

# Connecting Dimensions of School Leadership for Partnerships with School and Teacher Practices of Family Engagement

*Sol Bee Jung and Steven Sheldon*

## Abstract

This study examined how school leadership for school and family partnerships is related to the percent of teachers in a school that engage families in their children's education. Using data collected from over 380 schools nationwide, we examined the roles principals played to establish school–family partnerships. Structural equation modeling analysis explored the associations of transformational and collaborative leadership for partnerships with the quality of partnership program organization and the extent of teachers' engagement of families. Results indicated that more active engagement of families by teachers was associated with strong transformational leadership for partnerships. Also, principal's strong collaborative leadership for partnerships was related to the quality of partnership program organization, which was then associated with the percent of teachers practicing active engagement of families. The findings suggest that school leaders must consider the multiple domains of their leadership in promoting school, family, and community partnerships to maximize teachers' connections with families.

Key Words: principal leadership for family engagement, teacher practices to engage families, school, family, community partnerships, school improvement

## Introduction

Prior works have suggested that school leaders are well-positioned to influence the general quality of school–family partnerships (Donaldson, 2006; Hands, 2012). However, more research is needed that explains what types of leadership practices for promoting partnerships link to positive partnership outcomes. Research shows that even school leaders who show strong commitment to partnering with families tend to define their roles differently (Auerbach, 2007). Many principals talk about their role in promoting school–family partnerships as showing support, being open and welcoming to families, and allocating personnel, resources, and funds for family engagement. However, not as many recognize the more active roles that they could play in order to create strong programs of school–family partnerships in their schools (Auerbach, 2007). There is a need to better understand the multiple dimensions of leadership for school–family partnerships and to raise the awareness of school leaders regarding what these dimensions are in order to guide their practice.

Drawing on existing leadership theories, particularly those works on transformational and collaborative leadership (Clift et al., 1992; Griffith, 2004; Gronn, 2000; Hallinger, 2003; Spillane & Diamond, 2007; Spillane et al., 2001), the study described in this article attempted to define transformational and collaborative leadership in relation to school–family partnerships and to illustrate what types of practices and actions would potentially fall into these definitions of leadership for partnerships. To add to the existing knowledge base, the study also examined the extent to which principals' leadership practices are related to the quality of school partnership programs and the level of teachers' practices of family engagement. Importantly, the study explored how teachers may be differently affected by the different dimensions of leadership for partnerships.

### **The Importance of Family Engagement**

Family involvement in children's education has long been reported as one way to raise student achievement, narrow achievement gaps in school, and improve other student outcomes (Dearing et al., 2006; Epstein et al., 2018; Galindo & Sheldon, 2012; Jeynes, 2005; Sanders & Sheldon, 2009). Studies suggest that strong, systematic, schoolwide initiatives for building ties between families and schools are important for student outcomes such as higher academic achievement of students (Galindo & Sheldon, 2012), higher rates of school attendance (Epstein & Sheldon, 2002; Sheldon, 2007; Sheldon & Epstein, 2004), fewer disciplinary actions taken at schools, and fewer behavior problems (Domina, 2005; Sheldon & Epstein, 2002).

In her theory of overlapping spheres of influence, Epstein (2011) calls for greater collaboration among stakeholders in schools, homes, and communities to create better educational outcomes because student learning and development is dependent upon these three main contexts. As such, the importance of school and family collaboration has been demonstrated in studies of school improvement (Bryk et al., 2010), and the results of many studies form the basis of the U.S. Department of Education's "Dual Capacity-Building Framework for Family-School Partnerships" (Mapp & Kuttner, 2013).

## **Proven Predictors of Strong School-Family Partnerships**

### *The Role of Teachers*

One important determinant of the success of schoolwide approaches to partnerships is the role that teachers play in their implementation (Edwards et al., 2019; Epstein & Dauber, 1991). Teachers are best positioned to have consistent interactions and maintain the closest relationships with families. Practices by teachers that have been shown to lead to strong school-family partnerships include designing classroom and home activities that involve families in their children's learning, creating open lines of communication with all families, and personally inviting families into the classroom and the school (Griffith, 1998; Epstein, 2011; Hill & Taylor, 2004; Hoover-Dempsey & Sandler, 1995). For example, supporting and guiding families to discuss homework with their children at home is one way that teachers could partner with families (see Epstein & Van Voorhis, 2001; Van Voorhis, 2003). Teachers can also build stronger personal ties with families through means such as parent-teacher conferences or family home visits, which have been shown to predict improved school attendance and academic achievement (Becker & Epstein, 1982; Epstein, 1986; Epstein & Becker, 1982; Sheldon & Jung, 2015, 2018; Wright et al., 2018). Through these partnership practices, teachers can play instrumental roles in increasing families' understanding about schools, helping them feel more informed and empowered to be true partners in the education of their children (Epstein, 1986; Epstein et al., 2018).

Furthermore, past studies suggest that effective program organization is critical for establishing strong connections between schools and families (Weiss et al., 2009). Quoting Kate Gill Kressley, Weiss and colleagues (2009) emphasized that for family engagement to become more than "random acts," it must be embedded in a strategy for whole school improvement. When schools organize and structure their family engagement programs around student goals and the needs of families, families will receive guidance and support for more effective home-based engagement, such as strategies to monitor homework or students' assignments that encourage conversations with family members and

that utilize families' funds of knowledge (Keith et al., 1993; Epstein & Van Voorhis, 2010; Moll et al., 1992; Moll & Cammorata, 2010).

### *The Role of School Leadership*

School leadership provides the right conditions that enable effective teacher practices for family engagement, strong program organization, and sustainable school–family partnerships; leadership is also important for enlisting the active involvement of all stakeholders (Epstein et al., 2018; Hands, 2012). Principals carry the responsibility of cultivating greater willingness and engagement of staff and teachers in collaborating with families, and the principals' actions impact the culture of a school in ways that critically shape the goals and activities of other school actors (Donaldson, 2006; Hands, 2012; Sanders & Sheldon, 2009).

