

**Examining Congruence in Parent-Teacher Perceptions of
Middle School Supports for Students and Families**

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Abstract

The purpose of this study was to examine parent–teacher congruent perceptions of middle school structures to support parent monitoring of children’s behavior. We examined family educational involvement and school’s communication and support to families as predictors of congruence, as well as congruence as a predictor of children following school rules and expectations.

Participants were 415 teachers and 5003 parents across 40 public middle schools in the Northwest Region of the U.S. Mixed-effects regression was used to examine the cross-sectional data. School size and student eligibility of free or reduced price school lunch were included as school-level covariates. Results suggested that higher levels of teacher-reported family involvement and school communication and support to families were significantly associated with greater parent–teacher congruence. In addition, results suggested that greater parent–teacher congruence was significantly associated with higher levels of teacher-report of children following school rules and expectations. Implications for research on parent–teacher congruence and family-school collaboration are discussed at the school system level in terms of parent monitoring of children’s behavior. Practical applications are reviewed for public middle schools.

Keywords: child behavior, congruence, family-school collaboration, family involvement

Examining Congruence in Parent–Teacher Perceptions of Middle School Supports for Students and Families

Families and schools are central, proximal systems that promote children’s education, behavior, and social-emotional competencies. Decades of research have advanced the notion that children experience academic, behavior, and social-emotional benefits when families and schools work together (Sheridan et al., 2019). One specific aspect of the family–school connection that research suggests may be particularly important is congruence, or the extent to which parents and teachers view a certain aspect of their relationship or school procedures in a similar fashion (Garbacz et al., 2015). Limited research has investigated parent–teacher congruence and there is a particular need to examine parent–teacher congruent perceptions of school systems to support children (Dishion, 2011; McIntyre & Garbacz, 2014). In the present study, we examined parent–teacher congruent perceptions of middle school structures to support parent monitoring of children’s behavior. Parent monitoring was targeted due to its pivotal role in parenting during the middle school years (Dishion et al., 1991). We investigated parent educational involvement and a school’s communication and support to families as predictors of congruence, as well as congruence as a predictor of teacher-report of students following school rules and expectations.

Family–School Collaboration

The conceptual importance of parent–teacher congruence is grounded in the larger family–school collaboration literature. Family–school collaboration refers to families and educators working together to support children’s academic performance, behavior, and social-emotional competencies (Christenson & Sheridan, 2001). Families and schools can collaborate to build and refine schoolwide systems, as well as to support individual children with targeted or intensive support needs (Garbacz et al., 2017). Ecological systems theory (Bronfenbrenner,

1979) depicts the importance of the home and school setting, as well as the important role parents and educators have in promoting children’s development. Home and school are two proximal microsystems, each with their own nested set of systems, settings, and structures. Ecological systems theory suggests that influences on child development extend beyond the home and school setting and include home-school connections and consistencies in parent and educator beliefs and practices (Rimm-Kaufman & Pianta, 2000). Ecological systems theory also suggests that systems and practices in home and school are impacted by larger systems, such as neighborhoods, communities, and socio-political contexts. Peers, community members, parents, and educators interact within these nested ecological systems to develop supportive systems where children can experience positive outcomes (Holmes et al., in press).

Research examining relations among variables related to family–school collaboration (e.g., educational support at home), as well as interventions which join families and educators to support children show positive associations with children’s academic performance, behavior, and social-emotional competencies (Pomerantz et al., 2011; Sheridan et al., 2019). Studies have shown that family–school collaboration is relevant across school levels and for families of different racial/ethnic backgrounds (Hill & Tyson, 2009). Although many studies that have examined family–school collaboration show positive associations with important child outcomes, some studies of related variables, such as family involvement, have not found uniformly statistically significant effects (e.g., Domina, 2005). The differences in findings across studies may be an artifact of methodological approaches (Holloway & Park, 2014) and measurement tools (Garbacz et al., 2017). Differences in findings across studies may also suggest that certain aspects of family-school services may contribute less variance to children’s learning and development than other aspects of family-school services. A comprehensive meta-analysis of

family-school interventions identified significant effects on children's social-behavior competence and mental health and also identified components of efficacy (Sheridan et al., 2019). For example, in terms of promoting social-behavioral competence, collaboration, the parent-teacher relationship, and communication had larger effect sizes than school-based involvement and home-based involvement.

