

A Conceptual Framework for Teacher-Child Relationships in Early Childhood

Shallu Sansanwal

Nanyang Technological Institute, Jurong West, Singapore

Teacher-child relationship is an important factor for the overall development of the child. It is also a reflector of child centred teaching practices, classroom quality and child outcomes. These relationships are influenced by many factors that are personal to teacher and child and are also related to the classroom environment. Positive teacher-child relationships develop warm and secure teacher-child bondings which are beneficial for the socio-emotional and academic success of the child. Dependent and conflictual teacher-child relationships are stressful for teachers and have a negative outcome for the child. This paper explores the literature to recognise the factors affecting teacher-child relationships and have proposed a conceptual framework to understand these relationships in ethnically and socioeconomically diverse classrooms. Literature has tried to define these relationships according to the attachment theory or through bio-ecological model of development thus ignoring the role of culture as a major factor in formation of these relationships. This paper used Bourdieu's theory of Capital, Field and Habitus and Contextual System Model of Pianta as theoretical framework and proposes Cultural Framework for teacher-child relationships.

Keywords: Teacher-child relationships, culture, teacher factors, child factors, early childhood, cultural framework

Introduction

Early childhood is a crucial period for the building blocks of development of child physically, cognitively, socially, and emotionally. During this period, the quality of early childhood education and programme offered to the children is very important as it impacts them a lot. The transition from home to school depends to a larger extent on the teachers' appropriate response to children's need in order to annihilate children's anxiety of separation from parents and coming to a new environment. In this new journey, the teachers are the most important agents of socialization. Some researchers compare teacher-child relationship to mother-child relationship at home (Pianta, Nimetz, & Bennett, 1997; Zhang & Sun, 2011). Teacher plays various important roles like guiding the child, soothing him/her when he/she is upset, providing safety, and reproofing him/her on misbehavior. Thus, this relationship has an ability to exert positive and negative influence on the child by regulating their emotional, social, and cognitive development. The relationships formed from the interactions between teacher and children in the classroom also play an important role in supporting children's adaptation to new challenges and demands in the classroom. This becomes more important to be understood and studied when teacher and children from diverse backgrounds come together in one classroom.

Teaching is defined as an “interactive and interpersonal process” (Amidon & Hunter, 1967). It is the most important mechanism of classroom experiences that affect the child development (Paro, Pianta, & Stuhlman, 2004). The relationships formed between teacher and child act as a regulatory system for the children’s overall development contributing to the academic and social competencies of the children in school (Pianta, 1999). Teachers are responsible for providing instructions, behavioral support, and the coping skills to the children in classroom.

Another aspect of teacher-child relationship is that they are not only dependent on the teachers but are bi-directional in nature and are affected by the emotions, experiences, competencies, and level of conflict or warmth perceived by the children with their teachers. These perceptions of closeness and conflict in a relationship by both teachers and children form specific pattern of behaviors that affect the academic, social, and emotional outcomes of the children (Howes et al., 2008; Pianta et al., 1997; Thijs, Koomen, & van der Leij, 2008). It has been reasoned that the externalising behavior in the late childhood is associated with the conflicting teacher-child relationships in early childhood. Also, low levels of closeness in teacher-child relationship have been found to be associated with the internalizing behavior in late childhood (O’Connor, Collins, & Supplee, 2012). Positive teacher-child relationships, on the other hand, can also help in mediating externalizing and internalizing behaviors during childhood.

Thus, teacher-child relationship can be defined as a process of formation of relationship based on interactions and characteristics of both teacher and child, where teachers aim to not only help child learning academic skills but also support in the children’s development of social, emotional, and behavioral competencies. These competencies enable the children to be academically and socially successful. These relationships are also affected by various factors associated with teacher and child. Before looking into these factors, it is important to understand various types of teacher-child relationship and their affect in classrooms.

Types of Teacher-Child Relationship

Past literature has not only supported the role of teacher-child relationships in young children’s development but has also recognized various pattern of interactions between teacher and child (Erickson & Pianta, 1989; Howes et al., 2008; Sroufe, 1989). Children and teachers come in contact with each other frequently in the classroom and each encounter forms a stable pattern of interaction between them. These patterns are unique as they give rise to expectations, begin to have quality for each teacher-child dyads, and over a period of time form the unique relationship between them (Hinde, 1987). Some of the major types of teacher-child relationships recognized in the past studies are:

Warm Teacher-Child Relationships

These relationships are marked with feelings of warmth, closeness, mutual trust, and sense of security between teacher and child. It is indicative of open communication, positive emotional climate of classroom, and positive interaction behavior (Mantzicopoulos & Neuharth-Pritchett, 2003). According to Gable (2002),

When children experience the security of supportive teacher-child relationship, they know that their basic needs will be met, are confident about their thoughts, feelings and ideas and have a foundation from which to explore and develop their own relationships with other children. (p.42)

Such kind of relationships are beneficial for the child as it motivates teachers to work closely with child and also helps child to elicit support and help from the teachers (Brich & Ladd, 1998).