The extant literature shows that the actions and practices of school leaders can play a defining role in determining whether schools are welcoming and inviting places for families and whether necessary resources—tangible and intangible—for establishing personal connections between individual family members and educators are available (Auerbach, 2009, 2012). For instance, principals' invitations for family involvement, creating a positive culture around school and family relations, providing parents with the tools to be engaged in support of student learning, and empowering them to use those tools are all important steps for fostering more family engagement (Epstein et al., 2018; Ferguson, 2005; Leithwood & Riehl, 2003).

The principal's leadership could also impact the ways in which teachers interact with families. For instance, it has been found that teachers' perceptions of their school leader's efforts to partner with nonsystem actors, such as parents and community members, is positively related to the level of teachers' outreach efforts and ultimately links to levels of parent involvement and influence (Ishimaru, 2019). In such ways, there are positive connections between school leaders' actions to promote partnerships and the partnership practices of other school actors, including families and teachers.

## **The Multidimensionality of the Principal's Role in School–Family Partnerships**

The job of the school principal is inherently complex and multidimensional (Leithwood et al., 2004), and literature suggests that their role in supporting school–family partnerships also is complex (Auerbach, 2007). Not only do principals manage the allocation of resources and build the schools' capacity for implementing strong programs of partnerships, they also serve as important advocates for teachers, families, and school staff to collaborate to enhance students' schooling experiences (Auerbach, 2012; Sanders & Sheldon, 2009).

Transformational leadership and collaborative leadership are approaches to school leadership that research has identified as being particularly effective for school improvement, as well as for addressing challenges, enhancing organizational capacity, or achieving innovation (e.g., Clift et al., 1992; Gronn, 2000; Hallinger, 2003; Spillane & Diamond, 2007; Spillane et al., 2001). Applying these leadership frameworks to school–family partnerships, the next subsections describe what types of practices and actions would potentially fall into these styles of leadership.

### **Transformational Leadership for Partnerships**

There are many ways researchers have discussed and defined transformational leadership. Transformational leadership has been defined as an approach that instills in all members of an organization a shared vision for organizational success and improvement and a stronger commitment to these common goals through enhanced collaboration among all constituents (Robinson et al., 2008). Particular to the context of school organizations, transformational leadership has been conceptualized as leadership that builds the climate for teachers to engage in continuous learning through collaboration with colleagues and that works with the school community to create and form consensus around common goals and vision (Hallinger, 2003). In contrast to transactional leadership, where principals focus on management and maintenance of resources (Hallinger, 2003), transformational leadership denotes the broad range of principals' actions to establish a shared vision for the organization and to create a climate for all members of the organization to partake in actualizing this vision in order to achieve common goals.

For this study, *transformational leadership for partnerships* was defined as principals' actions to create an inclusive and supportive school climate and share their vision for strong school–family partnerships with the rest of the school community, supporting and encouraging teachers to actively participate in the work, and welcoming and empowering families to be genuine partners. These leadership practices have been discussed and identified previously by leading scholars in the area of family and community engagement (Epstein et al., 2002; Epstein & Sanders, 2006; Mapp, 2004; Shartrand et al., 1997).

### **Collaborative Leadership for Partnerships**

Collaborative leadership has also been discussed as an effective model of leadership. It draws a contrast between leadership by a single individual and leadership enacted by a team or multiple individuals carrying out different functions, roles, and tasks in ways that enlist the expertise and strengths of those individuals to work towards organizational goals (Spillane et al., 2001).

This collaborative approach to leadership emphasizes the importance of leaders working with others (Hallinger, 2003). Collaborative leadership goes beyond the simple delegation of roles and responsibilities from the principal to others to involve all members of an organization, even those who are not in formal roles of authority (Crow et al., 2002; Spillane et al., 2001). This approach to leadership prioritizes building the capacity of teachers and parents to share in the leadership (Gronn, 2000; Ishimaru, 2019; Spillane & Diamond, 2007).

Based on these depictions, this study used the following definition of *collaborative leadership for partnerships*: principals' actions to empower others in the school, such as teachers, staff, families, students, and even members of the community, to lead the work of partnerships; to show support for these leadership teams so that they have the power to do the work; and to help facilitate the activities of the leadership teams by providing the time, resources, and scheduling support to make programs, events, and other outreach and partnering initiatives possible.

### **The Hypothesized Model for the Study**

School leaders' practices have been suggested as an important contributor to shaping the attitudes and practices of teachers toward family engagement and for implementing partnership programs and activities (Hands, 2012; Riehl, 2012). For instance, Addi-Racah and Ainhoren (2009) found that positive teacher attitudes about parent involvement were most likely to occur under school governance that empowers both teachers and families equally, compared to school governance that empowers either parents or teachers or to a bureaucratic model where authority lies only with the administrator. Based on this finding, the authors suggested that leaders ought to encourage shared leadership of teachers and parents to shape teacher attitudes towards partnerships and to improve teachers' perceptions of their role in establishing ties with families as collaborators with teachers and principals.

Past studies also have suggested that high quality partnership programs may affect teachers' attitudes towards working with families. For example, a quantitative study of 171 teachers in urban elementary and middle schools indicated that those who reported similarly high levels of support for family engagement with their principals and co-teachers tended to be in schools that had strong programs of family engagement (Epstein & Dauber, 1991). This finding suggested that strong partnership programs may help shape the culture of a school so that teachers are more supportive of building ties with families. Also, in a study of two schools that had well-structured programs of school and family partnerships, teachers perceived a stronger culture of partnerships among staff, which led to stronger teacher and family ties (Hands, 2012).

