Research on Family-School Partnerships
Series Editors: Susan M. Sheridan · Elizabeth Moorman Kim

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Elizabeth Moorman Kim
Editors

Foundational Aspects of Family-School Partnership Research

Springer

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Volume 1

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Chapter 1
Foundational Aspects of Family–School Connections: Definitions, Conceptual Frameworks, and Research Needs

Elizabeth Moorman Kim and Susan M. Sheridan

Collectively and together, families and schools exert a significant influence on children's educational success. Furthermore, connections between families and schools are viewed as critical to children's positive adaptation. Such views are grounded in decades of research showing that parents' engagement in education is linked to children's enhanced functioning in multiple areas, including academics, motivation, and social–emotional adjustment (for reviews, see Ginsburg-Block et al. 2010; Pomerantz et al. 2007). These effects appear to be present across developmental stages (e.g., Hill and Tyson 2009; Jeynes 2005b), among diverse families (e.g., Jeynes 2003), and across socioeconomic strata (e.g., Domina 2005; Miedel and Reynolds 1999). Taken together, research demonstrates the important role family–school connections can play in children's overall adjustment.

Despite a seeming consensus in the literature around the importance of family–school connections, there is less agreement surrounding how these connections are conceptualized and defined. This is surprising given the wealth of research devoted to the topic. Beyond simple differences in terminology (e.g., home–school connections, family–school partnerships, parental engagement, parental involvement),

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conceptualizations of family–school connections often focus on a single dimension of such connections such as the activities in which parents engage or the efforts teachers make to involve parents. These singular conceptualizations can often overlook the complexity of family–school connections. For instance, it can be difficult to determine differences in effectiveness of various dimensions of family–school connections and their interactions given that they are rarely examined simultaneously. The implications of such limited conceptualizations for research and practice are countless.

In this chapter, we provide a brief description of the core features of family–school connections and review two commonly employed conceptualizations. We then set forth a model of family–school connections that draws together these two conceptualizations. Drawing on this model, we set forth research directions emanating from this integrated perspective.

Core Features of Family–School Connections

A variety of terms exists to capture family–school connections. For the sake of clarity, in this chapter we use the term family–school connections as a way to gather this diverse terminology. Despite the variety of terms, there are certain salient features of family–school connections that unite these various conceptualizations. In this chapter, we view family–school connections as consisting of two core features: (1) parents and educators are mutually engaged in the educational process, and (2) efforts are aimed at supporting children's learning and positive development.

First, family–school connections involve parents and educators both engaged in the educational and learning processes of children (Grolnick and Slowiaczek 1994). For parents, this may take the form of behavioral engagement, such as attending parent–teacher conferences, taking children to the library, working on homework together, or talking with children about school. This could also include cognitive engagement, such as parents' beliefs, attitudes, and aspirations, for children's learning and education (Hill and Tyson 2009). Parents may also be engaged relationally, such as establishing relationships with children's teachers or school personnel and working together, to enhance children's functioning (Christenson and Sheridan 2001). Teachers may be engaged behaviorally, such as inviting parents to come to school, talking with parents, conducting parent–teacher conferences, or sending home notes for parents. Cognitively, teachers may be engaged by forming positive attitudes toward parents' involvement or being open to parents' involvement efforts. Teachers may also be engaged relationally, by establishing relationships with parents.

Second, family–school connections are aimed at supporting children's learning and healthy development. The efforts on the part of teachers, administrators, and parents to form connections are guided by a desire to aid in children's adjustment and help them to function optimally in the educational setting. There is an implicit

assumption that in the context of family–school connections, parents and educators adopt strategies that are effective at enhancing children's outcomes. Indeed, family–school connections appear to promote children's skills and their motivational, social, and emotional development, all of which contribute to children's academic functioning (Pomerantz et al. 2011). Interventions specifically aimed at enhancing the quality of family–school partnerships have been linked to gains in children's academic, social, and behavioral functioning (e.g., Sheridan et al. 2010, 2011, 2012). Indeed, the focus on family–school connections for the enhancement of children's functioning is reflected in national policy attention, such as the No Child Left Behind Act of 2001, which requires schools to have a plan for family–school connections.

Despite these core underlying features of family–school connections, the manifestations of these features take a variety of forms. Broadly speaking, researchers have investigated family–school connections across two areas: those focusing on the *activities* in which parents and teachers engage (structural approaches), and those focusing on the *relationships* within which parents and teachers engage (relational approaches).

Parental Involvement: A Structural Approach to Family–School Connections

Much work on family–school connections has focused on active, meaningful overtures by parents to engage in activities and behaviors at home and school to benefit their child's learning and development (Fantuzzo et al. 2004), often termed parental (or family) involvement. We characterize these approaches as largely structural, as they emphasize the form or structure of activities demonstrated by parents to provide support for their child's education. For example, parental involvement research may focus on parents' support for children's homework or parents' efforts to volunteer at school. Parent involvement efforts are often directed by the school and are conducted programmatically. They are often compartmentalized, focusing on and describing activities that are taking place at home separately from school. In line with this conceptualization, researchers (e.g., Pomerantz et al. 2007) often divide such efforts by the setting within which they take place. School-based involvement is that which takes place at the school, such as attending parent–teacher conferences or school events, volunteering in the classroom, or becoming involved in the parent–teacher association (Fantuzzo et al. 2004). Home-based involvement is that which typically takes place in the home or community. This includes practices such as talking with children about school, helping children with homework, reading with children, or taking children to the library (Fantuzzo et al. 2004).

Parental involvement is related to several desirable student outcomes, including those related to achievement and academic performance, study habits, positive attitudes toward school, homework habits and work orientation, propensity to complete

secondary school, and educational aspirations (Aeby et al. 1999; Fan and Chen 2001; Grolnick and Slowiaczek 1994; Ma 1999; Masten and Coatsworth 1998; Sénéchal 2006; Trusty 1999). For students living in disadvantaged conditions, parent involvement has been found to be associated with lower rates of grade retention, drop out, and years in special education. Benefits to students are evident after students' abilities and socioeconomic status (SES) are taken into account (Barnard 2004; Miedel and Reynolds 1999), with some research suggesting magnified effects for families of low SES (Domina 2005). Meta-analyses investigating the effects of parent involvement with racially diverse students (Jeynes 2003), urban-residing children (Jeynes 2007), and adolescents (Hill and Tyson 2009; Jeynes 2005a) have found positive effects of parent involvement on a range of desirable students outcomes.

Despite the benefits of traditional parental involvement programs and activities, we believe there are some fundamental limitations associated with this approach. The focus on activities that parents are asked to perform directs efforts to practices that may be narrowly construed and disconnected from other learning opportunities. For example, although important to convey interest in school-based performance, a sole focus on increasing attendance at parent–teacher conferences may leave parents feeling at a loss for understanding how to maximize out-of-school learning opportunities. Activities are often implemented in a static fashion without regard to the manner in which parents interact with their children. Thus, more emphasis is placed on structured and scripted objectives rather than interpersonal processes that support learning within the parent–child interaction. Indeed, the *quality* of parental involvement has been highlighted as a key element in whether the benefits of parental involvement are transmitted to children (e.g., Pomerantz et al. 2011; Simpkins et al. 2006). As they tend to be short-term and focused on what parents can do in the here-and-now rather than how parents interact with their children to support learning, goals of parent involvement tend to be narrow in scope.

An inherent yet implicit goal of efforts connecting homes and schools concerns the desire for long-term engagement practices, or practices that extend across a child's school years. However, promoting activities within which parents become involved at one point in time may result in immediate responses that do not generalize. It is unclear whether the parent engagement practices that are necessary at one development period or in one classroom context (e.g., preschool) generalize to practices necessary as children move to new classrooms or as they interact with new teachers.

Family–School Partnerships: A Relational Approach to Family–School Connections

A second approach to family–school connections is relational. This approach emphasizes the interpersonal relationships between primary actors (parents and teachers) who are responsible for various aspects of a child's development. Definitions

of family–school partnership illustrate the emphasis of a relational approach to family engagement. Borrowing from several sources (Albright and Weissberg 2010; Downer and Myers 2010; Lines et al. 2010), we define family–school partnerships as child-focused approaches, wherein families and professionals cooperate, coordinate, and collaborate to enhance opportunities and success for children and adolescents across social, emotional, behavioral, and academic domains. Family–school partnerships recognize shared roles and responsibilities among families and schools. Programs that promote cross-system (home and school) partnerships involve collaboration and cooperation between individuals across home and school settings and articulate shared responsibilities (Christenson and Sheridan 2001). Whereas, parent involvement is concerned primarily with distinct and separate (albeit important) roles and actions for parents and teachers, family–school partnerships are concerned with promoting reciprocal relationships, bidirectional communication, constructive connections, and complementary roles among home and school systems to promote positive social–emotional, behavioral, and academic trajectories in children and youth (Christenson and Sheridan 2001). Partnering with families to foster academic outcomes implies that school personnel reach out to families by inviting them into the partnership, and supporting them in ways that enhance their children's learning. Thus, parents are engaged as partners in services (McKay and Bannon 2004).

A concomitant focus on families *and* schools and their relationship with one another is grounded in ecological systems theory (Bronfenbrenner 1979, 1992). Accordingly, children develop within multiple contexts, and development is optimal when effective connections and continuities among these major systems are created (Hobbs 1966). Bronfenbrenner (1979, 1992) stressed understanding development-in-context by noting the relevance of immediate settings, such as school and home (i.e., microsystems), the influence of the interactions among these immediate settings (i.e., mesosystems), and the larger systems and contexts in which the immediate settings are embedded (i.e., macro- and exosystems). In ecological systems, home–school relationship orientation takes into account the interacting systems within which children learn, the multiple opportunities across systems for bolstering cognitive and social development, and the bidirectional influences that extend between learning environments. When working as partners, the emphasis is on the mesosystem (i.e., the quality of the interface and sustained connection between families and schools). Collaboration among key stakeholders that cooperate within a child's life is important for students to experience smooth transitions across systems (Early et al. 2001), and is particularly important for students whose families are often poorly connected with schools or other service delivery systems (Dishion and Stormshak 2007). In potentially challenging or high-risk situations, the establishment of positive, constructive relationships among family–school partners provides an opportunity for dialogue and problem solving, a "window of opportunity" not present when home and school systems operate in isolation from or counter to one another.

From the standpoint of a relational approach to family–school connections, processes by which parents and teachers work jointly to provide cross-setting oppor-

tunities and experiences for children's learning and development are salient. The benefits of consistencies across primary learning environments (Phelan et al. 1998), cumulative cognitive and linguistic stimulation (Crosnoe et al. 2010), and positive interactions between a child, his or her family and school systems are well accepted. In a significant study using a national sample of 1364 children involved in the National Institute of Child Health and Human Development's (NICHD) Study of Early Child Care and Youth Development (SECCYD), Crosnoe et al. (2010) explored the unique and combined contribution to early learning of cognitive stimulation at home, in preschool childcare, and first grade classrooms. Specifically, the study examined whether children received stimulation in one, two, or all of these settings. It was important because it addressed both additive (or cumulative) influences of stimulation on early and later learning, as well as the configuration (or typology) of environmental effects. They found that both the number of settings in which children received stimulation as well as the settings in which such stimulation occurred, were critical for children's early reading and math trajectories. Enhanced performance in reading and math was found for children who experienced consistencies in cognitive stimulation across multiple settings, but only when one of those settings was the home (Crosnoe et al. 2010). For low-income, low-achieving children, stimulation in the home environment appeared pivotal for changing negative achievement trajectories; these children benefitted most from stimulation at home in combination with other settings. The essential, take-home conclusion of these authors bears repeating: "(T)argeting single settings as a means of improving children's learning might not be sufficiently powerful for establishing or deflecting trajectories of early achievement…. Policies that focus solely on one setting, such as parenting programs, preschool interventions, or school standards movements, are unlikely to be as efficacious as those targeting consistency across multiple settings" (Crosnoe et al. 2010, p. 984).

Several terms have been used to describe the nature of cross-setting supports for children. Two common terms are consistency and continuity, and although similar in connotation, we believe they reflect distinctive purposes and processes, and potentially different outcomes. *Consistency* refers to the use of common, parallel activities provided to children across settings (sometimes by chance; Crosnoe et al. 2010). On the other hand, *continuity* implies coordinated and planned interactions to encourage stimulation or provide support across home and school (by design; Sheridan et al. 2010). It considers not only indirect transactions as they occur across home and school, but also direct engagement as it occurs between actors (i.e., parents and teachers) in both settings. Continuities in positive stimulation across caregiving systems (i.e., family and school) and healthy relationships among parents and professionals may provide greater power for establishing progressive achievement trajectories for children living at risk due to poverty and associated circumstances (Barbarin et al. 2010; Crosnoe et al. 2010; Rimm-Kaufman and Pianta 2000), and changing developmental trajectories for those showing signs of educational risk (Jung 2010; Turnbull et al. 1999). Working in collaboration with one another creates opportunities for continuities across children's learning contexts, providing a richness in experience and breadth of support for learning.

Researchers have demonstrated the importance of family-school partnerships in promoting children's adjustment. Intervention research testing the effects of a parent–teacher collaborative consultation model (Conjoint Behavioral Consultation; Sheridan and Kratochwill 2008) found that relationships between parents and teachers are essential in linking home–school interventions with desirable outcomes. Specifically, the quality of relationship between teachers and parents has been found to mediate the effects of a home–school consultation-based intervention on self-regulatory and prosocial behaviors that interfered with learning (Sheridan et al. 2012). In a randomized clinical trial investigating a family–school partnership intervention for treating students with Attention Deficit Hyperactivity Disorder (ADHD), Power et al. (2012) also found that when compared to the control group, parents and teachers who received CBC reported significant improvements in the quality of the family–school relationship at follow-up. Reviews of family–school partnership research also indicate that dialogue and two-way communication about student performance are associated with evidence of intervention effectiveness (Christenson and Carlson 2005). Indeed, aspects of parent–teacher relationship quality, such as communication, have been shown to mediate the effects of a partnership intervention on children's behavior (Sheridan et al. 2012).

The benefits of partnership orientations to family–school connections are clear, but they are not without their challenges in both research and practice. As a novel approach to working across home and school, some partnership practices may be experienced as foreign or uncomfortable to family members. As with any relationship, time is a necessary commodity to formulate meaningful interpersonal connections; however, finding extra time for relationship-building is often challenging for busy families and teachers. Furthermore, dyadic partnerships change each year a child progresses through the educational system, thereby challenging parents to form new partnerships virtually every year of their children's school careers. Thus, specific parent–teacher relationships do not remain static from year to year, and little is known about specific interpersonal processes that may influence positive transitions and transactions among adults across development, dyads, or school years.

Bringing Together Structural and Relational Approaches: A Meta Model of Family–School Partnerships

We believe that a fruitful approach to family–school connections lies in an integration of structural and relational elements, enveloped within a partnership orientation. Indeed, we believe both structural and relational features characterize effective parent–teacher interactions and partnership practices. Such an approach capitalizes on the strengths of both structural and relational aspects of family–school connections. Specifically, an integrated partnership approach is intentional in its focus on helping children achieve specific learning and developmental goals. As such, the goals are jointly established and determined around mutual (parent and teacher)

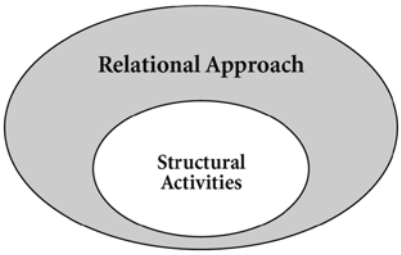

Fig. 1 A theoretical model of family–school connections. Structural activities include co-determined, cohesive practices and activities (e.g., instructional support [in-classroom, homework]; monitoring/feedback/scaffolded learning; reinforcement and motivation; increased home and school learning opportunities and experiences; and adult–child communication). A relational approach is characterized by two-way communication, trust-building, joint engagement/commitment, congruent expectations, mutual goals, and collaborative problem solving.

priorities. The partnership unfolds as a process that is culturally sensitive (responsive to values, priorities, and interaction styles of families), developmentally responsive (appropriate to children's needs across the developmental spectrum), and strengths-based (building on family/child and school/teacher competencies and interests). At the same time, it incorporates structural features or strategies grounded in research that facilitate children's learning, behavior, or social–emotional development.

Figure 1 depicts a graphic representation of our thinking related to family–school partnerships. As a cohesive model, it unites the benefits of structural and relational elements as parents and teachers work as partners. We purport that partnerships always, by definition, include attention to the relationship between families and schools. As a common denominator in all interactions, family–school partnerships are concerned with how families and schools cooperate to support learning. Although not yet empirically established, we suggest that it may be possible to identify certain interpersonal elements characteristic of relational approaches that influence partnership-based practices, including two-way communication, trust-building practices, joint engagement and commitment, congruent expectations, mutual goal setting, and collaborative problem solving. Similarly, certain structural activities that represent integrated, cohesive, co-determined practices may be deemed particularly relevant relative to isolated activities. For example, cross-system learning experiences and support with monitoring and feedback provide exposure to learning opportunities beyond those occurring in an isolated fashion. Consistent motivation provided at home and school, reinforcement and reflective communication provide interpersonal connections between children and adults that send positive messages and expectations about children's efforts and accomplishments. Note that we do not argue for identical practices across home and school, but rather those that are designed to capitalize on strengths within each system, are responsive to individual circumstances, and that collectively support a child in meeting academic, social–emotional, and behavioral goals.

A relationally based partnership approach allows for flexibility and responsiveness to situations and dyads. At times, structural elements will be most important

to help accomplish goals for learning, and at times, relational elements will take precedence. In situations where historical or interpersonal dynamics challenge the ability of family members and educators to work effectively (Lareau and Muñoz 2012), time and effort may be best spent on building trust (relational objectives) prior to the development of educational intervention plans (structural objectives). Certainly our field experiences bear this out; once trust is formed, communications may be directed to establishing specific tactics to be used at home and school to support continuity in educational expectations and experiences.

Research Limitations and an Agenda

A number of research directions that are consistent with our conceptual framework of relationally embedded family–school connections and practices are offered. First, research is needed to uncover the unique effect of partnerships as defined by co-determined structural activities enveloped by strong relational components. Much of the extant research has focused on structural activities only, or failed to differentiate between structured activities and relationship-based approaches. Specifically, there is a need to investigate the effects of family–school partnerships distinct from more general parent involvement interventions. Several meta-analyses of parent involvement are already available in the literature (e.g., Hill and Tyson 2009; Jeynes 2003, 2005a, b, 2007; Mattingly et al. 2002; White et al. 1992), focusing on activities *parents do*, with little attention to relationships formed *between parents and teachers* with the goal of promoting positive student outcomes. That is, to date no research has appreciably tested the possibility of unique effects based on the orientation or delivery of the intervention (i.e., structurally-based activities or relationship-based partnerships). No quantitative attempts have been made to synthesize effects of such partnerships on student outcomes or differential effects of family–school partnership models. Research is needed to determine the differential effects of interventions addressing structural activities only (i.e., parent involvement) and those implementing activities within a relationship-based approach (i.e., family–school partnership). A quantitative synthesis of family–school partnerships apart from parent involvement, in general, may uncover distinct contributions of approaches that promote joint parent–teacher relationships and cross-system supports for broad student outcomes.

Second, presuming that both structural and relational features are important in supporting children's learning and development, it is necessary to uncover methods to integrate these elements. Here and elsewhere (cf. Sheridan et al. 2014), we have argued for the need to discern operative relational and structural elements or components of evidence-based family–school partnership models that are empirically related to learning, behavioral and social–emotional outcomes, and then determining how (in what combination or form) they can be distilled. It is also likely that involvement practices and relationship qualities relevant at one developmental period (e.g., early childhood) are not identical to those necessary at later points in

development (e.g., adolescence; see chapter by Hill in this series). Research uncovering nuances within and among approaches should be invaluable in determining with greater precision whether the source of variability found in previous reviews is related to structural versus relational factors present in the respective approaches, and clarifying operative and developmentally relevant intervention elements and their effects.

The specific mechanisms by which parental involvement and family–school partnerships promote positive child outcomes have received limited attention. It is possible that modeling, reinforcement, and instruction play active roles (Hoover-Dempsey and Sandler 2005). Theory purports that when parents are involved, they are modeling positive school-related behaviors and attitudes. The parent's behavior conveys to their child that school and school-related activities are worthwhile. In line with this notion, Cheung and Pomerantz (2012) demonstrated that parents' involvement was related to adolescents' achievement through its effect on adolescents' motivation and engagement. Parental involvement also reinforces child behaviors by creating occasions for parents to provide their child with attention or rewards for school-related behavior. Indeed, one mechanism by which parental involvement confers benefits on children's academic performance is through children's enhanced academic skills (Hill and Craft 2003). Finally, parental involvement provides the opportunity for parents to impact their child's education via direct instruction (Hoover-Dempsey and Sandler 2005). Whereas, these mechanisms have received some research support for structural activities, the mechanisms by which partnerships influence student learning and development are far less clear. Whereas, at least one study found that the quality of the parent–teacher relationship mediated in part the effects of a consultation-based intervention on student social-behavioral outcomes (Sheridan et al. 2012), there are likely unmeasured constructs also partly responsible for that pathway. That is, it is probable that the enhanced relationship directly influenced certain congruent practices, which are essential to understand in order to determine how relationally based interventions optimize learning.

As in most intervention research, context matters when it comes to the development, evolution, and study of family–school partnerships. There is a need to identify the effects of context within school and family systems (e.g., age/grade of students, SES, culture, locale) on uptake of partnership interventions and outcomes on students, families and schools. An investigation of moderators will allow us to uncover how the effects of interventions addressing structural activities only, and those occurring within a relationship-based approach, differ as a function of certain child, family, and school variables. Such research would be focused on determining what works (aspects of parent involvement and family–school partnership) under variable contexts and conditions.

Another key area where research is needed is measurement. Consistent with the different approaches we have outlined, measurement has evolved hand-in-hand with these conceptualizations. From a parental involvement perspective, many measures have been developed to assess parental involvement activities. These measures often take the form of checklists measuring the frequency with which

Table 1 Examples of structural activities and these activities in a relational framework

Structural Activities	Structural Activities + Relational Approach
Teachers present information about children during parent–teacher conferences	Teachers and parents share information regarding children during parent–teacher conferences
Homework is assigned with an expectation that it will be completed outside of class time	Extensions of classroom work are coupled with natural learning opportunities on similar subject matter, with direct links between formal- and informal-learning opportunities
Parents are taught to use positive reinforcement for desired behaviors	A cross-system plan is agreed upon wherein specific desired behavioral goals are set, collectively reinforced, and celebrated when met at home and school
Parents volunteer to help lead small math circles in the classroom and are provided with lesson plans for delivery	Parents and teachers share math goals, with a range of mutual opportunities in and outside the classroom for students to engage

parents are involved in school- or home-based activities. From a relational perspective, fewer measures exist to capture the quality of partnering between families and school. Although measures of some dimensions of partnerships exist, such as the Parent–Teacher Relationships Scale (Vickers and Minke 1995) and the Parent Satisfaction with Educational Experiences Scale (Fantuzzo et al. 2006), there are no multidimensional measures assessing this construct. Drawing on the conceptualization of family–school partnerships presented here, there exist no methods that simultaneously assess relational and structural aspects of partnerships. It is likely that a multi-method (e.g., direct observation, ecological/event recording, self-report), multi-source (i.e., parent, teacher) approach is needed to capture the many dimensions (e.g., behavioral, cognitive), characteristics (e.g., quality, frequency), and settings (e.g., home, school, community) representing partnerships. Such measures and methods are vital to our understanding of the operative elements and dynamics in the effects of family–school partnerships (Table 1).

Conclusions

Much research has been devoted to understanding the benefits of connections between children's families and schools. However, there remains a lack of clarity regarding definitions and conceptualizations of such connections. We propose a view in which the benefits for children, parents, and schools are greatest when such connections are infused with an emphasis on continuities and relationships between the home and school environments. Many new and exciting research directions stem from this conceptualization. By bringing together these research areas, we hope to move research in this area forward toward a theoretically grounded, empirically supported, and practically relevant understanding of family–school connections.

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Chapter 2
Core Components of Family–School Connections: Toward a Model of Need Satisfying Partnerships

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A growing and consistent literature supports the importance of schools and families making an active effort to work together and share the responsibility for educating children. In fact, work on family–school partnerships suggests that families and schools should not be viewed as separate influences, but instead partners that must jointly ensure student success, given their shared goals and investment in students. This way of thinking about connections between families and schools is perhaps best exemplified by Christenson and Sheridan's (2001) definition of school–family partnerships: "[developing an] intentional and ongoing relationship between school and family designed to directly or indirectly enhance children's learning and development, and/or address the obstacles that impede it" (p. 38). According to these authors, these family–school partnerships are characterized by four features: (a) a student focus, (b) a belief that families and students are jointly essential and must share responsibility for ensuring student success, (c) an emphasis on active collaboration, and (d) a preventative solution-focused approach, whereby families and schools work together to create optimal learning conditions.

Researchers agree that active partnerships are important in that they provide facilitative contexts for student learning. Thus, it is essential to examine the ways in which these partnerships are constructed, the roles that parents and teachers take on as partners, and the ways that stakeholders create and sustain these connections. It is

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also important to specify why partnerships are important so they can be constructed in ways that are most helpful.

In this chapter, we explore the key constructs that make up these partnerships, focusing on structural elements of effective partnerships, including what parents, teachers, and schools do as partners. We then discuss relational issues, reviewing parent and teacher constructions of and attitudes about their relationships with each other. The bulk of this chapter, however, is devoted to providing a theoretical approach to understanding partnerships and the implications that this perspective has for possible ways of constructing true partnerships and identifying potential barriers that may arise in developing them.

How Have Family–School Partnerships Been Organized Structurally?

Parent Activities and Behaviors

Most of the work on family–school partnerships has come under the rubric of parent involvement. In thinking about how optimal family–school partnerships should be constructed, researchers have focused on the different roles that parents can take. For example, Epstein (1990) offered six types of parent involvement thought to be crucial to partnerships. A first type of involvement refers to family obligations to provide a home environment that supports children's health, safety, and well-being so that they are able to learn. This could include securing adequate housing and food, and making sure that the home is conducive to studying. A second type of involvement, home–school communication, refers to the communication between parents and schools about school programs and student progress. Home–school communication can take the form of notices, memos, report cards, or conferences. Epstein labeled the third type of involvement "parent involvement at school." This type of involvement refers to parent participation in at-school activities and can include classroom volunteering or attendance at school-wide events (e.g., school sports games or performances). In a fourth type of involvement, parents assist their children in learning activities at home. This type of involvement could include parental monitoring or assistance in the completion of homework or other at-home academic assignments. The fifth type of involvement refers to parent participation in advocacy, governance, and decision-making at the level of the education system. This type of involvement includes parents serving on school, district, and state committees as members of PTO/PTA groups, Advisory Councils, or Advocacy Groups. Lastly, the sixth type of involvement refers to school collaboration with community stakeholders that can include businesses or agencies within the district. It is important to note that Epstein does not see these six parental involvement practices as responsibilities of parents alone, but proposes that schools can and should do many things to support parents in taking a more active role in their child's education.

