Home–school differences in beliefs, support, and control during public pre-kindergarten and their link to children's kindergarten readiness

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A B S T R A C T

This study examines the prevalence of home–school match in childrearing beliefs and socialization practices (control and support) and their relation to ethnicity and readiness skills of children ($n = 310$) making the transition from publicly sponsored Pre-k to kindergarten. Home–school match was operationalized both as a continuous absolute measure and as categories of match or mismatch. Overall, home–school match was more prevalent than mismatch. However, the results corroborate previous ethnographic studies showing higher rates of home–school mismatch among African Americans and Latinos than Euro Americans. Controlling for race and socio-economic status, parents' beliefs and practices predicted readiness but teachers' did not. Absolute indicators of home–school differences were not related to kindergarten readiness. Directional indicators revealed that children attained greater skills when parents and teachers matched on child-centered beliefs, low control, and high support. Contrary to the cultural match hypothesis, home–school mismatch was associated with better outcomes than match in the case of adult-centered beliefs, control, and low support.

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1. Introduction

The nature and significance of differences between home and school environments have long been a topic of interest to scholars concerned about children's adaptation to school. As far back as 1982, Shirley Brice Heath published findings from a program of ethnographic observations that revealed striking differences between teachers and African American parents in discourse style, particularly regarding the role and use of questions in adult–child communication. The role of home–school match is important because of its possible implications for children's early adaptation to and success at school. In recent years, this issue has become even more compelling as a result of the growing ethnic and cultural diversity of students in our public schools and the lack of corresponding diversity in a teaching workforce that is predominantly Euro American (Clifford et al., 2005; National Center for Education Statistics, 2000, 2009). Euro Americans make up about 83.5% of the teaching workforce, whereas African Americans and Latinos constitute less than seven percent each (National Center for Education Statistics, 2009). These statistics suggest that once children enter school, they will most likely be matched with a teacher who has a different racial/ethnic background than them. We argue, however, that although much of the home–school mismatch literature focuses on race/ethnicity, what may be most important for children's academic success is the degree of match on the culturally rooted beliefs and practices of parents and teacher. Therefore, this paper explores the extent to which parental

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beliefs about children and their support and control practices match those of their children's teachers. First, the review provides evidence of home–school mismatch by situating the construct within the historical literature on racial/ethnic differences in discourse styles and practices, beliefs, and values related to behavioral expectations for children. Then, we examine the literature on how similarity and difference between home and school in beliefs and practices are related to the academic and social outcomes of preschool children. Finally, we present our theoretically driven, re-conceptualization of home–school match/mismatch, quantified through the calculation of absolute difference and directional difference scores.

1.1. Evidence of home–school mismatch

The culture of American schools tends to reflect and be more consonant with the beliefs and practice of Euro American homes (Rogoff, 2003). Therefore, for ethnic minority children, the rich knowledge set, values, relational styles, and behavioral repertoires cultivated and adaptive at home under one set of socialization beliefs and practices often do not match up well with those in educational settings (Bowman, 2002). Heath's (1982) original work which focused principally on Euro American–African American differences in language use, and in particular adult questioning of children, brings this point home with striking clarity. She observed how African American mothers are less likely than Euro American mothers to utilize forms of discourse that involve question-asking routines that are typical in schools (Heath, 1996). In addition, African American children are not regarded as information givers or conversational partners by their parents. Whereas teachers posed questions calling for attributes or labels of objects and specific details of events out of their context, adults in the African American community posed questions about whole events or objects, their causes, and effects (Heath, 1982). Heath's observations were essentially replicated in a rural sample by Vernon-Feagans (1996). In contrast to the suppositions of mismatch between African American homes and schools is the situation of Euro Americans for whom a strong match is often posited (Rogoff, 2003). For example, Rogoff (2003) observed that Euro American families interact with their Pre-k children by using "school-like" discourse styles and talking to them "like a book" before they even learn to read. Given the demographic profiles of the nation's teachers, it would not be surprising to find that language use, the styles of questioning, the nature of adult–child interaction, and regimes for controlling social behavior observed among teachers more closely resembled those observed in the homes of Euro American parents than they resemble those observed in ethnic minority homes (Michaels, 1981).

Early formulations of the mismatch hypothesis centered on differences in language and discourse styles. However, analysis of home–school mismatch has been extended to a range of issues including practices, beliefs, and values related to behavioral expectations, teaching, and discipline strategies, adult–child interaction styles, and conceptions of developmental competence and maturity. For example, mismatch may occur with respect to the emphasis by the home and the school on individuality, independence, and competition, as opposed to embracing interdependence and cooperation, and is further reflected in valuing verbal–intensive interactions and reliance on inductive discipline practices (Rogoff, 2003; Vernon-Feagans, Head-Reeves, & Kainz, 2004). Like schools, Euro American parents tend to value an inductive approach to behavior management in which teaching is conceived as "child directed" and discipline is articulated as "supporting" desired behavior rather than punishing misbehavior. In contrast, Delpit (1995) and others have noted that minority parents tend to use a directive teaching style, and impose explicit sanctions to manage children's misbehavior. For example, African American parents commonly use explicit direction and control practices, whereas Euro American, middle-class parents rely on indirect control practices based on a combination of elicitation strategies that involve questions, explanations, and inferential reasoning (Ballenger, 1999). Puerto Rican mothers, too, are more likely than Euro American mothers to emphasize the need to exercise parental authority rather than the modeling of positive behaviors (Harwood, Schoelmerich, Schulze, & Gonzalez, 1999). Keels (2009) notes a similar pattern of differences among African American, Euro American, and Latinos in parental beliefs and practices.

With respect to teaching practices at home, African American families are also more likely than Euro American families to value memorized information and direct teaching of nominal knowledge (i.e., ability to name letters, numbers, body parts; Barbarin et al., 2008; Nord, Lennon, Liu, & Chandler, 2000). Similar observations have been made of Latino parents who emphasize correct performance of reading related tasks (i.e., writing or naming letters correctly), rather than focusing on the meaning of text (Gallimore & Goldenberg, 2001). Harwood et al. (1999) also observed that Puerto Rican mothers directly structured their infants' behavior more often than Euro American mothers during a teaching task.

Given the confounding of socio-economic status (SES) and ethnicity, challenges are often raised about whether ethnic differences are in fact attributable mostly to SES (Barbarin, 1999). However, both ethnicity and social class appear to be independently related to beliefs and practices. For example, at each SES level there is an identical pattern in which African American parents are lower in their use of supportive strategies and higher in their use of controlling practices than Euro American and Latino families (Barbarin, 2004). For this reason, our analyses will control for SES when looking at congruence across racial groups, and control for both SES and race in using home–school match/mismatch to predict child outcomes.

It is important to note that practice differences represent preferences that do not arise out of a vacuum but in response to specific demands within the social context in which parents are raising children. Bowman (2002) argues that most children, including children from minority backgrounds and economically disadvantaged families, develop the skills and attributes that enable them to thrive in their particular communities and homes. In preparing children for life, parents take a broad view and foster in their children a range of competencies they deem necessary for safety and success in their environment (Ogbu, 1981). Similarly, Rogoff (2003) argues that adults guided by their diverse cultural values and ideologies have different

socialization goals and employ varied methods for accomplishing and assessing progress toward desired developmental outcomes. Most children acquire the competencies valued and used in their communities, including language, symbols, categorization of objects, and appropriate interaction styles with adults and peers. However, the particular language and symbols they learn, the objects worthy of categorization, and the specific patterns of interactions are determined by culture and the social context (Rogoff, 2003). The effect of cultural beliefs on socialization goals and practices has motivated this examination of home–school match/mismatch to include beliefs as well as practices.