Conflicting Teacher-Child Relationships

These relationships are marked by mutual anger and negativity in both teachers and children. It is viewed as a negative indicator of relationship quality (Hamre, Pianta, Downer, & Mashburn, 2008; Saft & Pianta, 2001; Thijs et al., 2008). Teachers, who view their students as conflicting in interaction, also perceive them as annoying and stressful to deal with and they exert more control towards them in the classrooms (Hamre & Pianta, 2001). The poor teacher-child relationships have been related to low levels of competence and job satisfaction and high levels of teaching stress in teachers (Koomen, Verschueren, van Schooten, Jak, & Pianta, 2012; Pianta, 1996). Teachers feel angrier and more helpless concerning the child they perceive as disruptive and have conflictual relationship (Split & Koomen, 2009).

Dependent Teacher-Child Relationships

These relationships are marked with over-reliance of children on teachers. They show intense and consistent proximity seeking behavior towards teachers and react negatively when separated from teachers (Pianta & Nimetz, 1991; Thijs et al., 2008). Teachers perceive children in dependent relationship as attention seekers who constantly require their help and reassurance. Children in dependent teacher-child relationship are also rated higher in disruptive behaviors by teachers. Teachers' perception of child's dependency on them is positively associated with the level of behavior regulation and level of socio-emotional support provided by teachers to them (Thijs, 2005). Dependent and conflicting relationships thus signify deficit that impedes children in their social functioning.

Teacher-child relationship has been studied by various disciplines with the aim of improving the learning experiences of the children in school. Various theoretical and empirical works have been explored to understand teacher-child relationships. This paper aims to present the conceptual framework relevant to study teacher-child relationship by exploring past researches identifying factors affecting teacher-child relationship and discussing these factors in the light of various frameworks. These findings will be considered for implication of impact of teacher-child relationship on both teacher and children.

Role of Culture in Classrooms

Culture is an important part of a human life. It is a lens with which individuals view other consciously and unconsciously (Gay, 2002). Family is the primary agent in transmitting cultural values, beliefs, and ideas (Garbarino, 1992). With the increasing number of working parents and rise in the number of nuclear families, pre-schools have become an influential socialization force (Robles de Melendez & Ostertag, 1997). Increase in cultural diversity in classrooms requires teachers to structure their learning experiences that will help students to be both academically and socially successful (Dean, 2016). Learning the rituals, gestures, or trick of persuasions are just the surface feature of any culture (Bartolomè, 1984). In classrooms, children from diverse culture are taught about what are acceptable culture practices in the given social context of the school. But further, the school culture is from the home culture less are the chances of child's academic success (Dean, 2013). The children, who feel accepted in the school culture, learn more effortlessly than the children, who go through acculturation process (Bourdieu & Passeron, 1990). Heath (1983) in her ethnography about the way for both teachers and students to mediate between home and school cultures found that the only way for the students to succeed academically and to be motivated to learn in mainstream school is when the boundaries between classroom and

home culture are erased and letting the children express their cultural patterns. Teachers have a huge responsibility to make transition of students easier in academic culture and, at the same time, increase their skills in moving between cultures.

The quality of teacher-child interaction contributes substantially to the effects on preschool education and early group care (Bowam et al., 2000). Culture again plays a prominent role in deciding the acceptable and non-acceptable behavior in children and also the degree to which a specific behavior can be encouraged or discouraged (Ladd, Birch, & Buhs, 1999; Lam & Pollard, 2006; Mashburn & Pianta, 2006). By the age of three years, young children can recognize racial clues but are not able to express their thoughts verbally. The attitudes and preferences formed in early childhood are reflected through children's body language and verbal communication. At an early age, most children make friends, who are similar in observable characteristics, such as age, sex, ethnicity, and behavioral proclivities. Even in preschool, they are more likely to choose play partners, who are similar in age, sex, ethnicity, and behavior (Lederberg, Ryan, & Robbins, 1986). Thus, knowledge of multiculturalism helps teachers to scrutinize and to decide between the choices that help the students to understand the kind of social information they are being conveyed (Goodwin, 1997). In early childhood, the teachers can influence the development of child and build in positive attitudes towards the children on various cultural groups (Karuppiyah, 2010). Thus, teachers should introduce young children to diversity of culture both the similarities and differences that hold them unique and united.

In playing such a pivotal role, teachers should also recognize their own beliefs and prejudices as they are role models for children. McIntyre (1997) and Valli (1995) in their studies reported that when White preservice teachers tend to use colorblindness as a strategy of coping with their ignorance about the cultural diversity in the classroom, they tend to bring along the stress and negative climate in their teaching practices. Their feeling of efficacy declines from pre-service to in-service stage (Pang & Sablan, 1998). Thus, it is important to realize that cultural diversity within classroom affects both teacher and child.