While the existing studies demonstrate support for the connections between leadership practices of school–family partnerships, program quality, and teachers’ engagement of families, they do not distinguish whether certain types of leadership practices are uniquely linked with partnership programming and teacher engagement. Using structural equation modeling (SEM), the current study tested the hypothesis that both transformational and collaborative leadership for partnerships are related directly to teachers’ engagement of families. It also tested how these two leadership types relate to teachers’ engagement of families through their effect on the quality of partnership program implementation. Figure 1 illustrates this hypothesized model.

### **Key Research Questions**

Two questions were addressed in this current study. First, the study tested whether a clear distinction could be drawn between transformational and collaborative approaches to leadership for partnerships. We analyzed a set of survey items on principal leadership actions to see if there indeed were two constructs that can be distinguished. Second, the study tested the extent to which these two styles of leadership for partnerships were differentially related to the implementation of school, family, and community partnership programs and to teachers’ engagement with families in their children’s education.

**Research Question 1:** How does a multidimensional conceptualization of principals’ leadership for partnerships—as transformational and collaborative—compare to a single construct measure of principals’ actions to promote partnerships?

**Research Question 2:** How are different dimensions of principal leadership for school and family partnerships related to the implementation of schools’ partnership programs and the extent of teachers’ engagement of families?

## **Method**

### **Data Source**

The study analyzed data collected by the National Network of Partnership Schools (NNPS) at Johns Hopkins University from schools working to strengthen school, family, and community relationships. Schools join NNPS to gain knowledge of research-based approaches for developing stronger relationships with families and community partners, with the goal of improving student outcomes (Epstein et al., 2018). Each school is guided to have a well-organized and sustainable partnership program that uses: (1) a team approach, (2) a goal-linked framework, (3) responsive implementation, and (4) evaluation. The school constructs a team of teachers, parents or family members, and

administrators (called an Action Team for Partnerships or ATP) to write an annual plan for family and community engagement targeting goals for student learning and development that are in the school improvement plan. The school team is expected to use Epstein’s six types of involvement (Epstein et al., 2018) to conduct a range of practices and to account for factors that might challenge or limit family members’ ability to actively support their child’s education. Finally, NNPS expects each school to evaluate the individual practices implemented to engage families, as well as the overall partnership program.

NNPS annually collects *UPDATE* surveys from schools that have been partners in the network for at least six months. The surveys are returned to NNPS along with a \$250 payment to renew membership in NNPS for the next school year. NNPS recommends that the survey be utilized as a self-assessment tool for schools to continue improving their programs and practices.

In 2013, a total of 381 surveys were collected for a 68% response/renewal rate. The final sample of schools was highly diverse, as shown in Table 1. The sample consisted of mostly elementary schools (72%), with about one quarter of the schools located in large urban areas. On average, schools had about 43% African American students and about 15% Hispanic students. On average, over 70% of students across schools received free or reduced-price meals.

Table 1. Summary Statistics for Analytic Sample

| Variables  | N   | Mean  | SD    | Min | Max |
|--|-----|-------|-------|-----|-----|
| School grade level (Secondary = 1)                 | 381 | 0.28  | 0.45  | 0   | 1   |
| Proportion of FARM <sup>1</sup> -eligible students | 365 | 70.52 | 28.13 | 1   | 100 |
| School locale                                      |     |       |       |     |     |
| Large urban  | 375 | 0.26  | 0.44  | 0   | 1   |
| Small urban  | 375 | 0.33  | 0.47  | 0   | 1   |
| Suburb   | 375 | 0.23  | 0.42  | 0   | 1   |
| Rural  | 375 | 0.18  | 0.38  | 0   | 1   |
| Proportion of African American students (%)        | 375 | 42.86 | 35.28 | 0   | 100 |
| Proportion of Hispanic students (%)                | 374 | 15.05 | 22.19 | 0   | 98  |

<sup>1</sup> FARM= Free and Reduced-priced Meals.

Source = 2013 *UPDATE* survey of National Network of Partnership Schools (NNPS) Variables