1.2. Mismatch and success at school

Even though claims about the existence and impact of mismatch between home and schools have been disseminated widely, their persuasiveness is still based largely on a few compelling ethnographic studies (Delpit, 1995). Quantitative analyses corroborating these qualitative observations have been rare. Nevertheless, examining match between home and school is important because a match may confer advantage and facilitate the adjustment of children who come from home environments that resemble the school's and help explain why some children from homes which do not match with the school fare poorly (Dee, 2004). When there is a home–school mismatch, children must work to negotiate the divergent rules, expectations, values, discourse styles, and modes of control the exist in each setting (Keels, 2009). This condition may burden children with great demands for accommodation if they are to be successful in the new setting. Context-specific competencies are adequate, until the child is confronted with different goals, practices, and beliefs about how they should be, talk, and behave. When children enter school, they clearly must discern and learn the school value systems, control regimes, behavioral expectations, and discourse styles (Brooks-Gunn & Markman, 2005; Coll & Pachter, 2000). As noted above, children from families that espouse the same beliefs or similar cultural values, mores, and expectations for behaviors and interactions as schools are more likely to adapt successfully than children raised in families that diverge from schools (Keels, 2009; Sonnenschein, Baker, Moyer, & LeFevre, 2005; Stipek, Milburn, Clements, & Daniels, 1992). For instance, when similar language styles, expectations, rules, and regimes of discipline exist in both home and school, a child's experience in the classroom is likely to have a ring of familiarity to it, thus lessening the strain of adjustment to the new setting. Conversely, children with parents who highly value self-care and practical knowledge may experience a much different emphasis at school where the importance of inferential reasoning and self-regulation are underscored (Barbarin et al., 2008). Unacknowledged differences between home and school about what constitutes critical skill sets means that some children may start school less familiar with the culture, discourse styles and expectations within classrooms than many schools have recognized. In this way, a lack of home–school match results in many children, particularly children of color, being less familiar with the ways and expectations of school.

If schools reflect and propagate the values and expectations of the majority culture (Euro American), this may make the adjustment to school more challenging for some children. In spite of these sometimes stark differences, many children learn enough to negotiate the two environments successfully (Keels, 2009). For others, we speculate that the home–school divide in skill sets, relational styles, and practices may be too wide an expanse to bridge and lead to struggles that undermine success. If this is correct, children who enter a classroom sharing the same or similar cultural values and expectations for behaviors and interactions and who have culturally based knowledge and skill sets valued by teachers are more likely to make a smooth transition than children who come from home environments that are dissimilar (Rogoff, 2003).

The notion of home–school mismatch has received a great deal of attention precisely because it has been proffered as a way of accounting for ethnic achievement gaps (Delpit, 1995; Villegas, 1988). For this reason, an empirical analysis of home–school mismatch would be incomplete without examining the strength of its relationship to academic competencies. In an era of increasing economic and ethnic diversity among American families, a match of beliefs, values, and practices as children navigate across familial and school settings may be a salient factor for young children's success in the early years of school. Teachers rate children as less competent when they perceive differences with parents on values related to discipline, reading, writing, math, and parents' role in assisting with homework (Hauser-Cram, Sirin, & Stipek, 2003). It has also been evidenced that teachers are less likely to facilitate children's story-telling when their discourse styles differ (Michaels, 1981). For many children in the United States, navigation of this mismatch is likely to first occur within a pre-kindergarten classroom and may have ramifications for academic functioning in early elementary school grades. Connections between home and school are considered to be key contributors to early school adjustment, providing a consistent web of support during a challenging time of change (Rimm-Kaufman & Pianta, 2005). When there is a distinct lack of continuity across these settings, children can be faced with the difficult task of adapting to vastly different expectations and socialization experiences, possibly contributing to early academic and social struggles.

1.3. Re-conceptualizing home–school match

Up to this point, our discussion of attitudinal and practice differences between schools and homes has been framed using the typical rubric of match or mismatch. Conceptually, mismatch takes the form of person–environment fit (P–E; Bronfenbrenner & Morris, 1998), which forecasts poor adjustment when individual qualities deviate from the qualities required, privileged, or supported by the environment. P–E fit theories are neutral and agnostic with respect to imputing moral correctness or value to the qualities of either the individual or the environment. Nevertheless, P–E fit theories predict that problems will arise to the extent that families do not replicate the salient qualities of school environments. Though

commonly used, mismatch frames the discussion narrowly in terms of absolute differences between home and school and fails to capture potentially important details about the direction of these differences. Specifically, mismatch theories assert that absolute differences between home and school lead to adverse effects but they do not address the potential importance of the direction of the differences, viz., who is high and who is low on a particular belief or practice. This means that they cannot account for the possibility that mismatch between the home and school might be more desirable than match, because one setting can compensate for deficiencies in the other. Though helpful in many respects, the mismatch approach simplifies what may be more complex relations that could be detected by incorporating directional differences. By limiting its conceptual scope to absolute differences, the term mismatch omits information on the direction of that difference which may turn out to be critical in determining the impact of home–school differences on children.

In this paper, we argue that although discussions of home and school environments have been cast largely in terms of match vs. mismatch, the nature and direction of the match or the mismatch should not be ignored. For example, the present study compares parents and teachers on support in interactions with children. Match is operationalized in a way that captures polarity and distinguishes between matches that exist when both parents *and* teachers are high in support from matches that exist when parents and teachers are both low in support. Similarly, when mismatches occur, we are able to distinguish whether it is the parent or teacher who is high or low. These distinctions have both theoretical and practical significance. In the case of support, we would predict that matched high support would lead to favorable outcomes, but matched low support would not. In the case of mismatch, a salubrious environment might compensate for a deleterious environment by neutralizing or making up for what is lacking in the other. Moreover, when a mismatch occurs, the ability to distinguish which party is high and which is low may prove to be valuable. It is conceivable that for qualities such as control, mismatched environments have the same effect as matched environment. For example, highly controlling disciplinary styles observed in African American families do not seem to produce the same negative effect on children's behavior that it does in other ethnic groups (Deater-Deckard & Dodge, 1997). As a consequence, high parental control and low teacher control might lead to outcomes that are equally positive as when both home and school are low in control. Thus, incorporating the notion of directionality also permits the theory to test whether the effect of being high or low on a quality may differ depending on the environment.

This report examines absolute home–school mismatch as it is conventionally defined in order to situate our findings within the existing discourse on ethnic differences in beliefs and practices compared to schools. In addition, we will test a directional conception of home–school match and its relation to children's kindergarten outcomes as way of extending the current home–school mismatch debate. To accomplish these aims, we quantify the match between home and school using both absolute differences and directional categories. The paper also analyzes ethnic group differences in the prevalence of match observed between the home and school environments of children enrolled in publicly sponsored early childhood programs. Beliefs, support, and control practices have been selected because aside from language, these are issues around which concerns about home–school mismatch have most often been expressed (Rogoff, 2003). Finally, even if quantitative evidence of home–school mismatch is found, the case for its theoretical and practical relevance can be more compelling if there is evidence that it is also linked to children's academic performance.

Therefore, a final issue concerns the broader significance of home–school match. Skeptics about the cultural mismatch hypothesis may cite a lack of empirical evidence demonstrating that home–school match or mismatch matters. In truth, though we have ample evidence of diversity of beliefs and practices along ethnic and cultural lines, with a few exceptions, evidence linking home–school match to children's academic or socio-emotional outcomes is limited (Brooks-Gunn and Markman, 2005; Heath, 1982; Phillips, Brooks-Gunn, Duncan, Klebanov, & Crane, 1998). Despite its putative importance, scholarly efforts to determine the relation of home–school match to academic achievement and social development have been slowed by conceptual ambiguity and an absence of operational definitions and adequate assessments of the construct. Importantly, questions remain about which domains of match across home and school might be most critical for children's academic and socio-emotional development?