Importance of teacher-child relationship in early childhood can be well-established when we study the long-term effect of these relationships. Maldonado-Carreño and Votruba-Drzal (2011) studied these long-term correlations between teacher-child relationship quality and its effect on children's achievement and behavior problems. The study tracked children in kindergarten (age 4-6 years) through fifth grade (age 9-11 years). The result has reported that the teacher-child relationship quality is associated significantly with the behavior trajectories and academic achievement of the child. This study has emphasized that the importance of quality of the teacher-child relationship in child development is undebatable and it remains an important factor for children well-being even as the children get older.

Factors Affecting Teacher-Child Relationship

Reviews of the past studies have led to the recognition of various factors that affect teacher-child relationship. These include factors related to classroom system, family system, child temperament, and teacher and child personal characteristics.

Classroom System

Within a classroom, emotional climate and instruction support play a major role in the building up of teacher-child relationships (Brich & Ladd, 1998; Cassidy, L. L. Hestenes, Hegde, S. Hestenes, & Mims, 2005; Pianta, 1999; Hamre et al., 2008; Howes et al., 2008; Pianta, Steinberg, & Rollins, 1995).

Instructional Support

Instructional quality is one of the factors within classroom that affects the teacher-child relationships. The classrooms are places where the age appropriate and developmentally appropriate instructions have more positive and warmer teacher-child relationships (Mantzicopolus, 2005; National Institute of Child & Human Development Early Child Care Research, 2005). Also, classrooms where teachers use more frequent instructional dialogues between teachers and children give high levels of evaluative feedback and usually instruct small group at a time have more warm teacher-child relationships (Paro et al., 2004). Positive relationship, when combined by the high-quality instructional practices, can be more beneficial to the children as they motivate the children to meet new challenges in learning and help them to navigate successfully in the academically achieving classrooms. Instructional support provided by the teachers encourages higher order thinking as children learn new concepts. Constructive and specific feedbacks stimulate the child to learn more by his own motivation and experiences. There is evidence in literature that use of high level of instructional support and also use of appropriate language modelling by teachers help children build up their language ability that helps them to communicate better with their teachers (Battistich, Solomon, Watson, & Schaps, 1997; Bredekamp & Copple, 1997).

Whereas, if the instructional quality is not developmentally appropriate then positive teacher-child relationship will not be stimulating enough for the child to excel academically (Crosnoe et al., 2010; Curby, Rimm-Kaufman, & Ponitz, 2009). Thus, instructional support by the teacher is an important consideration in teacher-child relationship and their academic achievement and motivation to learn.

Emotional Climate

In classrooms that have positive emotional climate, more warm teacher-child relationship are found and teachers have greater appreciation for children's individual needs (Paro et al., 2004; Wentzel, 2002). Positive emotional climate also allows for high reciprocity between teacher and child interactions. It is found to have positive effect with minority students who might have earlier experienced conflictual relationships in other classrooms (Johnson, 2006).

In a study done by Curby et al. (2009), on 143 children followed across kindergarten through first grade, the high-quality of emotional support given by the first grade teachers was found to be associated with the faster growth in phonic awareness regardless of the achievement scores in kindergarten. It also highlights the point that high emotional support classroom interactions are not only beneficial for lower achieving students but are more influential for high achievers. In an emotionally supportive classroom, teachers foster positive climate, minimize the negative climate, and act sensitively to the individual needs. Teacher supports the child in his/her emotional and academic needs thus giving more freedom to children to express him/her and develop independently (Battistich et al., 1997; Kern & Clemens, 2007; Bredekamp & Copple, 1997).

Classroom Management

Classroom management usually includes actions taken by teachers for establishing order and engaging children to learn and cooperate in classroom. Doyle (1986) concisely referred to classroom management as, "The actions and strategies teacher used to solve the problems of order in the classroom" (p. 397).

Warm teacher-child relationships are found in the classrooms that are well-managed and teachers productively use the instructional time. One of the reasons for this can be the goodness of fit between teachers and

children and clear understanding between teacher and children both in terms of behavior and academic expectations (Emmer & Stough, 2001). In well-managed classrooms, teachers view children's engagement in class activities as a positive behavior and these classrooms tend to evidence more cooperation and prosocial behavior of students which are associated with warm teacher-child relationships (Donohue Perry, & Weinstein, 2003).

Secondly, in a well-managed classroom, teachers productively use their time and they have more time to interact and support children's needs thus, enabling them to maintain high-quality teacher-child relationships. This also helps the learning process of the children by increasing their own task focus and decreasing their disruptive behavior in the classroom (Emmer & Stough, 2001). Importance of classroom management on children's learning process is clearly documented in a study done by Bohn, Roehrig, and Pressley (2004) on first grade teachers ($n = 6$) in public and private school. The study reported teachers, who effectively engage students, establish the routines and procedures in the beginning of the school year. They offer more engaging activities and work more on literacy writing and reading skills to children. Specific feedbacks were given by them, which keeps children focused and motivated towards learning task. Teachers, in more managed classrooms, also indicated higher expectation from the students. Hence, classroom management plays an important role in establishing positive teacher-child relationships, which in turn benefits the overall outcomes of children.