Congruence

Parents and teachers may view relationships, interactions, and systems similarly or differently. When parents and teachers share a perception, it is referred to as congruence. Glueck and Reschly (2014) defined congruence as a continuity or common approach across home and school. Congruence is not limited to commonalities in approaches across settings. Congruence also references shared goals and commitments to support children (Kim & Sheridan, 2015). For the purpose of the present study, congruence is specifically defined as the extent to which parents and teachers share perceptions of (i.e., agree on) schoolwide structures to support parent monitoring; the continuity across home and school is the shared perception of schoolwide structure.

Congruence is one aspect of family-school collaboration. Congruence has been described in the context of conceptual and theoretical work on family-school collaboration, with a specific focus on the pivotal and interconnected contribution of the home and school context (Glueck & Reschly, 2014; Holmes et al., in press; Rimm-Kaufman & Pianta, 2000). Pianta and Walsh (1996) noted congruence as an important factor for positive learning and behavioral outcomes, particularly for at-risk populations. Crosnoe et al. (2010) applied this conceptual framework to examine consistencies in home-school environments and its promise for establishing positive trajectories to support children's development of academic and social-emotional skills. Similarly,

Barbarin et al. (2010) examined parent and teacher shared perceptions of child-centered beliefs and found that children had more positive outcomes when parents and teachers had consistency in their perceptions.

Much of the research on parent–teacher congruence has examined parent–teacher relationship quality and family involvement or environmental consistencies across home and school during early elementary school. Minke et al. (2014) studied congruence in parent–teacher relationship quality among parents and teachers of elementary school children referred for behavioral consultation. Minke et al. found that shared, positive views of parent–teacher relationships were associated with more favorable teacher ratings of child social skills and externalizing behavior. Garbacz et al. (2015) examined parent–teacher congruent communication, or the extent to which parents and teachers had similar perceptions about their communications in the context of a family–school intervention implemented in early elementary school. Garbacz and colleagues found that in the context of the family–school intervention, children’s social skills increased when parents and teachers had more similar perceptions of their communications. Santiago (2019) studied perceptions among parents and teachers of elementary school children with autism spectrum disorder and found that parent-reported parent–teacher relationship quality and family involvement had a significant effect on positive and consistent ratings of parent–teacher relationship quality by both parents and teachers approximately two years later.

Congruence Research Needs

Although previous studies have established the importance of parent–teacher congruence in perceptions of parent–teacher relationships and family involvement, little is known about parent–teacher congruence in perceptions of school-wide systems. Indeed, much of the prior

research on parent–teacher congruence has focused on an individual parent–teacher dyad (Garbacz et al., 2015). Because all parents experience schoolwide systems, it is important to understand parent–teacher congruence for schoolwide systems. In addition, all research on congruence we could find examined congruence during early elementary school (Barbarin et al., 2010). Early adolescence and the middle school time period hold great promise as an impactful point of intervention (Eccles & Harold, 1996; Eccles & Roeser, 2011), particularly for parenting and family-school programs (Smolkowski et al., 2017; Stormshak et al., 2018). Information on how parents and teachers perceive systems, such as universal school structures, may provide a foundation for enhancing family engagement and outreach initiatives (Dishion, 2011).

Middle School and Parent Monitoring

Schoolwide systems are particularly important during middle school when children have greater exposure to risky experiences and contexts that can promote them (e.g., deviant peer affiliations; Dishion & Owen, 2002). A pivotal parenting skill during middle school is parent monitoring (Dishion et al., 1991; Fosco et al., 2012). Parent monitoring refers to the extent to which parents are knowledgeable of, attending to, and tracking their child’s behavior (Dishion & McMahon, 1998). Research examining parent monitoring suggests that during the middle school years, parent monitoring is positively associated with positive peer affiliations and negatively associated with deviant peer affiliations and child behavior problems (Garbacz et al., 2018; Véronneau & Dishion, 2010). In addition, school-wide support for parent monitoring is a promising approach to engage parents in school-based parenting interventions (Stormshak et al., 2005). Further research is needed to better understand parent–teacher congruent perceptions of middle school structures to support parent monitoring of children’s behavior. Such research

would have implications for family engagement in school-wide services to support parenting (Stormshak et al., 2005).