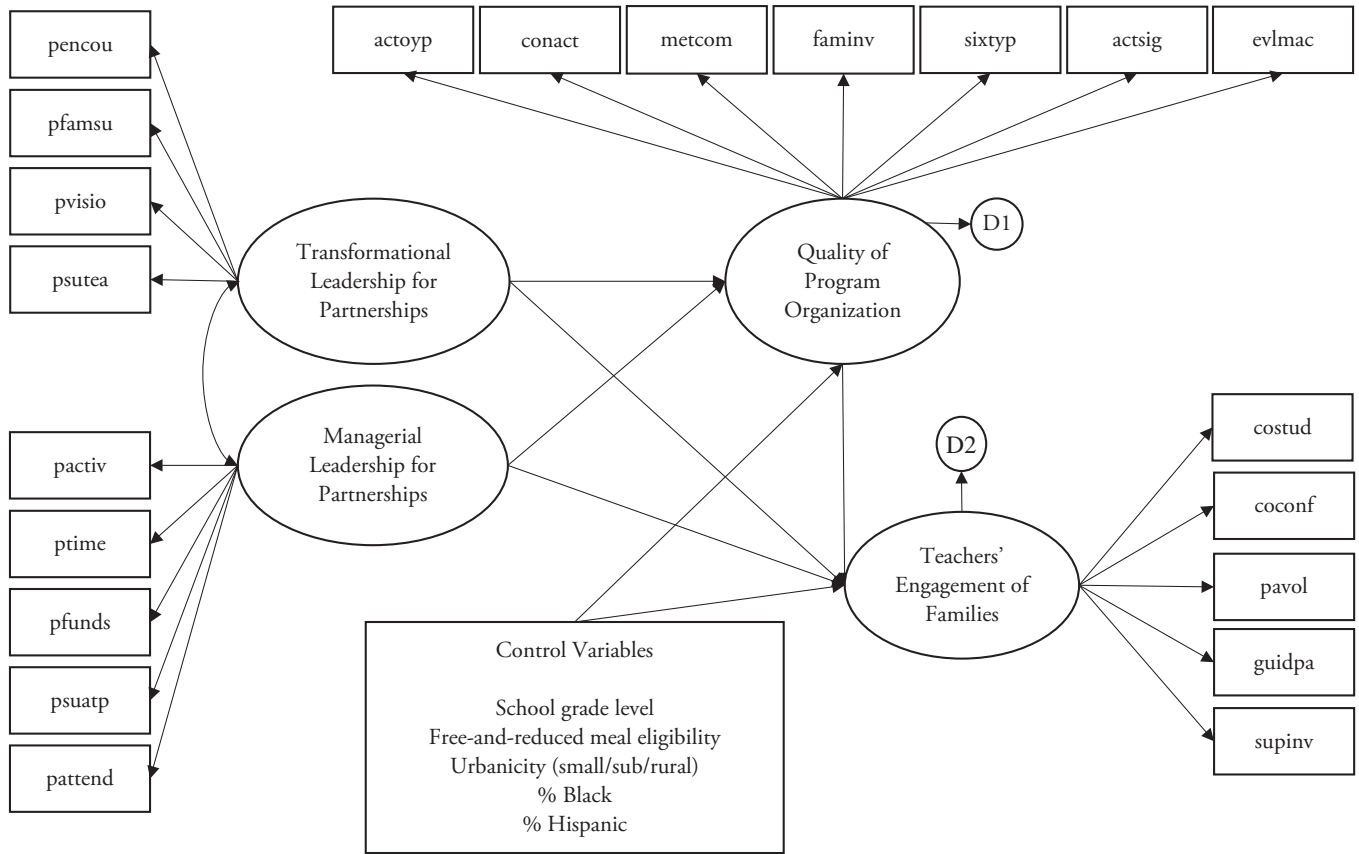


Figure 1. Hypothesis for the SEM analysis specifying connections between Transformational and Collaborative Leadership for Partnerships, quality of program organization, and teachers' engagement of families (see Table 2 for full variable names).

### *School Leadership for Partnerships*

There were nine items on the *UPDATE* survey that asked about the actions and practices of school principals to promote school–family partnerships. Schools’ action teams rated their principals on a 4-point scale (never, sometimes, often, always) on the extent of support for various types of leadership practices, including the allocation of funding for partnership activities, attendance at partnership events and ATP meetings, and the support and encouragement of families and teachers to engage in partnership activities and events.

Based on the definitions of transformational and collaborative leadership, we used the nine items to create a separate measure for each leadership dimension. We hypothesized that four leadership actions represented *transformational leadership for partnerships*. These included how actively principals (1) encouraged teachers and staff to participate in involvement activities; (2) encouraged families to participate in involvement activities; (3) communicated a clear vision of family and community involvement; and (4) supported teachers’ efforts to communicate with families. The four-item scale had high reliability (Cronbach’s  $\alpha = 0.92$ ).

Based on the description of collaborative leadership, we used five principal actions as measures of *collaborative leadership for partnerships*: (1) attended meetings of the ATP; (2) provided time for the ATP to meet and work; (3) allocated funds for ATP activities; (4) publicized ATP-sponsored activities; and (5) attended partnership events and activities. The five-item scale had high reliability (Cronbach’s  $\alpha = 0.85$ ).

### *Teachers’ Engagement of Families*

To assess the extent of teacher outreach and partnership support, five survey items inquired about the percentage of teachers at each school that participated in practices of family engagement. Respondents reported the percentage of teachers at their school who (1) communicated frequently with all of their students’ parents; (2) conducted at least one parent–teacher conference with each student’s family; (3) utilized parent volunteers in the class, at school, or at home; (4) guided parents in how to monitor and discuss homework; and (5) supported the program of family and community involvement. Possible responses for these items were 0%, 10%, 25%, 50%, 75%, and 100%. These values were recoded from 1 to 6, with 0% taking a value of 1 and 100% a value of 6. A factor analysis of the five survey items resulted in one factor that had an Eigenvalue greater than 1. The five items had high loadings on this factor, ranging between 0.72 and 0.80. The five-item scale had high internal reliability (Cronbach’s  $\alpha = 0.88$ ).

### *Quality of Program Organization*

The quality of the school's partnership program organization was constructed from seven items. School teams used a 4-point scale from "did not do" to "did very well" on conducting basic organizational tasks throughout the year. The items included: how well the school (1) implemented all activities in their one-year action plan; (2) scheduled various partnership activities throughout the year; (3) met in ATP committees or work groups, as needed; (4) involved all families in at least some partnership activities; (5) implemented activities for all six types of involvement; (6) implemented partnership activities linked to the school improvement goals; and (7) evaluated each activity after it was implemented. A factor analysis conducted on these seven items yielded a single latent factor with an Eigenvalue greater than 1. The loadings of the seven items on this factor ranged between 0.68 and 0.79. The reliability for the scale was high (Cronbach's  $\alpha = 0.90$ ).

### *School Demographics*

School demographic and background variables to address Research Question 2 included the percentage of students eligible to receive free or reduced-price meals, percentage of African American and Hispanic students, school urbanicity (coded 1 for large urban and 0 for small urban, suburban, and rural areas), and school grade level (coded 0 for elementary schools and 1 for secondary schools).

Table 2 presents the variable names, means, and standard deviations of survey items for all key constructs, including teacher engagement of families, transformational leadership of principals for partnerships, collaborative leadership for partnerships, and quality of partnership program organization.