A number of other researchers have also identified the types of involvement that intersect with Epstein's six categories, and have examined how they relate to student achievement. A number of meaningful distinctions have been made between different types of involvement (e.g., Epstein 1987; Grolnick and Slowiaczek 1994; Hickman et al. 1995; Ritblatt et al. 2002), with many researchers differentiating between involvement at school, involvement at home, and parent academic expectations/aspirations—sometimes referred to as academic socialization (e.g., Hill and Tyson 2009). Involvement at school includes parent practices that take place at the school. Such practices can include attendance at school meetings (e.g., parent–teacher conferences), initiating contact with teachers, attending school-wide events (e.g., school performances, open houses), and volunteering in the classroom. School-based involvement can also occur at the system level, such as when parents are members of school governance boards. Involvement at home represents practices that parents engage in outside the school, usually at home, to assist their child's learning. Home-based practices include directly assisting with academic tasks (e.g., homework and studying), and exposing students to intellectually stimulating activities and experiences such as reading material and current events. A third type of involvement delineated by researchers (e.g., Grolnick and Slowiaczek 1994) has been labeled personal involvement and represents the interest and expectations that parents convey to their children about education. These parental practices are thought to reflect parental socialization about the value and utility of school and learning.

There has been a plethora of research showing that these types of involvement differentially relate to academic outcomes. For example, McWayne et al. (2004) identified three dimensions relevant to involvement: (a) supportive home-learning environments, which included talking to children about school activities and organizing the home to facilitate learning, (b) direct involvement, such as parental participation in at-school activities and direct communication with educational staff, and (c) inhibited involvement occurring in the context of competing commitments and limited time that may undermine involvement. Whereas, the supportive home-learning environment dimension was strongly associated with reading and mathematics achievement, direct involvement was unrelated to academic outcomes.

In another study, Hill and Tyson (2009) identified three different types of parental involvement. First, school-based practices involved communication with school personnel, volunteering in the classroom, and participation in school governance and advocacy groups. Second, home-based practices included assistance with homework and providing students with exposure to cultural activities. Lastly, academic socialization included providing support for children's own educational and vocational aspirations, conveying the value of learning, and helping to make clear to children how learning activities connect to outside interests and current events. There were no relations between school-based involvement and children's middle-school achievement, and only modest effects for home-based involvement. However, there were significant and strong effects for academic socialization. A similar pattern of findings was shown by Jeynes (2005), who reported that parental achievement expectations more strongly predicted academic outcomes than other

parental involvement practices, including assistance with homework, parental reading, and at-school participation.

There has also been some longitudinal support for differential relations with achievement by involvement type. Sy et al. (2013) distinguished between academic instruction and academic socialization. The authors described academic instruction as comprised of individual interactions between parents and children that target the development of specific intellectual skills (e.g., reading with a child to enhance literacy skills). Academic socialization refers to parents conveying academic beliefs, expectations, and values to their children, creating a cognitively stimulating home climate, expressing an interest in, and discussing school and learning activities, and setting academic expectations. While academic instruction predicted reading achievement in early childhood (but not middle childhood or adolescence), academic socialization was a persistent predictor of achievement across childhood and adolescence.

Researchers have also found that academic socialization is a positive predictor of academic achievement across ethnic groups. Fan et al. (2012) showed, for instance, that when parents had high aspirations for their children's postsecondary education, their children felt more competent in school, were more engaged in the classroom, and had higher grades, independent of their ethnicity status. Overall, these studies suggest that academic socialization is a stronger predictor of achievement than other types of involvement more directly aimed at building skills or providing academic assistance.

Teacher Activities and Behaviors

In addition to examining the sorts of activities in which parents engage, researchers interested in school–family partnerships have also looked at the practices that teachers use in establishing and supporting these connections. The majority of this work has examined how teacher practices impact the behaviors and attitudes of parents. Patrikakou and Weissberg (2000) assessed several teacher outreach practices, examining how they were related to parent involvement at home and school. They found that parents' perceptions of teacher outreach strongly predicted parent involvement, above and beyond demographic predictors such as parental education, employment status, child age, gender, or race. Specifically, they found that when parents reported that their child's teacher encouraged them to visit the school they were more likely to participate in a range of at-school activities. Parents were also more involved in their children's schooling when they reported that teachers were providing them with information about their child's achievement and about school-wide activities, through phone calls, notes, and home–school journals. In a similar study, Ames (1993) found that when teachers communicated to parents about student progress and in-class activities, and provided parents with feedback about how they can support their child's learning at home, parents felt more comfortable with their child's school and were subsequently more involved.

Several researchers have also found that invitations for involvement from teachers predict the frequency and effectiveness of specific parent involvement activities (e.g., Balli et al. 1998; Epstein and Van Voorhis 2001; Simon 2004). Green et al. (2007) found, for instance, that parents' perceptions of specific teacher invitations predicted school-based involvement practices. Similarly, Dauber and Epstein (1993) showed that teacher invitations were strong predictors of, both, home and school-based involvement among parents of elementary and middle-school students. These findings have been replicated by others in diverse and at-risk school populations (e.g., Simon 2004; Walker et al. 2011). Interestingly, teachers' invitations for parent involvement have also been shown to predict increased time on homework and improved academic performance, likely through their effects on parent involvement (Epstein and Van Voorhis 2001). In addition, Epstein and colleagues (e.g., Becker and Epstein 1982; Epstein 1986) have found that when teachers incorporate parent involvement into regular teaching practices, parents feel more competent about their capacity to help their children with academic tasks and show more frequent interactions with their children at home, and students show improved learning attitudes and achievement (Epstein 1991). Other research examining the effects of teachers' efforts to involve parents has shown greater gains in reading scores for low ability students, and among those who read outside of school when teachers engaged in more outreach efforts to involve parents (Jung and Han 2013).

Given that work has consistently shown that teachers' involvement practices can impact student achievement through their effects on parents' involvement, a number of systematic programs have been developed to support teachers in involving parents. One particularly illustrative program is the Teachers Involve Parents in Schoolwork (TIPS) program (Epstein and Van Voorhis 2001) that entails teachers assigning homework involving family interaction. The developers of this program found that classrooms that implemented the TIPS program had families that were more involved in their children's learning, even among older students and for families of low socioeconomic status. Others have found that such interactive homework approaches can increase homework completion rates (Balli et al. 1997; Balli et al. 1998).

Stakeholder Role Construction

As illustrated above, family–school partnerships can be understood in terms of what parents and teachers do, i.e., whether parents display involvement at school and at home, and whether teachers actively involve parents in their children's learning. However, it is also important to understand the way stakeholders (parents, teachers, principals, and community) view their roles and relations with each other. Parents, teachers, and principals have beliefs and attitudes about their own and others' roles in the school endeavor and in children's learning. These beliefs and attitudes may guide their efforts and actions. Thus, researchers have examined the way parents, teachers, and principals construct partnership roles and the consequences of these ideas for both behavior and for children's learning.

Parent Role Construction

There is evidence that parents have differing ideas about what their roles are with regard to children's learning and schools. Hoover-Dempsey et al. (2005) discuss such beliefs as parental role construction. For example, some parents see themselves as key contributors to their children's educational success, while others see learning as largely in the purview of schools. Grolnick et al. (1997) related the extent to which parents of third through fifth grade students saw their role as that of a teacher with their levels of school, cognitive, and personal involvement. Parents who tended to see their role as teacher were more involved in cognitive activities than those who endorsed this role less. More recently, Green et al. (2007) showed that parents who had a more active role construction, i.e., those who thought parents should be more active in relation to their children's educations, showed more school- and home-based involvement. Finally, Walker et al. (2011) examined three types of role constructions in parents: parent-focused, where parents thought they had primary responsibility for their children's school outcomes; partnership role construction, where parents believed that they and teachers share responsibility for school outcomes; and school-focused role construction, where parents believe that the school has primary responsibility for school outcomes. Surveying 147 Latino parents, the authors found that parents' partnership-focused role construction was associated with more home involvement, whereas school-focused role construction was associated with lower home involvement. Thus, evidence supports the importance of parents' view of their roles regarding schools, and learning as a key predictor of how they behave with regard to their children's schooling.

Teachers' and Administrators' Role Constructions

In parallel, teachers hold varying views of parents' roles and abilities to help their children learn. Epstein and her colleagues' pioneering work in this area demonstrates the importance of these views. While Epstein noted that many teachers have doubts about parents' abilities, especially those of more disadvantaged and less educated parents, to help their children with schoolwork, not all teachers hold such attitudes. Becker and Epstein (1982) showed that teachers who were leaders in the frequent use of parent involvement did not prejudge parents according to background characteristics on whether they could be helpful and would follow-through on learning activities at home. Conversely, teachers who infrequently used parent involvement in their classrooms tended to hold more stereotyped views of parents' abilities to help. Epstein and Dauber (1991), in a survey of 171 teachers in five elementary and three middle schools, found that the more positive teachers' attitudes about parent involvement, the more importance they placed on such practices such as holding conferences with all students' parents, communicating with parents about school programs, and providing parents with both positive and negative information about students' progress. More positive attitudes about parent involve-

ment were also associated with more success in involving parents with limited time and resources such as single and less educated parents. More recently, Gordon and Louis (2009) surveyed 4491 teachers about their views of school leadership and parent involvement. Teachers who more strongly believed that parents and teachers should share leadership perceived parents as more involved. In addition, the more teachers viewed parents as involved and the more they believed in shared leadership, the higher was children's school achievement.

Finally, principal attitudes toward family–school partnerships have been studied. Giles (2006) examined principals' views of "ownership" of schools. They found that principals who saw parents as equal partners were most able to engage parents and community members in ownership of the school process. Goldring (1990) studied three principal leadership styles when confronted with parent involvement: socialization, coalition forming, and buffering and cooptation. The socialization style involved principals trying to mold parent involvement into acceptable styles and encourage parents to accept school goals and methods. Coalition forming involved principals seeing parents as allies and seeking to involve them. Finally, buffering and cooptation involved attempts to diminish parent influence and to create formal procedures to deal with parent requests. Surveys of principals showed that these leadership styles were connected to the populations of the schools being served. In more homogenous schools (low or high SES), principals were more likely to use cooperation; while, in more heterogeneous schools, there was more use of socialization and formal organizations. Further, principals were more likely to use a buffering style in lower SES schools and to involve parents as resource providers in higher SES schools.

Beyond individual views of each other, parents', teachers' and principals' views interact to create relational contexts for partnerships. For example, parents' ratings of teacher quality are associated with whether teachers frequently involve them in learning activities. When teachers frequently involve parents in learning activities at home and send home communications, parents rate them as more effective teachers (Epstein 1988). Further, the school culture can have an impact on teachers' views. Bauch and Goldring (2000) showed that when the school provided a caring atmosphere and required parent volunteering, teachers saw this as promoting parent participation. If schools are seen as supportive, teachers are more likely to provide information to parents. Thus, both conceptions of one's own role as well as that of others have implications for how satisfied stakeholders are with the school experience.

Bringing a Theoretical Perspective to Family–School Partnerships

The current research on family–school partnerships includes a wealth of information on the importance of such partnerships for students. Yet, the field has lacked an organizing framework to understand why such partnerships are so crucial, not only

for children but for all stakeholders, and what may impede them. Here, we suggest that self-determination theory (SDT) may provide such a framework.

SDT begins with the assumption that all individuals have three inherent psychological needs—those for autonomy, for competence, and for relatedness (Deci and Ryan 1985). When these needs are satisfied, people will be most motivated and engaged in activities and will experience greater well-being.

The need for autonomy is that to experience oneself as volitional in activities rather than experiencing oneself as coerced or forced to behave. The need for competence refers to the need to feel effective in one's environment. Finally, the need for relatedness concerns the need to experience oneself as connected to others or as belonging. We suggest that, within the educational context, family–school partnerships can help students, parents, and teachers to experience satisfaction of these needs.

When the need for competence is satisfied, individuals feel competent or efficacious. They also report that they know how to succeed and to avoid failure or have a sense of perceived control (Skinner et al. 1990). Satisfaction of the need for autonomy is in evidence when individuals behave out of a sense of volition or regulate themselves autonomously (Deci and Ryan 1985). This is often assessed in research by measuring the reasons that individuals have for engaging in behaviors. For example, children may do their homework or schoolwork because they will get in trouble if they don't, a more external or controlled reason, or because they feel it is important, a more autonomous reason in which children identify with the value of their behavior. Finally, satisfaction of the need for relatedness is in evidence when individuals feel secure and positive in their relationships (Bretherton 1985; Crittenden 1990). Within SDT, satisfaction of needs for autonomy, competence, and relatedness will, in turn, lead to engaged patterns of behavior that are associated with individuals' well-being. We now turn to research on the effects of partnerships on student outcomes that can be understood from this perspective, highlighting how this framework can also illuminate areas on which to focus.

SDT is a useful framework for interpreting the data on relations between family involvement and student outcomes as well as understanding why particular types of involvement may facilitate student outcomes. In our own empirical work on parent involvement, we have asked *how* parent involvement practices impact students. Grolnick and Slowiaczek (1994) proposed two models for explaining the effects of parental involvement on student achievement. In the first model, a direct effects model, parental involvement is thought to impact students by teaching them the requisite academic skills needed for success. In this model, parents for instance, would increase students' academic skills (e.g., their reading fluency or comprehension or mathematics computation) through their interactions with their children, particularly by assisting them during learning activities at home. The second, a motivational model, proposes that parental involvement practices impact students by meeting children's needs for competence, autonomy, and relatedness, thereby, facilitating motivational attitudes and values that would enable them to engage and put forth effort in school. Thus, parents who discuss learning activities with students, attend school events, and help to make connections between learning material and outside

activities would be helping their children regulate their school behavior out of their own value for learning, and feel competent and in control so that they can be active participants in their learning. These authors studied 302 seventh grade children and their parents, and found that both mother and father involvement at school and involvement in cognitive activities were associated with children's perceived competence and perceptions of control, which then were positively associated with school performance. These findings support the motivational model whereby parent involvement impacts student achievement by facilitating motivational resources. Support for a motivational model also comes from a study by Marchant et al. (2001) in which parents' values for students' efforts and academic success affected student achievement by facilitating students' motivation and sense of competence.

The SDT model may also explain particularly large effects for some types of involvement, namely those related to parents' academic attitudes and expectations. Academic socialization, even more so than involvement practices aimed at enhancing skills, may facilitate the motivational attitudes and values connected to the three needs, thus serving as a stronger predictor of children's engagement and achievement.

From an SDT framework, it would also be crucial that parent involvement meet children's need for autonomy. Thus, it is important to consider how parents are involved, rather than just their level of involvement (Pomerantz et al. 2007). In particular, parents can be involved in ways that support children's autonomy by taking their perspectives, allowing them choice, and supporting their initiations and problem-solving strategies. By contrast, parents may be controlling in their involvement, pressuring children to perform and solving problems for them. Most research on parental autonomy support versus control has focused on how parents motivate their children for academic endeavors, showing that when parents are more supportive of autonomy, children show more autonomous regulation of their school activities (e.g., Grolnick and Ryan 1989; Soenens and Vansteenkiste 2005). However, a few studies have focused on parent involvement activities per se. For example, Steinberg et al. (1992) showed that parents' involvement in their children's schooling (assisting with homework, attending school programs, etc.) had a more positive effect when it was conveyed along with an authoritative parenting style rather than a more authoritarian style. Grolnick et al. (2002) showed that when parents interacted with their children on a homework-like task in the laboratory using a more controlling style, children were less accurate in applying the material later, when on their own.

SDT also proposes that it is important for parent involvement to meet children's needs for competence. Emerging research in this area has looked at how parents structure their children's learning environment through the use of rules and expectations, predictable consequences, and clear feedback (Farkas and Grolnick 2010). When parents provide such structure, children are thought to be better able to anticipate outcomes and plan their behavior. If parents do not clearly specify expectations, delineate consequences, or provide feedback, children may feel helpless and incompetent, undermining engagement and active learning. The little empirical work on parental structure that has been conducted has shown that it is related to

children's motivational resources. Grolnick and Ryan (1989) found that parental structure, which they defined as the clarity of guidelines and expectations and the consistency with which these expectations were enforced, was related to children's greater perceived control of their academic successes and failures. Grolnick and Wellborn (1988) similarly found that parents high in structure had children who endorsed fewer maladaptive control beliefs (i.e., beliefs that academic success was due to luck or powerful others) and showed higher perceived competence. Others have found that parental structure is associated with greater perceived control, classroom engagement, and general self-worth (e.g. Skinner et al. 2005).

In our own work on parental structure, we have delineated specific components of structure and examined their relations with outcomes. Farkas and Grolnick (2010) identified six components of structure: (a) clear and consistent guidelines, rules, and expectations; (b) predictability of consequences for action; (c) information feedback; (d) opportunities to meet expectations; (e) provision of rationales for rules and expectations, and (f) parental authority (i.e., parents acting as leaders in the home). These six components were coded from interviews with seventh and eighth grade students. Structure components were found to relate to several motivational outcomes including engagement, grades, and perceived control. In a second study (Grolnick et al. 2014), 160 sixth grade students were interviewed about their home with regard to homework and studying. Interviews were coded for clarity and consistency of guidelines, predictability of consequences, provision of rationales, and parental authority. Interviews were also coded for how the structure was implemented, either in a way that supported the children's autonomy or controlled their behavior, in relation to four components: (a) the extent to which rules and expectations were jointly established versus parent dictated, (b) whether there was open exchange or dialogue about rules and expectations, (c) parent empathy, and (d) provision of choice. Consistent with the Farkas and Grolnick (2010) study, parental structure was associated with perceived control. Further, the more the structure was implemented in an autonomy supportive manner, the higher were the children's perceived competence, engagement, and end-of-year grades.

We also examined parental structure across the transition to middle school (Grolnick et al. in press). Results showed that higher parental structure was associated with increases (lesser decreases) in perceived competence, classroom engagement, and English grades across the transition from sixth to seventh grade. In addition, when structure was implemented in an autonomy supportive manner, children showed increases in their autonomous regulation, being less likely to report engaging in schoolwork for external reasons (i.e., rewards and punishments), and more likely to report engaging in schoolwork for autonomous reasons (i.e., interest or value). The authors tested and found support for a mediational model whereby parental structure and the way the structure was implemented predicted English grades and classroom engagement through children's perceived competence. In sum, developing work points to the importance of parental structure (and the way it is implemented) in understanding how parents can be effectively involved with their children's schooling.

While SDT has been applied to parents' support of children's needs, this theory may also be useful in considering need-fulfilling partnerships from the perspec-

tives of parents, teachers, and administrators. In the next section, we consider what need-supportive partnerships would entail and following this, factors that may challenge the creation of need-supportive partnerships. In doing so, we bring to bear what we know about types of involvement as well as stakeholders' role constructions.

Need-Supportive Partnerships: Current Knowledge, Barriers and Future Directions

Just as need-supportive family and school partnerships help to satisfy children's needs, need-satisfying partnerships should help parents to feel more competent, autonomous, and related. In particular, effective family partnerships would help parents feel competent, both, as parents and as partners in the educational process. Within these partnerships, parents would have a clear sense of how to best facilitate their children's school experience and be clear about their helping role. In addition, within need-supportive partnerships, parents would feel a sense of autonomy, i.e., that they had opportunities to initiate ideas and some choice in their activities and roles, rather than feeling coerced or helpless. Finally, parents would experience themselves as connected with and valued by other stakeholders, including teachers and administrators.

In turn, within need-supportive partnerships, teachers and principals would have their needs for autonomy, competence, and relatedness met. Teachers and principals would feel that parents believe they are effective and supportive of their efforts and strategies. They would feel competent in their knowledge of how to involve parents, both within the school context and in home-learning activities. They would also feel free to initiate innovative and satisfying ways to connect with parents and communities. Finally, they would feel connected with parents and supported by them in their efforts with children.

Knowledge and Understanding

Feeling efficacious is a key aspect of need-supportive partnerships that is associated with positive outcomes. Reinforcing this, in one study parents who saw themselves as efficacious were more likely to see principals, teachers, and staff as effective, to have a belief in the collective efficacy of the school overall, and to be satisfied with their children's schools (Gordon and Louis 2009). Teacher confidence is boosted when they are appreciated by parents and this appreciation stems from greater use of involvement practices (Epstein 1988).

Yet, such feelings of competence are only possible when parents and teachers have knowledge about how to enter into need satisfying partnerships and feel confident in doing so. Unfortunately, there is evidence that not all parents and teachers feel they have this knowledge. In particular, while parents want to be involved, many say they do not know how to help their children at home (Epstein 1992).

And this lack of feeling competent can result in negative experiences. For example, given that homework can be a stressful experience for children and parents (e.g., Xu and Corno 2003), without knowledge of how to help, parent–child homework encounters may end up negative, which can have consequences for children's feelings about school, themselves, and learning (Pomerantz et al. 2005) as well as parents' subsequent desire to be involved.

In order to create successful partnerships, teachers must know how to successfully involve parents. Part of this knowledge is having an understanding of the culture and situations of the families in their schools, including their assumptions, values, and parenting practices. Parents from different backgrounds may have different preferences regarding the types of involvement they wish to pursue, and may face different barriers to involvement such as language and literacy. Families with fewer financial resources may have limited time and may have difficulty attending school activities and events because they lack transportation, childcare, flexible work hours, and other resources more readily available to middle-class families (Lareau 1987). Though having a clear parent involvement policy is a requirement for schools to receive Title I funds and having knowledge of effective parent involvement strategies is required for teacher certification in most states, often teachers do not receive explicit courses on best practices of parent involvement in their teacher preparation programs (Hiatt-Michael 2001).

There is some evidence that such instruction can make a difference. For example, Warren et al. (2011) studied the outcomes of a course for pre-service teachers. After the course, which provided strategies for building relationships with and collaborating with families, teachers were more likely to rate family involvement in schools, the teacher's role in family involvement, community involvement, and the teacher's role in community involvement as more active, potent, and positive on a semantic differential from pre- to post-course.

Given its importance for successful partnerships, we need to know more about how to help parents and teachers feel more confident in their partnership roles. With regard to involvement at home, teachers giving parents work to do with their children is not enough. Parents need clarity about what teachers expect from them. For example, do teachers wish parents to spend only a certain amount of time on homework? Is it important that ultimately children solve problems on their own so that teachers have information about their skills and needs? How should parents deal with challenging questions? On the teachers' side, more information, preferably at the start of teaching careers, about effective strategies for creating partnerships is crucial to teachers feeling successful. As well, creating space and time for such activities will be necessary to create successful partnership experiences.

Power Structures

In need-supportive partnerships, members feel a sense that they can initiate activity and can act on their values and beliefs. A culture of shared leadership and

responsibility that allows each member to have some true input is necessary for such a feeling. Yet, such a culture may be challenged by structural characteristics of schools and relationships with regard to who has the authority to make decisions. When stakeholders do not have authority, this may impact their feelings of efficacy and perceptions of control such that they may be left with feelings of helplessness and frustration. Lareau and Munoz (2012) demonstrated this challenge for parent involvement in school in their qualitative study of the PTO in one school. Using interviews and participant observation over a 5-month period, they identified multiple instances when the PTO's efforts came into conflict with bureaucracies of the schools. For example, when conducting a fund raiser in which the classroom that raised the most money would get a special recess, there were major difficulties scheduling the extra recess and problems staffing it. Such an occurrence highlights the problems encountered by parent groups that have no real power in the school.

The importance of parents having a sense of autonomy for their involvement activities is illustrated in a recent study conducted in our laboratory (Grolnick in press). In this study, 178 mothers of fourth through sixth grade children completed questionnaires about the reasons they are involved in their children's schooling in three areas: talking to children's teachers, participating in events at children's schools, and helping children with homework. Reasons reflected different levels of autonomy for involvement including external (because of rules or contingencies), introjected (to avoid negative feelings such as guilt), identified (because of perceived importance or value), and intrinsic (for fun or enjoyment). Findings suggested that parents who were more autonomous in their involvement experienced more positive affect when involved. Further, mothers who were involved for more identified reasons exhibited higher levels of involvement. Structural modeling suggested that identified reasons for involvement were positively associated with children's perceptions of competence and grades by increasing levels of cognitive involvement and positive affect. Thus, when parents truly believe in the value of their efforts, they are more likely to be involved and to do so in a way that is positive for children; and thus, builds children's confidence. These results suggest that it is crucial for parents to have a sense that they are not just complying with school rules and requests but are helping and devoting their time for their own self-endorsed reasons.

It is not just parental power in schools that may prove problematic for creating partnerships; teacher power and authority may also be an issue. In creating need-supportive partnerships, it is important for teachers to feel they are empowered to build such partnerships with parents. One study showed that teachers who feel empowered within their schools were more willing to engage parents in children's learning and accept their input (Gordon and Louis 2009). They were less likely than those who felt less empowered to claim exclusive knowledge. Empowerment can create openness as teachers' authority would not be threatened by shared responsibility.

At this point, we know little about how parent and teacher empowerment occur in schools. Clearly, power structures are set at the school level by principals and other administrators who have the challenging task of running a school. Work by Goldring (1990) discussed earlier suggests that setting a tone of mutual responsibility

and authority may be especially difficult in diverse and low-income schools, where multiple backgrounds and perspectives are represented. Clearly more attention to the way power is enacted to create partnerships is needed. As Epstein suggested (Epstein and Dauber 1991), one of the least frequent aspects of partnerships is parents' involvement in school governance, advocacy, and decision-making at the level of the education system. How to balance power so that parents have more input into school governance and policy is an area which deserves more attention. Perhaps then, parent involvement will be viewed not as something that must be "invited" by teachers and principals but as part and parcel of the structure of school contexts.

Pressure

With more emphasis on standards and testing than ever before, there is no doubt that all stakeholders feel pressure to have children perform well. Such pressure may have unintended consequences for forming need-supportive partnerships. Pressure may lead stakeholders to blame each other as they may feel they have to defend themselves when outcomes do not meet requirements, either self- or other-imposed. This can undermine a climate of trust, crucial for need supporting partnerships. Further, even when teachers and principals believe that parents are important to children's learning and would like to create partnerships, pressure narrows one's focus (Amabile 1983; Grolnick and Ryan 1987), and for teachers and principals this may mean attending more to the exigencies of day-to-day student performance than on the larger picture that may ultimately be more important. If this is the case, parent involvement efforts may suffer. And in such situations, if schools do involve parents, it is likely to be in ways that meet specific needs, e.g., fund raising for a school need, asking parents to practice for an upcoming exam, etc. These requests are likely to come directly from the school and be imposed, rather than negotiated, on individual parents or parent organizations. While these activities may serve some useful functions, parents may feel less autonomous about activities that come directly from the school and not mutually discussed goals. This may result in their feeling more like pawns rather than partners with schools, undermining parents' sense of autonomy.

For parents as well, pressure to have children perform may result in interactions that are not need satisfying. For example, Grolnick et al. (2002) observed parents interacting on homework-like tasks under conditions in which they were pressured to have their children perform "up to standards" or were not pressured. Mothers in the high-pressure condition were more likely to direct children and solve problems for them than those who were not in this pressuring situation. Thus, pressure may result in parents transferring their pressure "downhill," which may ultimately make them less efficacious as controlling interactions tend to have negative consequences for children's motivation.

Given the unintended consequences of pressure for need-supportive partnerships, it would be important to challenge this pressure. Undoubtedly, some of this

pressure comes at the societal level and is difficult to combat. However, principals and other administrators can make clear that family–school partnerships are not "nonessentials" but key to the educational process. Such a guiding framework may help all stakeholders value and emphasize partnerships. In such a situation, interactions between stakeholders will be less blaming and more supportive, ultimately making for a more integrative and need-supportive experience for children.