1.4. Research questions

Quantitative analyses examine the extent of home–school match in an ethnically diverse group of children who attended publicly sponsored Pre-k. They also assess whether the match/mismatch is related to children's academic and socio-emotional competence at the beginning of kindergarten. Specifically, a quantitative approach is applied to operationalizing home–school mismatch, using self-reported authoritarian vs. child-centered beliefs and observed socialization practices (warmth/support, control) for both parents and teachers. This measurement approach makes it possible to examine the effects of the *absolute* difference between parents and teachers, as well as the effects of the direction of those differences (e.g., low teacher warmth/support and high parent warmth/support). Accordingly this research questions addresses questions of the prevalence and effects on children's school readiness of home–school match/mismatch. Specifically these three questions are:

1. What is the overall prevalence of home–school match and mismatch in public Pre-k programs on socialization beliefs and practices?
2. Does the prevalence of match vary by racial/ethnic group membership?

3. Is home–school match in Pre-k related to children's academic and socio-emotional competence at the beginning of kindergarten?

The literature reviewed points to a likelihood of mismatch between home and school environments on the dimensions of authoritarian beliefs, support practices, and control practices for some families more than others (Deater-Deckard and Dodge, 1997). Pre-k teachers as representatives of the school environments are more likely to express child-centered beliefs, demonstrate warmth/support, and employ control practices best described as inductive, responsive to child initiation, and characterized by indirect commands (Rogoff, 2003). Some groups of parents, notably African American and Latino, are likely to be very warm and supportive but express traditional, authoritarian, adult-centered beliefs and use more directive control strategies (e.g., explicit direct orders, sanctions).

The theorizing on question three (e.g., person-environment fit and home–school mismatch hypothesis) suggests that mismatch on authoritarian beliefs, support practices, and control practices will be associated with poorer socio-emotional and academic competence in children. However, low support, high control and authoritarian beliefs may by themselves be inversely related to readiness. Accordingly our extension of the mismatch hypothesis to include directionality of difference suggests that some matches (high warmth/support, low control, low authoritarian beliefs) will be associated with better outcomes than either type of mismatch, which in turn will be better than the other similarities (low warmth/support, high control, high authoritarian beliefs). Thus contrary to the hypothesis that home–school mismatch contributes to poor outcomes, specific types of mismatch may be associated with better child outcomes than match because one setting may compensate for what is lacking in the other. Given scant empirical basis on which to argue either way, these analyses are exploratory and hypotheses are preliminary.

2. Method

2.1. Participants

Participants for this study were drawn from a study of six state-funded preschool programs: the National Center for Early Development and Learning's Multi-State Study of Pre-kindergarten (Multi-State Study). The purpose of this study was to describe Pre-k programs in states with large publicly-funded programs. The Multi-State Study involved a stratified sampling of 40 Pre-k sites within each state during the 2001–2002 school year. Within each Pre-k site, one classroom was randomly selected to participate. In each participating classroom, four children were randomly selected from among those who: (1) had parental consent; (2) met the age criteria for kindergarten eligibility in fall of the following year; (3) did not have an Individualized Education Plan; and (4) spoke English or Spanish well enough to understand simple instructions.

In five of the six states, families were also invited to participate in the Family and Social Environment Supplement, which entailed home-based interviews and observations regarding family socialization beliefs and practices. The Multi-State study recruited 939 children for classroom observations. This report was based on data from the 310 children whose families provided complete data on self-reported socialization beliefs. Due to small numbers of Asian/Indian families ($n = 13$), only Euro American ($n = 145$, 47%), African American ($n = 89$, 29%), and Latino ($n = 76$, 24%) families were included in analyses. These children were drawn from 154 different pre-kindergarten classrooms. Fifty-two percent of the children were girls. Ninety-two percent of parent respondents were biological mothers, whereas fathers, grandparents and other adults consisted of the other eight percent. Mothers of children had, on average, just over a high school education ($M = 13.05$, $SD = 2.20$), 43% of families were at or below 150% of the federal poverty line, and 22% of families spoke a language other than English in the home. This sub-sample differed from the whole sample in that parents were slightly better educated and were of higher SES than the full random sample of children (see Barbarin et al., 2008 for a fuller description of the family sub-sample study).

Pre-kindergarten classrooms varied widely in terms of teacher and classroom characteristics. Teachers were both experienced (with a *mean total number of years teaching at any level* = 13.55, $SD = 9.80$) and well educated (*mean years of education* = 15.68, $SD = 2.01$). They were also mostly Euro American (56%) though a significant number of African American (20%), Latina (14%) and Multiracial/Asian (10%) teachers were also represented. Seventy percent of parents reported that they speak English only, seven percent reported speaking Spanish only, and 27% reported speaking both English and Spanish. Over 90% of Euro American children had Euro American teachers. Over 92% of Latino children have Euro American Teachers. About 67% of African American children have Euro American teachers, but about 32% of African American children have an African American teacher. The average class size was 18.45 ($SD = 3.49$), and 55% of the children in each classroom were from families classified as poor in that total family income was below 150% of the U.S. poverty guideline.

2.2. Measures

In order to describe home–school match from a data-driven perspective, there was a need to measure parallel beliefs and practices of adults in both the family and classroom settings of target children. In the Multi-State Study (including the Family and Social Environment Supplement), the following constructs were measured similarly across home and school settings, thus providing the opportunity to describe match (or lack thereof) with data.

2.2.1. Demographics

Both teachers and parents reported the amount of *education* that they had completed at the time of the study, assessed in terms of years. Both teachers and parents reported their *race/ethnicity*, reflected in one of the following categories: Euro American, African American, Latina.

2.2.2. Socialization beliefs

The *Ideas About Children* (IAC; Schaefer & Edgerton, 1985) scale is a 16-item self-report version of the original *Parent Modernity Scale*, which measured an adult's beliefs about childrearing on a five-point scale; both parents and teachers completed the exact same items. This measure yielded a primary score labeled *Authoritarian* childrearing beliefs; a high score represented beliefs about children that were more authoritarian, adult-leading and less child-centered. Cronbach's alpha estimate of internal consistency for this scale was reported as .84 by the scale's authors and was .79 for teachers and .78 for parents in the present sample. When estimates of internal consistency were calculated separately by ethnicity, they were all in the acceptable range: African Americans = .75; Euro Americans = .76; Latinos = .68.

2.2.3. Socialization practices

The *Classroom Assessment Scoring System* (CLASS; Pianta, La Paro, & Hamre, 2007) was developed based on large-scale classroom observation studies in the NICHD Study of Early Child Care (NICHD ECCRN, 2002) and the National Center for Early Development and Learning (NCEDL) Multi-State Pre-k Study (Early et al., 2005). The version of the CLASS used in the NCEDL study consisted of nine ratings of dimensions such as supportive climate, teacher sensitivity, behavior management and overcontrol. Each dimension was rated on a seven-point scale with one or two indicating the classroom was low on that dimension, and three, four or five indicating that the classroom was in the mid-range, and a six or seven indicating the classroom was high on that dimension. Observers rated Pre-k classrooms and teachers on all nine dimensions roughly every 30 min, throughout a spring observation day. Inter-rater agreement on these scales with video-taped, gold-standard codes ranged from .72 to .89 for the more than 30 coders used in the NCEDL study.