Table 2. Descriptive Summaries for Items in Teacher Engagement of Families, Quality of Program Organization, and Leadership for Partnerships

| Variables   | Variable Names | Mean | SD   | Min | Max |
|---|----------------|------|------|-----|-----|
| <i>Teacher Engagement of Families</i>   |                |      |      |     |     |
| The proportion of teachers communicating with all students' families                    | <i>costud</i>  | 4.87 | 1.15 | 1   | 6   |
| The proportion of teachers having parent-teacher conferences with each student's family | <i>coconf</i>  | 4.86 | 1.36 | 1   | 6   |
| The proportion of teachers utilizing volunteers in the classroom                        | <i>pavol</i>   | 3.57 | 1.58 | 1   | 6   |
| The proportion of teachers guiding parents in discussing homework with their children   | <i>guidpa</i>  | 4.24 | 1.41 | 1   | 6   |
| The proportion of teachers supporting the partnership program                           | <i>supinv</i>  | 4.71 | 1.31 | 1   | 6   |

Table 2, continued

| <i>Quality of Program Organization</i>   |                |      |      |   |   |
|--|----------------|------|------|---|---|
| The Action Team for Partnerships (ATP) implemented all activities in the One-Year Action Plan. | <i>actoyp</i>  | 3.24 | 0.84 | 1 | 4 |
| The ATP scheduled various partnership activities throughout the year.                          | <i>conact</i>  | 3.40 | 0.77 | 1 | 4 |
| The ATP met in ATP committees or work groups, as needed.                                       | <i>metcom</i>  | 3.13 | 0.89 | 1 | 4 |
| The ATP involved ALL families in at least some partnership activities.                         | <i>faminv</i>  | 3.24 | 0.84 | 1 | 4 |
| The ATP implemented activities for all six types of involvement.                               | <i>sixtyp</i>  | 3.20 | 0.86 | 1 | 4 |
| The ATP implemented partnership activities linked to the school improvement goals.             | <i>actsig</i>  | 3.51 | 0.71 | 1 | 4 |
| The ATP evaluated each activity after it was implemented.                                      | <i>evlmac</i>  | 3.16 | 0.83 | 1 | 4 |
| <i>Transformational Leadership for Partnerships</i>  |                |      |      |   |   |
| The principal encourages teachers and staff to participate in involvement activities           | <i>pencou</i>  | 3.62 | 0.68 | 1 | 4 |
| The principal encourages families to participate in involvement activities                     | <i>pfamsu</i>  | 3.66 | 0.66 | 1 | 4 |
| The principal communicates a clear vision of family and community involvement                  | <i>pvisio</i>  | 3.56 | 0.70 | 1 | 4 |
| The principal supports teachers' efforts to communicate with families                          | <i>psutea</i>  | 3.71 | 0.59 | 1 | 4 |
| <i>Collaborative Leadership for Partnerships</i>   |                |      |      |   |   |
| The principal attends the meetings of the Action Team for Partnerships (ATP)                   | <i>pactiv</i>  | 3.40 | 0.83 | 1 | 4 |
| The principal provides time for the ATP to meet and work                                       | <i>ptime</i>   | 3.53 | 0.79 | 1 | 4 |
| The principal allocates funds for ATP activities   | <i>pfunds</i>  | 3.36 | 0.92 | 1 | 4 |
| The principal publicizes ATP-sponsored activities  | <i>psuatp</i>  | 3.59 | 0.72 | 1 | 4 |
| The principal attends partnership events and activities  | <i>pattend</i> | 3.61 | 0.67 | 1 | 4 |

Source = 2013 UPDATE survey of National Network of Partnership Schools (NNPS)

### Analysis

Research Question 1 asked whether principals' transformational and collaborative leadership should be characterized as a single or multidimensional

construct to understand leaders' impact of school partnership programs. Based on prior studies, we hypothesized that our questionnaire items would represent the two dimensions of leadership.

To test that transformational and collaborative leadership for partnerships are unique dimensions of school leadership for partnerships, we conducted a confirmatory factor analysis (CFA). The CFA model allowed the two constructs of leadership to covary, acknowledging the fact that they may be related to one another as a result of other exogenous factors. To further confirm that a two-factor model had better fit than a single-factor model (a unidimensional construct of school leadership for partnerships), a chi-square difference test for nested models—a formal test of the difference in the model fit of these two different treatments of the nine items—was conducted. A statistically significant result showing that the two-factor model better fits the data would support our hypothesis that leadership for partnership is measured better using a multidimensional approach and that data support distinguishing between transformational and collaborative leadership for partnerships.

Next, Research Question 2 asked about the extent to which various aspects of leadership for partnerships shaped the implementation of partnership programs and the extent of teachers' practices of family engagement. We used SEM as the method of analysis to address this question. The hypothesized model simultaneously tested for (1) the direct relationship between both transformational and collaborative leadership for partnerships and teachers' engagement of families, and (2) the indirect relationship between leadership and teachers' practices, mediated by the quality of partnership program organization. The sample size for this analysis was 381. The hypothesized model is illustrated in Figure 1.

For the CFA and SEM analyses, we used multiple indices of overall model fit. The first measure of fit used was the Chi-square statistics ( $\chi^2$ ), which should be nonsignificant ( $p < 0.05$ ) to indicate a good fit of the data to the hypothesized model. Because  $\chi^2$  is sensitive to the size of the sample, other fit indices were considered (Bollen, 1989). The additional fit indices included: a comparative fit index (CFI) where a value greater than 0.90 indicates good fit (Browne & Cudeck, 1993), the non-normed fit index referred to as the Tucker-Lewis Index (TLI) where a value greater than 0.95 indicates good fit (Hooper et al., 2008), and the Root Mean Square Error of Approximation (RMSEA) where a value less than 0.08 indicates an adequate fit (MacCallum et al., 1996) and a value less than 0.05 indicates a close fit (Browne & Cudeck, 1993).

### **Missing Data**

The data had some missing values, which could reasonably be assumed to be missing at random or by an "ignorable" mechanism, rather than as a result of

the values of the missing observations (Little & Rubin, 2019). In other words, action teams were not likely to have skipped items due to a systematic reason. To account for missing data, the SEM analysis was conducted using the full information maximum likelihood (FIML) method, using the maximum likelihood with missing values (mlmv) option in Stata 13, which allowed us to preserve all available data.