Future Research Directions in Need-Supportive Family–School Partnerships

Below we discuss a number of topics within family–school partnerships deserving further research attention.

Mechanisms of Family–School Partner Influence

Although it is clear that parents' and teachers' partnership efforts have positive effects, it is often unclear how these effects occur. With regard to parents, we know that parent involvement is associated with children's school success, at least partially through children's motivation. Yet, since most of the studies on family involvement do not include effects of parent involvement on teachers and children in the same studies, it is unclear whether parents' involvement may also influence children's motivation by influencing their teachers. Using an SDT model emphasizing the benefits of need-satisfying environments, one might posit, for example, that higher parent involvement may influence teachers' abilities to understand and help children which may then have consequences for children's motivation. Relatedly, outreach from teachers to parents may assist children by increasing parents' confidence in working with their children at home. Researchers espousing a partnership model have begun to examine such multifaceted pathways. For example, Dearing et al. (2008) conducted a longitudinal study of children from kindergarten through fifth grade, measuring family involvement in school over time. These authors found that increases in family involvement were associated with more positive student–teacher relationships as perceived by children. In turn, improvements in teacher–student relationships predicted children's perceptions of their own competence in reading and mathematics as well as their general attitudes toward school. Studies such as this underscore the complex relationships between family–school partnerships and outcomes that may be mediated in multiple ways.

Addressing the Quality of Partnership Behaviors in Addition to their Quantity

Most research on partnership practices focuses on how such practices impact the amount or frequency of stakeholder behavior. For example, teacher practices of involving parents may result in increases in parents' involvement with their children's schoolwork at home. However, less research has examined whether certain teacher practices, and perhaps how they are implemented, influence *how* parents help their children at home. As indicated earlier, when parents are involved in a more controlling manner, this may undermine children's autonomous motivation in school. Thus, it is crucial to understand whether some types of outreach, e.g., those that increase parents' perceptions of pressure to have their children perform may result in more parental action but perhaps that of a quality that is not beneficial. Research on the quality of practices and outcomes would need to consider the messages received by parents, teachers, and principals as a result of partnership efforts. In addition, it would need to consider the quality of behaviors that result, in addition to their frequency or quantity.

Considering Bidirectional, Reciprocal, and Developmental Effects

To truly understand the impact of family–school partnership and to identify promising points of intervention, studies that consider bidirectional and reciprocal effects are needed. Clearly, parents' involvement affects children but children's behavior can also affect their levels of involvement. For example, Grolnick et al. (1991) showed that parent involvement was positively associated with children's motivation which then predicted children's achievement. However, in addition, there was a negative relationship between achievement and involvement, suggesting that parents become more involved when their children are not doing well in school. The oft-cited finding that help with or supervision of homework is negatively associated with grades may represent such a child-to-parent effect (Fan 2001).

Although rare, some research uses longitudinal data and cross-lagged analyses to examine reciprocal relationships. For example, Flamm and Grolnick (2013) showed longitudinally that parents' involvement led to increase in children's engagement over a 1-year period. In addition, higher engagement in students led to increased parental involvement across the year. Hong et al. (2010) examined the possible reciprocal effects between parents' involvement in mathematics (value and reinforcement) and children's mathematics achievement from seventh to twelfth grade. Results showed that, while there were both effects of higher parental value for mathematics on increases in mathematics achievement over time and higher student achievement on parents' increased value for mathematics, the student-to-parent effect was the stronger of the two.

Using this model, it would be possible to examine possible reciprocal and transactional patterns between parents, teachers, and principals. For example, could

teacher outreach to parents increase parents' involvement which then increases further outreach? Or might principals' attitudes increase involvement which changes principals' attitudes? Identifying the long-term effects of partnership interventions on multiple stakeholders might usefully adopt such a design and analytic strategy.

In addition, work needs to address whether partnerships differentially affect children at different developmental periods. For example, parental involvement in children's homework has been shown to be positively associated with improved academic scores in elementary school (Villas-Boas 1998), but negatively associated with performance in middle-school students (Desimone 1999). While not examined empirically, we have suggested that parental structure may be experienced as supporting competence at younger ages but may be perceived as more intrusive at older ages. Research on different developmental periods is crucial to creating developmentally appropriate partnership behaviors.

In sum, work on family–school partnerships suggests the power of this concept in thinking about how to promote student success. It is clear that there are multiple components and constructs that must be considered with regard to each stakeholder. Further, it is clear that these constructs are multidetermined and interact. We have argued that a theoretical approach, in this case SDT, to understand how these partnerships meet stakeholder needs will be a useful addition to the field. Hopefully, it can instigate interventions that will ultimately increase not only the well-being of students but also of all participants in the educational process.

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Chapter 3
Diverse Perspectives of Parents, Diverse Concepts of Parent Involvement and Participation: What Can They Suggest to Researchers?

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Diversity of experiences and perspectives, it is widely agreed, should be a source of strength in home–school partnerships, as in other aspects of educational endeavor. Yet often, in the literature, diversity is presented as a complication to be overcome. Certainly, many educators find that relationships improve or flourish when they get past the communication challenges or other kinds of complexity deriving from the variations of student and family background, history, culture, and economic situations. Stakeholders in successful partnerships seek out the strengths and potentials presented by those variations.

Yet, it is a bit of a puzzle that a limiting mindset often prevails, both in theory and practice, where diversity is regarded as an issue or barrier, even amidst the best of intentions to be inclusive. In this chapter, we argue that this limiting mindset on diversity may in fact derive in part from the conceptual frameworks with which we in the USA contemplate and conduct research on diversity issues in home–school relationships. We will make this point by taking the discussion outside the framework of the American literature. Instead, we will juxtapose central elements of the terminology and rationales underlying American writing about home–school relationships, with those of another country, Italy. In our view, the case of Italy is particularly interesting and germane to the discussion of the relationship of diversity issues to family–school partnerships because Italy has a democratic tradition and national/

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provincial structure much like that federal state system in the USA; Italy also represents a society that has faced many of the same general kinds of demographic, cultural, and societal changes over the last half century as we have. Yet, Italy's literature on home–school relations offers vocabulary and thematic emphases that are different enough from our own to provoke a productive angle for critical reflection on American approaches. Of course, in the literature of international education, nations are often compared for their educational and family policies, and researchers publish comparative reports of student achievement and what predicts it. However, taking a different direction, we ask the question of what can be learned by taking one step further back and examining the discourse used to frame discussions about home–school relationships, particularly with respect to issues of diversity.

First, we will offer our summary and interpretation of several general principles that describe the purpose, nature, and value attached to parental involvement in the USA. These "big ideas" characterize the general mindset or stance that we believe prevails in this country, regarding the responsibilities families and schools have toward children. We do not claim that our summary interpretations are exhaustive or comprehensive of all the important ideas that Americans have about parent involvement in education. However, we submit that they capture certain key assumptions about parental involvement, as evident in the current body of theoretical writings and empirical studies.

Next, we will turn to the field of Italian education, in particular, to the conceptualizations about *partecipazione*, or participation, a term for the idealized way in which parents, teachers, and community members should take an active part in the life, culture, and decisions concerning children and the educational services created for them (Bove 2007; Mantovani 2001, 2007). We will draw mainly from the field of early childhood (preschool to primary), which has been for decades at the forefront of Italian educational reform, and from the writings of a network of educational leaders from cities of northern and central Italy (e.g., Bologna, Milan, Modena, Pistoia, Reggio Emilia, and others)—places which have carried out the strongest experiments in creating and sustaining systems of home–school–community partnership (Bove 2007; Ghedini 2001). Finally, we will close by summarizing, raising questions growing out of our analysis of American and Italian conceptualizations of parent involvement, and suggesting that further cross-national comparisons may be equally fruitful.

American Conceptualizations of Parent Involvement in Education

A useful place to begin is with the terminology used to discuss family–school relationships in the USA. In the American literature, parents' relationships with schools are usually labeled with one of three terms: "involvement," "engagement," or "partnership." These labels have arisen as researchers seek to analyze home–school relationships, categorize their manifestations, and operationalize the processes and

outcomes of primary caregiver's interactions with schools. However, the field continues to suffer from inconsistent and sometimes confusing use of this terminology (Epstein 2001; Henderson and Mapp 2002).

Involvement, Engagement, and Partnership: Evolving Terminology

"Involvement" is the oldest label and sometimes acts as an umbrella term that broadly categorizes the various types of activities parents use to connect with schools, though it carries a connotation of parents supporting their students or the school in the ways requested by educators and school personnel. Involvement can include many formats of family–school interactions, whether enacted in home, school, or community settings. Joyce Epstein has provided highly regarded syntheses of the literature and noted the lack of consistency in use of the terminology of involvement. To increase clarity, she has proposed a framework identifying six distinct types, or levels, of involvement: (1) parenting, (2) communicating, (3) volunteering, (4) home-based learning, (5) decision-making, and (6) collaborating with the community (Epstein 1995). Kohl et al. (2000) have pointed to the limitations in Epstein's framework with respect to assumptions it makes about power hierarchies; they noted that her categorizations are primarily school-centered and teacher-initiated, that is, they look at parental involvement from the point of view of the school. This criticism is reminiscent of an earlier formulation provided by Delgado-Gaitain (1991), which proposed the following three categories of parent involvement, based on who sets the agenda for the interaction: (1) school-initiated agendas, where parents conform to school policies or requests; (2) parent-initiated agendas, where school staff are invited to participate in activities determined by parents; and (3) shared agendas, that reflect collaboration and shared power between parents and school personnel. Thus, shared agenda setting makes space for parents to initiate communication with schools, negotiate the terms of relationships and goals with schools, and act as advocates for their children.

"Engagement" and "partnership" are the newer terms in the literature of home–school relationships. These terms have arisen as scholars seek to be more inclusive and culturally sensitive about the diverse ways that families respond to educators and want to take part in their children's educational experience. The term engagement is being used more and more and applies to a broad range of activities, including not only those that have been labeled as "involvement" but also those making space for a fuller range of ways that parents can advocate and contribute. For this reason, "engagement" may be the best term to refer generically to any and all forms of family contribution, involvement, and partnership; we will follow that usage in the rest of this chapter.

The term engagement arose as an alternative to "involvement" to indicate a different, less school-centric perspective on home–school relationships. For example, Sheridan and colleagues (including the first author of this chapter) at the University

of Nebraska—Lincoln have chosen to use the term engagement in our intervention approach (e.g., Sheridan et al. 2010, 2011). By our definition, "family engagement" involves genuine collaboration between families and schools/agencies whereby parents and educators share responsibility for the healthy development and educational aspirations of children. In the *Getting Ready* intervention, family engagement is promoted across two complementary relational contexts: (1) the parent–child relationship, and (2) the parent–teacher relationship. We base our formulation on the fact that empirical literature suggests that relationships between parents and children in poverty experience heightened strain, due to external sources and increased levels of parenting stress, depression and/or other risks. Furthermore, relationships between parents and professionals are also often challenged due to discontinuities across systems and misunderstandings of one another's perspectives. Therefore, the *Getting Ready* intervention program seeks to strengthen relationships both *within* (parent–child) and *between* (parent–teacher) systems, in order to support positive child and family outcomes. In this way, Sheridan and colleagues focus on shared agenda-setting, as formulated by Delgado-Gaitain (1991).

Engagement is also used by McKenna and Millen (2013) to describe parent–school relationships where there is parent voice and parent presence. Focusing on parents who are economically, culturally, and geographically diverse, they have constructed a grounded theory of engagement based on data collected from focus groups and interviews with parents. Parent voice is honored when the teacher allows for an open, multidirectional flow of communication. Parent presence is honored when the parents' ideas and opinions about their children are given consideration and enacted. Other researchers have begun to introduce political considerations and speak to the rights of parents, families, and communities to participate in institutional governance. For example, Pappas (2012) used school closings in low-income neighborhoods in New York City as an opportunity to offer a discussion of parents as politically conscious actors who demand system-wide change and accountability. In Pappas's view (2012), engagement operates through two ideological frameworks. One framework views education as a free market and recognizes parents as consumers; the other views education as a democratic process and recognizes parents as decision-makers and community builders. Thus, Pappas views engagement in its fullest sense as including opportunities for diverse parents to open negotiation with schools and advocate for reform.

"Partnership" is also an emerging label, frequently used in the current literature. The framework of "partnership" is particularly prominent in research by educational psychologists, early interventionists, and special educators, where the population of interest is children with special needs and their families. For example, Hornby (2011) describes the partnership model as one in which teachers are viewed as experts on education, while parents are viewed as experts on their children. Partnership is built on seven principles, including trust, respect, competence, communication, commitment, equality, and advocacy. Hornby also describes the knowledge, attitudes, and skills that may be necessary for professionals to work effectively with parents. Interpersonal skills are paramount, and although teachers may be practiced in presenting information and explanations, they may be less practiced in other skills

such as listening and counseling. In the *Getting Ready* project, parents and teachers are said to be in a true partnership relationship when both parent and teacher make a responsible commitment to plan and work together on behalf of the child's learning; decision-making is shared; communication is frequent, positive, and bi-directional; cultural and language differences are respected, appreciated and reinforced; and unique child, family, and school characteristics influence how responsibilities are allocated. In general, a "one-size-fits-all" approach to parent–teacher collaboration is avoided (Sheridan et al. Training Documents of *Getting Ready Project*, 2013), and professionals learn to recognize parental strengths in myriad forms, and to bridge cultural boundaries to form productive alliances (Edwards et al. 2010).

Parent Engagement as a Responsibility

Regardless of label, the literature seems to suggest that home–school relationships are a *responsibility* or *duty*, representing the fulfillment of joint professional and parental/caregiving obligations. The responsibilities are seen as occurring in two contexts, school and home. For example, in Hill and Craft's (2003) formulation, school-based involvement includes being present at meetings (e.g., parent–teacher), attending school events (e.g., open house), or volunteering. Home-based involvement includes assisting children with school-related tasks such as course selection and homework as well as talking with children about academic issues like test performance and the value of doing well in school. This conceptualization clarifies the roles, expectations, and resources that parents can and should provide through their involvement. Teachers and parents interact with one another, but the roles each side plays, in promoting children's learning and development, are complementary.

Joyce Epstein (1987, 2001) has offered a model of family and school relationships that accounts for the history, development, and possible patterns of responsibility between parents, teachers, and students. This model, referred to as the Overlapping Spheres of Influence of Family, School, and Community, delineates the separate, shared, and sequential arenas of influence and responsibility borne by each party. First, the notion of separate responsibilities assumes that families, educators, and community members have different goals and competencies; and therefore, bear different responsibilities toward children. Educators who hold this perspective may believe that the responsibilities of school and family do not overlap because formal learning is best achieved when teachers maintain universal, objective standards within their classrooms, or that it is risky to invite parents into their classrooms and expose themselves to criticism (Fleharty and Pope-Edwards 2013). Parents may also hold this perspective; for example, some parents, especially those from minority or low-income backgrounds, may find it uncomfortable to go into the school where they believe they are unwelcome and seen as incompetent. Second, the notion of shared responsibilities assumes that families and educators can coordinate their efforts to educate and socialize children. An individual who holds this perspective may believe that family and school responsibilities are complementary,

and that common goals can be constructed and achieved through communication and cooperation (as in the *Getting Ready* Project). Finally, the notion of sequential responsibilities emphasizes the timing of family and school contributions to development. An individual might hold this perspective in the belief that the early years are critical for laying the foundations for later learning; and therefore, parents and other socializing agents (e.g., physicians, child care providers, and preschool teachers) are responsible for preparing the child for primary school, at which point educators take on the task of promoting formal learning.

In all three kinds of allocation of responsibility (separate, shared, and sequential), parental involvement, or engagement, is conceived and enacted as an event or series of events that may or may not be intrinsically connected. Indeed, parental engagement is usually expected to be a short-term partnership with short-term goals. After all, in American schools, children are assigned to classrooms for the duration of a single academic year. Time and efficiency are of the essence and can dictate the terms of a relationship. Teachers have many children and families calling for their attention. Likewise, families may have busy schedules and time constraints that do not align with school-related events. Thus, pragmatic, short-term goals for parent engagement often seem to be the most reasonable way to proceed, and enhancing the potency of short-term relationships becomes important, in hopes that home–school relationships will have enduring and long-term effects (Dearing et al. 2006, 2009). Robert Crosnoe (2009; Crosnoe et al. 2010) is among the several researchers studying how consistency in positive stimulation across caregiving systems (i.e., family and school) and continuity across transitions from one level of schooling to the next, provide greater power for establishing or deflecting trajectories of early achievement (see Chap. 2, Vol. II in this series). Pomerantz and Moorman (Pomerantz et al. 2007; Pomerantz and Moorman 2010) offer insight into what specific kinds, or qualities, of parent involvement, whether occurring in home or school settings, lead to better learning outcomes for children. Hill (2001; Hill and Craft 2003) speaks more directly to how African-American versus European-American families become involved in school, and the impacts of that involvement on school readiness and academic achievement.

Parent Engagement as a Remedy

Throughout the research literature, then, the notion that parent engagement is a *remedy* prevails. Therefore, establishing the causal or underlying processes and measuring effects validates the social utility of parental contribution. Indeed, determining the measurable outcomes of family–school relationships is one of the strengths of the American research on parent engagement. Educators and policymakers, along with researchers, share a strong concern over whether, and how, parental engagement links to student achievement, and under what conditions intervention programs to promote engagement are effective. Two major theories posit how home, school, and community connections might be expected to benefit children's

academic achievement and functioning: the skills development model, and the motivation development model (for a review, see Pomerantz and Moorman 2010). The skills development model proposes that parental involvement fosters skills-related resources that directly impact academic achievement; for instance, phonological awareness, counting, and self-regulation, when fostered by parents, become elements of preschool readiness. In contrast, the motivation development model proposes that parental involvement provides children with dispositions to engage in school, indirectly enhancing achievement. For example, parents may transmit the message that school and learning are important; children may internalize this value and be intrinsically (as opposed to extrinsically) motivated to engage in schoolwork. In recent years, many experts have provided comprehensive reviews linking parental engagement to students' academic outcomes and, in some cases, also their social–emotional outcomes (e.g., Boethel 2003; Ferguson et al. 2008; Pomerantz and Moorman 2010). Henderson and Mapp (2002) list the ways that school, family, and community connections influence student academic outcomes: having better attendance; earning higher grades and test scores; enrolling in higher level courses/programs; being promoted; passing courses and earning credits; showing improved behavior at home and school; and developing better social skills and adapting to school.

The attention to empirical links between family engagement and student outcomes is consistent with the American belief that parental involvement is part of the solution to narrowing the achievement gap between groups differing by race, culture, ethnicity, and socioeconomic background. The need to improve the academic outcomes of certain segments of the student population remains a persistent challenge confronting American educators, policymakers, and members of the public. Researchers have identified parent/caregiver variables that predict levels of home–school connection, most notably the "diversity" factors of race/ethnicity, culture/language, and education/socioeconomic status (see Boethel 2003, for a review). These are the same factors found to put children at risk for poorer achievement and developmental outcomes. Although many cultural theorists (e.g., Ada and Zubizarreta 2001; Banks 1995) assert that viewing family profiles through a deficit lens is not helpful for generating constructive approaches to relationship-building, the emphasis by researchers on categorizing families and analyzing specific outcomes for each category has led to more focused strategies for specific families, while also highlighting the types of families we have yet to effectively reach. Furthermore, even though specific causal mechanisms and predictive strengths may vary, Henderson and Mapp (2002) in their review of 64 studies, found positive relationships to prevail between parental engagement and student achievement outcomes, across families of all economic, racial/ethnic, and educational backgrounds, for students at all ages. In this sense, promoting parental engagement can be considered a sound financial investment and linked to broader economic outcomes.

Showing the economic value of investing in parental engagement is important in today's political climate. In a global economy where jobs require more sophisticated skills than in the past, American educators and business leaders have expressed concern about students' achievement, especially in light of international

comparisons. Policymakers and the general public focus on student achievement as one pathway to a stronger and more competitive workforce. For example, in 2000, the Office of the Superintendent of Public Instruction in the state of Washington published a literature review of 20 studies to determine the common characteristics of high-performing schools, one of which turned out to be a high level of parent and community involvement (cited in Henderson and Mapp 2002).

The economic relevance of parental investment mirrors two concerns of the policymaking and business regarding cultural diversity and achievement outcomes. The first concern is that within the USA, children from low socioeconomic backgrounds, a group comprised of a disproportionate number of African–American and Latino families (National Center for Children in Poverty 2006), show lower levels of academic achievement than their middle- and upper-class peers (Arnold and Doctoroff 2003). The second concern is that across the world (of our global competitors), children from East Asia outperform their American counterparts, specifically in mathematics, as early as preschool and kindergarten (Starkey et al. 1999; Yuzawa et al. 1999; Miller and Parades 1996; Stevenson et al. 1986). There are numerous explanations for the national and international differences in achievement, ranging from school-level factors such as curriculum and teacher-effectiveness to student and family-level factors such as racial identity and the curriculum of the home (e.g., the number of books in the house). In this contemporary climate with its focus on academic success as the road to economic well-being, parental engagement is conceptualized as a source of social capital, and it becomes natural for stakeholders to call for cost and benefit assessments of programs. Such evaluations identify where districts and schools should focus their energies and resources, as well as illuminate, for the educators, strategies and practices that leverage parent and community participation. As efforts to promote home–school partnership may cost money, they should pay off, that is, they should be effective in reducing the social and educational ills they are designed to remediate.

Summary of the American Perspective

To conclude this review of the American perspective, there are several characteristic themes to be seen in discussions of parent engagement in education and that, we suggest, may be provocative for research on family–school relationships in the USA:

- Parental "involvement," "engagement," and "partnership" are related, but distinct ways of describing and operationalizing how primary caregivers interact and build relationships with schools.
- Parental engagement is a matter of duty; it represents the fulfillment of professional and parental/caregiving responsibilities or obligations.
- Parental engagement is conceived and enacted as an event or series of events that may or may not be connected. The home–school relationship is generally a short-term partnership, due to discontinuities and transitions, and time constraints and efficiency concerns are always present.

- Strong empirical links can be found between parental engagement and student academic achievement. These empirical links are consistent with the American belief that strengthening home, school, and community connections is part of the solution to narrowing the achievement gap.
- Because of these links, parental engagement can be considered an important remedy to social ills and a sound financial investment by society, linked to broader, long-term economic outcomes.

Italian Conceptualizations of Parent Engagement in Education

Italian conceptualizations grow out of a different history from that of grappling with school achievement concerns. Instead, parent engagement is more closely connected to wider political movements involving collective rights to conditions affecting quality of life.

Italy is a country with a strong tradition of publicly funded municipal systems of early childhood education and care, originating in the women's and labor rights movements that sprang forth at the end of World War II (Edwards et al. 2012). These family-centered child care systems have not only been created and sustained by city administrations, primarily in progressive, left-leaning, regions like Emilia Romagna and Tuscany but also supported by more conservative and religious elements protective of family cohesion and women's maternal role. During the 1960s and 1970s, when most of the municipal systems of public infant–toddler centers and preschools were established across northern and central Italy, political coalitions came together on the basis of democratic ideals of solidarity and civic engagement, and these coalitions were able to secure legislation defining young children's rights to services prior to school age (Bove 2007; Mantovani 2001). Thus, from the mid-twentieth century forward, home-(pre)school relationships took on a cooperative, or socially oriented, rather than individualistic character, centered on notions of civic engagement, sense of belonging, and the common good.

Participation

In Italian schools, the relationship between schools and families is generally referred to with the term "participation" (Cagliari and Giudici 2001, p. 136). This is the case even though a cognate of the English word "involvement" (*coinvolgimento*) is available to them. In all of the writings on Italian early childhood education, even to this day, the term participation recurs over and over, incorporating the whole spectrum of meanings that in our opinion are covered by American terms: involvement, engagement, partnership. It is broader, implying that not only parents and teachers, but also other members of the community participate. It also covers all forms and levels of participation and contribution, without distinction, and frames

issues connected to diversity in terms of multiple perspectives and invitations to dialogue. The following three quotations from parents in Reggio Emilia suggest the emotional value that parents derive from participating, as they serve on the advisory council of their children's preschool:

> For me it's a looking for growth through times of shared reflection, through opportunities for exchange, comparing points of view, taking our reflections further, so that I am closer to my child as a parent, so that we grow together as people.

> It's a personal development, sharing points of view, friendship, wanting to help do things, telling our stories; because if we parents talk about ourselves a bit then that helps the teachers in their work with our children which is of primary importance to all of us. It shows us that not everything is necessarily owed to us, and if we can learn that we can pass it on to our children for their growth and future.

> I understand participation in the City and Childhood Council to be an assumption of responsibility… which comes from the civic sense of belonging and contributing to a civilized community—collective—society. (Quotations from the *Charter of the City and Childhood Councils* 2002, pp. 9, 25, and 34)

Educators also have recognizable ways of describing the participation. Here is how the concept is defined by Susanna Mantovani, eminent educator at the University of Milan, in summarizing for an international audience the dominant themes of contemporary Italian educational philosophy:

> *La pedagogia della participazione*" [pedagogy of participation]—this concept, which is difficult to capture within the framework of home–school relationships, describes the community character of schools for children and the consciousness that for parents and children the school of the early years is often the first experience of getting in touch as citizens or future citizens with the communities, its rules and its opportunities. It encompasses both the ideas of control and cooperation of citizens of the community in establishing and running the early childhood system and the daily practices connecting school with family and with the outside community, such as transition practices, meetings with group of parents, and common initiatives. (Mantovani 2007, p. 1117).

Interestingly, this concept of participation is actually enshrined in the Italian Constitution (Article 3), which speaks of the duty of the state to remove economic and social obstacles that constrain "the freedom and equality of citizens, thereby impeding the full development of the human person and the effective participation of all workers in the political, economic, and social organization of the country" (Delrio 2012, p. 82). Thus, the word participation has a deep resonance in the Italian language related to the fundamental rights and dignity of persons before the law, perhaps in the same way that the phrase, "pursuit of happiness," speaks to Americans. Participation is not merely a means to an end, but an ultimate end, or *good*, in itself. While Italy is not as collectivistic a society as, for example, China or Korea, neither is it as individualistic as the USA; community and social belonging are strongly valued (Oyserman et al. 2002; Putnam 1993).

Reggio Emilia is one of the progressive cities of northern Italy which have always been in the forefront of educational innovation. Reggio educators speak frequently of participation when talking about parent and citizen involvement (Cor-

radini 2012; Gandini 2012; Hall et al. 2010). They regard respect for children as recognizing them from the first years of life as members of a permanent social group of citizens (Ghedini 2001). Carlina Rinaldi (2006), in a chapter called "Participation as Communication," discusses participation as something that should permeate the infant–toddler center and influence not only its architecture and staff routines but also its very concepts of ethical professional practice. Indeed, she states:

> There are no aspects, topics and sectors of participation, as opposed to aspects, topics and sectors of non-participation. In our view, the term 'participation' goes deep into and helps work out and reinterpret issues such as the professionalism of staff members, educational freedom, vocation in teaching, the role of the educator and the allocation of various rights and skills between the families and the professionals. (Rinaldi 2006, pp. 49–50).