In this study of home–school match, the overcontrol, teacher sensitivity, and positive climate dimensions of the CLASS were used exclusively. *Overcontrol* reflected the extent to which classroom activities are rigidly structured or regimented, and the teacher was more directive in contrast with a more flexible, child-centered approach. *Positive climate* reflected the enthusiasm, enjoyment, and respect displayed during interactions between the teacher and children, and among children. *Teacher sensitivity* reflected the extent to which teachers were supportive and responsive to child needs and provided comfort, reassurance, and encouragement. Positive climate and teacher sensitivity were combined to form an *emotional support/warmth* dimension to parallel parent–child interactions as described below.

The *Parent–Child Observation* (PCO; NICHD ECCRN, 2002) utilized three tasks developed as part of the NICHD Study of Early Child Care protocol. These observations focused on parent teaching practices, child responses and the quality of the dyadic relations within the context of two structured teaching-learning tasks and a period of free play. The first task required parents to teach their children how to complete a maze using an Etch-a-sketch toy. The second task required the child to combine blocks of different sizes and shapes to build seven towers that matched a single model tower. In the final task, the parent and child were given puppets and simply told they could play with them however they would like. Parent–child dyads completed this set of tasks in 20–30 min. Parent–child interactions were video-recorded for later coding. Anchored ratings of behavior were used to characterize various aspects of parent and child behavior across the three tasks. The following parent behaviors were coded on a five-point scale: expand, explain, direct, supportive presence, criticism, and affective mutuality. Inter-coder reliability was assessed and the mean Cohen's kappa was across all dimensions was .90.

For the purposes of home–school match analyses, the direct, supportive presence, and affective mutuality ratings were used exclusively. *Direct* parent behaviors included the amount of time that the parent spends directing, telling, or explicitly structuring the child response to the task (Cohen's kappa = .99); this scale paralleled the overcontrol dimension of the CLASS. *Supportive presence* measured the degree of security afforded to the child by parental responsiveness (Cohen's kappa = .89), acceptance and affirmation, whereas *affective mutuality* reflected a bond of emotional warmth between a parent and child (Cohen's kappa = .91); supportive presence and affective mutuality were combined to form an *emotional support/warmth* dimension to parallel classroom climate as described above.

2.2.4. Home–school comparisons

Using the aforementioned variables in the NCEDL dataset, two methods of measuring differences between home and school were pursued. Taking advantage of parallel parent and teacher measures of the same constructs, one method involved the creation of absolute difference scores, while the other utilized a categorical approach using median splits to capture the direction of the parent–teacher differences. Given that some constructs were rated on different scales and the distribution of scores at times differed among parents and teachers, all variables were centered at the sample mean prior to calculation of the home–school match scores. Each of these two calculation methods is described below in greater detail.

2.2.5. Absolute indicator of home–school match (absolute difference scores)

Given that constructs of interest were measured similarly across home and school settings, one method used to operationalize *home–school match* was to subtract the teacher score on a measure from the parent's score and use the absolute value of this difference without regard for who was higher. The *absolute difference score* then became a continuous measure

of similarity/difference of parents and teachers on a given construct. Based on the self-report and observed variables noted above, the following absolute difference scores were produced:

1. Parent Authoritarian Beliefs about Children (self-reported) score minus Teacher Authoritarian Beliefs about Children (self-reported) score;
2. Observation of Parent Emotional Support/Warmth minus Observation of Teacher Emotional Support/Warmth;
3. Observation of Parent Directiveness minus Observation of Teacher Overcontrol.

2.2.6. Directional Indicator of home–school match (categorical scores)

A second method created a categorical indicator of *home–school match* with the same ratings and scales used to create the absolute indicator. Both mean and median splits were conducted using parent and teacher reports/observations of the same construct, which resulted in low and high groupings. They yielded roughly similar results in terms of dividing the sample and in their relationships to outcomes. Analyses based on the median splits are reported in the results.

The support and control behaviors of teachers were observed in their classrooms. Parents were observed during a series of prescribed teaching tasks and play activities with the child at home. The resulting groupings of parents and teachers were defined in the following ways.

High control group. Teachers assigned to this group were rated as relying on classroom activities that were regimented and adult directed; children were inappropriately stifled; spontaneity was discouraged. Children were required to sit in their seats without talking. Both parents and teachers were observed to give few choices in activities or in approaches to tasks. In interactions with the child, parents and teachers did most of the talking and low levels of child involvement were observed.

Low control group. Parents and teachers in this group were observed to be generally respectful of child autonomy. Children were permitted some but not complete independence and were offered a choice of activities and strategies. Parents and teachers tended to "go with the flow" of children's ideas and did not insist on pursuing their own plans at the expense of the child.

High support group. The parents and teachers in this group were rated as somewhat or highly attuned to the child's emotional and academic needs. They were observed to listen carefully to the child and provided soothing assistance and reassurance as the child needed. Their interactions with the child were characterized by emotional warmth, acceptance, smiling, patience, frequent social conversation, mutual affection, and joy.

Low support group. Parents and teachers assigned to this group did not tend to offer help when the child sought assistance. They ignored or dismissed the child's questions or problems. Few, if any demonstrations of emotional connection were observed between adults and children in this group. The adults assigned to this group seemed pre-occupied and did not manifest understanding of the child developmental level, awareness of the child's emotional states (e.g., frustration and confusion), or respond to child disengagement with the task. Interactions between child and adults in this group were seen as strained, contrived, and lacking in joy.

Authoritarian beliefs group. Parents and teachers assigned to this group endorsed beliefs that underscored expectations that adult authority should be unquestioned; that child obedience should be absolute and that children learn best through repetition. They also endorsed beliefs that children left to their own devices are inclined to misbehave. They believe that adults must monitor and keep children's behavior within acceptable limits. The task of adults is to guide and control; children are to follow.

Child-centered beliefs group. Parents and teachers assigned to this group endorsed beliefs about the primacy of individual differences, that children have rights that must be respected and that children have natural tendency to do the right thing. Accordingly, for adults in this group, effective socialization of children involved accepting child autonomy; promoting independence; individualizing expectations of and responses to children; and tolerating disagreement and conflict with child as an expected aspect of child development.

Analyses using the median splits were used to assign adults and children into one of four categories (*directional score*), based on different combinations of low and high parent and teacher variables. For example, one child's parent and teacher may both on the basis of a score or rating be assigned to authoritarian childrearing beliefs, whereas another child's parent and teacher scores were such that the parent was assigned to the authoritarian group and the teacher to the child-centered group. This categorical approach resulted in two types of match (high parent and teacher; low parent and teacher) and two types of mismatch (low parent/high teacher; high parent/low teacher).

School readiness. Children's school readiness, operationalized as social and academic competencies in the fall of the kindergarten year, was measured by kindergarten teacher ratings and standardized direct assessments. *Social competence* and *behavior problems* were rated by kindergarten teachers, using the Teacher-Child Rating Scale (Hightower et al., 1986; Weissberg et al., 1987). The social competence scale was computed as the mean of 20 items and had a Cronbach's alpha of .95, while the behavior problems scale was computed as the mean of 18 items and had a Cronbach's alpha of .91. An evaluation of the normative and parametric characteristics of the TCRS was reported by Weissberg et al. (1987). Three standardized direct assessments were also conducted. The Peabody Picture Vocabulary Test—3rd edition (PPVT-III) was used to measure children's *receptive vocabulary* skills (Dunn & Dunn, 1997). Raw scores were converted into standardized scores ($M = 100$, $SD = 15$) that reflected each child's performance relative to the expected performance of children in the population who were the same age. The PPVT demonstrated acceptable levels of test–retest reliability and split-half reliability, and

Table 1
Means, standard deviations, and analysis of covariance (ANCOVA) results for absolute home–school difference scores as a function of child race/ethnicity, with maternal education as covariate.