Teacher-Child Ratio

Teacher-child relationships are impacted by the teacher-child ratio in classrooms as they impact the number and type of interactions teacher have with children. Children's demand to teacher in large group were not always met as teachers in order to cope up with all the children attended only to the request for help and rest are ignored (Schaffer & Liddel, 1984). Large number of children in a classroom makes it difficult for teacher to give individualized attention and form more positive and warm relationship (Pianta et al., 2005). Hyun-Joo et al. (2010), when investigated the individual experiences in the classroom found that higher level of global classroom quality was experienced in the classrooms with small group size. In such classrooms, teacher was able to engage every child fully in the available interactions and activities. These quality experiences of the children had also been found to be associated with the quality of teacher-child relationship. Teacher in classrooms with smaller groups perceived his/her relationship with children more positive and interactive. Teachers are also found to be more supportive in the social play situations in classroom where there is low teacher-child ratio (File & Kontos, 1993). Thus, teacher-child relationship is a factor that affects the teacher-child interactions and frequency of these interactions are important in formation of warm teacher-child relationships.

Personal Factors of Teachers

Teacher Sensitivity

Teacher's sensitivity is the teacher's ability to respond to the needs of young children. These needs can vary from being most basic to the complex ones and appropriate response can help in scaffolding the learning for children (Gerber, Whitebook, & Weinstein, 2007). It acts as a protective factor for high risk children if it is a part of positive teacher-child interaction (Pianta, 1999; Pianta & Stuhlman, 2004) as the relationship outside the family with a caregiver and individual (friend or teacher) was significantly predictive of resilient outcomes for children (Werner, 1996). Also, it has been established that early experiences related to teacher practices, socio-economic status, parental education, social environment etc., are linked to the cognitive functions and brain

development. These experiences have been found to bear implications on children's later resiliency, school readiness, behavior skills, and development of socio-emotional competencies. They are also responsible for child's vulnerability to psychological stressors (Farah & Nobel, 2005; Leckman, Mayes, & Cohen, 2002).

Teacher sensitivity has been identified as a key component of the quality of these classroom experiences (National Institute of Child & Human Development Early Child Care Research, 2005). Teacher sensitivity is the characteristic of the teacher that allows her to act in a more child-centred manner and rearrange the activities in the classroom in a way that is beneficial to the inattentive or disruptive child. Through these activities, teacher understands the emotions, expressions, and needs of children and in turn negotiates the emotional demands of children to achieve the objective of developing supportive relationship that is also academically competent to the child's development (Kontos & Wilcox-Herzog, 1997; Peisner-Feinberg et al., 2001; Pianta et al., 1997; Stipek, Daniels, Galluzzo, & Milburn, 1992). Thus, it becomes essential to understand how teacher's capacity to be available and responsive to children in school helps to attain positive outcomes for child.

Teacher sensitivity is the part of feedback and feed forward processes of teacher-child relationship (Pianta et al., 1997). The teacher's verbal and non-verbal communication with children gives them the clue about dos and don'ts, right and wrong of the classroom, and they react accordingly. Teacher sensitivity is not only an important factor in teacher-child relationship but is also an indispensable tool in children and their peer relations (Howes & Hamilton, 1994). The relationship developed by the teachers help students to explore peer and objects within classroom with confidence.

A study done by Rimm-Kaufman et al. (2002) on socially bold and socially wary kindergartens reported that socially bold children although showed more off task behavior and were prone to show more attention seeking behavior by talking and making requests to teacher, but these children with more sensitive teachers showed a better behavior in classroom. These children when placed with more sensitive teachers showed self-reliance, less off task behavior, and less negative behaviors than the socially bold children which were placed with less sensitive teachers. This study showed a significant correlation between the teacher sensitivity and social competence of the child (especially socially bold) along with supporting them to focus more on task and developing positive classroom adjustments. This study has certain limitation as the sample was predominantly white and families were from middle socio-economic status. For more generalized results, we need to see the interactions within more diverse classrooms. Also, the study did not report nature and sequence of interactions that lead to socially competent behavior.

Teacher Education

Teacher education (pre-service, in-service, and professional development) is an indicator to more positive teacher-child interactions and classroom qualities (Fontaine, Torre, Grafwallna, & Underhill, 2006). Teachers' education along with teachers' experience effects the way he/she handles the children in the classroom and thus form an important factor in developing the higher quality teacher-child relationships. Studies have reported that teacher education and support are important for establishing close teacher-child relationships to maximize the academic readiness of preschoolers and to help them to be socially adapted (Palermo, Hanish, Martin, Fabes, & Reiser, 2007).