The Reggio educators' latest declaration of the meaning of participation is published formally in the *Principles of the Educational Project* (2010). The principles include a dense layering of intermingled concepts, typical of Italian educational writings, rather than a logically ordered sequence of carefully distinguished ideas, as one expects to find in the more analytic style of writing in American educational literature:

> Participation is the value and the strategy that defines the way in which the children, the educators, and the parents are stakeholders in the educational project; it is the educational strategy that is constructed and lived day by day in the encounter with others and in the interpersonal relationships. Participation gives value to and makes use of the hundred languages [i.e. multiple symbol systems] of children and of human beings, viewed as a plurality of points of view and of cultures; it requires and fosters forms of cultural mediation and develops in a multiplicity of occasions and initiatives for constructing dialogue and the sense of belonging to a community. Participation generates and nurtures the feelings and culture of solidarity, responsibility and inclusion; it produces change and new cultures that contend with the dimension of the contemporary world and globalization (Istituzione Scuole e Nidi d'Infanzia of the Municipality of Reggio Emilia 2010, pp. 10–11).

While the concept of participation per se would not necessarily seem to have close connection to the concept of diversity (the focus of this chapter), in fact, it does. This is hinted at by the quotation above, which speaks of participation as fostering "forms of cultural mediation" and producing "new cultures that contend with the dimension of the contemporary world and globalization." However, the term, *cultura*, or "culture," has somewhat different connotations in Italian than it does in English, and this is important to our explication. In Italian, it not only refers to values and customs but also to intellectual creations and aesthetic awareness (reminiscent of the way English speakers refer to "someone of culture and cultivation"). The history of Italian educational reform in the public welfare and early childhood sector indicates that "cultural differences" (positively valenced as sources of diverse creativity and sensibility) have always been at the heart of thinking about the need for, and benefits of, parent and citizen participation in the schools. Parent and citizen participation in the running of preschools and infant–toddler centers was a victory won by left–center coalitions in the post-World War II era. The movement led to the legal formalization of what was called *gestione sociale* (awkwardly translated into English as "community-based management"). It is a legally mandated system

of advisory committees (composed of elected parents, citizens, and educators) who have a formal role in the running of the municipal preschools, infant–toddler centers, and other educational programs designated by their city administration. Thus, the diversity issues that originally inspired labor unions and women's organizations to demand formalized, protected participation were related to gender and social class diversity. These groups (women and the working classes) desperately wanted not to be sidelined, excluded, or left out of participation in the democracy. They were a mass of individuals who wanted to participate, in the sense of *being protagonists*, or "having a voice" in the everyday workings of the programs–they wanted to be invited in, respected, listened to, and appreciated to contribute.

Thus, the concept of family participation incorporates all forms of "protagonism" or active contribution, from attending parent meetings to serving on advisory committees, from helping with specific needed tasks such as preparing food for a celebration to advocating for funding for the schools. All forms and formats of parent contribution are equally valued and are not graded, for example, as to level or visibility of involvement. Perhaps, as Italians have a deep theatrical sense, they desire to become alive and visible to others through words and actions, and to have their contribution responded to respectfully. Being able to participate has more of the quality of a right than a duty.

"The city represents a natural and human stage where the actors are all the citizens: women and men, young and old, who participate, day-by-day, in the changing of the urban landscape. A stage of events, markets, religious and civic celebrations, conferences and meetings, commerce and music." (Sandra Piccinini, former president of the governing body of the early childhood system in Reggio Emilia in Piccinini and Giudici 2012, p. 89).

To be sure, the institutions to support educational participation are strongest at the early childhood level, in Italy as in the USA. In Italian schools, particularly at the middle and secondary levels, there is less evidence of parent participation (Corradini 2012); mainly in the preschools and primary schools is participation most visible and institutionalized.

Since the post-War era, Italian society has undergone many changes, some of them parallel to changes and transformations in other Western societies, and thus the conditions originally generating a culture of parent participation in education have been altered. Patrizia Ghedini (2001), policymaker from the Emilia Romagna Province, has described the macro changes that have made the necessity of redefining educational interventions urgent. For example, the decline of the rate of reproduction has led to Italy having one of the lowest birthrates in the world, leading to a change in expectations on the part of parents for their precious, only child. At the same time, the slowly rising divorce rate means that the nuclear family is more fragmented and more isolated from the extended kin. Longer life expectancy has often led to a different role for grandparents in taking care of children. Further, there is an explosion in the number and range of backgrounds of immigrant families with small children, presenting new and different problems in education, communication, and social integration. Finally, the economic recession of the early twenty-first century has deeply threatened the economic prosperity that supported Italy's generous welfare and family support system.

However, the idea or ideal of parent participation in early childhood systems has not collapsed in the face of these societal and economic changes, but rather has shown its capacity to endure in the face of occasional declines (Rinaldi 2006), and to adapt to new cultural and social situations (Gandini 2012; Moss 2012). The systems of advisory committees, set up originally to provide a voice in the running of schools for outsiders (women and working classes) have readily lent themselves into vehicles for giving new kinds of outsiders a way to participate and have a voice. Indeed, in our experience, Italians seem to enjoy the very process of gathering together, with everyone eventually contributing some idea to the discussion and listening politely to others, long into the night. Young children in preschool master the art of *discussione* ("debate," or "discussion," involving humor, stock references, and other stylized verbal flourishes, not escalating into serious conflict) to joyfully match wits with their peers (Corsaro 1994; Corsaro and Molinari 2005; Corsaro and Rizzo 1988). Today, in Reggio Emilia, new groups of immigrant families, and new generations of young parents, want their aspirations to be heard and recognized in different ways than in years past, but it is still possible for educators, parents, and citizens to create forums to listen closely to one another and be responsive to the felt needs of the parents of today (Dahlberg 2012; Moss 2012; Study Group on "Identities and Functions of the City and Childhood Councils" 2002).

In the opinion of the authors of this chapter, the idea of participation remains a living and vibrant, motivating concept in Italian society, and takes somewhat different forms in different locales. As an example from outside of Reggio Emilia, we would suggest that it takes on a different cast in another context. In Pistoia, in the Tuscany Region of central Italy, the term participation is not heard as often as the term, *reciprocità*, or "reciprocity."

Reciprocity

The concept of reciprocity refers to the chain of positive and meaningful exchanges that is set up in a school with high levels of family participation and close partnership with educators. The sense of the long time horizon of mutual benefit is even better captured by this term than by the earlier term, participation. Reciprocity depends on each party finding a way to contribute as well as to look for and recognize others' responses, thus inspiring further contributions, as seen in the following quotation from leading Pistoia early educators:

> Educators look for a practical contribution on the part of each parent to the life of the community, for example, through joint work in building furniture, playground equipment, games, or toys. Even more importantly, they also expect that parents interact with them in everyday ways. These social exchanges are often very positive and useful occasions that build ever more meaningful relationships and that bring life and color to the center. Parents often bring to the center little gifts of toys or food, just as children often carry small presents home. Such giving is a symbolic expression of the value each side gives to the exchange. The little gifts involve both the giver and the receiver, and the exchange guarantees the reciprocity that binds the community together. (Galardini and Giovannini 2001, p. 102).

In order to set up this cycle of reciprocity, educators must approach their work with particular emotions, or caring dispositions—"empathy" and "generosity of attitude," as they say—motivating the work of offering quality to children, and truly hear and welcome parents' messages, perspectives, and unique knowledge of their children (Cline et al. 2012; Edwards et al. 2014). A pedagogy oriented to *well-being* prevails, connecting the quality of education with a deep sensitivity to the children's, families', and even the teachers' sense of ease and comfort in the school (Becchi 2010; Mantovani 2007). Educators and families encounter one another with expectations of working together over a long term: at least 3 years in the preschool, and 5 years in the elementary school, since continuity created by "teacher looping" is the usual and culturally expected organization. In such a context, the Pistoia educators speak of interpersonal and cultural differences as a source of value, where reciprocity becomes realized: "Each family, with its particular culture, has many things to communicate if only educators listen, and many resources to invest if only educators can create a space for true dialogue" (Galardini and Giovanini 2001, p. 102). Families contribute not only the means to better understand their child, but also memories, stories, skills, and experiences gained from their own cultural traditions and experience of being parents. Thus, reciprocity depends on quality of process in school–family relationships, more than on specifically named products of the interaction.

Patrizia Ghedini, the north Italian policymaker whom we have quoted previously, ties together the concept of reciprocity with the idea of respect for children and their rights. Providing children with high quality schooling affirms children's right to excellent schools and depends on reciprocity:

> Respect for the rights of children is measured by the attention that we give to children's quality of life. It is measured by the attention we give to their psychological and physical well-being, their potential and their developmental rhythms, from a perspective of listening and reciprocity between children and adults. (Ghedini 2001, p. 42)

Summary of the Italian Perspective

To conclude this review of the Italian perspective, there are several characteristic themes to be seen in discussions of family and citizen involvement in education. These, we submit, may be provocative for research on family–school partnerships in the USA:

- Parent involvement is a matter of "participation," something not divorced from the political arena but instead seen as a right—gained through the same progressive trends that have led women, workers, and today, new immigrants, to take their just place in society.
- Participation includes all forms of contribution valued equally, not categorized by level or grade.
- Participation is seen as a long-term, committed relationship between generations, with emotional connotations, captured in the term, "reciprocity."

- Participation depends on the stakeholders cultivating attitudes of empathy and respectful listening, to foster a sense of belonging or inclusion by everyone; thus it concerns the process of the interactions.
- Progress of the educational endeavor depends on widespread participation and exchange of diverse perspectives flourishing together as a source of vitality and innovation.

Conclusions and Research Directions

In this chapter, we have presented two contrasting portraits, American and Italian, as ways to look at parent–school relationships. We have attempted to construct fair summaries, that is, not exaggerated or oversimplified contrasts that turn one mindset or the other into a caricature rather than a framework for reflection. We would submit that the American discourse on home–school relationships involves an analytic approach seeking to break down categories of involvement/engagement/partnership, and then to determine their measurable outcomes for parents and children of different diverse groups. The outlook assumes a distribution of responsibilities between home, school, and community with a short-term time horizon and less focus on the quality of communications and relationships, *per se* as an end value, than on parental engagement as a useful means to promote school readiness, learning, and success. In contrast, we would submit that the Italian discourse involves a holistic approach that subsumes all categories of contribution into a general concept of "participation," defined not as an obligation but rather a right. There is little or no interest in the measurable outcome of participation for parents and children of diverse groups, but instead a progressive outlook holding that participation *per se* contributes to democracy, on the one hand, and to the creation of a social good—diversity of outlooks and perspectives, the well-spring of innovation—on the other. This appreciation of participant diversity as a source of multiple perspectives, generative of possibilities, may be analogous to the way biologists and medical researchers view biodiversity as a rich source of potentially useful and important genetic variations. This juxtaposition of frameworks provokes a set of questions that could stimulate future research directions.

First, what interesting perspectives do other countries have on home–school relationships that may be useful to study? How can we begin to identify those national ideologies and diversity oriented practices and strategies that might spark innovation in the USA? For example, the Scandinavian countries have intensely democratic traditions, individualistic orientations, and diverse populations; how are they promoting home–school partnerships? (see, for example, Dahlberg et al. 2007).

Second, is it necessary for us to focus on learning skills and school achievement as the sole or predominant rationale for school–family partnerships? Are there other ways to think about the benefits, short- and long-term, that focus on the well-being and quality of life experienced by all of our children, families, educators, and ultimately, communities?

If so, third, what might be the benefit of regularly including narrative and case analysis, or other qualitative approaches, into mixed methods packages with strong quantitative design, to help illuminate the meaning-making that takes place for all the diverse stakeholders within successful partnerships, as well as to more fully describe the complex implementation processes of interventions?

Finally, what kind of attitudes, dispositions, or worldviews must stakeholders have in order to participate in open-minded and constructive family–school partnerships? What is the role of empathy and a "generosity of attitude" in the partnership and in our research, and how do we cultivate them? How about the role of time? When relationship formation is rushed and then truncated in the typical American manner, what constraints are imposed, especially with respect to families from cultural backgrounds with non-mainstream attitudes toward time and efficiency?

This chapter opened with the puzzle as to why, in spite of the widespread recognition that diversity should be seen as a source of strength in home–school partnerships, most research addresses the communication challenges or other kinds of complexity deriving from the variations of student and family background, history, culture, and economic situations. Based on a comparison with a certain body of Italian literature of parental participation in education, we have suggested that the answer may lie in constraints imposed by our very concepts around family–school relationships. Of course, these are rooted deeply in our language and national frames of mind, that is, in cultural belief systems that exist at multiple levels and spheres of discussion, involving assumptions implicit and explicit, and therefore not something to gloss over or disrespect. However, cross-national comparisons offer a way to widen our lens and ask new kinds of research questions, and to listen more carefully to the full range of perspectives offered by stakeholders in our society. The language of "participation" may add a valuable nuance to our usual discussions of "involvement," "engagement," and "partnership," providing a less evaluative and more synthetic way of framing family contributions, presence, and voice in our schools and communities.

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Chapter 4
Measuring Parents' Involvement in Children's Education

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There has been much attention to understanding how to create classrooms that allow children to learn at their full potential (for a review, see Hamre and Pianta 2010). Although this approach is critical to promoting children's achievement, it does not address the fact that children spend a large proportion of their lives outside the classroom, frequently with at least one parent. Indeed, a large body of research indicates that the more parents are involved in children's education, whether it be at school (e.g., volunteering in the classroom or attending school events) or home (e.g., discussing what children are learning in school or providing assistance when requested), the better children do in school over time (for reviews, see Pomerantz et al. 2007, 2012). Moreover, parents' involvement can compensate when children are at risk academically due to their families' socioeconomic status as well as other factors (e.g., Dearing et al. 2006; Monti et al. 2014). These kinds of findings are powerful in pointing to the importance of ensuring that children's learning is supported once they leave the classroom.

However, the benefits of parents' involvement in children's education need to be considered in light of the psychometric qualities of the instruments employed to assess such involvement. A variety of measures have been used to this end. The most common approach is for parents, children, or teachers to report on parents' typical involvement. Beyond a focus on identifying distinct types of involvement (e.g., Fantuzzo et al. 2004; Grolnick and Slowiaczek 1994), there has been surprisingly little attention to measurement issues in regard to parents' involvement (for a

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similar point, see Bakker and Denessen 2007). The goal of this chapter is to begin to address such issues. We start with a brief review of how parents' involvement has been assessed in prior research, highlighting the major strengths and weaknesses of the approaches to date. We then discuss key steps for the future in measuring parents' involvement that have the potential to move research forward in tackling major conceptual questions whose answers may be of practical significance.

As Kim and Sheridan note in their chapter in this volume (see also Sheridan et al. in press), the connection between families and schools has been conceptualized and operationalized in a variety of ways, accompanied by a myriad of terms. Kim and Sheridan draw a distinction between what they call structural and relational family–school connections. Structural connections are those in which parents engage in practices at school and home to support children's learning. We refer to such connections here as parents' involvement in children's education, but the term family engagement in children's education has also been used. Relational connections are manifest in what has often been labeled family–school partnerships; school personnel cooperate, coordinate, and collaborate with parents to support children's learning—as well as other domains of functioning. Given space limitations, the main focus of this chapter is on the measurement of structural family–school connections, that is, parents' involvement in children's education. This focus arises from not only our own expertise, but also from the large number of measures developed over the years to assess such involvement. Measurement issues in regard to relational connections are briefly addressed, with attention to the need for future work in this area.

Current Measurement Approaches

The Predominant Approach: Retrospective Reports

Parents' involvement in children's education is most often assessed with retrospective measures in which parents, children, teachers, or some combination of the three report on parents' use of a variety of practices reflective of involvement. The measures are retrospective in that they require an informant to think back—usually over an unspecified time period—to judge the frequency of parents' practices. These practices are generally consistent with Grolnick and Slowiaczek's (1994) definition of parents' involvement in children's education as parents' commitment of resources to the academic arena of children's lives (for somewhat different definitions, see Epstein 1990; Fan and Chen 2001; Hill and Tyson 2009). Such resources can take a variety of forms. Most often, measures focus on parenting practices at either school or home that take time and energy on the part of parents—for example, helping children with homework when they request it, attending school events, and taking children to the library or museums (e.g., Cheung and Pomerantz 2011; Green et al. 2007; Steinberg et al. 1992). Some measures diverge from the idea of parents' commitment of resources in asking about the extent to which teachers attempt to com-

municate with parents as well as the quality of the relationship parents have with teachers (e.g., Kohl et al. 2000).

A number of retrospective measures have been used to assess parents' involvement in children's education. For example, Fantuzzo et al.'s (2000) Family Involvement Questionnaire was designed to be used with parents of children in preschool, kindergarten, and early elementary school. Parents rate (1 = *rarely* to 4 = *always*) the frequency with which they engage a variety of practices reflective of parents' involvement (e.g., "I spend time working with my children on number skills" and "I talk with my child's teacher about classroom rules"). Once children reach the adolescent years, they often serve as reporters (e.g., Cheung and Pomerantz 2011; Hill et al. 2004). In this vein, Grolnick and colleagues (Grolnick and Slowiaczek 1994; Wellborn and Grolnick 1988) had children in middle school rate how true (1 = *not all true* to 4 = *very true*) statements about involvement were of their parents (e.g., "My mother knows a lot about what happens to me in school" and "My father asks me about what I do in school"). The Parent–Teacher Involvement Questionnaire (Conduct Problems Prevention Research Group 1995; Kohl et al. 2000) has been used with both parents and teachers of children in kindergarten through middle school. The teacher version largely, albeit not entirely, asks about parents' involvement at school (e.g., "How often does this parent volunteer at school?" and "How often does this parent send things to class like story books or objects?") given that teachers often have the opportunity to observe parents' involvement on this front.

Retrospective measures are useful in that they ask about what parents do on a regular basis in the context of their day-to-day lives. Moreover, they are time and cost efficient, permitting larger and more representative samples than would be possible with more intensive methods (e.g., daily reports or behavioral observations). Parents, children, and teachers all bring unique perspectives important to capturing parents' involvement in children's education (Grolnick and Slowiaczek 1994; Hill et al. 2004; Reynolds 1992). As the individuals who engage in the practices of interest, it may be argued that parents are the most aware of their involvement. Hence, they may be able to easily survey a general day or week to make estimations of frequency, eliminating instances of involvement that are exceptions to what is typical for them (for a similar analysis in regard to other dimensions of family interactions, see Cook and Goldstein 1993).

As the recipients of such practices, children may also be able to easily make estimations—once they have the cognitive skills to do so. The case has been made that children are particularly important reporters because for some mechanisms by which parents' involvement confers benefits (e.g., conveying that school is valuable or that parents care about children), it is critical that children are aware of the involvement (e.g., Cheung and Pomerantz 2012; Grolnick and Slowiaczek 1994). In addition, children may not be as concerned as parents with presenting parents in a positive light (e.g., Steinberg et al. 1992). The comparative norms guiding teachers' judgments of parents' involvement at school are likely based on a wider base of parents than those available to either parents or children. Hence, teachers may be best able to put the frequency of such involvement in normative perspective.

Systematic attention has not been directed to the associations between parents, children, and teachers' reports of parents' involvement in children's education. The few studies that have looked at this issue have generally asked each informant to report on different types of parents' involvement (e.g., Grolnick and Slowiaczek 1994; Reynolds 1992). For example, Hill et al. (2004) reported reliable correlations between mothers, children, and teachers' reports of parents' involvement ranging from .18 to .23, but children generally reported on parents' involvement on the home front whereas mothers and teachers generally did so on the school front, with only some overlap in the practices reported by the three. In Bakker et al's. (2007) research, parents and teachers reported on identical types of involvement. Correlations were highest for school-based involvement—that is, contact with teachers ($r = .44$) and participation in activities at school ($r = .64$)—with a smaller, but reliable, association for home-based involvement ($r = .28$). Unfortunately, prior research has not examined how parents, children, or teachers' reports map on to observations of parent's involvement in children's education. Hence, it is unclear whether the three are accurate informants and, if so, who is the most accurate. It is possible that the accuracy of information provided by each reporter is dependent upon the type of involvement (see below).

Regardless of informant, retrospective measures are prone to a variety of biases (for reviews, see Podsakoff et al. 2003; Schwarz and Oyserman 2001). A key issue with retrospective measures relevant to parents' involvement is that parents, children, and teachers may not be able to accurately recall and report on the frequency of parents' practices (for a similar point, see Bakker and Denessen 2007; Levine et al. 2010). This may not be of concern for concrete, scheduled practices such as volunteering in children's classrooms or attending parent–teacher conferences. However, for less concrete practices that vary in regard to their duration as well as context (e.g., discussing school with children, contacting the teacher when there is a problem, or helping children with homework), it may be difficult to remember how often they occur. Moreover, unless rating scales include concrete frequencies (e.g., one to two times per week), which is rarely the case in retrospective reports of parents' involvement (for some exceptions, see, Blevins-Knabe and Musun-Miller 1996; Raikes et al. 2006), it may be difficult for reporters to interpret the scale metrics. For example, "frequently" can be interpreted as once a week or once a day. In addition, some items may be quite general, leading to variation in how they are construed (Bakker and Denessen 2007). A question on the commonly used Parent–Teacher Involvement Questionnaire, (Conduct Problems Prevention Research Group 1995; Kohl et al. 2000), for example, is "How involved is this parent in his/her child's education and school life?" It may not be clear to teachers what types of practices constitute involvement.

When measures are characterized by ambiguity in their response scales or individual items, each informant may use unique heuristics reflecting their unique biases. Parents may allow their intentions (e.g., to spend time reading with children) or beliefs (e.g., it is their role to support children) to guide their estimates of how often they are involved; although such cognitions are often aligned with behavior,

this is not always the case (e.g., Green et al. 2007). Parents' estimates may also be influenced by their attributes as well as children's attributes, for example, if children become particularly frustrated with homework, assisting them may loom large in parents' minds, leading parents to overestimate their involvement in this aspect of children's education. When attributes of children (e.g., heightened frustration with doing homework) associated with academic problems lead parents to overestimate their involvement, parents' reports may deflate the associations between their involvement and children's academic functioning. However, some biases in parents' reports may inflate such associations. For example, when children do well, parents may see themselves as responsible, leading them to overestimate their involvement.

Although some investigators have suggested that children are better reporters of parenting than are parents (e.g., Sessa et al. 2001; Steinberg et al. 1992), children may bring biases to their reports as well. For example, they may use the quality of their relationships with parents or parents' other parenting practices (e.g., autonomy support) to make estimates of parents' involvement in their education. Moreover, children's interest in school may drive their reports. For example, when children are not interested, they may overestimate parents' involvement because it may be forcing them to direct time and energy to something they see as taking away from endeavors of more relevance to them. This may deflate the association between parents' involvement and children's academic functioning. However, other attributes of children that accompany enhanced achievement (e.g., positive emotional functioning) may also influence how they see parents' involvement, which may inflate the association.

At first blush teachers' reports may appear to be free of bias given that teachers are neither the provider nor recipient of parents' practices. Moreover, teachers generally do not have as close a relationship with parents as do children; hence, closeness is not an issue to the same extent as it is in children's reports in terms of biased responses. However, teachers may use attributes of children such as their compliance with classroom rules, completion of homework, or achievement in making estimates of parents' involvement in children's education. Reynolds (1992) found that teachers' reports of parents' involvement were more strongly related to children's achievement than either parents or children's reports (see also Bakker et al. 2007), leading some to conclude that teachers' reports are the most valid (e.g., Hill et al. 2004). However, the heightened association may simply reflect teachers' use of children's achievement, and related attributes, as a heuristic to gauge parents' involvement, particularly at home given that they do not have substantial direct knowledge of such involvement. In fact, it appears that teachers' reports of involvement at home are guided in large part by parents' involvement at school given that involvement on the two fronts are more highly associated in teachers' than parents' reports (Bakker et al. 2007). Teachers' reports also appear to be biased by families' socioeconomic status: Based on both parents and teachers' reports, lower (vs. higher) socioeconomic parents are less involved at school, but only teachers report lower socioeconomic parents as less involved at home (Bakker et al. 2007). When

teachers' reports are used in assessing both parents' involvement and children's academic functioning (e.g., grades), associations may be inflated.

The possibility that the problems we have described are responsible for the effects of parents' involvement on children's academic functioning has been ruled out in part by adjusting for other dimensions of parenting (e.g., autonomy support vs. control), family demographics (e.g., parents' educational attainment), and children's earlier academic functioning when looking at the effects of parents' involvement over time (e.g., Cheung and Pomerantz 2011; Deslandes et al. 1998; Izzo et al. 1999; Jeynes 2005, 2007). Dearing et al. (2006) used within-family analyses to show that at times when parents were more involved than they were on average, children's literacy achievement was higher (see also El Nokali et al. 2010); such an analytic approach is important because it eliminates potential between-family confounds that may arise in retrospective reports. Other investigators have been creative in the types of reports they use. For example, to measure the extent to which parents expose children to reading, Senechal and LeFevre (2002) had parents report on their knowledge of children's story books, which was a better predictor of children's literacy skills than parents' reports of the frequency with which they read to children.

Other Approaches: Daily Reports and Behavioral Observations

Daily Reports Although retrospective measures are used the most frequently to assess parents' involvement in children's education, other approaches have also been used. In an effort to capture parents' involvement in their day-to-day lives, our group (e.g., Pomerantz and Kempner 2013; Pomerantz et al. 2006) has taken a daily report approach in which parents are asked each day (e.g., over the phone or in a questionnaire) over the course of 7 to 14 days about whether (i.e., a checklist method) or how much (i.e., a rating-scale method) they used a practice reflective of parents' involvement as manifest in a commitment of resources to the academic arena. Pomerantz and colleagues (e.g., Pomerantz and Eaton 2001; Pomerantz et al. 2005) asked parents daily whether they helped with or checked over children's homework. Children have also served as informants (Bhanot and Jovanovic 2005). Although daily reports have some of the same problems as retrospective reports (e.g., memory and social desirability biases), they provide more reliable and valid assessments (Bolger et al. 2003). When asked at the end of the day about that day (vs. what they typically do or what they have done in the past as in retrospective reports), parents may be more able to remember if they assisted children with homework or if and how they responded to children's school performance (for a similar point, see Pomerantz and Kempner 2013; Pomerantz et al. 2005). In making daily reports, parents may also be less prone to social desirability biases because each day is one of many on which they are reporting.

The daily approach has been used to assess not only the quantity of parents' involvement, but also the quality (e.g., the extent to which parents' involvement

is oriented toward mastery or is affectively positive versus negative (Pomerantz et al. 2005, 2006). The daily approach has provided descriptive information about parents' involvement in children's education in the context of their day-to-day lives. For example, on average parents experience more negative affect on days they are involved in children's homework than on days they are not (e.g., Pomerantz et al. 2005). It has also yielded insight into the role of parents' naturally occurring involvement in children's motivation and achievement over short periods of time such as the next day (e.g., when mothers help children with their homework without children requesting it, children are more likely to have success in school the next day) as well as longer periods of time such as six months (e.g., when mothers refrain from using person praise, such as you are so smart, in responding to children's school success, children are less likely to avoid challenge in school six months later; e.g., Pomerantz and Eaton 2001; Pomerantz and Kempner 2013).

Just like retrospective measures, however, daily measures have drawbacks (for a review, see Bolger et al. 2003). As noted earlier, daily reports have some of the same problems (e.g., memory and social desirability biases) as retrospective reports, albeit to a lesser extent. Moreover, despite the fact that daily reports are often kept short (e.g., no longer than five or 10 min), they demand a substantial time commitment from families (i.e., a report everyday for 7–14 days). Although days can be missed without major threats to the validity of the data given analytic tools to deal with missing data (e.g., Raudenbush and Bryk 2002), the representativeness of participants may be an issue. However, examining mothers' helping and monitoring of children's school- and nonschool-related work, Pomerantz (2001) found that not only were mothers' daily reports associated with children's retrospective reports ($r = .34$), but that both methods yielded the same effects despite the sample of mothers being smaller (i.e., less than 10% of the targeted population) and likely less representative than the sample of children (i.e., more than 80% of the targeted population). Thus, although daily reports may only be possible on smaller, more select samples, they may still be informative, permitting not only more accuracy, but also more flexibility in studying parents' involvement.