## Results

Zero-order correlations showed that the correlations between the measures of teachers' engagement of families and the measures of leadership for partnerships and of program quality were all positive. Table A-1 presenting zero-order correlations across all continuous variables used in the analysis is available from the authors upon request.

For the CFA model specifying leadership for partnerships as having two distinct constructs of transformational and collaborative leadership, the likelihood ratio test of model fit was  $\chi^2(26) = 50.26$  ( $p = 0.002$ ). Given the known limitations of the Chi-square test to reject the null hypothesis with larger samples, it was critical to examine other goodness-of-fit indices. The RMSEA was 0.050 with a 90% confidence interval of 0.028 to 0.070, which suggests good fit; the CFI and the Tucker-Lewis Index (TLI) were 0.989 and 0.985, respectively, which also indicate strong model fit. The covariance between transformational and collaborative leadership for partnerships was statistically significant and positive ( $B = 0.29$ ,  $\beta = 0.86$ ,  $SE = 0.03$ ,  $p < 0.001$ ). Standardized parameter estimates are shown in Figure 2.

In comparison, the CFA model specifying leadership for partnerships as a single construct had poorer fit than the two-factor representation presented above. For the single-factor model, the likelihood ratio test of model fit was  $\chi^2(27) = 174.13$  ( $p < 0.001$ ). The RMSEA was 0.120 with a 90% confidence interval of 0.103 to 0.137, indicating poor fit. The CFI was 0.935 and the TLI was 0.913, indicating an adequate to poor fit of the model to the data. A formal test of comparison between the two nested models, which compares the goodness-of-fit of the two models, further showed that the two-factor model was a significantly better representation of the data ( $\chi^2(1) = 123.87$ ,  $p < 0.001$ ). These results supported the use of the two-factor model of principal leadership for partnerships for our hypothesized effects model.

For the SEM analysis of the connections between the two dimensions of leadership for school-family partnerships, the organization of partnership programs, and teachers' engagement of families, the likelihood ratio test of model fit was  $\chi^2(156) = 321.13$  ( $p < 0.001$ ). The RMSEA was .053 with a 90% confidence interval of .044 to 0.061, suggesting acceptable fit. Also, the CFI

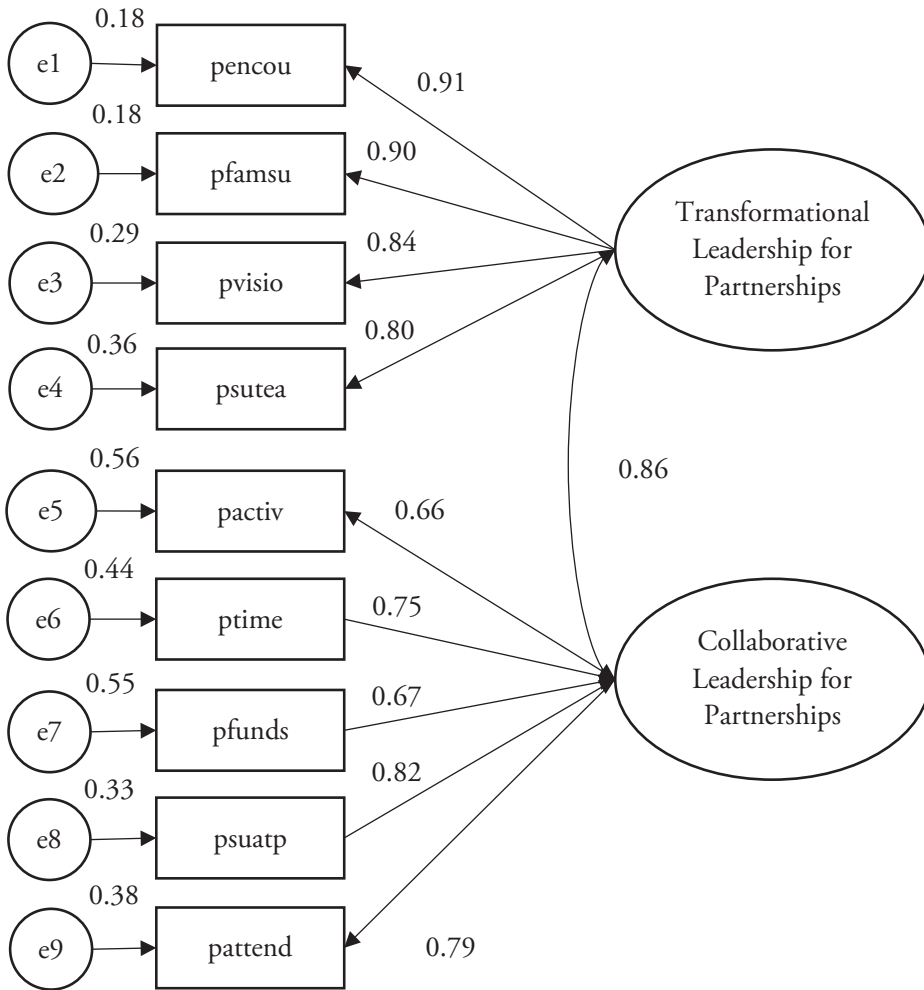


Figure 2. Standardized parameter estimates from the Confirmatory Factor Analysis specifying a 2-factor model for leadership for partnerships; all arrows represent statistically significant ( $p < 0.05$ ) results (see Table 2 for full variable names).

was .953, and TLI was 0.943, indicating strong fit. The model, overall, fit the data well. In the following subsections, we present key findings regarding the hypothesized connections across leadership for partnerships, program quality, and teachers’ engagement of families.

**Direct Effects on Teachers’ Engagement of Families**

Schools that had principals who practiced strong transformational leadership for partnerships, on average, had more teachers implementing active

family engagement practices (standardized  $\beta = 0.36$ ,  $p = 0.002$ ). Action teams that perceived the organization of their partnership programs to be higher in quality tended to have greater percent of teachers engaging families in different ways (standardized  $\beta = 0.21$ ,  $p = 0.001$ ). However, collaborative leadership for partnerships did not have a significant direct association with teachers' engagement of families.