Predictors of Parent–Teacher Congruence

To promote parent–teacher congruence, it is important to understand the factors that predict congruence. During middle school, two factors that may improve parent–teacher congruent perceptions of school structures to support parent monitoring are (a) the extent to which schools communicate with families about their child’s behavior in a proactive manner and (b) parent educational involvement. For example, a school’s communication and support to families about children’s behaviors may support links to schoolwide systems and strengthen parent–teacher congruent perceptions of schoolwide systems parents may access to support their child’s behavior (Reschly & Christenson, 2012). Conceptual models have advanced the notion that school communication and support at the systems-level can be an important way to build shared (parent-educator) understandings of school systems (Christenson, 2004; Dishion, 2011; Dishion & Kavanagh, 2003). However, to our knowledge, this link has not been tested. Research is needed that examines the relationship between middle school communication and support to families about their child’s behavior (e.g., positive behavior, school behavior expectations) and parent–teacher congruent perceptions of schoolwide systems.

Parents who are more involved in their child’s education may have more opportunities to interact with their child’s teacher and develop similar perceptions of schoolwide supports (Minke et al., 2014). A large body of research conducted over decades supports parental support in their child’s education (Garbacz et al., 2017). However, the role of family educational involvement in promoting parent–teacher congruence has not been examined to date. Research is needed that uncovers the role family educational involvement has in promoting parent–teacher congruence in

schoolwide systems. Such information would yield implications for intervention development. For example, there may be ways to leverage interactions parents and teachers have in their mutual support of a child’s behavior that could promote a shared understanding of school systems to support children (Fefer et al., 2020).

Parent–Teacher Congruence Influence on Child Behavior

In addition to examining predictors of parent–teacher congruence, it is important to understand how parent–teacher congruence may influence student behavior. In the context of translational research, a general understanding of promotive factors is useful, such as the influence of parent educational involvement on children’s social behavior. However, it may be more useful to understand discrete elements of larger variables so that interventions can clearly target specific elements with a small number of core features (Horner et al., 2017). Gaining a better understanding of how parent–teacher congruence is associated with children’s social behavior would allow researchers and practitioners to target specific components of family-school collaboration in family-school interventions at the schoolwide or systems level (Rimm-Kaufman & Pianta, 2000; Strickland-Cohen & Kyzar, 2019). Parent–teacher congruence has long been hypothesized to be associated with improvements in child behavior (Prywansky, 1986). More recently, studies have found empirical support for parent–teacher congruence to promote children’s behavior in the context of a parent–teacher dyad during school-based consultation (Garbacz et al., 2015). Research is needed that examines congruence at the schoolwide or systems level for promoting schoolwide behavior.

Study Purpose

In the present study, we examined parent–teacher congruent perceptions of middle school structures to support parent monitoring of children’s behavior. Specifically, we examined two

predictors of parent-teacher congruence: teacher-report of (a) family educational involvement and (b) a school's communication and support to families about student behavior. In addition, we examined parent-teacher congruent perceptions of middle school structures to support parent monitoring as a predictor of teacher-report of children following school rules and expectations. The present study will advance the family-school collaboration research agenda by examining a discrete factor of family-school collaboration: parent-teacher congruence. Implications of the present study include clarifying the importance of parent-teacher congruence as an aspect of family-school collaboration and identifying a discrete approach to target in family-school interventions. Three research questions guided our study. (1) To what extent does teacher-reported family educational involvement predict parent-teacher congruent perceptions of middle school structures to support parent monitoring of their children's behavior? We hypothesized that teacher-reported family educational involvement would significantly predict parent-teacher congruence (Christenson, 2004; Dishion, 2011). (2) To what extent does teacher-reported school use of communication and support to families about student behavior predict parent-teacher congruent perceptions of middle school structures to support parent monitoring of their children's behavior? We hypothesized that teacher-reported school communication and support to families about student behavior would significantly predict parent-teacher congruence (Barbarin et al., 2010; Crosnoe et al., 2010). (3) To what extent do parent-teacher congruent perceptions of middle school structures to support parent monitoring of their children's behavior predict teacher-report of children following school rules and expectations? We hypothesized that parent-teacher congruence would significantly predict teacher-report of children following school rules and expectations (Garbacz et al., 2015; Pryzwansky, 1986).

Method

Participants and Setting

Data used in the present study were drawn from a larger effectiveness trial of a family-school intervention (Smolkowski et al., 2017). The sample for the current study included 415 teachers (242 sixth grade, 96 seventh grade, and 77 eighth grade) with available self-report and corresponding parent-report data. The demographic characteristics of the teacher sample are summarized in Table 1 and are similar to the original effectiveness trial sample (Smolkowski et al., 2017). The demographic characteristics of the 5003 parents were not collected.