Behavioral Observations A number of studies have also used behavioral observation to assess parents' involvement in children's education, with an almost exclusive focus on the quality rather than quantity. Such observation is generally carried out in the laboratory where investigators create a situation similar to that of homework. Typically, children are given an academic task, for example, a number search grid or the Raven's Progressive Matrices (Raven et al. 1977) on which to work with a parent present for 5 to 15 min or sometimes longer (e.g., Moorman and Pomerantz 2010; Ng et al. 2004). In a study focusing on the quality of parents' involvement, Grolnick et al. (2002) provided children with two tasks similar to those they might bring home from school. In a map task, children solved various problems in regard to getting places on a map; in a poem task, children identified a rhyming pattern and then wrote a poem using such a pattern. In a different vein, Hyde and colleagues (e.g., Else-Quest et al. 2008; Hyde et al. 2006) gave children and mothers math problems that most children of the

target age had not yet learned; mothers were provided with information about the problems along with strategies to solve them. To examine parents' responses to children's success and failure, Ng et al. (2007) observed mothers with children for 5 min after mothers learned children did poorly or well on a set of Raven's Progressive Matrices in which children had to identify the patterns used in a set of sequences to determine the missing element of each matrix (see Raven et al. 1977).

A key strength of the observational approach is that many of the biases that may create problems in retrospective measures—and to some extent daily measures—are not an issue. Trained observers who do not have prior ties to the family code parents' actual behavior, thereby permitting heightened objectivity. In this vein, Ng et al. (2007) had trained observers code mothers' involvement as manifest in teaching children how to solve the problems on the Raven's Progressive Matrices, checking children's work on the problems, looking at the problems to see what they were like, doing the problems themselves, and paying attention when children showed them the problems. However, more often, investigators have capitalized on the heightened objectivity of behavioral observations, as well as the detailed level of analysis permitted by this method, to assess the quality of parents' involvement, which is rarely assessed in parents, children, and teachers' retrospective reports (for some exceptions, see, Ginsburg and Bronstein 1993; Gottfried et al. 1994). Elements of the quality of parents' involvement such as the extent to which it is autonomy supportive (e.g., children are permitted initiative) versus controlling (e.g., parents issue directives to children), how much scaffolding it provides (e.g., simplifies the task for children into manageable parts), and the degree to which it is affectively positive vs. negative have been coded (e.g., Grolnick et al. 2002; Hyde et al. 2006; Moorman and Pomerantz 2008a).

Another major benefit of observations in the laboratory is that the context of the interaction is to a large extent standardized across families because the same kind of task is given to all families. Hence, variability due to such factors as the type or difficulty of schoolwork is minimized; some studies also control children and parents' perceptions of how good children are at the task (e.g., Ng et al. 2007). However, such standardization can also be a drawback as it creates an artificial situation. Although investigators attempt to choose tasks that are like those that children and parents encounter naturally as part of the homework process, this is never actually the case in that the tasks are simply not children's homework. Hence, the consequences of doing well or poorly, or even of completing the work, are not the same as with homework. Some observational studies in the laboratory with younger children have examined parents' involvement in more naturalistic contexts (e.g., mothers' use of number language while they are waiting with children; Durkin et al. 1986). It is usually the case, however, that in the laboratory both children and parents have their full attention directed to the task at hand. Children are not distracted by television, computer games, or siblings; parents are not trying to tidy up the house, finish a work assignment, or get dinner on the table (Pomerantz and Ruble 1998).

Addressing this issue, there have been some observational studies examining parents' involvement in children's education conducted in the home to capture it in the context of families' naturally occurring daily interactions (e.g., Rowe 2012). For example, focusing on young (14–30 months) children's development of cardinal number concepts, Levine et al. (2010) observed how often parents engaged in number talk (e.g., "Let's count the balloons. Ready?" and "Three is after four.") during multiple 90-min periods as children and parents went about their ordinary daily activities. Such observations, however, have been rare for families of older children, presumably because older children have busier lives given the time they spend at school as well as their participation in extracurricular activities. When observations of families of older children have been used, they have been ethnographic in that they are intensive with relatively few families. For example, Xu and Corno (1998) observed six families while children did their homework. Although such studies do not allow for the examination of the effect of parents' involvement, they provide intriguing descriptive information. For example, based on their observations, Xu and Corno concluded that, among other things, homework is an "emotionally charged" (p. 427) endeavor for children as well as some parents.

Future Directions in Measurement

Although there has been substantial reliance on retrospective measures to assess parents' involvement in children's education, there has also been diversity in the approaches taken to assess such involvement. For one, retrospective measures have been used with multiple reporters including parents, children, and teachers who each bring unique information to their reports. Several studies have employed a combination of reporters to ensure a comprehensive assessment of parents' involvement (e.g., Grolnick and Slowiaczek 1994; Hill et al. 2004; Kohl et al. 2000). In addition, daily and observational approaches to assessing parents' involvement have been used, albeit not as frequently as retrospective measures, in several innovative ways that allow for the assessment of both the quantity and quality of parents' involvement. Such diversity in the assessment of parents' involvement may at first blush convey that little needs to be done in regards to measurement. However, this is not the case. First, efforts are necessary to ensure that the retrospective measures on which the field relies so heavily are maximally valid. Second, observational and daily approaches can be further developed to answer central questions that have not received enough attention to date, but are of both conceptual and practical importance. Third, new measures can be developed to identify how parents use the bridges (e.g., parent–teacher conferences and curriculum information meetings) that exist between schools and families.

Improving Retrospective Reports

A key initial endeavor to enhancing the measurement of parents' involvement in children's education is to improve the retrospective measures already being used. As highlighted earlier, the retrospective approach is relatively time and cost efficient. As such, it will continue to be employed in basic research, particularly as efforts are made to obtain large, representative samples that include families who do not have the resources to participate in more time-consuming methods such as observations in the laboratory. Retrospective measures also have the potential to serve as easy-to-use tools for schools to gauge their progress at increasing parents' involvement in children's education. Moreover, because different sources are often used for retrospective reports of parents' involvement (e.g., parents) and children's academic functioning (e.g., teachers), the effects of parents' involvement are not simply due to shared reporter variance.

Despite attention to the predictive validity of retrospective measures of parents' involvement in children's education, there has been little, if any, systematic attention to the convergent and discriminant validity of such measures. As a consequence, the question of whether these measures really assess parents' involvement, regardless of reporter, remains unanswered. Given the potential problems with retrospective reports (for reviews, see, Podsakoff et al. 2003; Schwarz and Oyserman 2001), this issue cannot be ignored. Based on their review of the measurement pitfalls of retrospective measures of parents' involvement, Bakker and Dennesen (2007) concluded that such measures should be replaced with qualitative measures relying on in-depth interviews with parents. However, replacing retrospective measures with such an approach is not only impractical, but also unnecessary. Based on investigations of the cognitive errors that can occur when individuals make retrospective behavioral reports (e.g., Schwarz 1999; Schwarz and Oyserman 2001), Morsbach and Prinz (2006) make several recommendations to address the weaknesses of such measures. Such an approach has the potential to sizably improve retrospective measures.

Drawing from Morsbach and Prinz's (2006) recommendations, as well as directly from the cognitive errors work, we highlight two key steps that have the potential to substantially improve retrospective measures of parents' involvement in children's education. First, a central source of error in retrospective measures is respondents' understanding of the questions (Schwarz and Oyserman 2001). As noted earlier, retrospective measures of parents' involvement may have a substantial number of items that can be construed in various ways (e.g., "Does the parent encourage positive attitudes toward education?" and "My parents spend time with me on things related to my schoolwork"). Schwarz and Oyserman (2001) suggest that "cognitive pilot testing" can be useful in ensuring that respondents (e.g., parents and children) interpret the items as intended by the investigators. This includes a range of procedures (e.g., DeMaio and Rothgeb 1996; Willis et al. 1991). The most simple is having respondents paraphrase the statements or questions comprising the items to ensure that respondents interpret the items as intended by the investigators. Extensive probes about the items and even having respondents think aloud while answering

can also be useful. Parents, children, and teachers can also be given vignettes that describe varying degrees of involvement practices as well as other types of parenting that are not intended to be assessed. They then complete the items assessing parents' involvement for the parents in each vignette; their responses should map on to the vignettes. For example, if a vignette describes a parent asking children about what they did in math or other subjects once or twice a month, parents should endorse an item such as "I discuss what my child is learning in school" as occurring rarely for the parent in that vignette. If they see it as never occurring or occurring as more frequently, then the item should be revised. Cognitive pilot testing can be particularly useful in ensuring that parents from diverse cultural backgrounds who may differ in their definitions of the general concept of involvement in children's education similarly interpret the specific practices asked about in retrospective measures of parents' involvement.

Second, more attention to the scales that parents, children, and teachers use to respond to questions and statements about parents' involvement in children's education is needed. Such scales can substantially influence responses, with both specific (e.g., "never" to "four times a week) and vague (e.g., "not all true" and "very true") anchors leading to inaccurate responses (Schwarz and Oyserman 2001). Schwarz and Oyserman (2001) suggest that instead of making ratings on scales, reporters should simply give a frequency for how often the behavior occurred in a specific time period (e.g., the last week). Another approach would be to use daily assessments with a large representative sample over one-week or longer periods to identify how often per week parents engage in routine involvement practices such as helping children with homework or discussing what they are learning at school; frequencies for each day could be provided by parents and children. These frequencies could then be used to concretely anchor scales around what is normative for each individual practice, for example, if once a week is normative for a practice, then "never," "once a month," "once a week," "two to four times a week," "more than four times a week" could be provided as response options.

Once such revisions are made to retrospective measures of parents' involvement in children's education, the convergent and discriminant validity of the measures can be examined in the context of the multitrait-multimethod matrix proposed by Campbell and Fiske (1959; for a similar, but alternative, approach, see Cook and Goldstein 1993). In a multitrait-multimethod matrix, the associations between multiple methods of assessing a single construct (e.g., parents' involvement) are compared to the associations between that construct and others (e.g., parents' autonomy support) assessed using the same method (i.e., parents' retrospective reports). Application of a multitrait-multimethod matrix to retrospective measures of parents' involvement would require extending the small number of studies examining the associations between parents, children, and teachers' retrospective reports. In doing so, a key advancement is to ensure that the different informants report on the *same* types of involvement, which has been rare (for an exception, see Bakker et al. 2007). Moreover, other assessment approaches can be incorporated (e.g., laboratory and home observations that capture the types of involvement asked about in the retrospective reports). Although time intensive, home-based observations are of

particular importance to ensure that the retrospective measures assess what parents do in their day-to-day lives; they can serve as a gold standard for parents' involvement at home. Given recent advances in technology, this may not be as challenging as in the past because children and parents can wear small audio recording devices as they go about their regular activities (for an example of this in the assessment of parents' management language, see Bindman et al. 2014).

Convergent validity would be established not only if the multiple methods of assessing parents' involvement were reliably, positively correlated, but if they were more strongly correlated with one another than with other dimensions of parenting assessed with the same methods used to assess parents' involvement. The relatively smaller correlations of the measures of parents' involvement with other dimensions of parenting (versus with other methods of assessment of parents' involvement) would also be key to establishing the discriminant validity of the measures. Given the evidence to date, the multitrait-multimethod matrix would likely yield reliable, positive correlations between the different methods of assessment. However, these would likely not be so large as to indicate that the different methods are completely overlapping.

A key endeavor to enhancing the validity of retrospective measures would thus be to identify the sources of unique variance among different reporters. To this end, after adjusting for other informants' reports of parents' involvement in children's education, analyses could predict each informant's reports from a host of constructs that may contribute to unique variance in that informants' reports. This could include parents' intentions (e.g., to spend time with children on schoolwork), perceptions of children's competence, and their own emotional functioning; also of importance would be socioeconomic status as well as the attributes of children such as their interest in school and frustration in the face of challenge. Attention also can be given to how the unique variance of each informant's reports maps on to observations of what parents actually do. This would require observations at home or the laboratory coded by trained observers; these ratings could then be used as a predictor of the unique variance of each informant to identify if such variance reflects parents' actual behavior. This approach may be especially fruitful when parents and children provide reports for the observational session, thereby ensuring that the target behaviors are similar for all of the informants (for additional approaches to identifying biases in informants' reports, see Durbin and Wilson 2012).

If the unique variance of informants is not meaningful (e.g., it is due to parents' intentions or perceptions of children's competence), it can be removed. To this end, structural equation modeling (SEM) using only the portion of each report that is overlapping and predicted by the latent construct can be employed (Cook and Goldstein 1993), rather than simply taking the mean of different reporters. If the unique variance is meaningful—for example, the unique variance in parents' reports is associated with objective observers' reports—this can be taken into account (see Cook and Goldstein 1993). Of course, multiple reporters and SEM will not always be possible given the time and sample constraints. In such cases, knowing what creates bias among informants can be useful as it will allow analyses to control for these potential confounds.

Taking Daily Reports and Behavioral Observations Further

Despite the fact that daily and observational assessment approaches are relatively time intensive for both families and investigators, their frequent use in the future is likely to provide significant insights into parents' involvement in children's education. Such approaches can be used to answer key conceptual questions whose answers will provide important information to school personnel working on the ground to foster involvement among parents. Both daily and observational assessment approaches are optimal for determining how parents can best adapt their involvement to the varying situations that children face as they progress through the school system (e.g., a change in the quantity and quality of homework as children begin a new grade with new teachers). These approaches can identify fluctuations in parents' involvement over time that are unlikely to be captured in a single administration of retrospective reports or even multiple administrations (e.g., in a longitudinal design with assessments every six months).

As the start of the school year often brings changes in not only homework but also the daily routine of the classroom, it may be a critical time for parents to become involved in children's education on both the home and school fronts. This may be particularly true as children transition from elementary to middle school and middle to high school when changes are particularly marked (for reviews, see Benner 2011; Eccles et al. 1993). Using daily assessments, profiles of how parents' involvement changes over time can be identified and employed to predict children's academic functioning. When parents are highly involved at the start of the year both in terms of supporting children at home and seeking information from teachers or other school personnel, children may benefit. Parents' involvement at this time may not only provide children with important emotional (e.g., emotion regulation skills) and academic (e.g., problem solving skills) resources, but also highlight the value of school to children, thereby giving them a reason to persist through initial difficulties. However, it may be important for parents to reduce their involvement over time to support children's autonomy. When parents are never involved or fail to reduce their involvement, children may suffer. This could also be examined at a microlevel with behavioral observations in the laboratory by giving children a novel, challenging task and examining fluctuations in mothers' assistance over the course of children working on the task. Ultimately, results from daily and observational assessment approaches used in these ways can inform school personnel in regards to key points at which to encourage (or discourage) parents' involvement via school communications, conferences, and events.

Daily and observational assessment approaches can also be used to capture the role children's attributes play in determining optimal involvement practices. We have used both of these approaches to elucidate what shapes parents' involvement, and its quality (e.g., Moorman and Pomerantz 2008a, b). For example, using daily assessments, we demonstrated that mothers were more likely to assist children with homework on days children were helpless (e.g., felt frustrated and gave up) over their homework, with such helplessness being associated with heightened negative affect among mothers (Pomerantz et al. 2005). Our observational research examining the link between children's helplessness and the quality of mothers' involve-

ment from one half-minute segment to the next indicates that there is variability between mothers in the extent to which the quality of their involvement is contingent on children's attributes driven in part by mothers' beliefs (e.g., Moorman and Pomerantz 2008a, 2010). Unfortunately, the implications of this variability for children's academic functioning has not been examined. As we know from research using retrospective reports, a major reason that parents appear to become involved in children's education is because children request their involvement (e.g., Green et al. 2007). Hence, a key question is whether parents' involvement is particularly effective when it is in response to children's attributes (e.g., helplessness or requests) rather than simply initiated by parents.

As daily and observational approaches can take children's behavior into account (e.g., examining the extent to which children's behavior is followed by changes in parents' involvement a minute or a day later), these approaches are ideal for examining the question of whether and how parents should vary their involvement contingent on children's attributes. For example, parents' involvement may be particularly important when children are having difficulty. This idea could be tested by examining whether children whose parents respond to their difficulty in school (e.g., doing poorly on a test or becoming frustrated with homework) with increased subsequent (e.g., the next day) involvement (e.g., assistance with homework or talking with the teacher), fare better academically over the long run.

This kind of approach may also be useful in understanding how parents can be optimally involved as children move into adolescence. Given that children often seek to establish their independence during this phase of development, it has been suggested that many types of involvement on the part of parents are not particularly effective because they may be experienced as intrusive by children (Hill and Tyson 2009). Perhaps in response to children pushing parents away, parents' involvement declines over the initial adolescent years (e.g., Cheung and Pomerantz 2011). However, this decline can undermine children's motivation and achievement (e.g., Cheung and Pomerantz 2011). Parents who pay attention to children's attributes (e.g., requests for assistance and difficulty with new academic demands) at this phase of development may be most successful at supporting children's learning.

Daily and observational approaches are likely to provide new insights into important questions that cannot be answered with retrospective measures. However, it is necessary to optimize the validity of these approaches in a similar manner to that detailed for retrospective measures. Additional steps can be taken as well. In terms of daily reports, the general approach to date has been to either have parents complete the reports on their own at the end of each day (e.g., Eaton and Pomerantz 2001) or in the context of a phone interview at the end of each day (e.g., Pomerantz et al. 2005). However, alternative methods may prove useful. For example, experience sampling methods in which parents are questioned (e.g., via text messaging or a beeping system) several times between the end of school (or parents' arrival at home after work) and children's bedtime about their involvement in children's schooling may be able to further minimize memory biases. In addition, in regard to such activities as homework, experience sampling methods may permit useful information about how interactions in this often challenging context unfold to, for

example, support or interfere with children's independent work. Event-based assessment approaches may also be useful for types of involvement that are not particularly frequent, but may be meaningful. For example, parents may complete a form about their responses to children's performance every time children share their test results; or they may provide information about their discussions about school with children every time such events occur (for a recent review of different daily report methods, see Iida et al. 2012).

For observations, much of the research has been conducted in the laboratory. More consideration of how to create contexts in this setting that reflect those that children and parents encounter in the home is necessary in establishing validity. This may include using tasks that are more similar to homework than has been true in the past, both in terms of the type of activities and their interest level. Also of importance is creating consequences for children's performance that are similar to those for homework as perceived by both parents and children. In addition, situations should be created in which parents are not totally available, but rather involved at least partially in another task, to mirror the home situation in which parents often have limited resources for becoming involved. Although challenging, consideration should be given to making observations in the home as well—for example, leaving a camera on during the time children do homework or at dinner when discussions about school may occur.

Focusing on Key Bridges between Schools and Parents

To maximize the practical significance of research on parents' involvement in children's education, future research should pursue a better understanding of parents' involvement in the context of bridges created by schools to link parents to schools. Schools create multiple bridges for parents to be involved in children's education. For example, curriculum nights and parent–teacher conferences are common events in most public schools in the USA. Notably, national surveys in the USA indicate that many parents take part in such activities (Noel et al. 2013). A large proportion of parents attend general school meetings (87%), school or class events (74%), and parent–teacher conferences (76%). Parents' attendance at such events is often considered an important aspect of their involvement on the school front measured in retrospective reports. Parents' attendance can be beneficial in that it conveys to children that parents value school, leading children to do so (Epstein 1988; Grolnick and Slowiaczek 1994); teachers are often aware of such involvement, which may lead them to attend more to the children of parents who take part in bridge activities (Epstein 1988). In addition, parents can obtain important information that may ensure their involvement at home is particularly effective (e.g., Hill and Craft 2003; Hill and Taylor 2004). However, not all parents may productively use the bridges created by schools. Understanding what makes successful navigation of these bridges will require measuring what parents do when they are at school events.

To this end, three central steps can be taken. First, and most basically, logs recording attendance (e.g., parents sign in as they enter the event) at these events are a

simple way to document parents' attendance at school events. Second, observations can be made to identify the variety of ways that parents engage at these events. For example, at parent–teacher conferences, to what extent do parents monopolize the conversations versus permit teachers to provide information about children? Do parents ask questions about what and how children are learning so that they may appropriately gauge their involvement? How much do parents seek teachers' advice about how they may support children at home? Once observations are made, the implications of variability among parents in such involvement for children's motivation and achievement can be evaluated.

Observational assessment of how parents navigate the bridges is an important first step. However, if such navigation matters for children's academic functioning, there will be a need for more time and cost-efficient measures. Thus, a third step will be for the creation of measures asking parents and teachers about the various behaviors in which parents engage at particular school events; this can be done immediately after such events (e.g., parents can complete a brief survey after their parent–teacher conference), thereby limiting memory biases. Data from such endeavors will be important for teachers and schools in designing optimal bridges that foster the most effective practices among parents. For example, memos could be distributed to parents about helpful questions to ask during the parent–teacher conference, conveying the importance of advanced planning. In fact, advice on how parents can maximize the utility of parent–teacher conferences already exists (e.g., Harvard Family Research Project 2010). However, because there is little, if any, research on the issue, the advice is not empirically based.

Key to understanding parents' involvement in children's schooling in the context of the bridges created by schools is elucidating the role of teachers and other school personnel in such bridges to ultimately understand how they work together with parents. This endeavor will move away from measuring structural connections between parents and schools to measuring relational connections—that is, for example, the quality of the relationship between teachers and parents or when and how teachers invite parents to school. Such relational connections have begun to be measured already (e.g., Green et al. 2007). For example, Vickers and Minke (1995) asked teachers and parents about their relationships along such dimensions as affiliation and support (e.g., "We trust each other" and "I respect this parent/teacher"). However, there is much to be done in this area. One key direction is to make observations of how teachers navigate the bridges between schools and parents as manifest in the parent–teacher conference. Although the importance of such an endeavor has been highlighted by Vickers et al. (2002) for creating productive relational connections, there is not empirical evidence as to what types of practices are beneficial.

Conclusions

Despite the large body of research on parents' involvement in children's education (for reviews, see Pomerantz et al. 2007, 2012), there has been relatively little attention to measurement issues (for an exception, see Bakker and Denessen 2007). However, such attention is critical to ensure confidence in the findings on the benefits of parents' involvement. In this vein, a key direction for future research is to ensure the convergent and discriminant validity of the frequently used retrospective measures of parents' involvement. We make the case that although retrospective measures are useful in many contexts, both daily and observational assessment approaches are also useful, lending unique insights. These assessment approaches have been employed in the past, but should be used more often in future research. Indeed, they may provide significant knowledge into the relatively unexplored arena of identifying optimal involvement among parents to events driven by schools (e.g., changes in the quantity and quality of schoolwork due to a new teacher or school) or children (e.g., a new desire for independence as they enter adolescence). Our final recommendation is to begin developing measures that assess not only if parents attend school events (e.g., parent–teacher conferences) as is common in retrospective measures, but also how parents and teachers navigate these bridges.

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Chapter 5
Capturing Family–School Partnership Constructs Over Time: Creating Developmental Measurement Models

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Research in education and related social sciences disciplines is often concerned with investigating change over time. Perhaps the most ubiquitous example is that of educational achievement, in which scores on standardized tests or other measures of achievement are commonly used to track student learning over time. Longitudinal research methods have become increasingly popular with researchers interested in understanding how and why outcomes change over time. Recent developments in statistical methodology and the availability of software with which to conduct such research have made longitudinal methods more accessible (Singer and Willett 2003). For example, in the area of structural equation modeling (SEM), longitudinal models known as latent growth models (LGMs) have become increasingly popular. LGMs use a modified form of the confirmatory factor analysis in which a slope and intercept are modeled as latent factors. In the area of family–school partnerships, it is easy to envisage applications of such methodologies. For example, such methods could be used to answer questions such as "How does parental involvement in students' schoolwork change over time?" and "How do changes in parental involvement relate to changes in students' achievement levels?"

Two basic goals of longitudinal data analysis are the investigation of changes in mean levels of variables over time and of changes in individual differences over time (Marsh and Grayson 1994). Take, for example, a team of researchers who are interested in measuring family–school partnerships during childhood. The team may want to understand parents' levels of involvement and how this changes over time. On average, does parental involvement increase, decrease, or stay the same

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as students get older? Do these changes take a linear form, or do they follow some other pattern? Researchers may also want to investigate differences in the patterns of change across students. At the beginning time point, are levels of involvement approximately equal, or is there substantial variation across parents? Does involvement follow approximately the same developmental trajectory for all parents, or do trajectories vary? Do those who begin with high initial levels of involvement change more or less than those with lower initial levels? Other questions of interest are concerned with the degree to which changes in one outcome are related to changes in another. For example, are changes in parental involvement related to changes in students' achievement levels? Longitudinal models such as LGMs can be used to answer all of these types of questions, and more.

Importance of Equivalence of Measures over Time

Proper interpretation of longitudinal models hinges on two assumptions: (1) the measures used at each time point remain the same, and (2) these measures have equivalent measurement properties at each time point. The latter assumption is referred to as *longitudinal measurement invariance* and has been the subject of numerous articles (e.g., Bontempo and Hofer 2007; Ferrer et al. 2008; Marsh and Grayson 1994). Briefly, longitudinal invariance is concerned with the degree to which item parameters are equivalent at each time point. In order to study change over time, item loadings and intercepts should be equal at each time point. Equivalence of item loadings indicates that items are related to the latent construct in the same way across time points, or, in other words, the items are equally salient at each time. Equivalence, or invariance, of item intercepts indicates that those with the same amount of the latent construct will, on average, provide the same response on the answer scale at each time point. That is, a high level of the construct will not result in a response scale mean of four at one time point but of seven at another; if this were the case, it would be difficult to interpret levels of change across time.

Because references on longitudinal invariance are readily available, we focus instead on the first assumption, which has not been the subject of much investigation. To continue with our family–school partnership example, researchers would have to use the same measure of partnerships at each measurement occasion included in the study. If different measures at different time points were used, researchers might well find changes due to these differences in measurement and not because of changes in parental involvement. In this sense, trying to assess change with measures that are not the same from year to year is a little like comparing apples to oranges. This may introduce a dilemma for those studying children, however. Measures that are developmentally appropriate for students in the first grade, for instance, may not be appropriate for those in the sixth grade. This dilemma is well recognized in aptitude and achievement testing. In scales such as the Weschler Intelligence Scale for Children (WISC; Wechsler 2004) or Stanford Binet (Roid 1916–2003), this problem is overcome by providing different starting points for

students at different levels. Thus, although the same test is used for all students, the particular items a student is administered differ according to age and ability.

In the realm of standardized achievement tests, researchers use strategies known as *linking* or *equating* methods to make tests comparable across grade levels. One such strategy involves creating a set of *common* or *anchor items* for adjacent grade levels and embedding this set of items into the tests of both grades. For example, a set of ten common items is developed for the fourth and fifth grade tests. These ten items are then included in the tests for both grades, along with other items that are unique to each grade. Although tests for the two grades include different items, the ten common items provide a basis on which the tests can be *linked* or *equated* such that scores are on the same scale and can be compared across tests (see Kolen and Brennan 2004 for more information on these methods).