### **Direct Effects on Quality of Partnership Program Organization**

Collaborative leadership for partnerships was a statistically significant predictor of the quality of partnership program organization (standardized  $\beta = 0.52$ ,  $p < 0.001$ ). On the other hand, transformational leadership for partnerships was not a statistically significant direct predictor of program organization.

### **Indirect Effects**

Stronger collaborative leadership for partnerships had a statistically significant indirect association with higher percentages of teachers working actively with families, through its effect on the quality of partnership programs (standardized  $\beta = 0.11$ ,  $p = 0.019$ ). Hence, school leaders' actions to build team leadership and support their action team to run partnership programs and activities had a positive connection to the quality of partnership program organization, which in turn predicted having more teachers in the school enlist families as partners in their work. However, transformational leadership for partnerships did not have this indirect effect on teachers' engagement of families through the quality of program organization; rather, its effect on teachers was direct. Figure 3 represents the significant associations that were found in the study and reports the standardized coefficients for each.

Regarding school and student demographic variables, zero-order correlations showed that leadership measures had only weak or nonsignificant correlations with most demographic variables, except for school grade level. Secondary schools tended to be negatively correlated with both measures of principal leadership for partnerships (e.g.,  $r = -0.06$  to  $-0.16$ ). Correlations with other demographic variables mostly fell between  $-0.04$  and  $0.05$ , which are much lower than the critical value of  $.104$  for sample sizes greater than 350. This suggested that school demographics were mainly unrelated to the type and strength of leadership practices enacted by school principals.

In all, the SEM analyses indicated that teachers' practices to engage families in their children's education, whether as volunteers in the classroom or through their involvement in the home by monitoring and discussing homework with their children, were shaped by school leaders' roles in supporting an organizational approach to school–family partnerships and in promoting teachers'



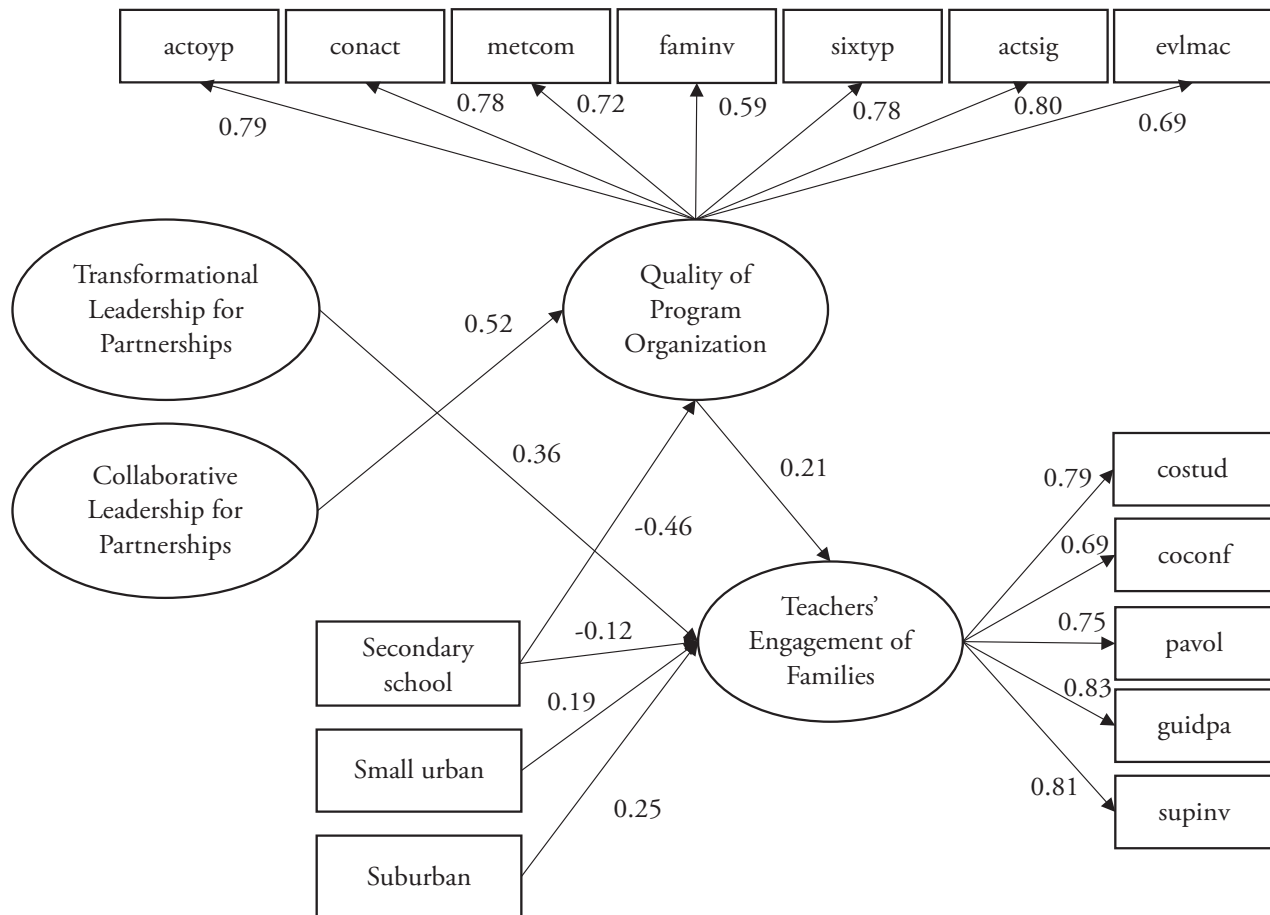


Figure 3. Results of the SEM analysis; all estimates are standardized, and all arrows represent statistically significant ( $p < 0.05$ ) results (see Table 2 for full variable names).

work of partnerships. Whereas principals' transformational leadership practices directly predicted teachers' active engagement of parents, collaborative leadership promoted teachers' engagement with families through the development of partnership program structures and organization. In other words, the findings suggest that the culture-building and vision-sharing roles of school leaders promoting school–family partnerships tend to be more directly related to getting more teachers to practice strong partnership practices than the actions of school leaders to support and empower team leadership around strategizing, planning, and implementing partnership programming.