Forty public middle schools from the Northwest Region of the U.S. participated. The total student enrollment for the 40 middle schools represented by the teacher sample ranged from 151 to 1037, with four schools considered small (<250 students), 18 considered medium (251 to 500 students), and 18 considered large (>500 students). The school-level proportion of students who received free or reduced-price lunch ranged from 26% to 94% (median = 58%). The proportion of English language learners ranged from 0% to 37% (median = 3%). The proportion of minority students ranged from 5% to 82% (median = 28%). Students were on average age 11.8 years (SD = 0.70), about half were female (49%), most were Caucasian (74%), and about half of students reported their families had “just enough money to get by” (48%).

For teachers who taught in more than one grade across the study period (13% of teachers), we only included data from the highest grade taught to simplify interpretation of results and maximize balance of representation across grades. Teachers who had the most contact with students, such as homeroom teachers, were specifically targeted. In addition, teachers who taught in more than one participating school across the study period (12% of teachers) were excluded from the analysis given challenges with addressing our research questions with cross-

classified models. Teacher self-report and corresponding parent-reported student data were aggregated across student cohorts.

Variables and Measures

Parent–Teacher Congruence

Parent–teacher congruent perceptions of middle school structures to support parent monitoring knowledge of middle school student behavior were measured through the use of a parallel item across parent- and teacher-report forms. Parents and teachers responded to the following questions on scales from *strongly disagree* to *strongly agree*: “Does this school have structures in place so you can easily monitor your child’s behavior?” and “There are current structures in place for parents to monitor their child’s behavior in school.” Parents responded on a four-point scale and teachers responded on a six-point scale. Prior to calculating the congruence score, we collapsed teacher ratings of strongly and moderately agree/disagree into a single category to reflect the parent response categories. For each teacher, a congruence score was calculated as negative one times the square root of the squared difference between the teacher response and the average corresponding parent response. Higher scores represent higher levels of parent–teacher congruence.

Family Educational Involvement

Teacher-report of family educational involvement was measured with five items from the Parent and Teacher Involvement Measure–Teacher (Conduct Problems Prevention Research Group, 1991). Teachers were asked whether parents regularly attended school meetings and events, volunteered at school, and monitored their child’s homework, attendance, and behavior in school (e.g., parents regularly volunteer at this school). Teachers provided responses on a 6-point

scale from 1 (*strongly disagree*) to 6 (*strongly agree*). A mean score across all items on this scale was used for analysis and coefficient alpha for the present sample was .81.

School Communication and Support to Families

Teacher-report of school communication and support to families was measured with three items rated on a scale from strongly disagree to strongly agree: (a) parents are contacted before child behavior problems get out of hand, (b) parents are regularly informed about their student's positive behavior, and (c) this school clearly communicates with families about expected student behaviors at school. Response options were on a 6-point scale from 1 (*strongly disagree*) to 6 (*strongly agree*). A mean score across all items was used for analysis and coefficient alpha for this sample was .72.

Children Following Rules and Expectations

Teacher-report of students following school rules and expectations was measured on a scale from strongly disagree to strongly agree with the item, "Students follow the rules and behavior expectations" (Smolkowski et al., 2017). This item was adapted from the Student Adjustment to School Scale adapted from the Teacher Risk Assessment (Soberman, 1994).

School-Level Covariates

Two school-level variables were collected from each school by research staff and included in the study as covariates: the number of students enrolled at the school (school size) and the proportion of students eligible for free or reduced-price school lunch (FRL).

Procedure

The present study was approved by the appropriate Institutional Review Board. After consent was obtained, participating parents and teachers completed paper and pencil measures each spring for the duration of the three-year study period. The study targeted teachers who

interacted the most with students (e.g., homeroom teachers). Please see Smolkowski et al. (2017) for complete study procedures.

Statistical Analysis

We addressed our research questions using mixed-effects regression analysis implemented with SAS PROC MIXED version 9.4 (SAS Institute, 2016). This analytic technique is appropriate when the data have a nested structure. The data structure for the current study is teachers, the unit of analysis, nested within schools. The models nested teacher-level congruence scores within schools to examine whether associations between study variables significantly varied by school and to allow for school-level covariates. Fixed effects and variance component estimates were generated using maximum likelihood estimation and tests of fixed effects relied on Satterthwaite approximation to determine degrees of freedom. For each research question, we estimated statistical models with and without including school size and percent of students eligible for free and reduced lunch as school-level covariates (hereafter referred to as adjusted and unadjusted results, respectively). To facilitate interpretation of effects we reported partial r using a formula in Rosenthal & Rosnow (1991). Partial r represents the correlation between the predictor and criterion variable after removing the variance in the criterion explained by covariates. In unadjusted results partial r can be interpreted as a zero order correlation. Because the sample was restricted to teachers with self-report and corresponding parent-report data, rates of missing data for all variables were less than 1%. Listwise deletion was used to handle the few cases with missing data.