Specialized teacher education in early childhood has proven positive outcomes for both teacher and children. More teachers, with specialized education in early childhood that tends to be more child-centered in their approach and uses less punitive methods towards the children thus, are more sensitive to individual child's need

(Early et al., 2007; Chung, Marvin, & Churchill, 2005; Heisner & Lederberg, 2011). Teachers, who become discouraged and disillusioned in their career, lack specialized education to perceive sensitively the effective classroom factors which contribute to their frustration and stress (Clark, 1988). The negative effect, stress, and low levels of self-efficacy are believed to be the factors associated with negative teacher-child relationship. Teachers, who experience high levels of stress and frustration in the classroom, are found to exhibit more anger and hostility in their interaction with the children in classrooms (Yoon, 2002). Thus, specialized education for the children is important decision from the policy point of view. Teachers with specialized education and feeling of high self-efficacy have reported more close relationship with children.

Teacher with degree in early childhood education are more flexible; more children-centered in their instruction approach in the classroom. They are more positive and respectful towards children and do not use harsh tone and punitive treatments to correct the misbehavior of children. Teachers with degree in early childhood education use more child-centered developmentally appropriate practices and allow children to resolve the problem and find a solution thus helping them to develop socially and cognitively (Chung et al., 2005). Children in such classroom were found to be more concerned and caring for each other.

Teacher Efficacy Beliefs

Teachers' efficacy beliefs about their ability to manage expected situations and learning of children influence their teaching abilities and their expectations of children. These perceptions of the early childhood teachers in their ability are an important factor in their ability to maintain positive teacher-child relationship (Stuart & Thurlow, 2000). Chung et al. (2005), in a study of 152 head teachers, investigated their relationship with 608 children (four children per teacher) and administered the Teacher Self Efficacy Scale and Student-Teacher Relationship scale in 60 preschools. They found that teacher efficacy showed a significant relationship with teacher-child relationship. The teachers, who were found to be high in teacher-efficacy, were also reported more positive teacher-child relationship.

According to Kagan (1992), these teacher beliefs about teaching and their efficacy in teaching are formed early in their career and are resistant to change. Teachers with low self-efficacy find it stressful to deal with children demonstrating challenging behaviors and have a low competency in influencing the change of behavior in children (Boulton, 1997; Chung et al., 2005). Thus, preparing of the teachers as agents of change begins with their understanding of their own beliefs and practices that drive important decisions and classroom practices (Pajares, 1992; Richardson, 1996).

Teacher Expectations

Teacher expectation is one of the most subtle and important influencing factors in the teacher-child relationship. Teacher's expectation of the child to be high achiever or low achiever in a way reflects the phenomenon of self-fulfilling prophecies (West & Anderson, 1976; Cooper & Tom, 1984, Clark, 1988, McKnow, 2013). Self-fulfilling prophecy has been defined by Merton (1948, p. 194), "the false definition of the situation evolving a new behavior which makes the originally false conception come true". Rosenthal and Jacobson (1968), in their book *Pygmalion in the Classroom*, described this through a classic experiment in which teacher's expectations were manipulated by administering intelligence test on the students and letting teachers believe that 20% of the students were expected to bloom academically and intellectually during the school year. In reality, the researchers randomly named the expected bloomers who had no relation with the test scores. Teachers by the end of school year described these students as happier, curious, appealing, better adjusted, and affectionate with a

greater chance of succeeding in life.

These expectations form different behavior by the perceiver and are conveyed by four factors as described by Four Factor Theory by Rosenthal (1973; 1974). The Factor one is climate, formed by non-verbal communication, like smiling, nodding more often, greater eye contact, and leaning closer to students. These all are created by the person holding the expectation (teacher) and create positive climate for higher expectation students and negative climate for low-expectation students (Chachin, Sigler, & Derlega, 1974; Rosenthal & DePaulo, 1979). As students are quick to decode these environmental clues and know whether they are in warm, caring and supportive positive climate or in a stressful negative climate which they want to escape both mentally and physically. This can be the beginning of the negative conflictual teacher-child relationship. Factor two is feedback that includes providing of affective and cognitive responses to the students. Teachers provide more praise and less criticism to higher expectation students than lower expectation children. This difference in the type and intensity of the feedback hinders the achievement of the overall goal in the low expectation students (Copper & Tom, 1984; Tauber, 1997). Factor three is the input difference in the expectation that refers to teachers devoting more time, energy, and educational resources to teach higher expectation students than low expectation students. This difference in input from the teacher is due to their thinking of higher expectation students as more deserving and justifying the difference in action by their expectancy bias. The fourth factor is the output which is marked by teacher's conscious effort to give more opportunities through verbal and non-verbal behavior to be more responsive in classroom for higher expectancy students. The higher the expectations from the student, the more they are encouraged to ask task related questions and seek more clarifications on the subject matter. Thus, giving them more chance to participate in the classroom activity and be constantly motivated to be task oriented (Tauber, 1997).