	Euro American			African American			Latino(a)			ANCOVA
	M	SD	n	M	SD	n	M	SD	n	F
Authoritarian beliefs ($n = 310$)	.58[a]	.49	145	.75[b]	.52	89	.62	.40	76	2.27[+]
Socialization practices ($n = 239$)										
Support	.97	.68	108	.95	.64	69	.97	.63	62	0.11
Control	.76	.58	108	.90	.75	69	.70	.55	62	1.23

Note: Different superscripts indicate a statistically significant mean difference.
  [+] $p < .10$.

has been strongly correlated with other measures of receptive language, achievement, and intelligence (Chow & McBride-Chang, 2003; Dunn & Dunn, 1997). The Oral Expression Scale from the Oral and Written Language Scale (OWLS) was used to assess children's understanding and use of *expressive vocabulary* (Carrow-Woolfolk, 1995). Raw scores were converted to standardized scores ($M = 100$, $SD = 15$), and according to the measure's author the test–retest reliability was 0.86 for children 4–5 years of age. The measure's author also reported correlations between the OWLS and other tests of achievement that ranged from 0.44 to 0.89. The Woodcock-Johnson—III Test of Achievement, Applied Problems sub-test was used to measure children's applied problem solving skills, including *basic math* skills such as counting, numeracy, comparisons, and word problems (Woodcock, McGrew, & Mather, 2001). Raw scores were converted to standardized scores ($M = 100$, $SD = 15$) that reflected each child's performance relative to the expected performance of children in the population who were the same age. This sub-test demonstrated high internal consistency and positive correlations with other measures of academic achievement in past research (Woodcock et al., 2001).

3. Results

Results from descriptive statistics are first presented, focusing first on the absolute difference scores between parents and teachers and then examining patterns across racial/ethnic groups. Frequency data from the directional, categorical indicators are then presented, again followed by racial/ethnic comparisons of these categorical data. Two approaches to regression analyses are summarized, testing the extent to which parent and teacher match and mismatch on authoritarian beliefs, support practices, and control practices during Pre-k predicted the social and academics skills children had developed by the time they entered kindergarten. Maternal education (used as our indicator of SES) and child race/ethnicity (African American and Latino are dummy codes with Euro American as the reference group) were used as covariates in the regression analyses to examine whether home–school match was associated with child outcomes independently of SES and race/ethnicity. Finally, to clarify the extent inferences made about the effects of home–school match may simply be attributable to the effects of beliefs and practices independent of match, we report the results of regressing authoritarian beliefs, support, and control by themselves on readiness skills.

3.1. Patterns of home–school match across racial/ethnic groups

3.1.1. Absolute home–school differences

Absolute difference scores were calculated between parents and teachers on socialization beliefs and practices, after centering each variable at the sample mean. These scores indicated the magnitude of the discrepancy between the parents and teachers, without regard to who was higher or lower on the measure. Absolute difference scores averaged .64 ($SD = .48$) for authoritarian beliefs (range = .02–2.17), .97 ($SD = .65$) for support practices (range = .01–2.84), and .79 ($SD = .63$) for control practices (range = .00–3.87).

3.1.2. Absolute home–school match by race ethnicity

Table 1 shows mean absolute difference scores for Euro American, African American, and Latino families. Analyses of covariance, controlling for maternal education, examined whether these absolute difference scores for authoritarian beliefs, control practices, and support practices were different across racial/ethnic groups. Results indicated that there was a non-significant trend toward racial/ethnic groups differing in the level of home–school match for authoritarian beliefs, but not for support and control practices. Post hoc comparisons revealed that the effect was accounted for by the differences between Euro Americans and African Americans. Specifically, African American parents' authoritarian beliefs tended to be less similar to that of their children's teachers when compared to Euro American parents, but Latinos did not differ significantly from either group.

3.1.3. Directional index of home–school match

Table 2 presents data on the categorical approach to measuring home–school match. This approach to assessing match added the element of directionality and provided information about whether parents or teachers scored high (scores above

Table 2
Frequency of home–school match and mismatch categories in the whole sample.

	Low parent/low teacher, n (%)	Low parent/high teacher, n (%)	High parent/ low teacher, n (%)	High parent/high teacher, n (%)
Authoritarian beliefs	83 (26.8)	55 (17.7)	76 (24.5)	96 (30.9)
Socialization practices				
Support	52 (21.8)	56 (23.4)	64 (26.8)	68 (28.5)
Control	70 (29.3)	34 (14.2)	52 (21.8)	83 (34.7)

Table 3
Frequency of home–school match and mismatch categories by child ethnicity/race.

	Low parent/low teacher			Low parent/high teacher			High parent/low teacher			High parent/high teacher			$\chi^2(6)^a$
	EA	AA	L	EA	AA	L	EA	AA	L	EA	AA	L	
Authoritarian Beliefs, n (%)	60 (41)	12 (14)	11 (14)	29 (20)	11 (12)	15 (20)	23 (16)	32 (36)	21 (28)	33 (23)	34 (38)	29 (38)	39.17[*]
Socialization practices													
Support, n (%)	23 (21)	21 (30)	8 (13)	18 (17)	17 (25)	21 (34)	36 (33)	13 (19)	15 (24)	32 (29)	18 (26)	18 (29)	13.39[*]
Control, n (%)	45 (41)	9 (13)	16 (25)	17 (16)	8 (12)	9 (15)	24 (22)	17 (25)	11 (18)	22 (20)	35 (51)	26 (42)	25.79[*]

[a] *Note*: Six degree of freedom Chi-squared test of association between categorical variables of race/ethnicity (3) and home–school match and mismatch categories (4). EA = Euro American; AA = African American; L = Latino(a). The percent are calculated by ethnic group. For example, the percent recorded for European American in the low parent low teacher group is obtained by dividing the number of Euro American in that group by the total number of Euro Americans.

[*] $p < .05$.

the median) or low (scores below the median) on the measures. In the categorical approach, parent–teacher pairs were classified into one of four groups: low parent–low teacher (low–low); low parent–high teacher (low–high); high parent–low teacher (high–low); or high parent–high teacher (high–high). A match was said to occur if the pair fell in the low–low or high–high categories; mismatch occurred when the pair was categorized as low–high or high–low. For authoritarian beliefs and control practices, the most common patterns were the two match categories (high–high and low–low). For support practices, the distribution of types was fairly even across the four categories.

3.1.4. Directional indicator of home–school match by race/ethnicity

Table 3 displays data on racial/ethnic group differences in the frequencies of assignment to the two match and two mismatch categories noted above. Chi-square analyses revealed significant racial/ethnic differences in the distribution of parent–teacher match and mismatch of authoritarian beliefs ($\chi^2(6) = 39.17$, $p < .05$), support ($\chi^2(6) = 13.39$, $p < .05$) and control practices ($\chi^2(6) = 25.79$, $p < .05$). For authoritarian beliefs, Euro Americans were most commonly in one of the two matched categories (64%) with most in the low parent–low teacher category. About half of African Americans and Latinos were in one of the matched categories. However, most of this group (38% and 38%, respectively) was in the authoritarian parent–authoritarian teacher classification. For support practices, Euro Americans were most often in the high–parent, low–teacher or high–parent, high–teacher categories. African Americans were fairly evenly distributed across categories, though most often in the low–parent, low–teacher group. Latinos were most often in the low–parent, high–teacher support category. For control practices, Euro Americans were most commonly in the low–parent, low–teacher category. However, the opposite was true for African Americans and Latinos who were most often in the high–parent, high–teacher category for control.