Results

Table 2 summarizes descriptive statistics for study variables. To address our first research question, we regressed parent-teacher congruence in perceptions of middle school structures to

support parent monitoring of middle school student behavior on teacher-report of family educational involvement. Table 3 summarizes the mixed effect regression results with and without including school size and percent of students eligible for FRL as covariates. Results indicated that higher levels of teacher-reported family educational involvement were significantly associated with greater parent-teacher congruence in unadjusted (partial $r = .41, p < .0001$) and adjusted analyses (partial $r = .33, p < .0001$). The school-level variance in the effect of teacher-report of parent educational involvement was not statistically significant (p 's $> .2498$), indicating that the association between parent involvement and parent-teacher congruence did not significantly vary by school.

To address our second research question, we regressed parent-teacher congruence scores on teacher-report of school communication and support to families (Table 4). Results indicated that higher levels of teacher-report of school communication and support were significantly associated with greater parent-teacher congruence in unadjusted (partial $r = .31, p < .0001$) and adjusted analyses (partial $r = .29, p < .0001$). The school-level variance in the effect of teacher-report of school communication and support was not statistically significant in unadjusted or adjusted analyses (p 's $> .3385$), indicating that the association between school communication and support to families and parent-teacher congruence did not significantly vary by school.

To address our third research question, we regressed teacher-report of children following school rules and expectations on parent-teacher congruence scores. As summarized in Table 5, results indicated that greater parent-teacher congruence was significantly associated with higher levels of teacher-report of children following school rules and expectations in unadjusted (partial $r = .32, p = .0008$) and adjusted analyses (partial $r = .35, p = .0002$). The effect of parent-teacher congruence demonstrated significant variability between schools with and without adjusting for

school size and percent of children eligible for FRL (p 's < .0069), indicating that the association between parent–teacher congruence and children following school rules and expectations significantly varied by school.

Discussion

The purpose of the present study was to examine parent–teacher congruent perceptions of middle school structures to support parent monitoring of children's behavior. In particular, we examined as predictors of congruence, teacher-report of family educational involvement, and teacher-report of the school's communication and support to families about student behavior. Additionally, we examined parent–teacher congruent perceptions of middle school structures to support parent monitoring as a predictor of teacher-report of children following school rules and expectations. School size and student eligibility for FRL were included as covariates. Results suggested that teacher-report of family educational involvement and of a school's communication and support to families about student behavior were statistically significant predictors of parent–teacher congruence. In addition, parent–teacher congruence was a statistically significant predictor of teacher-report of children following school rules and expectations.

Family Educational Involvement as a Predictor of Parent–Teacher Congruence

Our first research question examined teacher-report of family educational involvement as a predictor of parent–teacher congruent perceptions of middle school structures to support parent monitoring of children's behavior. Although the findings are not universal, a preponderance of evidence over decades has established family educational involvement as an important aspect of children's education (Garbacz et al., 2017). The present findings indicated that higher levels of teacher-reported family educational involvement were significantly associated with greater

parent–teacher congruence. In addition, findings indicated that the association between family involvement and congruence did not significantly vary by school. This finding suggests that teachers’ perceptions of family educational involvement may contribute to parents and teachers being more in sync with regard to their perceptions of school structures and systems to support children, which can promote environmental consistencies (Crosnoe et al., 2010). In addition, the items used to measure family educational involvement in the present study focused on activities that would likely make family members aware of school systems, such as volunteering at school and attending school meetings. School efforts to build school–home connections that increase parents’ knowledge about school systems may be a key avenue to improve parent–teacher congruence for all families, not only those families whose involvement takes place at the school (Case & Davidson, 2018).