Teacher expectations are another major contributor to teacher-child relationships and academic achievement gap. Weinstein and Middlestadt (1979) reported in a study that children can perceive the difference in teachers' expectations from high and low achievers. Students perceived that teachers' expectation for high achiever were different, more demanding, and consisting of special privileges. In an study done by McKown and Weinstein (2002) in classrooms with culturally diverse population, it has found that the children perceived more differential treatment from the teachers and teachers expectations contributed to year end ethnic-achievement gaps. Thus, the children, who are the beneficiary of higher teacher expectation, benefit from greater exposure to higher quality of teacher-instructions. But the children, who are a part of stereotyped ethnic group, in face of low expectation may be increasingly susceptible to negative expectancy effect (McKnow & Weinstein, 2002). These different expectations lead to differential treatments and different pattern of interactions between teacher and children, thus impacting their teacher-child relationship and child outcomes.

Personal Factors of Children

Economic Factor

Literature has the evidence that economic status of the person also affects the teacher-child relationship. Less positive teacher-child relationships are usually reported in classrooms that have high percentage of children from below poverty line (Pianta et al., 2005; Nichd, 2003).

The classrooms with a greater number of children from low socio-economic status (low SES) group had lower quality; teachers lacked formal education in early childhood and held less child-centered beliefs. Low socio-economic status is also related to poor or delayed language development that affects the teacher-child

interaction in the classrooms (Pianta et al., 2005; Ladd et al., 1999). Even in Singapore where low, medium, and high socio-economic group children go to same kindergartens and are given equal opportunity to gain education (Lim, 1998; Sharpe, 1998), it was found that children in low SES group were at most risk at proficiency of mother tongue and English language than their peers from middle and high SES (Dixon, Wu, & Daraghmeh, 2012; Tai, 2019). This relationship of low SES in the teacher-child relationship becomes complex when ethnicity is taken into consideration. K. M. Murray, Waas, and C. Murray (2008) found that race has effect on teacher-child relationship and school liking. For lower socio-economic status (SES), positive relationship had the better outcomes for the child. These results have also supported various other studies indicating the importance of positive teacher-child relationship with at risk children (Huaqing Qi & Kaiser, 2004; Hyun-Joo et al., 2010; Justice, Cottone, Mashburn, & Rimm-Kaufman, 2008; Merritt, Wanless, Rimm-Kaufman, Cameron, & Peugh, 2012). Thus, support from teacher is equally important to act as protective factor against these socio-demographic factors. Quay and Jarrett (1986) compared the low SES children and middle SES children's interaction with their teachers. Teachers of low SES children had few verbal communications with them and teachers of middle SES children had more positive teacher teacher-child interactions. The negative teacher-child interactions were found to be significantly related to gender in middle SES children. Boys were found to form more conflictual relationship with teachers in middle SES children although such association was not reported for the low SES children.

Child Temperament

Temperament is a multidirectional behavioral construct involving genetic traits and environmental factors. Children's temperament is the result of two functions, the biological reactivity to the stimuli and the environmental regulatory response to the external stimuli (Rothbart, Posner, & Kieras, 2006). These functions synchronize with each other to produce a behavioral response in people. Both shyness and effortful control are behavioral response of children to the environmental stimuli that in turn affect the quality of teacher-child relationship.

Shyness

Shyness makes shy people respond to new and unfamiliar situations with more caution than their peers. In children, shyness is the function of reactivity. Children with high reactivity at age 14 to 21 months are found to show greater motor and vocal reactions to external stimuli (Kagan, Snidman, & Arcus, 1992). Such children at the age of 4 are found to be showing quite behavior, less social interaction, more on-looking behavior (like quietly observing the surroundings), and fear towards novel stimuli (Kagan & Snidman, 1998).

Although higher level of shyness is marked with low aggression and more empathy but shyness in children is also related significantly to internalizing behavior and social withdrawal (Olson, Sameroff, Kerr, Lopez, & Wellman, 2005). Shyness in children thus impacts their teacher-child relationship in preschool as it inhibits them to develop social competence.

Shyness reflects differently in girls and boys. Shy girls are more cautious of unknown person and shy boys are more vary of unknown situations at the age of two to three and half years (Kochanska, 1991). Preschool aged boys show more behavioral problems, internalizing and externalizing problems than girls and shy girls talk more to peers than shy boys in class (Rimm-Kaufman & Kagan, 2005). These behavior problems in preschool are more adverse for boys than for girls as teacher's perceive boys to be more in conflictual relationship than girls

(Coplan, Prakash, O'Neil, & Armer, 2004; Pianta & Stuhlman, 2004).

Effortful Control

Effortful control is considered as a subdominant response of the regulatory system of children's social behavior. Effortful control leads to suppression of the dominant response of being cautious to novice and unknown stimuli and situation and helps children to develop socially bold temperament.

Effortful control plays an important role in child's behavior in classroom and in turn his/her relationship with teachers and peers. High effortful control exercised by children in age groups between 5 to 10 years has reported to develop positive teacher-child relationship, is less likely to disrupt the class, and requires less intervention from the teachers (Blair, Denham, Kochanoff, & Whipple, 2004; Zhou et al., 2007).

