, 91(3), 289-305. doi:10.1086/461656
- Epstein, J. L., & Salinas, K. C. (1993). School and family partnerships: Surveys and summaries. Questionnaires for teachers and parents in elementary and middle grades, and how to summarize your school's survey data. Baltimore, MD: Center on Families, Communities, Schools, and Children's Learning.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A metaanalysis. *Educational Psychology Review, 13*(1), 1-22. doi:10.1023/A:1009048817385
- Fargnoli, J. (2004). Parental perceptions of successful middle school and family partnerships: A Rhode Island case study. *Dissertation Abstracts International*. (UMI No. 3135663)
- Griffith, J. (1998). The relation of school structure and social environment to parent involvement in elementary schools. *The Elementary School Journal*, 99(1), 53-80. doi:10.1086/461916
- Harter, S. (1982). The perceived competence scale for children. *Child Development*, 53(1), 87-97.
- Ho, E. S., & Willms, D. J. (1996). Effects of parental involvement on eighth-grade achievement. *Sociology of Education*, 69(2), 126-141.
- Hoover-Dempsey, K. V., & Sandler, H. (1995). Parental involvement in children's education: Why does it make a difference? *Teachers College Record*, 97(2), 310-331.
- Hoover-Dempsey, K. V., & Sandler, H. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67(1), 3-42. doi:10.2307/1170618
- Hoover-Dempsey, K. V., & Sandler, H. M. (2005). *The social context of parental involvement: A path to enhanced achievement* (Final Performance Report for OERI Grant #R305T010673). Retrieved from The Family-School Partnership Lab, Vanderbilt University website: http://www.vanderbilt.edu/Peabody/family-school/Reports.html
- Jeynes, W. (2003). A meta-analysis: The effects of parental involvement on minority children's academic achievement. *Education and Urban Society*, 35(2), 202-218. doi:10.1177/0013124502239392
- Jordan, C., Orozco, E., & Averett, A. (2001). Emerging issues in school, family, and community connections. Austin, TX: National Center for Family and Community Connections with Schools, SEDL. Retrieved from http://www.sedl.org/connections/resources/emergingis-sues.pdf
- Juang, L. P., & Silbereisen, R. K. (2002). The relationship between adolescent academic capability beliefs, parenting, and school grades. *Journal of Adolescence*, 25(1), 3-18. doi:10.1006/jado.2001.0445
- Kenny, M. E., Gallagher, L. A., Alvarez, R., & Silsby, J. (2002). Sources of support and psychological distress among academically successful inner-city youth. *Adolescence*, 37(145), 161-182.
- Mapp, K. (2003). Having their say: Parents describe why and how they are engaged in their children's learning. *School Community Journal*, *13*(1), 35-64. Retrieved from http://www.adi.org/journal/ss03/Mapp%2035-64.pdf
- Miller, S. A. (1988). Parents' beliefs about children's cognitive development. *Child Development*, 59(2), 259-285.

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- Miller, S. A., & Davis, T. L. (1992). Beliefs about children: A comparative study of mothers, teachers, peers, and self. *Child Development*, *63*(5), 1251-1265.
- Msengi, S. G. (2007). Family, child, and teacher perceptions of African American adult assistance to young readers. *School Community Journal*, 17(1), 33-60. Retrieved from http://www.adi.org/journalsearch/
- Onikama, D. L., Hammond, O. W., & Koki, S. (1998). Family involvement in education: A synthesis of research for Pacific educators. Honolulu, HI: Pacific Resources for Education and Learning. Retrieved from http://www.prel.org/products/products/family-invol.htm
- Pelco, L., & Ries, R. (1999). Teachers' attitudes and behaviors towards family–school partnerships: What school psychologists need to know. *School Psychology International*, 20(3), 265–277. doi:10.1177/0143034399203002
- Pena, D. C. (2000). Parent involvement: Influencing factors and implications. *Journal of Educational Research*, 94(1), 42-54. doi:10.1080/00220670009598741
- Ramirez, A. Y. F. (2003). Dismay and disappointment: Parental involvement of Latino immigrant parents. *The Urban Review*, 25(2), 93-110. doi:10.1023/A:1023705511946
- Sanders, M. G. (1996). Action teams in action: Interviews and observations in three schools in the Baltimore school–family–community partnership program. *Journal of Education for Students Placed at Risk*, 1(3), 249-262.
- Trumbull, E., Rothstein-Fisch, C., & Hernandez, E. (2003). Parent involvement in schooling—According to whose values? *School Community Journal*, 13(2), 45-72. Retrieved from http://www.adi.org/journal/fw03/Trumbull,%20et%20al.pdf
- Vaden-Kiernan, N., & McManus, J. (2005). *Parent and family involvement in education: 2002-03* (NCES 2005-043). Washington, DC: National Center for Education Statistics, U.S. Department of Education. Retrieved from http://nces.ed.gov/pubs2005/2005043.pdf
- Van Voorhis, F. L. (2003). Interactive homework in middle school: Effects on family involvement and science achievement. *Journal of Educational Research*, 96(6), 323-338. doi:10.1080/00220670309596616

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