School Communication and Support as a Predictor of Parent–Teacher Congruence

Our second research question examined teacher-report of school communication and support to families about student behavior as a predictor of parent–teacher congruent perceptions of middle school structures to support parent monitoring of children’s behavior. In this study, school communication and support to families about student behavior focused on issues such as a school informing parents about their child’s positive behavior and a school communicating with families about school behavior expectations. In conceptual models, school communication and support about student behavior have been considered an important pathway for schools to build mutual (parent–educator) understandings about school systems (Dishion, 2011). However, prior to the present study, we were not aware of any studies that tested the conceptual link with data. Findings from the present study suggested that higher levels of teacher-reported school communication and support about student behavior were significantly associated with greater

parent-teacher congruence, and the association did not significantly vary by school. This finding suggests that schools may be able to build parent-teacher congruence through communicating with families directly about their child's school behavior and school behavior expectations. Indeed, school-home communication has been frequently noted as a pivotal aspect of family-school collaboration (McIntyre & Garbacz, 2015) and a key mechanism in promoting children's education outcomes in the context of family-school interventions (Sheridan et al., 2019). Findings from the present study suggested a specific aspect of school-home communication (i.e., about student behavior and school expectations) that may be particularly important to build parent-teacher congruence (Rimm-Kaufman & Pianta, 2000), which is one aspect of family-school collaboration associated with improved child outcomes (Holmes et al., in press).

Parent-Teacher Congruence as a Predictor of Children's School Behavior

Our third research question examined parent-teacher congruent perceptions of middle school structures to support parent monitoring as a predictor of teacher-report of children following school rules and expectations. Findings from the present study suggested greater parent-teacher congruence about those school structures was significantly associated with higher levels of teacher-report of children following school rules and expectations. Results indicated that this finding demonstrated significant variability between schools, even while adjusting for school size and the percent of children eligible for FRL. Prior research has suggested that parent-teacher congruent perceptions about communication are an important mechanism for promoting child outcomes in the context of a family-school intervention (Garbacz et al., 2015). Other research has pointed to the importance of congruence through findings that suggest the importance of consistency in parent-teacher relationship quality ratings (Santiago, 2019). Findings from the present study provided initial support for the role of parent-teacher congruent

perceptions about middle school structures in promoting child school behavior. This finding suggests that building a shared understanding among parents and teachers about middle school supports for parents may be a useful pathway through which to support student school behavior, which is consistent with conceptual (Rimm-Kaufman & Pianta, 2000) and empirical work during early elementary school (Barbarin et al., 2010). For example, if parents and teachers are similarly aware of school supports, they may be better equipped to use them in a coordinated manner to promote children's school and home behavior, which can be pivotal activities during middle school (Eccles & Roeser, 2011).

Limitations and Directions for Future Research

There are several limitations that must be considered when interpreting findings from the present study. One category of limitations concerns the measures. All measures were self-report, and thus interpretations cannot be made about observable events. Parent-teacher congruence addresses parent and teacher perceptions, and thus, parent and teacher reports are a useful way to measure the variable. However, it would be helpful for future research to examine other ways of addressing parent-teacher congruence, such as through school products that show evidence of congruence-in-action (e.g., co-developing support plans). In addition, teachers reported on family educational involvement, school communication and support to families, and child school behavior. Teacher perspectives on school communication and support, as well as child school behavior, are important as teachers have direct knowledge about those variables through direct observation within and across school days. In terms of family educational involvement, teachers and parents are important reporters. In the present study, we were interested in how teacher perceptions of family involvement were associated with parent-teacher congruence. However, family perspectives and voices are vital to a research program about family-school connections.

Thus, it would be helpful for future research to include family perspectives on their educational involvement.

There are a few other measure-related limitations that must be mentioned. Some measures have not been subject to rigorous psychometric work, such as the measure of school communication and support. In addition, the measure of student behavior was a single item. We used these measures because we were interested in specific and sometimes discrete behaviors. Indeed, measures with few discrete items, including single items, can be appropriate and have evidence of validity (Elo, Leppänen, & Jahkola, 2004; Stormont et al., 2017). In addition, the measure of parent–teacher congruence and family educational involvement addressed specific aspects of those variables. We were interested in maximizing practical implications for this line of work. Using discrete measures allowed us to comment specifically on certain aspects of the variables we targeted.

Another limitation concerns the participation rate. Only about 39% of parents completed a survey. Thus, the present findings may not represent how these variables are associated for all families. In fact, research suggests that studies that examine family–school collaboration may vary by enrollment group (Case & Davidson, 2018). Future studies could examine the variables investigated in the present study for families who may be hesitant to engage in school, including the completion of research forms, due to a lack of trust.