## Discussion

This study examined data from elementary and secondary schools working to develop programs of school and family relationships to help students succeed. Data were collected from schools that were members of the NNPS to test the extent to which dimensions of principal leadership (transformational and collaborative) predicted the quality of school partnership programs and the percent of teachers in schools who actively engaged parents in school and in their children's education. The findings from this study contribute to the growing body of research on the principals' role in the development of effective programs of school, family, and community partnerships.

In light of research showing the need for principal leadership to be thought of more broadly to include partnerships (Bryk & Schneider, 2002; Bryk et al., 2010), the present study suggests that principal leadership for partnerships itself is multidimensional and more nuanced than has been discussed previously. The findings suggest that principals have dual leadership roles in building high quality partnership programs and in guiding more teachers to engage parents in their children's education at school and at home. This is in contrast to the extant literature on principal leadership for partnerships, which has typically conceptualized it in more singular or unitary terms (Sanders & Sheldon, 2009; Van Voorhis & Sheldon, 2004).

One dimension identified in this study is the principals' role in transforming the culture and mindsets of teachers to promote their work on partnerships: transformational leadership for partnerships. Another dimension was the leaders' role in supporting a team of leaders—including teachers, parents, and other members of the school community—to share the responsibility for strengthening partnership programs: collaborative leadership for partnerships. The study shows that both transformational and collaborative leadership for partnerships are important, though through different paths, for getting more teachers in a school to actively build ties with families.

The second key finding of this study was that each dimension of principal leadership for partnerships demonstrated a different mechanism predicting the degree of teachers' engagement with families. The data showed that transformational leadership for partnerships directly predicted teacher outreach, suggesting how critical it is for principals to emphasize the importance of family engagement at their school. Collaborative leadership also explained the degree of teacher outreach with families; however, this form of leadership supported teachers' work through its effect on the implementation of organizational structures designed to facilitate teachers' outreach and engagement with families. In the end, both forms of principal leadership, emphasizing a partnership culture at school and enabling organizational structures for partnerships, appear to be critical for getting more teachers to work with more families in support of positive student outcomes. The findings indeed suggest that principals' actions matter for encouraging more teachers' participation in the development and execution of family engagement practices and the development of stronger teacher–family relationships.

### **Limitations of the Current Study**

The results showing the interrelationships among school leadership, quality of partnership program organization, and teachers' outreach to families, while important, need to be understood in light of some limitations in this study. For one, the data used were provided by schools implementing the NNPS partnership model. The findings, then, may generalize only to schools already working to improve their programs of family and community engagement. They may not reflect the processes that exist in schools where family engagement is not valued and seen as an important strategy to help more students experience academic success. Another limitation of this study comes from the fact that the surveys were completed by school teams (which included the principal, teachers, and parents) about their own programs. As a result, there could be some inflated reports about the quality of partnerships and the percent of teachers actively working to engage parents. Studies are needed that collect data from multiple and independent sources to confirm or correct the results of this study.

### **Implications**

The findings of this study have important implications for educational practice, particularly around the issues of leadership training. Presently, despite the fact that organizations such as the National Association of Elementary School Principals (2008) and the National Policy Board for Educational Administration (2015) list family and community engagement as an indicator of principal excellence, preparation programs for school principals and administrators give

very little attention to the issue of family engagement. The results reinforce the calls of researchers that principal preparation and in-service training need to do a better job of emphasizing the value of family engagement and the role that principals have in realizing this work (i.e., Auerbach, 2009; Epstein, 2011; Sanders & Sheldon, 2009). This study suggests that these sorts of programs, as well as professional development for principals, should go beyond a simple focus on principal leadership for partnerships by emphasizing both the transformative and collaborative approaches to partnership leadership so that cultural and structural aspects of schools can support greater family engagement for all students.

This study explored school-level factors associated with teachers' partnership practices. Our analyses focused on the role of school leadership for promoting school–family partnerships and the various types of leadership principals exercise to guide this work. The findings confirmed results of past studies that principal leadership is important for encouraging greater buy-in of more teachers at their schools to actively engage parents in their children's education (Auerbach, 2012; Bryk & Schneider, 2002; Sanders & Sheldon, 2009; Van Voorhis & Sheldon, 2004). This study adds new knowledge by showing that there are multiple layers of school leadership that are associated with different aspects of partnership program development. School leaders may make their impact by fostering a strong partnership culture in their schools and by collaborating with and empowering other key actors to lead the planning, the implementation, and the continued improvement of partnership programs. The findings suggest that schoolwide strategies to engage families are likely to be more positive and more comprehensive when principals leverage both dimensions of leadership for partnerships. The study extends the understanding that teachers' active outreach to engage all families does not exist in a vacuum. Rather, teachers' efforts are reinforced within the context of strong school leadership driving a robust and well-functioning program of school, family, and community partnerships.

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Sol Bee Jung is currently a postdoctoral fellow at the Johns Hopkins School of Education. She conducts research and program evaluations on various education topics, including the effects of school resources, school organization, and school and family partnership programs on various school outcomes. Correspondence concerning this article may be addressed to Dr. Sol Bee Jung, Johns Hopkins School of Education, 2800 N. Charles Street, Baltimore, MD 21218, or email [sjung26@jhu.edu](mailto:sjung26@jhu.edu)

Steven Sheldon is an associate professor in the Johns Hopkins University School of Education and a research scientist with the Center on School, Family, and Community Partnerships. His research focuses on the predictors and impact of family involvement in children's education. He also teaches within the urban education and education doctorate programs in the School of Education at Johns Hopkins University.