Socially Bold Children

Socially bold children can be defined as those children who approach unfamiliar situations with ease. They may either be highly motivated and well-regulated in their approaches or are unable to inhibit their impulsiveness (Rimm-Kaufman et al., 2002). Although socially bold children are more socially active because of which they may be viewed positively by teachers but they can also be difficult to manage in a classroom and are more likely to speak out of turn or when not spoken too (Rothbart & Jones, 1998). Socially bold children, who show high impulsiveness and less self-regulation, have problems like externalizing behavior and difficulty in confronting to school settings (Caspi & Silva, 1995).

Behavior Problems of Children

Behavior problems are said to be associated with the relationship that children form with the teachers. When the child shows internalizing and externalizing behavior problems, it affects the teacher-child relationship (Hamre & Pianta, 2001; Howes et al., 2008). Children with high levels of externalizing and internalizing problems are more likely to develop conflictual relationship with teachers in classroom. Howes and Hamilton (1994) found that in preschool, the dependence on teachers and withdrawal behavior was significantly associated with low security and high dependence in teacher-child relationship. Antisocial behavior in the preschool is the predictor of negative teacher-child relationship later in elementary school (Birch & Ladd, 1998).

Since teacher-child relationship is bi-directional in nature, so the externalizing and internalizing behaviors of the children affect teacher-child relationship and vice versa. Pianta et al. (1995) also reported in their study that children who have negative relationship with their teachers in preschool usually demonstrates higher level of behavioral problems later in the elementary school. These children have also found to have lower level of competencies. Children who have more conflict in the teacher-child relationships are found to be less engaged in the classroom (Ladd et al., 1999) and they are at an increased risk of academic failure (Birch & Ladd, 1998). They have reduced liking towards school, but a supportive, secure teacher-child relationship can mitigate these effects. As secure and warm teacher-child relationships are related to more competent behavior in classroom and fewer behavior problems (Pianta & Nimetz, 1991).

Child Perception

Children perspective about their relationship with their teachers is also an important factor. The interaction with teacher leads to the formation of internal working model (IWM) as defined by Bowlby (1982) in attachment theory where the role of significant other is defined. The internalized models form the patterns of behavior that

shape the expectations, feelings, and behavior of child in teacher-child interactions, thus forming the relationship that is either having warmth and support or is conflictual from child's perspective (Pianta & Stuhlman, 2004) and will affect their outcomes accordingly.

Language Ability

Teachers are considered as vehicle of knowledge by which classroom interactions are delivered. Both teacher and child bring in their attributes in this relationship that interact with each other and make this relationship bi-directional (Saft & Pianta, 2001; Stuhlman & Pianta, 2002). Teacher forms ideas about children characteristics and attributes like "teachable children" or "difficult children" and thus the children, who do not meet these criteria, become at-risk children in academic and social development (Evans, 1992). Children with perceived or actual developmental delay in language ability are more likely to be reported by teacher as difficult and at risk academically and socially. Also, an attempt to communicate and to elicit speech from such children makes stressful relationship (Buss, Gingles, & Price, 1993; Keogh, 2003). On the other hand, lesser the language complexity more the problematic behavior is exhibited by children (Huaqing Qi & Kaiser, 2004).

Race and Ethnicity

Race and ethnicity are the part of our daily discourse. Children also inhabit this social world around us and are not color innocent. They form their own opinions and perceptions about peers, and people around them. The constant bias behavior of white children towards black children shows that children are not only aware of differences in race but are also notions of bias and stereotypes (Goodchild & Gloger, 2005; Simipson, 2007). Haney-Lopez (2003) reasons that race is a part of our very existence and racial ideas are generally seen operating within our sphere of common sense. These ideas usually inform our thinking and action and are seen as normal and natural in our life.

The works on Piagetian developmental theories by Aboud (1988) have shown that children in preschool are in preoperational stage and are egocentric and therefore, ethnocentric. They possess rudimentary knowledge of race based on the physical traits. It is thus a tool that children use to construct identities and establish interactions, dominant individual space or secure adult and peer attention. So, racism is not only about the ideas, patterns, behaviors, values, and structures, but it is also about how it reaches to the very sense of individual and shapes their identities (Connolly, 2002). Understanding the process of race and ethnicity in school, needs us to attend to the process and meaning. Images, words, and pictures that children and teachers encounter in the classroom do not themselves have a meaning and are interpreted according to individual experiences. But what is meaningful in this phenomenon is the meaning that student takes from the classroom talks, school rules, and relationship they form with these symbols. Everyone makes sense of their present from the past experiences in life; so the social framework plays an important role in self-identification and connecting with others (Ryan, 1999). Thus, in the classroom, ethnicity plays an important role not only in terms of ethnically sensitive materials being used but also how teachers and children of different culture interact and bond with each other. To further make these interactions between culturally diverse individuals the stereotypes also play a major role. These mental representations play a major role when culturally diverse group interact with each other. The stereotypes can be misleading judgments and can cause anxiety and stress when directed towards other individuals (McKnow, 2013; Ryan, 1999). These stereotypes can be associated to the economic capital of some ethnic group (Olson, Kinzler, Shutts, & Weisman, 2012) or with symbolic capital (Skiba, Michael, Nardo, & Peterson, 2002) or even in teacher-child interaction where the child ethnic background leads to the formation of different type of