One final limitation concerns the study design and the cross-sectional nature of the data. Although we examined associations between predictor and outcome variables, we defined predictors and outcomes based on theoretical and empirical support in the literature. No causal or temporal interpretations of results are warranted.

Implications

There are several interesting implications that emanate from the present study. Parent-teacher congruence was the primary focus of the present study. Myriad studies have examined family-school collaboration based on the principles described in Bronfenbrenner's (1979) ecological systems theoretical model. Despite the importance of congruence (Kim & Sheridan, 2015), few studies have addressed the mesosystem and even fewer have sought to understand factors that promote parent-teacher congruence and its association with student outcomes (Holmes et al., in press). Furthermore, the early adolescent developmental period and the middle school context have been under emphasized relative to early childhood and elementary school settings in studies examining family-school collaboration. Findings from the present study suggest family educational involvement and school communication and support to families may be primary factors to promote parent-teacher congruent perceptions of middle school structures to support parent monitoring of student behavior. In addition, this aspect of parent-teacher congruence was significantly associated with teacher-report of children following school rules and expectations. These findings suggest implications for practice and research.

There are several ways schools can promote parent-teacher congruence in the context of their existing school systems. Schools can promote family educational involvement and school communication and support to families through universal systems in ways that honor the dynamic and varied ways that families and schools support children (Garbacz, 2020). Research-based strategies to promote family involvement and school-home communication include creating a role for families on school teams and setting up school-home communication systems that allow families and educators to share information back-and-forth (Smith et al., 2019). Those schoolwide systems may help promote congruence, as observed in the present study. As acknowledged as a limitation herein, schools might specifically target families who may be

hesitant to engage due to a lack of trust in schools and related educational institutions. Dialogues among families and educators have been shown to build perspective taking and develop a shared understanding for acceptable and feasible school systems (Minch et al., 2017). These approaches could help advance congruence in parent-teacher perceptions about school systems that support parents to engage in interventions that support them in better monitoring their child (Stormshak et al., 2005). A primary mechanism through which congruence may exert its influence is through family members and educators coordinating their support for children across and within settings (Barbarin et al., 2010; Garbacz et al., 2015; Rimm-Kaufman & Pianta, 2000), which may be one factor responsible for the significant association on teacher-report of student school behavior in the present study.

In terms of implications for research, the present findings are an initial step in a line of research that can better understand how to promote families and educators being more in sync about how to support children (Barbarin et al., 2010; Strickland-Cohen & Kyzar, 2019). There is a large body of research that has examined aspects of family-school interventions. These interventions may focus on support at home, support at school, and/or support that addresses home and school, as well as the school-home interface (Garbacz et al., 2017). The present study uncovered the importance of school-related factors that may be associated with parent-teacher congruence, one dimension of the school-home interface. To advance this line of research, it may be helpful for family-school intervention researchers to embed dimensions of parent-teacher congruence or other variables that address the mesosystem to better understand how families and educators can work together to support children. In addition, it would be useful for future research to examine longitudinal associations among the present and related variables to ascertain influences over time (Stormshak et al., 2011). For example, it would be useful to

understand how family educational involvement in Grade 6 may predict parent–teacher congruent perceptions of middle school systems at Grade 8. In addition, there are implications for tests of efficacy. For example, it would be helpful to examine the impacts of school communication and support on parent–teacher congruence, and in turn impacts on child school and home behavior in the context of a randomized trial.

When considering the present findings, school size is an important factor to examine. Our findings suggested that school size was a significant predictor of parent–teacher congruence after adjusting for family educational involvement and it was a significant (negative) predictor of students following rules after adjusting for congruence. Thus, it may be helpful for researchers to better understand the role of school size to inform school teams about practical steps they can take to promote parent–teacher congruence.

Summary

The purpose of the present study was to examine parent–teacher congruent perceptions of middle school structures to support parent monitoring of student behavior. Findings suggested that teacher-report of family educational involvement and school communication and support to parents were significantly associated with parent–teacher congruence. In addition, results suggested parent–teacher congruence is significantly associated with teacher-report of students following school rules and expectations. Future research is needed to better understand the congruence construct, including variables that predict congruence and how congruence impacts child education outcomes.