Although methods for making measures comparable over time are well known in the cognitive arena, such methods are not commonly used in developing scales to measure affective outcomes. In this chapter, we therefore propose a strategy that could be used to develop measures that are appropriate for measuring such outcomes over time, but do not necessarily include the same items at each age or grade level. For example, an item on our hypothetical family–school partnership scale may ask how often parents check their children's homework. Although such an item may be appropriate in the third grade, it may not be as appropriate in the seventh. This item may therefore be dropped in the seventh grade. It is also possible that additional items that are more appropriate for older children might be added to the scale. As long as there are some items common to each set of adjacent age or grade levels, scores can still be compared across time. We refer to models for such measures as *developmental measurement models* because they explicitly allow for items to be dropped from or added to the scale in order to maintain developmental appropriateness. However, because there are common items for adjacent age or grade levels, growth models can still be estimated and interpreted and growth parameter estimates are not biased.

We base our methods on confirmatory factor analytic (CFA) techniques because these are well known in developmental research and are fairly easy to implement using commonly available software. The use of common items to link adjacent levels is based on the same concept as the use of common or anchor items in achievement testing. The loading and intercept parameters for the common items are constrained to be equal across time points. This provides a linkage that allows for all items, both common and noncommon, to be scaled, or standardized in the same way. Thus, even though the items are not the same at all time points, they are on a common scale that can be used to make longitudinal comparisons. The mathematical underpinnings of this process are discussed in detail by Hancock and Buehl (2008), who first proposed the method, which they referred to as the *shifting indicators model*. To our knowledge, however, the process of creating such measures in practice has not been demonstrated. We therefore use this chapter to provide a comprehensive description of the steps involved in creating such models, which we refer to here as developmental measurement models.

Steps in Creating Developmental Measurement Models

We distinguish two broad classes of situations in which researchers might create developmental measurement models to study change in family–school partnerships across time. In the first situation, the researcher is working with an existing scale, but realizes that some of the items may not be age appropriate for all of the children who will be studied. The researcher would therefore be interested in choosing the scale items that are most appropriate for children of various ages/grades. This could be done through a combination of statistical analysis, theory about the construct, and developmental theory relevant to the items. In the second scenario, the researcher is not working with an existing scale, but instead plans to develop a scale that could be used with children of different ages. In this situation, the researcher would use theory about the construct in conjunction with developmental theory to create items that would best tap into the construct for each age group. In addition, the researcher would create sets of items that would be appropriate for (at least) each pair of adjacent age levels to use as linking items. Under both scenarios, the researcher would complete the following steps: (1) create the developmental measurement model, (2) test the developmental measurement model for longitudinal invariance, and (3) estimate the appropriate latent growth model, using the appropriate items for each age level. As we explain below, a separate test of the fit of the developmental measurement model is not necessarily needed. This is because this test may be subsumed in the final test for longitudinal invariance. If needed, however, the test of fit of the developmental measurement model would be performed in a separate step. The necessary steps for various scenarios are summarized in the flowchart shown in Fig. 1, and are described in more detail in the following paragraphs.

Under the first scenario, in which the research is based on an existing scale, the ideal situation is perhaps that in which the researcher has sufficient information from construct and/or developmental theory to determine which items are appropriate for multiple age levels and which are not. This situation is shown as scenario 1a in Fig. 1. If this is the case, the researcher could set up the developmental measurement model based on this theory and test it for longitudinal invariance. As explained in a subsequent section, the final test of longitudinal invariance is one in which the loadings and intercepts of all items are constrained to be equal. However, recall that in the developmental measurement model intercepts and slopes of all common items are also held equal. Thus, the final test of longitudinal invariance is also a test of the developmental measurement model. Although the developmental measurement model will likely also include age-specific items, these items are not expected to be longitudinally invariant, and would therefore be freely estimated in both the longitudinal and developmental measurement models.

If sufficient theory is not available for choosing developmentally appropriate items, the researcher could instead begin by testing all of the items on the existing scale for longitudinal invariance (scenario 1b in Fig. 1). The results of these invariance tests would allow the researcher to determine the items that perform most similarly across time points. These items would be the most likely candidates for the common or linking items. The results of longitudinal invariance tests could also

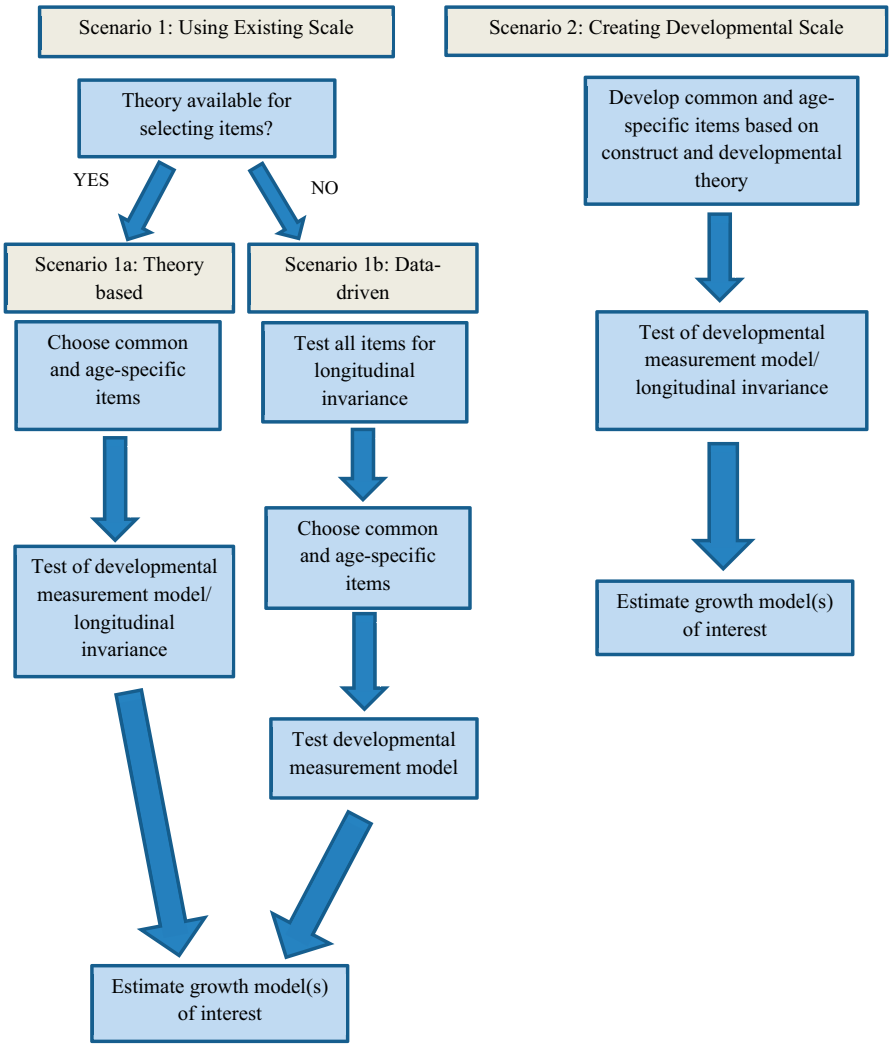


Fig. 1 Flowchart showing the order of analyses for developmental measurement models

be used to determine which items' performance is *least* similar across time points. Examination of the wording of such items would likely reveal that they are less salient for some age groups than others. This information could be used to determine which items should be dropped or added for each age group.

The process of choosing common and age-specific items should also be informed by theory to the extent possible, but under scenario 1b the process would necessarily be somewhat data driven. Thus, in this scenario researchers would first conduct longitudinal measurement invariance tests and would use the information from these, in conjunction with theory, to create a developmental measurement model. The resulting developmental measurement model should then be tested for its fit to the

data. Note that this is necessary under scenario 1b because, even though a test for loading and intercept invariance has been conducted to choose items, the particular configurations of items used for each age group will represent a new measurement model, and this necessitates a test of the fit of the new model to the data. Ideally, this test would be conducted on a separate sample, or on a hold-out sample, if the original sample size were sufficiently large. This is because the items were deliberately selected on the basis of tests of their measurement properties, and these tests were conducted with the original sample. Given that the item structure was presumably found to fit the data, tests of a subset of these items in the same sample does not yield particularly strong evidence of fit. Nevertheless, if one sample is all that is available, the test of fit for the developmental measurement model should still be conducted. Finally, in the fourth step, researchers working under both scenario 1a and 1b would estimate the growth model(s) of interest, based on the measurement model created in the previous steps.

Under the second scenario, in which the researcher is creating a developmental measurement model "from scratch," the first step would be to write items to be used as common or linking items, as well as items that will be specific to one or more age groups. Expertise in the theory of the construct and how it may change over time, and developmental theory specific to the age groups of interest will be needed at this stage. Common items should be appropriate for at least two adjacent age groups, although linkage across more ages is desirable, if possible. This is because the common items create the link by which items are connected across time. Using only one item results in a fairly weak link, but with more items that are common across multiple age levels, the link is stronger. For example, the researcher might create a set of family–school partnership items that would be appropriate at ages six, seven, and eight, and another set that would be appropriate for ages eight, nine, and ten. Because there is overlap only for the age eight items, the link would not be as strong as if items for both ages seven and eight were to overlap. In a later section we discuss specific requirements for the numbers and configurations of common or linking items that are needed for model identification. However, it should be noted that these requirements represent the bare minimum number of common items that can be used; the strength of the linking process increases with additional common items. In addition to the common items, sets of items that are specific to a single age group must also be developed. Once the items are developed and data collection has occurred, the researcher would test the developmental measurement model for longitudinal invariance. Note that, as in scenario 1a the test of longitudinal invariance subsumes the test of fit for the developmental measurement model. Thus, a separate test of fit is not necessary as it would be redundant. Assuming invariance is supported, the developmental measurement model would be used to estimate the growth model(s) of interest. For example, researchers could test whether levels of family–school partnership increase, decrease, or stay the same over the school years.

In the sections that follow, we provide more detail on these analyses. We begin with brief descriptions of the LGM and its relationship with developmental measurement models. We then provide an example of the processes described above based on a measure of students' goals and strategies for responding to conflict, obtained from an extant data set. Annotated computer code for all analyses using the M*plus* computer package is included in Appendix A.

Overview of Latent Growth Curve Modeling

LGMs are a popular and flexible approach to investigating longitudinal change rooted in SEM. Lance et al. (2000) summarized many advantages of LGMs, including the ability to model individual and group level change, investigate different types of growth trajectories (e.g., linear, quadratic), model growth in multiple constructs simultaneously, and include predictors and outcomes related to longitudinal growth parameters, such as the slope and intercept. In this section, we provide a brief, nontechnical overview of two types of LGMs: first-order LGMS, and second-order LGMs.

First-Order Latent Growth Curve Modeling

First-order LGMs are most commonly employed in research. First-order LGMs include a single manifest indicator at each time point. This indicator is typically a sum or average of several items (Ferrer et al. 2008). For example, imagine that educational researchers are interested in tracking partnership involvement with schoolwork from grades six through eight. At each of the 3 years, they may ask students to complete a four-item scale. To model longitudinal change with a first-order LGM, the researchers create a composite score for each respondent at each time point, such as the average of the four items. First-order LGMs model change in these composite scores over time. LGMs measure change as a linear (or nonlinear) function of time, using the familiar function for a straight (or curved) line. Recall that such functions consist of an intercept, which measures the initial status, or starting point, and a slope that measures the change over time. In the LGM framework, the slope and intercept are modeled as latent variables on which the measures (in this case, the composite score at each time point) load. Thus, the LGM is set up much like a confirmatory factor analysis, in which the slope and intercept are the factors and the composite scores are the indicators.

Figure 2 displays an example of individual growth trajectories across four time points[1]. Notice how individuals have different starting points (intercepts) and slopes, indicating substantial variation among individuals in these growth parameters. In all, five key parameters are estimated to describe the data for first-order LGMs: the intercept mean and variance, the slope mean and variance, and the slope/intercept covariance. The intercept mean represents the average value at the first measurement time point across individuals and can be thought of as the average "starting point" across individuals. The intercept variance describes how much individuals vary with respect to their responses at the first time point. The slope mean represents the average rate of linear change across individuals and can be either positive, indicating an increase across time, or negative, indicating a decrease. The slope variance describes how much individuals vary with respect to their rate of change across all time points. The slope/intercept covariance describes the relation-

[1] We thank Dena Pastor for providing this graph.

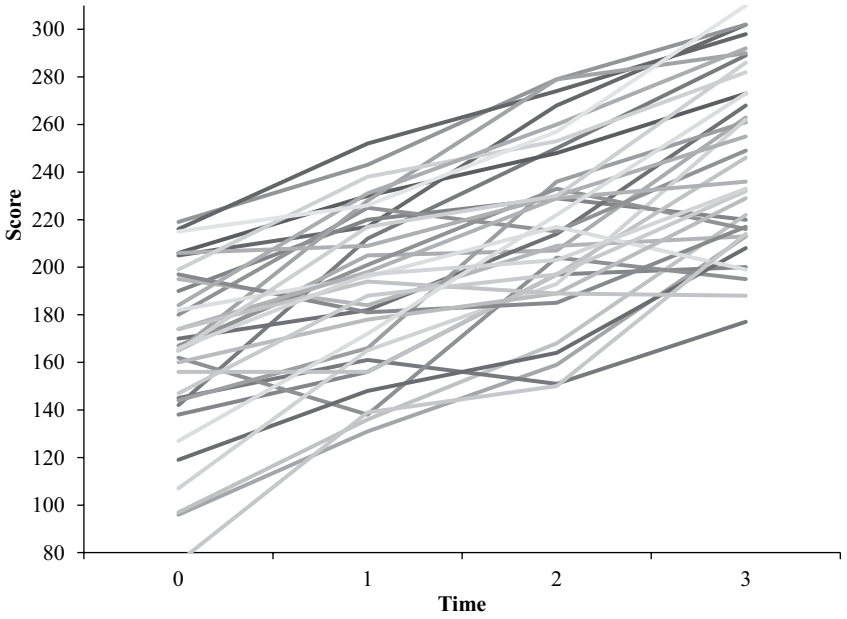
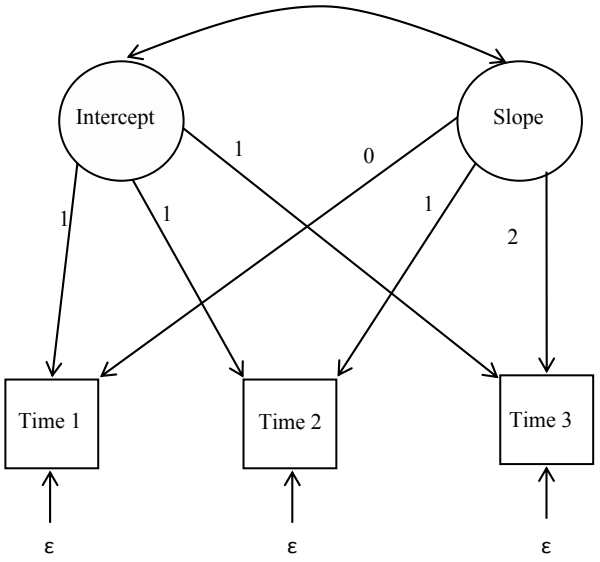


Fig. 2 Example of individual growth trajectories across four time points

Fig. 3 First-order LGM



ship between the intercept and the slope, such as whether individuals who start with low initial values grow more or less than individuals with high initial values.

A first-order LGM with three waves of data is presented in Fig. 3. Manifest variables (i.e., the composite scores) are represented by squares, and latent vari-

ables (i.e., intercept and slope) are represented by circles. All paths connecting the intercept to manifest variables are set to one to create the intercept term, and the paths connecting the slope to each manifest variable are set to [0, 1, 2] to invoke a linear growth pattern at three equally spaced time points. (Note that unequally spaced time points and nonlinear slopes are also possible with LGMs.) The curved arrow between the intercept and slope latent variables indicates that the correlation between these will be estimated. Finally, at each time point, an error term associated with each manifest variable represents residual variance in the indicator that is not explained by the latent intercept and slope variables.

As noted previously, the intercept and slope are represented with circles in the figure because they are treated as latent factors in the model. That is, individuals are assumed to vary on their starting point and rate of change, and these variables are estimated rather than being directly observed. In order to obtain estimates of slope and intercept means, LGMs include a mean structure along with the covariance structure analyzed in traditional structural equation models. Estimating a mean structure involves introducing a constant into the model which takes the value of 1 for all respondents (and thus has no variance). By regressing this "pseudovariable" on the slope and intercept, the latent means of the slope and intercept may be estimated.

Second-Order Latent Growth Curve Modeling

A fairly recent extension of latent growth curve modeling involves incorporating a measurement model into the examination of growth. A second-order LGM investigates growth in a latent construct measured by multiple indicators, rather than a single composite score, at each time point (Hancock et al. 2001).

Figure 4 presents a second-order LGM with three waves of data. In comparison to Fig. 3, the second-order LGM in Fig. 4 adds a second level of latent variables representing a latent construct measured by multiple items at each time point. In order to identify the measurement part of the model, the first indicator at each time point is designated as the scale indicator. These are set to one to provide a metric or scale for the latent construct. The intercepts (not depicted) are set to zero. This sets the metric of the latent variable equal to the metric of the scale indicator. This identification technique will be familiar to readers acquainted with confirmatory factor analysis (CFA). In fact, the measurement model portion of second-order LGMs can be thought of as a CFA incorporated into the growth model at each time point.

Second-order latent growth curve modeling provides several advantages over first-order latent growth curve modeling. These advantages relate to the use of multiple indicators rather than a composite score at each time point. The latter method introduces several potential sources of bias. First, a mean score does not differentially weight the items composing the scale (Hancock et al. 2001). Each item contributes equally to the mean, which implies that each item is equally related to the construct. With second-order LGMs, items are weighted according to their relationship to the latent construct, and items that are more related to the latent construct are weighted more heavily (Sayer and Cumsille 2001). Further, the unique variance for each indicator (ε) is explicitly

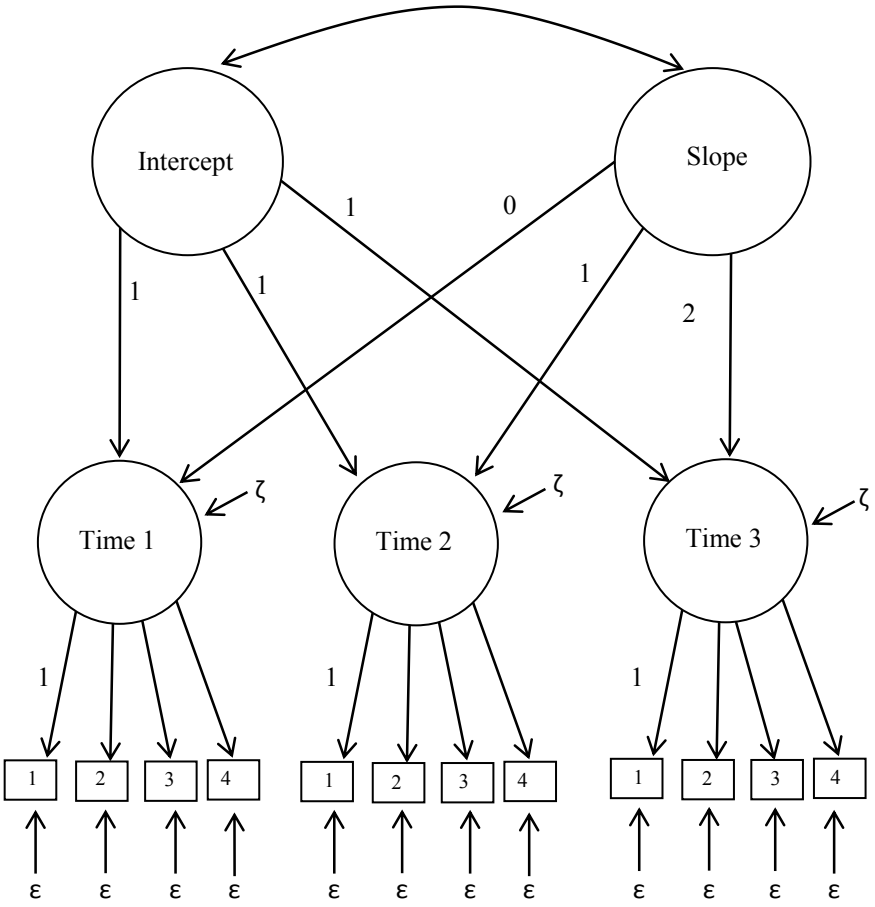


Fig. 4 Second-order LGM

modeled instead of being incorporated into a composite (Sayer and Cumsille 2001). An additional advantage of second-order LGMs is the ability to test the indicators for longitudinal measurement invariance. Note that in first-order LGMs longitudinal invariance of the indicators' parameters is assumed, but cannot be tested. Thus, growth parameters in first-order models may yield parameter estimates that are biased, to the extent that longitudinal invariance does not hold.

Developmental Measurement Models Using Latent Growth Curve Modeling

Second-order LGMs can be used to create developmental measurement models. Hancock and Buehl (2008) describe a variation of a second-order LGM where different indicators of the latent construct are employed across time. That is, a com-

mon latent construct is measured over time, but the indicators (i.e., items) used to measure the construct evolve over time—some may be added and others may be dropped according to developmental theory. Developmental measurement models thus take into account the reality that different items may be needed for children of different ages.

In this section, we present a demonstration of how second-order LGMs can be used to create a developmental measurement model with different indicators of a common latent construct over time. The demonstration uses a hypothetical example in which items from the Parent–Caregiver Relationship Scale (PCRS; Elicker et al. 1997) are revised to allow the scale to be used with a broader age range. In order to create a realistic example in the context of family school partnerships, we used data from another project, but changed the context to our PCRS example. Given this artificial manipulation, we emphasize that the results are presented solely for the sake of illustration, and should not be interpreted substantively.

The PCRS was originally developed as a measure of the perceived quality of a parent's relationship with the caregiver of an infant or toddler. The scale was therefore not designed to have different items at different time points. If researchers had an interest in studying how such relationships change over time, it would be necessary to broaden the PCRS by adding items that are appropriate for older children. Assuming that we worked with content and developmental experts in revising the scale, the study would represent an application under scenario 1a, as shown in Fig. 1. Through this demonstration, we aim to show that developmental measurement models are nearly as easy to set up and estimate as other LGMs, and have significant benefits in the form of increased flexibility and the ability to construct models that mirror developmental theory.

We based our example on a hypothetical situation in which researchers are interested in extending the scope of the PCRS to include parents' relationships with teachers of their elementary and middle/high school aged children. We therefore focused on three broad time points: early childhood, elementary school, and middle/high school. To keep our example as simple as possible, we include only four items. Of these items, two are common to all time points, and serve as our anchor items (items 1 and 3). Item 4 applies only to early childhood and elementary school children, and item 2 is specific to elementary and middle/high school students[2]. The four items are shown in Table 1 and the developmental measurement model is shown in Fig. 5.

Estimation Method

Basic descriptive statistics were obtained using SPSS 19, and SEM-based analyses were conducted using the structural equation modeling program M*plus* 6.

[2] Because the PCRS was written for infants/toddlers, we changed the word "caregiver" to "teacher" for older children, and added item 2.

Table 1 Items for developmental measurement model example

	Time point administered		
Item	1[a]	2	3
My child's caregiver (teacher) is someone I can rely on	X	X	X
My child's teachers have excellent content knowledge for the grade level they teach		X	X
My child's caregiver (teacher) and I really seem to value our relationship with each other	X	X	X
I usually agree with how and when my child's caregiver (teacher) handles my child's inappropriate behavior[b]	X	X	

Response scale for all items ranges from 1 = strongly disagree to 5 = strongly agree
[a] Time point codes are: 1 = early childhood, 2 = elementary school; 3 = middle/high school
[b] This item was created for the purposes of this illustration and is not part of the PCRS

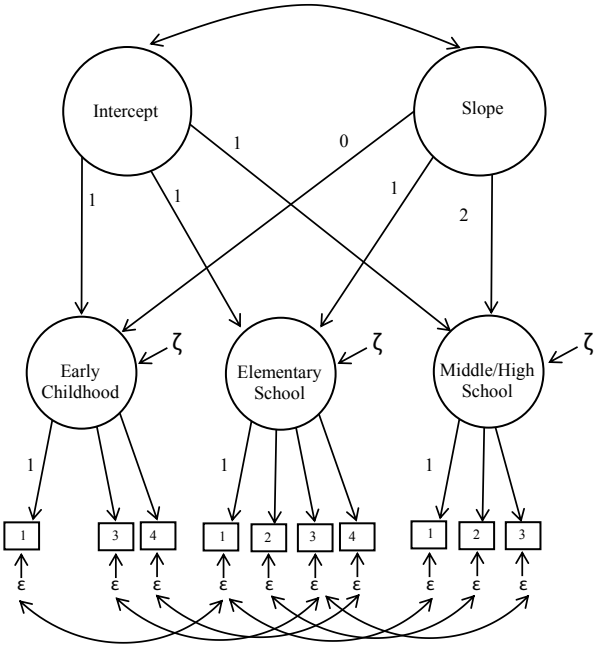


Fig. 5 Developmental measurement model

For the purpose of reducing the complexity of the demonstration, the data were considered continuous. Although ordered categorical data are inherently not continuous, under certain circumstances it may be acceptable to treat categorical data as continuous (Finney and DiStefano 2006). Specifically, at least five response categories should be present, and responses should be approximately normally distributed or only moderately nonnormal (i.e., skew < |2| and kurtosis < |7|; Finney and DiStefano 2006). An inspection of the response frequencies, histograms, and skewness/

kurtosis values indicated that the data met these recommendations. However, a maximum likelihood estimator with robust standard errors (MLR) was employed to account for any nonnormality in the data.

Analyses

Three phases of data analysis were conducted. First, we created a developmental measurement model. Second, we tested the items for longitudinal measurement invariance. Finally, we ran the substantive LGM analyses and interpreted the results. We also present a comparison of the parameter estimates obtained using the same model with none of the items dropped.

As discussed in the introduction, there are two broad scenarios under which researchers may elect to use a developmental measurement model. For situations in which the researchers have a full set of indicators but wish to create a developmental scale (scenario 1), the process may be altered by changing the order of steps one and two. Under scenario 1b, researchers could first conduct longitudinal invariance testing *using the full set of items* to identify those indicators that are not invariant across time. This information may be used, in conjunction with theory, to identify appropriate indicators for each time point (i.e., step one). Indicators for which the loading and/or intercepts are found to be noninvariant would be flagged and examined by developmental and content experts to determine the age(s) for which the indicators would be most appropriate. These indicators could then be included on the scale as items specific to that age group. Items that are found to be invariant across age groups can be used as the common or linking items. The model derived from this process would then be tested for its fit to the data.

In our example analysis, although we are (hypothetically) working with an existing scale, we make the assumption that the items appropriate for each age group had previously been determined, in collaboration with content and/or developmental experts. Thus, our example is most consistent with scenario 1a in Fig. 1. In the example below, we demonstrate the process of setting up a developmental measurement model, testing it for longitudinal invariance, and estimating the associated latent growth model. Annotated M*plus* syntax for all analyses is presented in Appendix A.

Creating the Developmental Measurement Model. The first phase of data analysis was creating the developmental measurement model. The developmental measurement model is essentially a longitudinal measurement model in which not all of the items are used at each time point. For the purpose of this demonstration, one item was dropped at two of the three time points, based on our research team's earlier determinations of the developmental appropriateness of each item. At the first time point, therefore, item 2 was dropped. At the third time point, item 4 was dropped.