When we turned to questions about which racial/ethnic groups matched more closely the perspective and practices of teachers, we found that the pattern was more complex than when we looked at absolute difference scores. Euro American parents were most similar to their children's teachers in endorsing few authoritarian beliefs and using few control practices. The parents of African American and Latino children were also similar to their children's teachers but in a different way than the match observed for Euro Americans. African American and Latino parents and their children's teachers were more often in agreement in endorsing strong authoritarian beliefs and frequent control practices than Euro Americans parents and their children's teachers. Thus data in Table 3 reveal contrasting experiences of children by ethnicity. European American children were more likely to have parents and teachers who held child-centered beliefs, provided support, and exerted low control. In contrast, African American and Latino children were more often with parents and teachers who were more likely to hold authoritarian beliefs and exhibit high control and low support.

3.2. Association of Pre-k home–school match/mismatch with kindergarten readiness indicators

Two sets of regression analyses were used to test the extent to which parent and teacher match and mismatch on authoritarian beliefs, support practices, and control practices during Pre-k predicted the social and academics skills children had developed by the time they entered kindergarten. The first set used the absolute difference score to represent home–school match, whereas the second set used the directional home–school match/mismatch categories as predictors. Social com-

Table 4

Regression analyses for match and mismatch of parent and teacher authoritarian beliefs about raising children in relation to kindergarten competence.

	Social competence	Problem behaviors	Receptive vocabulary	Expressive vocabulary	Math skills
Covariates, ΔR^2	.06	.06	.24*	.20*	.10*
Maternal education	.24*	−.26*	.22*	.25*	.23*
African American	−.08	.07	−.35*	−.22*	−.15*
Latino	.01	.01	−.21*	−.18*	.03
Reported beliefs, ΔR^2	.00	.00	.01	.02$^+$	.01
Low parent, high teacher	−.02	−.01	−.09	−.11$^+$	−.07
High parent, low teacher	.04	−.06	−.14*	−.15*	−.10
High parent, high teacher	.03	−.05	−.12$^+$	−.17*	−.05
Total R^2	.06	.06	.25	.22	.11

Note: Standardized betas are reported, $n = 310$.

* $p < .05$.
$^+$ $p < .10$.

Table 5

Regression analyses for match and mismatch of parent and teacher support in interactions with children in relation to kindergarten competence.

	Social competence	Problem behaviors	Receptive vocabulary	Expressive vocabulary	Math skills
Covariates, ΔR^2	.06*	.06*	.20*	.18*	.09*
Maternal education	.20*	−.22*	.24*	.29*	.23*
African American	−.06	.03	−.30*	−.21*	−.15*
Latino	−.02	−.05	−.23*	−.16*	.09
Observed support, ΔR^2	.04*	.02	.02	.02	.01
Low parent, low teacher	−.21*	.15$^+$	−.15*	−.13$^+$	.06
Low parent, high teacher	.03	.02	−.06	−.16*	−.03
High parent, low teacher	−.03	.04	−.08	−.11	−.01
Total R^2	.10	.08	.22	.20	.10

Note: Standardized betas are reported, $n = 239$.

* $p < .05$.
$^+$ $p < .10$.

petence, behavior problems, receptive vocabulary, expressive vocabulary, and math in kindergarten served as dependent variables. All models controlled for both maternal education and the child's race/ethnicity.

The first set of three regressions examined the association between the absolute difference scores and each outcome. Across all 15 models, the absolute difference between parent and teacher authoritarian beliefs, support practices, and control practices was not significantly related to any of the kindergarten outcomes.

The second set of regressions examined whether the directionality of match mattered in predicting children's kindergarten readiness. Three dummy variables were entered into each regression equation to represent home–school match and mismatch categories; the reference group for authoritarian beliefs and control practices was low parent, low teacher while the reference group for support practices was high parent, high teacher.

3.2.1. Authoritarian beliefs

Table 4 presents the results of the regression analyses for authoritarian beliefs. Three demographic covariates were entered in step one. Maternal education was significantly related to all four outcomes tested. Higher maternal education was associated with lower problem behavior ratings and higher receptive and expressive vocabulary and ratings of social competence. The three dummy variables for match and mismatch were entered in the second step. Significant main effects of match and mismatch categories for authoritarian beliefs were found on receptive and expressive vocabulary, but not on the other three child outcomes. The pattern was similar across these two models; children whose parents and Pre-k teachers were both low in their authoritarian beliefs (the reference group) had higher receptive and expressive vocabulary scores in kindergarten compared to children who experienced high parent, low Pre-k teacher ($\beta = -.14$; $\beta = -.15$, p's $\leq .05$) and high parent, high Pre-k teacher combinations ($\beta = -.12$, $p \leq .10$; $\beta = -.17$, $p \leq .05$). In addition, for expressive vocabulary, children in the low parent, high teacher category also had lower kindergarten scores than the reference group ($\beta = -.11$, $p \leq .10$).

3.2.2. Support practices

Table 5 presents the results of the regression analyses for support in interactions with the child. These regressions and those below for control used the same approach employed for authoritarian beliefs. The analyses control for the effects of maternal education and child ethnicity by entering the three demographic covariates in the first step and the effects of the three match variables and tested in the second step. Significant or trending main effects of match and mismatch categories for support practices were present on all child kindergarten outcomes, except math skills. The pattern was similar across these models; children whose parents and Pre-k teachers were both high in their support practices (the reference group) had

Table 6

Regression analyses for match and mismatch of parent and teacher control in interactions with children in relation to kindergarten competence.

	Social competence	Problem behaviors	Receptive vocabulary	Expressive vocabulary	Math skills
Covariates, ΔR^2	.06[*]	.06[*]	.20[*]	.18[*]	.09[*]
Maternal education	.22[*]	−.24[*]	.24[*]	.29[*]	.20[*]
African American	−.01	.02	−.23[*]	−.17[*]	−.06
Latino	.04	−.07	−.19[*]	−.15[*]	.11
Observed control, ΔR^2	.03[+]	.01	.05[*]	.03[*]	.08[*]
Low parent, high teacher	−.04	−.05	−.05	−.13[+]	−.13[+]
High parent, low teacher	−.09	.04	−.18[*]	−.15[*]	−.31[*]
High parent, high teacher	−.21[*]	.06	−.26[*]	−.22[*]	−.29[*]
Total R^2	.09	.07	.25	.21	.17

Note: Standardized betas are reported, $n = 239$.

[*] $p < .05$.
[+] $p < .10$.

Table 7

Regression analyses for parent and teacher authoritarian beliefs predicting kindergarten competence.

	Social competence	Problem behaviors	Receptive vocabulary	Expressive vocabulary	Math skills
Covariates, ΔR^2	.06[*]	.06[*]	.24[*]	.19[*]	.09[*]
Maternal education	.23[*]	−.24[*]	.25[*]	.30[*]	.26[*]
African American	−.08	.06	−.38[*]	−.26[*]	−.16[*]
Latino	−.02	.01	−.23[*]	−.21[*]	.02
Beliefs, ΔR^2	.002	.00	.02	.20[*]	.01
Parent	.06[+]	−.05[+]	−.16[*]	−.15[*]	−.08
Teacher	−.01	−.00	.03	−.07	−.03
Total R^2	.06	.06	.26	.29	.10

Note: Standardized betas are reported, $n = 286$.

[*] $p < .05$.
[+] $p < .10$.

more social competence ($\beta = -.21$, $p \leq .01$), fewer behavior problems ($\beta = .15$, $p \leq .10$), and higher receptive ($\beta = -.15$, $p \leq .05$) and expressive vocabulary ($\beta = -.13$, $p \leq .10$) scores in kindergarten compared to children who experienced the matched category of low parent, low Pre-k teacher. In addition, for expressive vocabulary, children in the low parent, high teacher category also had lower kindergarten scores than the reference group ($\beta = -.16$, $p \leq .05$).