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Table 1*Teacher Demographic Characteristics*

Variable	<i>n</i> (%) or <i>M</i> (<i>SD</i>)
Female, <i>n</i> (%)	232 (56%)
Race and ethnicity (checked all that apply)	
American Indian or Alaskan Native	22 (5%)
Asian	16 (4%)
Black	11 (3%)
Hispanic	29 (7%)
Native Hawaiian or Pacific Islander	5 (1%)
White	396 (95%)
Highest degree attained, <i>n</i> (%)	
High school diploma	3 (1%)
Associates	3 (1%)
Bachelors	69 (17%)
Masters	333 (80%)
Years teaching professionally	17.8 (9.3)
Years teaching at current school	11.0 (6.9)
Hour per week teaching	38.5 (7.7)

Note. *M* = Mean; *SD* = Standard Deviation.

Table 2*Descriptive Statistics for Study Variables*

Variable	<i>M</i> (<i>SD</i>)
Parent-teacher congruence ^a	-1.0 (0.5)
Teacher-report of Family educational involvement	3.6 (0.9)
Teacher-report of children following school rules	4.3 (1.0)
Teacher-report of school communication and family support	4.4 (0.9)

Note. *M* = Mean; *SD* = Standard Deviation.

^a Congruence score was calculated as negative one times the square root of the squared difference between the teacher response and the average corresponding parent response. Higher scores represent higher levels of parent-teacher congruence.

Table 3

Fixed effect and variance component estimates from two-level linear models predicting parent-teacher congruence in perceptions of middle school structures to support parent monitoring knowledge of middle school student behavior

	Effect or Statistic	Unadjusted	Adjusted	
Fixed Effects	Intercept	-1.65*** (0.10)	-1.63*** (0.20)	
	Teacher-Report of Family Educational Involvement	0.17*** (0.03)	0.18*** (0.03)	
	School Size		-0.03* (0.01)	
	School FRL		0.02 (0.01)	
	Variance Components	Level-1 Residual	0.25*** (0.02)	0.25*** (0.02)
		Teacher-Report of Family Educational Involvement	0.00 (0.00)	0.00 (0.00)
Partial <i>r</i>	Teacher-Report of Family Educational Involvement	.41	.33	

Note. Table entries show fixed effects and variance components with standard errors in parentheses. Tests of fixed effects were based on Satterthwaite degrees of freedom. FRL = percent of students eligible for free or reduced lunch. Partial *r* was calculated as *t* divided by the square root of t^2 plus the degrees of freedom (Rosenthal & Rosnow, 1991).

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 4

Fixed effect and variance component estimates from two-level linear models predicting parent-teacher congruence in perceptions of middle school structures to support parent monitoring knowledge of middle school student behavior

	Effect or Statistic	Unadjusted	Adjusted
Fixed Effects	Intercept	-1.80*** (0.13)	-1.57*** (0.19)
	Teacher-Report of School	0.17*** (0.03)	0.16*** (0.03)
	Communication and Family Support		
	School Size		-0.02 (0.01)
	School FRL		-0.01 (0.02)
Variance Components	Level-1 Residual	0.25*** (0.02)	0.25*** (0.02)
	Teacher-Report of School Communication and Family Support	0.00 (0.00)	0.00 (0.00)
Partial <i>r</i>	Teacher-Report of School	.31	.29
	Communication and Family Support		

Note. Table entries show fixed effects and variance components with standard errors in parentheses. Tests of fixed effects were based on Satterthwaite degrees of freedom. FRL = percent of students eligible for free or reduced lunch. Partial *r* was calculated as t divided by the square root of t^2 plus the degrees of freedom (Rosenthal & Rosnow, 1991).

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 5

Fixed effect and variance component estimates from two-level linear models predicting teacher-report of children following school rules and expectations

	Effect or Statistic	Unadjusted	Adjusted
Fixed Effects	Intercept	4.67*** (0.10)	5.54*** (0.31)
	Parent-Teacher	0.37***	0.39***
	Congruence	(0.11)	(0.10)
	School Size		-0.07* (0.03)
	School FRL		-0.08* (0.03)
Variance Components	Level-1 Residual	0.69*** (0.05)	0.70*** (0.05)
	Parent-Teacher	0.15** (0.05)	0.10** (0.04)
Partial <i>r</i>	Parent-Teacher	.32	.35
	Congruence		

Note. Table entries show fixed effects and variance components with standard errors in parentheses. Tests of fixed effects were based on Satterthwaite degrees of freedom. FRL = percent of students eligible for free or reduced lunch. Partial *r* was calculated as *t* divided by the square root of t^2 plus the degrees of freedom (Rosenthal & Rosnow, 1991).

* $p < .05$; ** $p < .01$; *** $p < .001$.