A graphical representation of the developmental measurement model is provided in Fig. 5. The first item was designated as the scaling indicator, which sets the

metric of the measurement model. The intercept and loading for item 1 were set to zero and one, respectively. Measurement errors of corresponding items at adjacent time points were allowed to covary. This practice accounts for shared error variance associated with each item (Pitts et al. 1996).

A primary consideration in creating a developmental measurement model is determining whether sufficient overlap in indicators exists to identify the model. There must be at least one common item connecting each measurement occasion to adjacent time points, although we strongly recommend having more than this minimum. In order to provide a linkage across measurement occasions, the common item(s) must be *constrained* (i.e., loadings and intercepts are held equal over time). In the current case, item 1 is shared across all time points. Item 1 is also the scale indicator and will be constrained to be equal across time points. Therefore, in this case it is easy to see that sufficient overlap exists. However, it is still possible to have sufficient linkages even under more complex arrangements of items. For example, the scale indicator does not necessarily have to be present at each time point as long as other constrained items are present to "carry forward" the scaling at subsequent time periods.

Given these more complex situations, Hancock and Buehl (2008) have provided comprehensive guidance for determining whether sufficient linkages exist across time. The first step involves developing a configuration matrix. In this matrix, asterisks indicate at which time points each item is measured. For example, for item 1, an asterisk is placed in the column for each time point because item 1 is measured at every measurement occasion. From the configuration matrix, an incidence matrix is created. The incidence matrix indicates which time points have one or more constrained indicators in common. Time points with shared indicators are designated with a "1," and time points with no shared indicators are designated with a "0." (Only the bottom half of the matrix—that is, below the diagonal—is used). In the current example, item 1 is common to all time points, so each time point has at least one constrained indicator in common. Thus, the matrix is designated with "1s."

In order to meet the minimum amount of overlap needed for model identification, the incidence matrix must have a minimum of $T-1$ nonzero elements (i.e., "1's") below the diagonal arranged in a particular configuration, where T is the number of measurement occasions. In the current case, the incidence matrix must have a minimum of two nonzero elements arranged in a particular configuration. The configuration is checked by drawing vertical and horizontal lines through the row or column containing each nonzero element below the diagonal. These lines are extended to cross out the elements above, below, and to the sides of the nonzero elements. If all of the elements are crossed out after the lines are extended, the minimum condition for model identification has been met. In the present case, all of the elements were crossed out, and the criterion for sufficient overlap for model identification was met. The configuration and incidence matrices for the current study are presented in Fig. 6.

Testing for Longitudinal Measurement Invariance. Before proceeding with any type of longitudinal analysis, it is important to obtain evidence that the measures exhibit adequate longitudinal measurement invariance by examining the

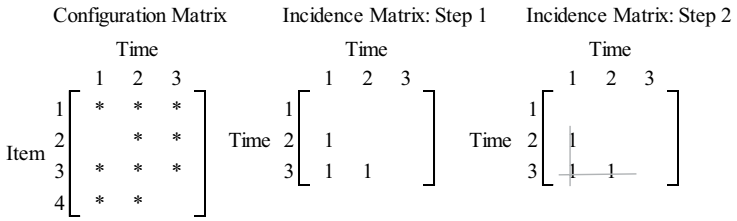


Fig. 6 Matrices involved in determining sufficient overlap

structure of the measurement model over time. Measurement invariance refers to a test's ability to measure the same latent variable under different conditions, such as at different measurement occasions (Horn and McArdle 1992). Before interpreting results obtained from a common measure over time, researchers should evaluate whether respondents respond to and interpret the measure in a similar way across measurement occasions. Without evidence of longitudinal measurement invariance, differences in item responses over time may be due to differences in how respondents interact with the measure rather than to actual growth or decline in the construct of interest.

One method for examining longitudinal measurement invariance involves estimating a series of nested confirmatory factor analysis (CFA) models with equality constraints on sets of measurement parameters added at each step. Nested models are compared using chi-square difference tests. To demonstrate the process of assessing longitudinal measurement invariance, we created a hypothetical example based on the same items described earlier for the developmental measurement model. To assess configural invariance, we estimated a CFA model with all loadings and intercepts freely estimated (except those for item 1, the scale indicator). In the next step of the longitudinal invariance testing process, corresponding loadings across time points were constrained to equality to test for metric invariance (i.e., the equality of factor loadings over time). In the third step, corresponding loadings and intercepts across time points were constrained to equality to test for scalar invariance (i.e., the equality of item intercepts over time). At each step, the effect of the added equality constraints on the fit of the model was assessed with a chi-square difference test.[3] As discussed previously, the final step in the longitudinal invariance testing process also provides a test of the fit of the developmental measurement model. It is therefore not necessary to carry out a separate test of model fit, as this test is subsumed in the test of scalar invariance.

Estimating the Latent Growth Model. Once the developmental measurement model is deemed adequate, it can be used to estimate a LGM. Assuming fit of the LGM is adequate, estimates of the five key growth parameters can be interpreted (i.e., slope mean, intercept mean, slope variance, intercept variance, and slope/intercept covariance) in terms of the magnitude, direction, and statistical significance.

[3] Under MLR estimation, an adjustment to the chi-square values and degrees of freedom used to conduct the difference test is required. All difference tests are adjusted according to the guidance provided on the Mplus website at: http://www.statmodel.com/chidiff.shtml

Results

Examining Longitudinal Measurement Invariance

In order to test for measurement invariance, a series of nested CFA models was fit to the data and chi-square difference tests were used to test the invariance of each set of model parameters (i.e., loadings and intercepts). Model 1 allowed intercepts and loadings of indicators two through four to freely vary across time. This model was used to test for configural invariance, or that the factor structure is similar across time points. The overall fit of the model was acceptable (χ^2 (26) = 59.85, p = 0.0002, CFI = 0.98, TLI = 0.97, RMSEA = 0.045[0.028–0.057]). The chi-square value was significant, indicating that the model-implied covariance matrix was significantly different than the original covariance matrix. However, values of the other fit indices were indicative of good fit. We therefore concluded that configural invariance held.

Model 2 constrained corresponding loadings to equality. A comparison of model 1 and model 2 provided evidence that metric invariance held for these data. A nonsignificant chi-square difference test indicated that adding equality constraints to corresponding loadings did not significantly decrease model fit.

Model 3 constrained corresponding factor loadings and item intercepts to equality. A comparison of model 2 and model 3 indicated that scalar invariance held for these data. A nonsignificant χ^2 difference test indicated that adding equality constraints to corresponding item intercepts did not significantly decrease model fit. We therefore concluded that both loading and intercept invariance held across the common items. Because this is also a test of the developmental measurement model, we similarly concluded that model fit the data.

Estimating the Latent Growth Model

Because the data exhibited longitudinal measurement invariance at the configural, metric, and scalar levels, the next step of data analysis was to estimate the latent growth model. This model exhibited acceptable model fit. Although the chi-square value was significant (69.32, df = 35, p = 0.0005), the chi-square test may be undesirably sensitive to trivial differences in the original and reproduced matrices under large sample sizes, such as we have in this case. All other measures of fit yielded values indicative of good fit (CFI = 0.98, TLI = 0.98, RMSEA = 0.037 [0.024–0.050]). Because the fit of the model was acceptable, we proceeded to interpret the growth parameter estimates.

Table 2 presents the growth parameters and standard errors estimated by the developmental measurement model. We interpret the results in the same way as with any other second-order LGM. Recall that the intercept mean relates to the average amount of the latent variable (in this case, levels of parent–caregiver/teacher relationship) at the first time point. In this case, the estimate is 2.57, indicating that the average level of the latent variable possessed by respondents is about midway between “strongly disagree” and “strongly agree” end. The parameter estimate is

Table 2 Estimates of key parameters obtained by full and developmental measurement models

	Estimate	Standard error	Est./S.E.	*p*-value
Intercept mean				
Full	2.56*	0.05	55.18	<0.001
Developmental	2.57*	0.05	54.91	<0.001
Slope mean				
Full	−0.11*	0.02	−4.744	<0.001
Developmental	−0.13*	0.03	−5.250	<0.001
Intercept variance				
Full	0.54*	0.09	5.94	<0.001
Developmental	0.53*	0.10	5.62	<0.001
Slope variance				
Full	0.13*	0.04	3.16	0.002
Developmental	0.12*	0.04	2.74	0.006
Intercept/slope covariance				
Full	−0.10*	0.05	−2.08	0.038
Developmental	−0.09	0.05	−1.76	0.078

*$p < 0.05$

significant, indicating that the intercept mean is significantly different from zero. The intercept variance is significant, indicating that individuals vary significantly on their initial levels of the latent construct in sixth grade (the beginning time point). That is, there is significant variation across individuals on their starting levels of the latent variable, with some having higher and some having lower values.

The slope mean of −0.13 indicates that, on average, respondents' levels of the latent variable decreased by 0.13 units at each time point subsequent to the initial measurement occasion, for a total model-implied decrease of 0.26 across the three time points. That is, levels of parent–caregiver/teacher relationship decreased from early childhood to middle/high school. This slope mean parameter estimate is significant, indicating that although the decreasing trajectory is small, the value is significantly different from zero. The slope variance is also significant, indicating that respondents were significantly different on their growth trajectories over the course of the study. The slope/intercept covariance was not significant, indicating that there was no relationship between initial levels of the latent construct and growth trajectories.

To demonstrate how estimates obtained from the developmental measurement model might differ from those of the full measurement model with all items included, we also created a hypothetical example of data from a full measurement model with all items present at each time point. In the context of our PCRS example, researchers would probably not want to include all four items for each age group. However, we thought it would be useful for readers to get a sense of how estimates from the developmental measurement model would compare to those from a longitudinal measurement model based on administering all four items at each time

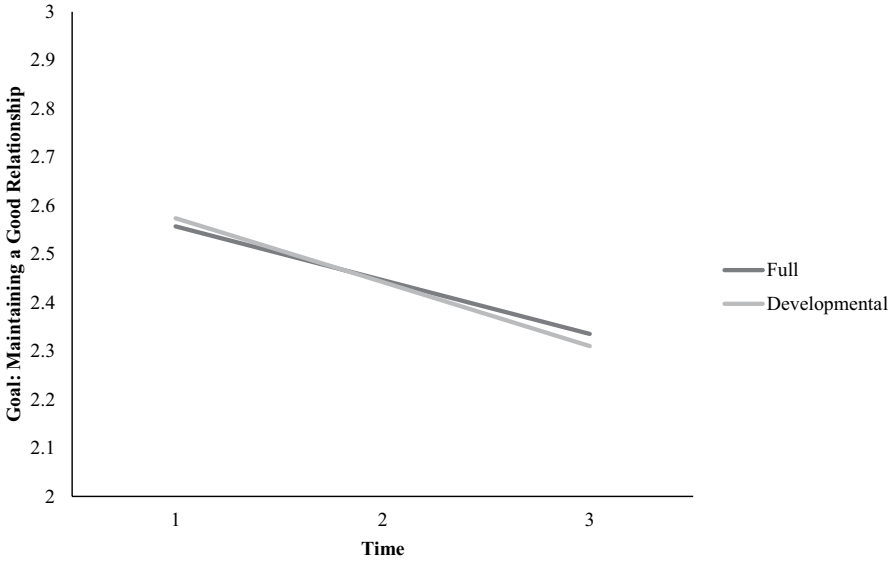


Fig. 7 Growth trajectories implied by the full and developmental measurement model

point. To accomplish this, we used data from the project on which our example data are taken, and for which we have measures on four items at all three time points. We estimated the model using the complete set of items and compare those estimates to those obtained from the developmental measurement model based on a reduced set of items.

As presented in Table 2, the parameter estimates and standard errors were quite similar across the two models. The direction of the estimates was in concordance. That is, the slope mean and the intercept/slope covariance were negative, and all other values were positive. In all but one case, the statistical significance of the estimates was in agreement. In the full model, all five growth parameters were statistically significant at the 0.05 level. In the developmental measurement model, four growth parameters were statistically significant and the significance level of the remaining parameter, the intercept/slope covariance, was 0.08. This illustrates that parameter estimates obtained from developmental measurement models can have less power than those obtained from full measurement models, although the difference is usually slight. Across the board, the standard errors were slightly larger in the developmental measurement model. This is to be expected, because the developmental measurement model is based on less information than the full measurement model. On the whole, these differences in the parameter estimates and standard errors seem fairly trivial. Note also that differences between the full measurement model and developmental measurement model will tend to decrease as the number of common items increases.

Figure 7 presents the model implied growth trajectories for the developmental measurement model and the full measurement model. As displayed in the figure, the

growth trajectories estimated by the two models is markedly similar. Across three time points, the overall model-implied decrease in the latent construct over time was 0.22 for the full model and 0.26 for the developmental measurement model, for a total difference of 0.04 across a five-point scale.

Concluding Comments

In this chapter we have provided a framework for developing and testing developmental measurement models that can be used with longitudinal models such as latent growth models. We believe that these measurement models offer considerable promise for researchers interested in the study of growth or change across the lifespan. Developmental measurement models do not constrain researchers to use the same indicators of a construct at each time point. Such constraints may be unreasonable for situations in which indicators are not developmentally appropriate for all ages and may degrade both data quality and estimates of growth parameters. For example, in measuring parents' roles in early literacy development, items might refer to parents reading to their children at age four, but to children reading to parents at age 6. If items are not age appropriate, parents may simply not respond, resulting in large amounts of missing data. Or, parents may respond inaccurately, which would likely result in a lack of longitudinal invariance, and inaccurate estimates of growth parameters (Ferrer et al. 2008; Leite 2007). Of course, some items, such as talking to children about their school day, would be appropriate for all ages, and such items could be included as common items.

In addition to being more age-appropriate, developmental measurement models can be useful for situations in which researchers are not able to administer the full complement of items at each time point, due to time considerations. Researchers often wish to administer several scales with multiple items on each, but responding to so many items can be prohibitive in terms of time, especially with young children. For those working in school environments, there is often pressure to use as little teacher time as possible. The use of developmental measurement models can be useful in this regard, because researchers could determine a priori a research design in which not all items need be administered to all students. Such determinations could be made on the basis of developmental appropriateness, or scales or items could be systematically omitted from the questionnaires for different cohorts of students. As long as sufficient numbers of common items are included across cohorts, the developmental measurement model strategy can be used to study change over time.

We have outlined strategies to help researchers create and test developmental measurement models under two broad scenarios. In the first of these the researcher uses an existing scale, but realizes that the items may not all be appropriate for all ages of interest. Under this scenario, the manner in which the researcher would proceed depends on the degree to which theory is available to inform decisions about potentially noninvariant items. If theory on which to base such decisions is

available, it can be used to create the developmental measurement scale, which would then be tested for longitudinal invariance. If such theory is not available, the researcher may choose to proceed in a more data-driven manner by first testing the items for longitudinal invariance and choosing the common and age-specific items on the basis of these analyses. Although we outline explicit steps in Fig. 1, in reality the interplay between statistical analyses and theory may be more complex, with researchers using these two sources of information in an iterative fashion. The same is likely to be true for the second scenario, in which the researcher creates a developmental measurement scale from the ground up. Here again, several iterations between theory-based interpretation and statistical results may be required to obtain the final scale.

As the reader may well imagine, the development of such scales can be time consuming and labor intensive. In some cases, the data-driven nature of this development may necessitate the collection of additional samples to provide a "clean" test of the final model. We envision that such scales may best be developed by teams of researchers that include experts in construct theory, developmental theory, measurement, and in this case, family–school partnership research. In addition to sharing expertise, members of the research team could collaborate on data collection, lessening the burden on any one member. Once developed, however, we believe that the benefits of such scales are well worth the effort. Developmental measurement scales can provide much more sensitive and flexible measures of change across time than current "static" measures, and with fewer burdens on respondents. We therefore urge researchers with an interest in studying change over time to consider developing and using such measures.

Appendix A Mplus Syntax

Longitudinal CFA Syntax

Step 1: Configural Invariance

! Comment: *This is the longitudinal CFA used to test for longitudinal measurement invariance of the developmental measurement model. In the initial run (i.e. test of configural invariance), no equality constraints are imposed on the model. This amounts to a test of fit of the developmental measurement model.*

Title: Developmental Measurement Model CFA

Data: File is PCRS.dat;

Variable: Names are

EC1 EC2 EC3 EC4

ES1 ES2 ES3 ES4

MH1 MH2 MH3 MH4;

usevariables are

EC1 EC3 EC4

ES1 ES2 ES3 ES4

MH1 MH2 MH3;

Missing are blank;

! Comment: *The usevariables command reflects the dropped items.*

analysis: estimator is mlr;

Model:

PCRS1 by EC1 EC3 EC4;

PCRS2 by ES1 ES2 ES3 ES4;

PCRS3 by MH1 MH2 MH3;

! Comment: *The model command reflects the dropped items.*

EC1 with ES1;

ES1 with MH1;

ES2 with MH2;

EC3 with ES3;

ES3 with MH3;

EC4 with ES4;

! Comment: *Here measurement errors of corresponding items at adjacent time points are allowed to covary, although this condition is not required.*

[EC1@0 ES1@0 MH1@0];

! Comment: *The intercepts of the first indicator for each latent variable are set to zero in order to scale the model and to allow the means of the latent variables to be estimated.*

[PCRS1 PCRS2 PCRS3*];

! Comment: *The means of the latent variables are freed from the default value of zero and allowed to be freely estimated.*

! Comment: *The means of the latent variables are freed from the default value of zero and allowed to be freely estimated.*

output:

tech3 tech4;

! Comment: *Tech3 requests estimated covariance and correlation matrices for the parameter estimates. Tech4 requests estimated means, covariances, and correlations for latent variables.*

Step 2: Metric Invariance

! Comment: *To impose factor loading constraints for the test of metric invariance, a portion of the model statement is adjusted as presented below. These equality constraints are placed in parentheses and numbered 1-4 because they are the first four constraints placed on the model.*

Model:

PCRS1 by EC1 (1)

EC3 EC4 (3-4);

PCRS2 by ES1 ES2 ES3 ES4 (1-4);

PCRS3 by MH1 MH2 MH3 (1-3);

! Comment: *The remainder of the model statement is identical to the syntax developed for Step 1.*

Step 3: Scalar Invariance

! Comment: *To impose item intercept constraints for the test of scalar invariance, a portion of the model statement is adjusted as presented below. These equality constraints are numbered 5-7.*

[EC1@0 ES1@0 MH1@0];

[ES2 MH2] (5);

[EC3 ES3 MH3] (6);

[EC4 ES4] (7);

! Comment: *The remainder of the model statement is identical to the syntax developed for Step 2.*

Longitudinal LGM Syntax

```
! Comment:  This is the LGM for the developmental measurement model. Equality constraints
associated with longitudinal measurement invariance are imposed on this model.

Title: Developmental Measurement Model LGM

Data: File is PCRS.dat;

Variable: Names are

EC1        EC3 EC4

ES1 ES2 ES3 ES4

MH1 MH2 MH3;

Missing are blank;

analysis: estimator is mlr;

Model:

PCRS1 by EC1                    (1)

                        EC3 EC4 (3-4);

PCRS2 by ES1 ES2 ES3 ES4 (1-4);

PCRS3 by MH1 MH2 MH3       (1-3);

EC1 with ES1;

ES1 with MH1;

ES2 with MH2;

EC3 with ES3;

ES3 with MH3;

EC4 with ES4;

 [EC1@0 ES1@0 MH1@0];

[       ES2 MH2] (5);

[EC3 ES3 MH3] (6);

[EC4 ES4       ] (7);

i s | PCRS1@0 PCRS2@1 PCRS3@2;

[i*];
```

! Comment: *Here a linear growth trajectory with equally spaced time points is imposed. The mean of the intercept is freed from the default value of zero and allowed to be freely estimated. Equality constraints associated with longitudinal measurement invariance are imposed on this model.*

output:

tech3 tech4;

Mplus Full Model Syntax

! Comment: *This is the LGM for the full model with all items included at each measurement occasion. Equality constraints associated with longitudinal measurement invariance are imposed on this model.*

Title: Full model with all items present at all time points

Data: File is PCRS.dat;

Variable: Names are

EC1 EC2 EC3 EC4

ES1 ES2 ES3 ES4

MH1 MH2 MH3 MH4;

usevariables are

EC1 EC2 EC3 EC4

ES1 ES2 ES3 ES4

MH1 MH2 MH3 MH4;

Missing are blank;

analysis: estimator is mlr;

Model:

PCRS1 by EC1-EC4 (1-4);

PCRS2 by ES1-ES4 (1-4);

PCRS3 by MH1-MH4 (1-4);

EC1 with ES1;

ES1 with MH1;

ES2 with MH2;

EC3 with ES3;

ES3 with MH3;

EC4 with ES4;

[EC1@0 ES1@0 MH1@0];

[EC2 ES2 MH2] (5);

[EC3 ES3 MH3] (6);

[EC4 ES4 MH4] (7);

i s | PCRS1@0 PCRS2@1 PCRS3@2;

[i*];

Output:

tech3 tech4;

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Chapter 6
Family–School Partnerships in a Context of Urgent Engagement: Rethinking Models, Measurement, and Meaningfulness

Christine M. McWayne

In the USA, disparities in achievement and opportunity reflected across groups based on race/ethnicity, income, and language are evident as early as the preschool years (Espinosa et al. 2006; Quintana et al. 2012). As we grapple with how the well-being of our nation is directly tied to the well-being of all individuals composing it, especially those of our youngest generation, our awareness has led to an unrelenting deluge of mandates to improve the quality of educational programs and intervention efforts to close the achievement and opportunity gaps (e.g., *No Child Left Behind*, U.S. Department of Education 2002). Seeking to fulfill these mandates, much empirical study has been focused on identifying factors responsible for these gaps, as well as potential moderators of the relationship between risk factors and later outcomes. Family engagement (i.e., the multiple ways parents support their children's learning across home, school, and community settings), and more recently, family–school partnerships (i.e., the "intentional and on-going relationship between school and family designed to directly or indirectly enhance children's learning and development, and/or address the obstacles that impede it"; Christenson and Sheridan 2001, p. 38) have emerged as key protective factors for children's overall development and academic success (e.g., Dearing et al. 2004; Ginsburg-Block et al. 2010). Therefore, in response to achievement disparities there is a growing sense of urgency around "getting families engaged" in their children's education as early as possible (Grolnick and Raftery-Helmer 2015, this volume). It is within this context of *urgent engagement* that the authors of this volume write (*cf.* "urgent knowing" in Fantuzzo et al. 2006, p. 28).

It is no coincidence that conceptual models, measurement, and methods are forefronted in this first volume of the series, as these truly form the foundation for our inquiry. In the set of chapters contained here, the authors have bravely tackled core issues and provided us with directions for how to move forward. Astutely, they have challenged the state-of-the-field. For example, by foregrounding the *relational* as-

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pects of family engagement as providing a larger context for the oft-more-studied *structural* activities of family engagement, Kim and Sheridan underscore an important shift that the field needs concerning the ways we conceive of the family–school connection. Grolnick and Raftery-Helmer discuss the application of self-determination theory for understanding how partnerships meet stakeholder needs for autonomy, competence, and relatedness, highlighting the importance of personally meaningful parent–school partnerships. Edwards and Kutaka, by juxtaposing two different national perspectives on family engagement, push us to understand how our own national ideology, and the assumptions flowing from it, has influenced the knowledge-base and practice concerning family–school connections in our nation's schools.

While in the first three chapters the authors wrestle primarily with advancing our conceptual frameworks, in the last two chapters they deal with the enduring challenges of operationalizing and measuring family–school connections. Bandalos and Raczynski, in their chapter, provide an alternative statistical model (i.e., a developmental measurement model) useful for researchers interested in measuring and understanding the family–school relationship over time. Pomerantz and Monti offer new considerations concerning methods of measurement, available in other areas of the field, but not yet realized within the literature on family–school partnerships.

The editors of this series have created an opportunity for us to pause in our work, take stock of where we are collectively and what we have learned thus far, and determine avenues to extend and perhaps redefine our course of inquiry on this very important topic. It has been a quarter of a century since Joyce Epstein's (1990) work raised the issue of family–school connections to the level of a national education policy agenda. Many others came before and have since followed, shaping our current thinking and adding unique perspectives about how to theorize and empirically understand family–school partnerships. But, our conceptualizations and methods of inquiry should continually be refined. I have been invited to comment on the first five chapters in this thoughtful series on family–school partnerships and have learned much from reflecting on this set of writings. In this commentary, I will share briefly my perspective on key themes across the chapters, as well as add my own recommendations concerning future directions for inquiry.

Foregrounding the Relationship in Family–School Partnership Research

A major theme that threads throughout this volume, led by Kim and Sheridan's main thesis in Chap. 1, concerns the need for combining a relational approach with a structural approach in the study of family engagement. By foregrounding study of the mesosystem relationship, both as a means for promoting student success as well as an "end in itself" (as per Edwards and Kutaka), these writings offer a productive point of focus for future theory-building and research. The ubiquitous emphasis on structural activities of family engagement, those "demonstrated by parents to

provide support for their children's education" (Kim and Sheridan, p. 3), such as homework help or volunteering at school, has, in many ways, served to constrain family–school partnership research and practice, as Kim and Sheridan so aptly reveal. Several implications of a shift in focus follow from a structural approach to a relational approach.

First, by focusing on a relational approach, researchers can nuance our understandings of how the parent–child relationship climate and specific involvement behaviors interact to foster or hinder student success. Indeed, research by Simpkins et al. (2006) has shown that warmth in the mother–child relationship moderates the impact of specific involvement behaviors in children's math and reading achievement, such that in a relationship context marked by high levels of warmth, involvement in school-based activities demonstrated a positive association with achievement. Alternatively, in a relational context of low warmth, this same parental involvement was negatively associated with reading and math outcomes. This study provides important evidence that parent involvement behaviors are not neutral nor do they occur in isolation of other family and child factors (e.g., Grolnick and Ryan 1989). As Kim and Sheridan state, regarding the more typical focus on structural components of family engagement, "[t]he focus on activities that parents are asked to perform directs efforts to practices that may be narrowly construed and disconnected from other learning opportunities… [and] activities are often implemented in a static fashion without regard to the manner in which parents interact with their children" (p. 4). By drawing attention to the parent–child relational aspect of these structural involvement behaviors, these authors provide an expanded lens for future empirical study.

Second, there are implications of this shift for understanding the interpersonal elements that foster or impede successful family–teacher relationships. Building on the ideas set forth in Kim and Sheridan's paper, Grolnick and Raftery-Helmer theorize about the ways that teachers and parents create and sustain connections with one another. In their chapter, they argue that self-determination theory (SDT) may be a useful framework for understanding how family–school partnerships meet individual stakeholder needs. This theory acknowledges three fundamental psychological needs (i.e., autonomy, competence, and relatedness); for family–school partnerships to be truly meaningful for individual parents and teachers, they must in some ways fulfill these needs, termed "need supportive" and "need fulfilling" partnerships (see p. 25). In her ethnographic work with Latino communities in California, Delgado-Gaitan (1991) also highlighted the importance of this issue of meaningfulness as a critical component of parents' involvement efforts. Specifically, when working with the parent and educator communities in Carpenteria schools, Delgado-Gaitan found that the "active" parents and those deemed "less active" differed primarily in that uninvolved parents were not yet convinced that their participation was important or relevant. She found that, "[t]he conventional parent-involvement efforts [such as parent-teacher conferences]… were not, by any means, appropriate occasions for teaching parents how the school operates or skills to help their children at home. The goals for these activities were incongruent between the home and the school. The parents expected more instructions and frequent communications from

the school, while teachers expected the parents to take more initiative to enquire about their child's progress on a regular basis" (p. 30). Among the many insights her work provides, one is that key needs and assumptions of individuals within both stakeholder groups impact the course and eventual outcome of the family–school partnership.