3.2.3. Control practices

Table 6 presents the results of the regression analyses for control. The results for the first step testing the effects of the covariates were the same as in the regressions for support and authoritarian beliefs. In the second step, significant main effects of match and mismatch categories for control practices were present on all child kindergarten outcomes, except problem behaviors. Patterns were generally similar across these models. First, children whose parents and Pre-k teachers were both low in their control practices (the reference group) had more social competence ($\beta = -.21$, $p \leq .05$) and higher receptive vocabulary ($\beta = -.26$, $p \leq .001$), expressive vocabulary ($\beta = -.22$, $p \leq .01$), and math skills ($\beta = -.29$, $p \leq .001$) in kindergarten compared to children who experienced the matched category of high parent, high Pre-k teacher. Second, children whose parents and Pre-k teachers were both low in their control practices had higher receptive vocabulary ($\beta = -.18$, $p \leq .05$), expressive vocabulary ($\beta = -.15$, $p \leq .05$), and math skills ($\beta = -.31$, $p \leq .001$) in kindergarten compared to children who experienced the mismatched category of high parent, low Pre-k teacher. Finally, for expressive vocabulary ($\beta = -.13$, $p \leq .10$) and math skills ($\beta = -.13$, $p \leq .10$), there was a trend toward children in the low parent, high teacher category also having lower kindergarten scores than the reference group.

In order to examine whether regression results were sensitive to how the home–school match and mismatch categories were created, we ran a supplementary set of analyses using directional categories that were created from splitting parent and teacher measures at the sample mean. These additional regressions using the mean-splits paralleled the regression analyses reported above. It is important to note that the pattern of these findings paralleled those reported below, lending confidence to the final match/mismatch categorizations.

Up to this point, we have tested the effect of match on authoritarian beliefs, support, and control on school readiness. To test whether authoritarian beliefs, support, and control are related directly to these outcomes, we computed a series of hierarchical regressions for each outcome. Ethnicity and maternal education were entered in the first step and the parent and teacher version of each measure. Tables 7–9 present the models for authoritarian beliefs, support, and control, respectively. Each of the models is significant and striking in their consistency. Across the models, parents' beliefs and practices significantly predict readiness skills but teachers' do not. Parent authoritarian beliefs predict receptive language ($\beta = -.16$, $p \leq .01$) and expressive language ($\beta = -.15$, $p \leq .05$). Support predicts social competence ($\beta = .12$, $p \leq .10$) problem behavior

Table 8
Regression analyses for parent and teacher support score predicting kindergarten competence.

	Social competence	Problem behaviors	Receptive vocabulary	Expressive vocabulary	Math skills
Covariates, ΔR^2	.06[*]	.06[*]	.19[*]	.18[*]	.09[*]
Maternal education	.23[*]	−.24[*]	.26[*]	.31[*]	.23[*]
African American	−.07	.05	−.31[*]	−.23[*]	−.15[*]
Latino	−.01	−.06	−.22[*]	−.17[*]	−.18
Observed support, ΔR^2	.02[*]	.02	.02	.03[*]	.00
Parent	−.12[+]	.05[+]	−.11[+]	.17[*]	.03
Teacher	.08	−.07	−.09	.05	−.01
Total R^2	.08	.08	.21	.21	.09

Note: Standardized betas are reported, $n = 239$.
  [*] $p < .05$.
  [+] $p < .10$.

Table 9
Regression analyses for parent and teacher control score predicting kindergarten competence.

	Social competence	Problem behaviors	Receptive vocabulary	Expressive vocabulary	Math skills
Covariates, ΔR^2	.05[*]	.06[*]	.20[*]	.18[*]	.09[*]
Maternal education	.23[*]	−.24[*]	.26[*]	.31[*]	.23[*]
African American	−.067	.05	−.25[*]	−.23[*]	−.15[*]
Latino	−.01	.06	−.18[*]	−.18[*]	.08
Observed control, ΔR^2	.07[*]	.00	.04[*]	.02	.05
Parent	−.11[*]	.05	−.21[*]	−.14[*]	−.25[*]
Teacher	−.12	.05	.03	−.03	−.03
Total R^2	.12	.07	.24	.20	.12

Note: Standardized betas are reported, $n = 239$.
  [*] $p < .05$.
  [+] $p < .10$.

($\beta = .05$, $p \leq .10$), receptive language ($\beta = .11$, $p \leq .10$) and expressive language ($\beta = .17$, $p \leq .01$). Parent control is inversely related to receptive language ($\beta = −.21$, $p \leq .01$), expressive language ($\beta = −.14$, $p \leq .05$) and math ($\beta = −.25$, $p \leq .001$).

4. Discussion

4.1. Rates and patterns of home–school match and mismatch

This study began with questions about the prevalence of home–school match on beliefs and practices, about ethnic differences in prevalence, and about whether a match in Pre-k was associated with readiness skills by the time the child entered kindergarten. To address these questions, we used two measures of home–school match. The first was a continuous index of the absolute difference between parent and teacher on authoritarian beliefs, support practices, and control practices. The second was a categorical designation accounting for the source and direction of a mismatch on these measures. The absolute indicator permitted us to address the question as it is often formulated in the literature. The categorical indicator captured distinctions of direction and source that pointed to relations that were not detectable by the first.

Results for the absolute measure reveal modest differences between home and school on beliefs. With the categorical indicator, matches were observed on both practices and beliefs for more than half of children and were therefore more common than mismatches. For example, 26% of African Americans were mismatched with teachers on control strategies and 25% of Latino parents differed with teachers on support strategies. In addition, about half of Latinos and African American parents held beliefs about children and childrearing that were discrepant from their children's teachers. Although the rates of match were high, there were still large proportions of parents who differed from teachers. If one is permitted to describe the half-empty cup as half full, these data corroborated in a modest way ethnographic depictions of home–school mismatch and assertions of the cultural mismatch hypothesis that mismatch would be more likely for African Americans and Latinos than for Euro Americans.

4.2. Association of home–school match with kindergarten readiness indicators

Even though we have demonstrated the existence home–school match, the question remained about whether match mattered for children's kindergarten readiness. Answers to this question are less straightforward than answers to questions about ethnic differences in matches. When absolute differences between parents and teachers were considered,

home–school match was unrelated to children's kindergarten readiness. However, the directional, categorical approach reveals that children experience better outcomes when both parents and teachers hold child-centered beliefs, promote autonomy, and demonstrate warmth and support. Although the high rates of match may be heartening to those worried about cultural mismatch, it turns out the match is only half of the story. Contrary to the predictions of cultural mismatch, our data suggest that the match between home–school does not guarantee good outcomes for children. When both parents and teachers are adult-centered, controlling, and unsupportive, children attained lower scores on the readiness indicators. This suggests that the distances between home and school on beliefs and practices is not the critical factor. Our results challenge the assumption that home–school mismatch is adverse and match is beneficial. To the contrary, match is not always advantageous for children; mismatch, not always disadvantageous.

Match is advantageous to children when parents and teachers are similar in espousing child-centered beliefs, promoting autonomy, and responding to children with sensitivity and warmth. However, when parents and teachers match on control and authoritarian beliefs, child outcomes are not optimal. This is important for several reasons. First, it should be noted that the most prevalent configuration of home–school relationships for ethnic minority children was a home–school match on an inauspicious combination of authoritarian beliefs and controlling behavior. Explanation for the prevalence of this match lies in several factors. Parents, when they have a choice of preschool programs, may opt for those with staff that reflect their own views about how children should be disciplined and socialized. These programs may be judged to be of higher quality because they reflect parents' own values around order, adult control, and absolute obedience in socializing their children (Barbarin, 2006). Moreover, some teachers come to believe that they serve ethnic minority children better by strict discipline, frequent correction, imposing order and discipline even at the cost of autonomy and self-expression. Our data suggest that a mismatch on control and authoritarian beliefs may be more advantageous for children than a match on these beliefs and practices.