Seminal work by Kathleen Hoover-Dempsey and her colleagues (e.g., Hoover-Dempsey et al. 2005) is also relevant here. Their psychological model outlines the multiple levels across which parents make decisions regarding if and how to engage with their children's education. At the first and most basic level, parents' decision to become involved is shaped by: their own construction of their role in supporting their child's education, their sense of efficacy for helping their child be successful, the overtures of the school in this regard, and the demands and invitations from their child. At the second level, their choice of exactly how to be involved is influenced by: their knowledge and skills, their particular family and work contexts, and, again, specific demands and invitations from their child and the school. In this model, mechanisms are identified through which involvement influences child outcomes (e.g., modeling, reinforcement, instruction, use of developmentally appropriate strategies, and the fit between involvement activities and school expectations). As these authors state, "by attending to the major motivations underlying parents' involvement in children's education, schools are more likely to hit the mark of supporting increasingly effective parental contributions to learning" (p. 53).

Though there may be great value in the kinds of structural activities that we typically see represented in family–school connections research, what these authors, collectively, are calling for is greater understanding of the ways in which these activities are also relationally situated. Authors of this volume specifically point to the need for research concerning "co-determined" activities and those that reflect the notion of "shared responsibility," as well as more research on constructs such as "joint engagement" and "trust building" (Kim and Sheridan, p. 5). This fundamental shift to a relational approach brings into focus the need for a radically different orientation toward the issue of family–school connections, as well as the need to reconceptualize current delivery models of family engagement programming (Kim and Sheridan 2015). Below, I raise three additional considerations as relevant for theorizing the relational approach.

Conflict in Relationships

First, it is important to include the issue of inevitable conflict in relationships, specifically, the role and necessity of conflict in relationships as providing opportunities to work toward better understanding. I have found Delgado-Gaitan's (e.g., 1991) work in Carpenteria, California to be highly influential in my own thinking about family–school connections. Her documentation of the COPLA (Comite de Padres Latinos) organization offers a poignant example of how collective realization, empowerment, and coordinated action can be achieved, while also providing

a model for working through conflict that inevitably arises when power sharing is sought. John Fantuzzo et al. have articulated the concept of *partnering with resistance* within the context of conducting community-based research that may be germane to understanding the issue of conflict in family–school partnerships (see Fantuzzo et al. 2006). Perhaps most relevant is the "fundamental recognition that partnership must begin by first seeking to identify the substantive *No's*… both visible and invisible…" (p. 34). Within the family–school partnership context, the *No's* are those parents deemed "hard to reach" (as per Mapp and Hong 2010), as well as those who typically get excluded or "rebuffed" because of their interpersonal style, lack of cultural capital, or other mismatch with mainstream norms and expectations (Lareau and Horvat 1999). Understanding and respecting the many valid reasons for the *No's* are "the antecedents to dialogue" (Fantuzzo et al. 2006, p. 34), a point to which I will return later in this commentary.

Family Is More than Mothers

Second, within this discussion of a relational approach, I want to raise the role of fathers, siblings, and other family members in supporting the education of children. Though, increasingly, these important contributors to children's education are being recognized in the research literature, they are still largely absent from the theory-building and empirical investigations of family–school partnerships. Historically, parenting research has reflected the white, middle-class notion that there is a primary caregiver who fulfills the role of child-rearing, most typically the mother of the child. In the field of family–school connections, the transition to use of the adjective "family" rather than "parent" engagement represents an acknowledgement of other key caregivers, but still the majority of studies tend to be conducted with mothers. Ample research has documented the important and perhaps unique role that fathers play in their children's development (Amato and Gilbreth 1999; Cabrera 2010; Coley 2001; Lamb 2010; McWayne et al. 2013; Nelson 2004; Pleck 2010). And, in a recent meta-analysis of father engagement in early childhood (see McWayne et al. 2013a), it appears that both quantity and quality of direct father-engagement matter. More specifically, aspects of parenting quality (e.g., warmth, responsiveness, punitiveness) and frequency of engagement activities (both general—e.g., playing—and learning-specific—e.g., reading to child) are important in predicting children's social and academic success. At first glance, this makes sense given similar research with mothers, showing that both the emotional climate of the parent–child relationship and specific parental practices are important in affecting child and youth outcomes (Darling and Steinberg 1993). However, quantity of father involvement has been downplayed, historically, largely due to studies that showed fathers' total amount of time engaged with children was not significantly associated with children's outcomes (Cabrera et al. 2000; Pleck 1997). Thus, there is much left to know about the important role fathers play in children's school and

learning experiences; these caregivers should not be overlooked in the family–school connections research.

It is also the case that in the lives of many children, *multiple* adults constitute a core of support so that parenting is not the sole responsibility of one or even two adults (Jackson 1993). Research indicates the importance of extended kinship networks for many children, representing a broader notion of who constitutes "family" raising the child (Slaughter-Defoe 1995). Therefore, in addition to the more typical nuclear family constellation, it will be important for future studies to include children's extended support networks and the combined influence of these networks on child outcomes (McWayne et al. 2008).

Child as Mediator

Lastly, although from a bioecological lens (i.e., Bronfenbrenner and Morris 2006) we view the mesosystem as precluding direct involvement of the child, it would be useful to consider the child's role as active mediator between the family and school systems (as per Grolnick and Slowiaczek 1994; Hoover-Demspey et al. 2005), particularly in communities with increasing numbers of immigrant families, where children are often the conduits of information and serve as liaisons between their parents and teachers due to linguistic and cultural barriers. Documenting further how this ambassador role is associated with various family–school partnership processes, as well as children's learning outcomes, would be beneficial for the field.

Acknowledging That the Larger Context Matters

To invoke Bronfenbrenner's model again, as applied to research in this area, it has certainly provided a theoretical advance in our understanding of family engagement by focusing us on the proximal processes within the family and school microsystems, as well as on the mesosystem relationship between teachers and families. However, much of the work on family–school partnerships still tends to neglect the larger exosystem and macrosystem influences on the mesosystem relationship, such as the structural, societal, and historical realities that impact if and how partnerships are formed and maintained. Grolnick and Raftery-Helmer raise influences operating within the exosystem such as administrator attitude toward and support of family–school partnerships. They point out that "parents', teachers', and principals' views interact to create relational contexts for partnerships" (p. 21). As several of the authors of this volume acknowledge, relationships between families and schools do not form and, therefore, cannot be understood, within a social vacuum.

At the broadest level, Edwards and Kutaka forefront societal and cultural values in a juxtaposition of US and Italian ideological influences in this area of the literature, surfacing what might be largely tacit assumptions of educational practice, at least in the USA. They place a spotlight on common expectations underlying the US mindset of "home-school relationships as a responsibility or duty, representing the fulfillment of joint professional and parental/caregiving obligations" (p. 39). They go on to explain that conceptualizations of the family–school partnership in Italian schools have grown out of a different history than that in the USA and are more closely aligned with wider political movements involving collective rights to conditions affecting quality of life. They highlight the Italian notion of "pedagogy of participation and well-being" as driving family–school relationships (p. 44), in contrast to the US notion of participation as duty. In their first paragraph, these authors also take head-on the sometimes explicit, more often implicit, view within the US research literature that "diversity [is] a complication to be overcome" rather than a source of strength in home-school partnerships (p. 35). As these authors acknowledge, it is difficult to consider honestly this issue of family–school partnerships, without somehow addressing the extant issues of ideology, power and inequality that pervade the very endeavor (Fine and Burns 2003). To fail to do so, locates the problem of unsuccessful family–school partnerships within individual teachers, parents, or school administrators, when, in fact, the problem is just as much, if not more, structural and societal.

Mismatch Is Larger than the Individuals Involved

Annette Lareau's work (1999, 2012), cited by some of the authors here, illustrates these very points. She and her colleagues have discussed family–school relationships using cultural and social capital theories to understand the disconnections that exist. Specifically, she has employed Pierre Bourdieu's (1984) resource-based concept of cultural capital (i.e., defined as the routines, dispositions, and habits of family life that provide individuals with interactional resources that advantage them toward desirable social outcomes). In this framework, all social and cultural capital does not have the same value in a given interaction field, such as the school. Rather, the presumed value of one's capital is based on the patterns of the dominant ideology in the broader culture (i.e., a macrosystem influence). For example, in her work with parents and teachers in Philadelphia, she documented that it was easier for many White parents, compared to Black parents, to comply with the larger values of trust, cooperation, and deference privileged by the educators with whom they interacted (Lareau and Horvat 1999).

Understanding Continuity and Discontinuity

Also relevant to understanding this interplay is the issue of continuity and discontinuity across home and school contexts. As Kim and Sheridan note in their chapter,

continuity implies "coordinated and planned interactions to encourage stimulation or provide support to children across settings" (p. 6). To realize this in its fullest form, educators must have real knowledge of children's home contexts, not a stereotypical or essentialized view of families, but an attention to needs as well as strengths within children's homes and communities upon which authentic connections may be built. Interestingly, there is emerging evidence in the literature on narrative styles about the nuances and potential importance of discontinuity across contexts (Melzi et al. 2011; Schick 2014). In Schick's (2014) study, for some literacy outcomes, low-income Latino children benefited when the narrative styles of their teachers and mothers were different, specifically, when their mothers engaged in narrative story-telling in a manner that was more congruent with their cultural style (as opposed to the dialogic reading style typically used by children's teachers). As Kim and Sheridan state, "some partnership practices may be experienced as foreign or uncomfortable to family members" (p. 7). The question then becomes, what do we do about it? The most typical response to any incongruity is to try to overwrite or alter family practices, bringing them into closer alignment with what mainstream practices we believe to be most effective. However, if the goal Kim and Sheridan lay before us (i.e., "parents and teachers work[ing] jointly together to provide cross-setting opportunities and experiences for children's learning and development") is to be truly strength-based, then aren't we called to recognize cultural and familial assets as a starting point? These ideas have not been fully integrated into our theorizing or empirical study.

In conclusion, as several of the authors in this volume advocate, it is critical for those with the institutional authority in the family–school relationship (i.e., teachers and administrators) to challenge themselves to grapple with what issues of power and inequity mean for the initiation, development, and maintenance of relationships with families. Furthermore, as a field we need to understand what we are asking of teachers and programs when mandates for family engagement reflect a one-size-fits-all endeavor, or when these mandates are viewed as a panacea for the entrenched and unjust structures that reproduce and perpetuate the very ills ("the achievement gap") that we seek to ameliorate through increased family engagement. These are not simple matters. As we continue to construct new theoretical models, it will be important to find additional ways to conceptualize these larger ecological forces (i.e., ideologies, culture, social structures) as they impinge on the relationships in a child's mesosystem.

Expanding Current Operationalizations

Similarly, as with prevailing assumptions that influence theory and practice, we are constrained by our current operationalizations and are in need of better measurement to guide our field. The last two chapters raised many important points in this regard, and I will only highlight a few of their contributions here, adding brief comments of my own. Bandalos and Raczynski tackle the problem of how best to

document the structural and relational aspects of family engagement across time. In their chapter, they present an accessible roadmap, providing clear steps for using a developmental measurement model in future research. In short, these authors propose linking/equating items across measures employed at different time points in the context of second-order latent growth curve models, similar to practices in the achievement testing realm to make tests comparable across grade levels. Their main contribution is in bringing this approach to the realm of affective variables, such as family engagement. Specifically, they discuss two circumstances in which a researcher might want to use this set of techniques: (a) while working with an existing scale with items that may not be fully age-appropriate across a given age spectrum of interest, and (b) in developing a new scale that could be used with children of different ages. Bandolos and Raczynski's proposed statistical modeling offers a way to measure change within family–school relationships as well. Clearly an important contribution to the work in our field, our knowledge base would benefit from simulation studies to further determine the unique value of this approach.

Pomerantz and Monti provide an incisive analysis of the state of measurement methods, pointing to an almost exclusive reliance on self-report measures of family engagement. Focusing primarily on the structural aspects of family–school connections, they discuss the contributions and inherent biases of retrospective report, and offer daily recordings and behavioral observations (both within the natural field as well as in the laboratory setting) as possibilities for improving upon existing research. These authors underscore the importance of including multiple perspectives on family–school connections (parents, teachers, children themselves), as well as raise the importance of measuring family–school partnerships across key transitions in a student's school life. Their analysis and these recommendations, if acted upon, will certainly expand our understandings of family–school connections. Furthermore, consideration of how we could measure relational variables, given their suggestions, would represent a critical advance in the field.

Though future volumes in this series will discuss issues of culture in much more depth, I do think it warrants mention that explicit attention to culture in measurement was largely absent from these chapters. I will come back to this point in the course of sharing my own thoughts below. Finally, at least two of the chapters raised the question of child evocative effects (see Pomerantz and Monti; Grolnick and Raftery-Helmer). This issue potentially obscures existing findings on the effects of interventions in the research literature, because it is difficult (especially within cross-sectional research) to ascertain if family engagement is causing child outcomes, if child factors are evoking particular family engagement practices, or more likely a combination of the two. Cross-lagged designs, as has been mentioned by authors in this volume, would be useful as a means for better disentangling important directional relations, as well as uncovering any bidirectional relations between parent engagement behaviors and child outcomes.

Reimagining our Current Models, Improving Measurement, and Problematizing Who Gets to Define Meaningful Engagement

In my own work, I am increasingly guided by four main premises, informed by empirical study across methodological and disciplinary traditions. First, because schools are essentially mainstream institutions (thus they largely and tacitly uphold norms and expectations of majority culture), certain ways of engaging in one's child's education are privileged (Lareau and Calarco 2012). Second, these, more, privileged forms of engagement (within research and practice) are often those most visible and/or helpful to teachers and schools (e.g., attending parent–teacher conferences, helping one's child with homework, volunteering in the school) (e.g., Delgado-Gaitan 1991). Third, this privileging has caused us to overlook or even negate the myriad "invisible" ways that families are engaged in their children's education and learning. We often neglect to seek to understand the assets that families bring to the endeavor of educating their children, especially if they don't fit the traditional expectations and norms. Finally, to mitigate this fundamental misjudgment, approaches are needed that seek to "uncover," document, and validate the multiple and effective ways that families from diverse sociocultural circumstances support their children's education (McWayne and Melzi 2014). In short, there is still much left to know.

There is no denying that substantial gaps exist in our understanding about appropriate and effective methods for fostering the relationship between families and schools (Ramirez 2003; Robinson and Harris 2013). These gaps are demonstrated most clearly by a lack of evidence for successful family engagement programs (Mattingly et al. 2002; Zellman and Waterman 1998), as well as by the proliferation of narrative that describes families who do not fit with traditional expectations of an involved parent as difficult or hard to reach. As Mapp and Hong (2010) note, "hard to reach" families are often those who are socioculturally different from the mainstream parent and educator. They go on to point out that despite the fact that many educators agree family–school partnerships are important, they often "harbor beliefs, attitudes, and fears about families that hinder their ability to cultivate partnerships" (Mapp and Hong 2010, p. 346). These realities foster disconnection and disengagement between families and schools.

As we seek to broaden our lens for informing research and practice, we must also acknowledge how the very act of research occurs within a particular social and historical context. That the majority of our research literature and theorizing in psychology and education has been based on middle-class and largely European-American norms is clearly problematic (Arnett 2008; Damon 2011; Mistry et al. 2012). In recent decades, however, there has been a greater appreciation for the need to understand phenomena as they manifest within particularly defined groups, especially those that find themselves on the margins of mainstream society. Over a decade ago, Sue (1999) cautioned that the search in scientific investigations for universals may constrict the development of an empirically- and theoretically sound

foundation for understanding and appreciating cross-cultural variation in behaviors. He noted, "we ask that ethnic minority research show its pertinence to other groups or more general phenomenon, but we fail to make the same requests when the research involves White populations" (Sue 1999, p. 1072). With the behaviors of White, middle-class families and children naively used as the standard in the USA, our field is ill-informed to determine what is most culturally relevant for diverse groups of children and families.

When minority groups have been incorporated into the empirical literature on family–school partnerships, it has been mainly for purposes of cross-group comparison. This comparative research, grounded in an etic approach, assumes a universal definition of engagement and elucidates similarities and differences by applying this universal conceptualization across groups. This can be very useful. However, research using an etic approach runs the risk of failing to illuminate the often unique beliefs and practices that define particular sociocultural groups because there is often no nuance in the operationalization of the construct of interest across groups (McWayne and Melzi 2014). In the field of psychometrics, the relevant term for this is: measurement invariance (Millsap 2011). It is a desirable thing for a construct to be invariant across groups, because it signifies that the construct is valid across populations, and this allows for cross-group comparisons. However, we have evidence that this is not always the case. Several studies have demonstrated that widely used measures, assumed to capture constructs equally across populations, are actually invalid for use with particular groups (see LeBoeuf et al. 2010 for an example). Promisingly, the method of linking and equating, promoted by Bandalos and Raczynski may also be useful with respect to developing measures to represent constructs in nuanced ways, incorporating items relevant for certain groups. Nevertheless, overreliance on comparative approaches has led, at best, to an incomplete picture of family engagement practices within marginalized and nondominant communities or, at worst, to a culturally inappropriate, and at times harmful, conception of families (McWayne et al. 2013).

Indeed, our current understanding about home–school connections, particularly within socioculturally and linguistically diverse communities is quite limited. For instance, few studies have included immigrants, despite increases in the number of children of immigrants in our nation's schools. For these families, typically recommended school-based practices may be problematic insofar as they do not acknowledge barriers to these (more) traditional (mainstream, middle-class) forms of family engagement. For example, traditional structural parent involvement activities, such as reading to children or helping with homework, may be difficult for immigrants who do not speak English, thus accounting for the lower involvement perceived by teachers (Lopéz 2001; Sosa 1997). Long work hours preclude participation in school-based activities normally scheduled during school hours (Aspiazu et al. 1998; Sosa 1997), as many low-income immigrant parents work multiple jobs that may include night shifts. Immigrant parents who fear deportation or other government interventions (because of political, often violent, realities in their home countries) may be reluctant to be involved in the school if they do not understand and/or trust educators or institutions (Garcia Coll and Chatman-Nelson 2010;

McWayne et al. 2008a). As Lareau and Calarco (2012) posit, these "social-class differences in the microinteractional resources that parents possess for navigating the complex and often unarticulated expectations of schools" are real and meaningful (p. 79). These realities, if unacknowledged, serve to perpetuate the notion that low-income and immigrant families are not involved in their children's education and simply "don't care" (Doucet 2008).

Notwithstanding these obstacles, research shows that these same parents care very much about their children's educational success and that they are often engaged in ways that differ from expected norms, thus remaining largely invisible and unaccounted (Hill 2010; Niemeyer et al. 2009; Okagaki and Bingham 2010). Further, status variables such as language, employment, and education might not have the same influence on parental engagement at home as they tend to have on their more visible engagement at school and with their child's classroom teacher. Specifically, parents are engaged in a broader range of home-based activities across levels of status variables (see McWayne et al. 2008; McWayne and Melzi 2014). Therefore, although it is essential to recognize the barriers and challenges that families face, exclusive focus on them blinds us from recognizing the assets that families bring to the education of their children and inhibits us from developing more accessible and personally relevant (*cf.* Grolnick and Raftery-Helmer) means for family engagement and relationship-building.

There are family and education researchers who employ sociocultural or emic approaches (in contrast to etic approaches) in exploring family-based protective factors for children of low-income, immigrant, or socioculturally diverse families (Jackson 1993; McWayne et al. 2013; Suárez-Orozco et al. 2012; Weisner 2005). An emic approach fosters culturally sensitive research by using inductively derived descriptions of naturally occurring behaviors, rather than relying on existing descriptions that generally exclude nondominant cultural groups (Gaskins 1994). Thus, an emic approach takes into account a particular community's values and practices in the creation of the descriptions that will then be used in the research process (McWayne and Melzi 2014). The use of emic approaches is not a new idea. Anthropologists have been practicing this approach for over a century, and cultural psychologists have been discussing the distinction between emic and etic approaches since at least the mid- to late-twentieth century (see Berry 1969; Jahoda 1977). Yet, emic approaches are still underutilized in much of the applied developmental and educational psychology research (Mistry et al. 2012), and in particular the research on family–school partnerships, further underscoring the importance of multidisciplinary dialog in our field.

In addition, mixed method approaches that seek to define constructs in partnership with relevant stakeholders provide a promising avenue for future emic research on family–school partnerships. Recent work in the fields of school psychology and mental health (Nastasi et al. 2007) and early childhood education (McWayne et al. 2013) supports this effort. For example, Hitchcock et al. (2005) promoted an approach that combines the use of ethnographic and factor analytic methods to develop and test psychological instruments for students located in Sri Lanka. Their studies have led to documentation of culture- and gender-specific constructs relevant for

mental health practice in cross-cultural settings. More closely related to the topic of family–school partnerships, my colleagues and I have employed a similar mixed method approach for defining and measuring culture-specific family engagement practices among low-income Latino families of preschool children (see McWayne et al. in press; McWayne et al. 2013; McWayne and Melzi 2014). Our work suggests that cultural and linguistic minorities in the USA may have a unique relationship to their children's schooling, and that culturally contextualized measurement can capture nuances in parent engagement with important implications for informing family–school connections in support of positive child outcomes (McWayne et al. under review).

So, how do we actualize the goal of supporting culturally sensitive family–school partnerships, defined as being "responsive to the values, priorities, and interaction styles of families" (Kim and Sheridan, p. 8)? In thinking more about this, I resonated with Edwards and Kutaka's discussion of participation as fostering "forms of cultural mediation" (p. 45). It reminds me of work by two prominent education researchers, Joseph Tobin and Luis Moll. Tobin, an educational anthropologist best known in our field for his books and video documentaries *Preschool in Three Cultures: Japan, China, and the United States* (1989) and *Preschool in Three Cultures Revisited* (2009), has highlighted for us the similarities and distinctions within early childhood practice across various cultures around the world. Most influential on my current work within Head Start contexts is Tobin's use of parent-teacher dialogues "as a form of social justice" (Adair and Tobin 2008, p. 144) to arrive at better understanding of how culture manifests within educational and family practices related to supporting young children's learning and development. According to Tobin et al., one of the key ways through which home–school connections may influence children's school success is through two-way dialogues between teachers and parents that challenge assumptions and open up the possibility of understanding (if not agreement) across the home and school contexts (Tobin et al. 2007).

Luis Moll, a renowned educational and cultural psychologist, and his associates promote an approach they have termed "funds of knowledge" (1992; 2005). Funds of knowledge are operationalized as the family's knowledge of the local environment and community and the funds of expertise they have developed to adapt to and function within their local context. The premise underlying this approach, as it pertains to the family–school partnership, is that by coming to understand and appreciate the knowledge already available to students at home and in the community, teachers can make connections between this knowledge and the classroom curriculum. This approach acknowledges that children's homes and communities "contain ample cultural and cognitive sources with great potential utility for classroom instruction" (Moll et al. 2005, p. 75). The funds of knowledge conception of culture contrasts with the more traditional, fixed concept of culture as an entity (i.e., a specific group's set of values, knowledge, and practices), because it emphasizes "the cultural resources that people acquire through participation in various social worlds…" (Seiler 2013, p. 112).

With my colleagues in the RISE (*Readiness through Integrative Science and Engineering*) project (McWayne et al. 2014), we have combined both Moll's funds

of knowledge approach and Tobin's idea of parent–teacher dialogue in a curriculum development project for Head Start programs. Thus, congruent with several chapters in this volume, our approach to family–school partnerships has been to shift the focus away from specific structural family engagement activities to helping teachers to identify families' specific knowledge, expertise, and everyday routines so that educators can infuse curriculum with information from children's home contexts. Our rationale for this shift of focus is, in part at least, based on research that delineates potential mechanisms through which family–school partnerships may impact children's outcomes. For example, a study by Hauser-Cram et al. (2003) found that teacher ratings of kindergarten children's academic abilities were related to teachers' perceptions of congruence between their educational values and those of parents from different cultural backgrounds. Researchers have also found that family–school connection supports teacher–child relationships (a key predictor of later outcomes), because family–teacher communication helps teachers learn about children and their families, thereby assisting teachers in the provision of experiences that make individual children feel comfortable in the learning environment (Smolkin and Suina 1999).

Several implications follow from this. One implication is that educators need support in learning more about children's experiences within their home and family contexts. In their chapter, Grolnick and Raftery-Helmer recognized the importance of parent empowerment, but also articulated the importance of teacher empowerment and support in this relationship-building process. A second implication relates to our understanding that children learn more effectively when new concepts connect to prior experiences. So, when teachers can link new information to a child's prior knowledge, experience, and home and family activities, they activate a student's interest and motivation to learn (Beyer 1991). In our RISE project approach, we advocate that by understanding and appreciating the knowledge and support already available to students at home and in the community, teachers can make connections between these experiences and the classroom curriculum in ways that are truly powerful for students (Michaels et al. 2008; Stephens 2000; Thompson 2010). Thus, the project is fundamentally built on the idea that schools can leverage families' unique contributions to their children's learning, rather than simply trying to overwrite these to get children "ready for school" (McWayne et al. 2014). This reconceptualization of home–school connections belies a deficit model of low-income, immigrant families by seeking to support nonhierarchical and reciprocal dialogue between parents and teachers. Understanding the reasons behind perceived "invisibility" of families when it comes to their children's education (the "No's" as Fantuzzo et al. 2006 have termed), while also seeking to understand the many ways in which families are supporting their children at home and in the community, we hope to bring a new lens for researchers and practitioners to apply in their work with families and schools.

Conclusions

The chapters in this volume outline salient issues concerning the state-of-inquiry on family–school partnerships, as well as articulate a bold research agenda moving forward. With a primary focus on foundational aspects of family–school partnership research, what the authors in this set of chapters have underscored for us is that an issue as complex as family–school connection necessitates a dialogue that brings together the best knowledge across disciplines, methodological traditions, practical and research settings, that is situated both locally and internationally. Having such dialogue allows us to scrutinize prevailing notions about family–school partnerships in a national context of urgent engagement and, in this liminal space, work toward better understanding. We should persistently ask: How do we interrogate the contexts within which particular knowledge has emerged and question our own epistemological biases concerning family–school connections? How can we become more aware of how those biases permeate the research questions that drive and perpetuate our inquiry? How can we better capture critical aspects of this phenomenon, especially in light of a relational approach? How, within the realm of family–school partnerships, do we ensure that the lived experiences of the stakeholders involved are central in our operationalizations and that the resulting measurement accurately (reliably and validly) reflects those lived experiences? Relatedly, how do we allow for new perspectives on this phenomenon to influence what we think we already "know," as well as how we go about pursuing new understandings? These papers provide for fundamental advances in the scientific conversation concerning family–school partnerships by holding up a mirror to our current knowledge base, and identifying reconceptualizations and reoperationalizations that are sorely needed to move the field forward. I believe we are up for the challenges these authors have set before us, and will benefit significantly from the guidance they have proffered as we seek to promote meaningful family–school connections within the increasingly socioculturally rich context of US schools on behalf of *all* students.

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