As noted above, the primary focus of this report was on the prevalence of home–school match and its relation to children's school readiness. However, several other findings emerged from the data that are so compelling in their implications that they deserve further discussion. First, authoritarian beliefs, support, and control practices are important in themselves. Data in this study support the notion that child-centered beliefs, respect for child autonomy and support facilitate the development of children's language, literacy and social competence. Experiences with child-centered, highly supportive, and less control-oriented adults, across home and school, are associated with school readiness. These qualities are important independent of the match between home and school on these dimensions. As a consequence, they deserve to be underscored in professional development and family support programs.

Note that the beliefs and practices of parents were more predictive of early academic and socio-emotional skills but those of teachers are not. Even when home–school match was examined, highly authoritarian beliefs, low support, and high control showed notable effects on readiness but the pattern suggested this was largely due to parents. If parents were authoritarian, high in control, and low in support, the status of the preschool teacher on these dimensions was unrelated to outcomes. Stated differently, the teachers' beliefs and practices – good or bad – were less predictive of child outcomes when parents exhibited practices and beliefs that were sub-optimal. To be clear, these findings say more about the importance of parents than the unimportance of preschool teachers. Why might this be the case? The most obvious explanation is that the parent has had considerably more time to influence child development than the preschool teacher. If this is true, the impact of teacher practices and beliefs on child outcomes will be more evident as the child progresses through school. Moreover, the domains assessed in this study are related to non-instructional practices and beliefs. Perhaps the teacher's influence may be more pronounced in the quality of instructional practices than in the socialization practices assessed here. In any event, these data underscore the critical importance of interventions such as Early Head Start and family support programs that strengthen parental practices beginning early in the child's life.

4.3. Practical implications

The question of home–school match is likely to be with us as an issue for some time. Demographic data indicate that the overwhelming majority of kindergarten teachers are Euro American women (National Center for Education Statistics, 2004, 2009). Ninety-eight percent of kindergarten teachers are women, while 85% are Euro American, 8–9% are African American, and 5% are Hispanic (National Center for Education Statistics, 2000). Moreover, the teacher workforce in elementary schools is more demographically homogenous than in Pre-k, presenting even greater potential for disparity between home and school for racial/ethnic minority students as they move into elementary schools (National Center for Education Statistics, 2004, 2009).

Home–school match/mismatch is not just an academic or theoretical issue; it has practical significance for the lives of children, families, and the early childhood programs that serve them. The issues surrounding home–school match play out in the difficulties that arise in the relationships between parents and program staff, especially those that result in impediments to effective communication. Home–school match may influence the perception of acceptance or disapproval, that parents experience when they visit the school. Importantly, issues in home–school match can affect how fully parents embrace their roles as collaborators with staff in the preparation of their child for school and for life. Home–school mismatch may take the form of staff discomfort over physical punishment or other strategies parents use to discipline their children. In the case of African American and Latino children, teaching staff and parents often concur on approaches to discipline. However, in some instances, teachers may approach the issue of parental approaches to discipline with ambivalence. Parental strategies may

be at odds with what teachers come to believe is appropriate. Knowing what to do with this disagreement and ambivalence is not ever easy.

Many efforts are under way to bridge the gulf that separates home and school. At the state level, early childhood policy makers have promulgated program quality standards that encourage cultural competence training and respect for cultural diversity by staff. In states such as California, cultural competence training has been included as part of the requirements for credentialing teaching staff. Professional development programs often translate these mandates into learning about the culture, practices, and history of diverse groups. Although these strategies are helpful, they do not address the problem in its entirety.

Perhaps the most important lesson for cultural competence training is that it should focus on awareness of differences, not on imitation in an effort to reduce differences. Teacher understanding of and respect for differences may be more important and in the long run more effective than half-hearted attempts to compromise and change one's deeply held beliefs. Nevertheless a disagreement over beliefs and practices is no excuse for disrespect. Finally, aiming to increase home–school match as a panacea for reducing underachievement of ethnic minority children may be misguided, especially if it involves double doses of bad medicine such as high control and low support. Match on the wrong qualities in the long run are likely to prove detrimental to children's development.

4.4. Limitations and future research

This report represents a modest effort to test the idea of home–school mismatch. It relies on admittedly limited measures of constructs, such as control, whose richness might be tapped more fully by a broader range of assessments. And, though the directional approach to conceptualizing and assessing home–school match and mismatch holds promise, the data-driven, median split approach used in this study requires further replication and corroboration in other data sets. The robustness and generalizability of the answers this study provides on the prevalence and effects of home–school match therefore have some limitations and cannot be treated as conclusive. They are but a start in accumulating evidence about the prevalence of home–school match and its association with young children's early school success.

Testing the effects of home–school match and mismatch in a Pre-k sample offers both advantages and disadvantages. On the one hand, a strength of this sample is that it occurs at a time of the transition between home and school when match and mismatch issues may matter most. Given the inclusion of programs from states which provided universal access, it also offers a diverse group of low-income children that are typical of children served in public school settings. Then again, the sample is limited by the fact that it does not include preschool-aged children who do not enroll in Pre-k programs and whose home life may be at the extreme end of incompatibility with schools.

Because the children for this sample were drawn from publicly sponsored Pre-k programs, over 50% of the children are from poor households and consequently at high risk of school difficulty. Because this report is based on the children whose parents agreed to be interviewed, they are less representative than the larger NCEDL sample. In particular, there are fewer low-risk Euro American children in the sample, and as a consequence, our estimates of mismatch may be low; so, further research is needed with larger, more nationally representative samples. Additionally, the context for assessing parent and teacher socialization practices differed. Parents were observed for approximately 1 h in structured teaching and unstructured play tasks with a single child. Teachers were rated during observations that took place over 2 days and were based on interactions with children in the entire classroom. Future work will benefit from careful development and selection of belief and observed practice measures directly comparable across home and school settings. Another limitation is the fact that the current design does not permit us to clarify the processes or mechanisms through which lack of match may lead to problems in skill development. A final limitation is the inability to test the question of whether ethnic match between staff and family influences cultural mismatch. There were insufficient numbers to test this question. Future studies with large national samples might test this question. Another important next step is to design research that tests more specific, process-oriented hypotheses about home–school match, such as whether match and mismatch may affect teacher–parent relations and in turn teachers' evaluations of children, as suggested in recent work by Hughes, Gleason, and Zhang (2005).

5. Conclusion

Educational attainment is undoubtedly valued across cultural communities. Nevertheless, ethnic groups and social classes vary in the practices they use to motivate achievement and nurture academic skills and the extent to which parents must balance their aspirations for children's school success with other life demands. The formation of supportive and well-aligned home–school relationships augurs well for early school adjustment (Taylor, Clayton, & Rowley, 2004). In other words, successful adaptation to school is predicated on a "good fit" between the dynamic entities of families, classrooms, and schools (Bowman, 2002). However, home–school match is not an absolute good. Rather, it bodes well for children's adaptation when the home–school match occurs within the context of high support for children. Given the increasingly diverse racial, ethnic, and cultural landscape of American families, the challenges faced by schools in educating the array of students who come through its doors continues to grow in complexity (Swick, Head-Reeves, & Barbarin, 2006). As a consequence of the growing demographic diversity of our nation's public schools, the issue of cultural match and mismatch will only increase in significance.

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