relationship with teachers (Howes & Shivers, 2006). Thus, the factor like ethnicity is the factor that is a part of personal attributes of both teacher and child and related to their belief and expectation and plays a subtle part in classrooms. According to Bourdieu (1977; 1985), outward mannerism of the social status in children including culturally recognized way of behaving and language patterns, is often perceived by teachers as indicator of academic ability. Likewise Asian children are usually recommended as gifted students and are less likely to be reported as learning disabled (Donovan & Cross, 2002). Such differences in the teachers perception on the basis of social status and cultural differences serve as positive stereotypes (Alexander, Entwisle, & Thompson, 1987).

Race like gender comes with set of stereotypes and prejudices that can impact the perception of both teacher and child in forming positive teacher-child relationship (Grant, 1988). African American students are found to be rated higher in conflict with teachers especially if the teacher is White (Saft & Pianta, 2001). Kesner (2000) had also reported African American children as higher in dependency in teacher-child relationship than any other student of color. On the other hand, African American students did not relate their school liking to their teachers' behaviors or teachers race (Murray, Murray, & Waas, 2008; Murray et al., 2008). Teacher-child ethnic match usually moderates these differences especially if the relationships are conflictual in nature. Pigott and Cowen (2000) studied a group of African American and White children and teachers and reported child race as the strongest determinant of teacher judgment.

Stereotypes also play a major role in the feedback and feed forward processes of teacher-child interactions. Stereotype threats occur when the individual child's development gets hampered due to their awareness that the social group they belong to is not supposed to do well. This can lead them to the threat of negative stereotype about one's own group. Children's awareness of the fact that others are endorsing the stereotype belief on them helps them to get insight into other's social motives that can affect their ability to form relation with others (Spencer, Steele, & Quinn, 1999). In Singapore, Malay students are perceived to be doing poorly in math and have more academic achievement gap than other ethnic groups (Tan, 2007). These stereotypes that are formed around these students' performance can hinder their own confidence and make them nervous and anxious which in turn will affect their performance (Stipek & Daniels, 1988; Hartley & Sutton, 2013; McKnow & Weinstein, 2003).

Gender

Gender is also found to be one of the factors affecting teacher-child relationships. Many studies have shown girls to be having higher positive quality of teacher-child relationship than boys (Bracken & Crain, 1994; Howes, 2000; Pianta, 1999). The girls express less conflict and more closeness and thus indicating that teacher-child relationship has a different developmental significance for girls and boys. Different perspectives in the literature explain these differences. Some of the perspectives are, the gender role socialization, the academic perspective, and third the symbolic capital recognition by Bourdieu (1985) and Brubaker (1985). According to gender role socialization perspective (Ewing & Taylor, 2009), the sensitive nature of girls leads them to form more positive and closer teacher-child relationships. This factor is also accountable for greater impact of hindrance if the relationships are negative in nature. According to the academic risk perspective, children having poor academic skills and those, who are at risk are most vulnerable to their relationship with teachers and peers (Hamre & Pianta, 2001).

Gender as a form of capital has been explained by Bourdieu as "double and obscure" relation between habitus and social circumstances (field) from which it emerges (Bourdieu, 1985). According to Bourdieu, these

both perspectives are right in their own way as in this world we organize and define our social world into male and female and then associate certain characteristics with each of them. These characteristics form the basis of the dominant capital relating the individuals to the notion of masculinity and femininity. The girls and boys then strive to achieve these masculine and feminine capitals. Connolly (2002), while adapting the Bourdieu's theory for his work on racism, culture, and identity, explained that boys as they learn to be physically strong and street wise, they are predisposed to the notion of masculinity and thus are conditioned subconsciously to act, think, and behave in certain way. Becoming masculine thus get habitualized in one's everyday life and shapes one's identity and sense of self. Within the field of classroom, these capitals are present and individual assigns certain importance to each of the characteristics that in turn affect and define the interrelation between various individuals (adult and child).

Gender may also contribute to different types of relationship even in teacher-child relationship. Spilt, Koomen, and Mantzicopoulos (2010) showed that teachers reported more closeness and less conflict with girls thus indicating different perception of relationship by teachers for boys and girls. Girls, who have negative or conflicting relationship with teachers, are reported to be socially inhibited in classrooms. Boys are reported to be more aggressive if teacher perceive their relationship conflictual. Thus, poor teacher-child relationship is an indicator of adjustment problems and even peer rejection (Ladd et al., 1999). This also raises the questions about teacher expectations being different for both genders. Boys are taken for granted for being inattentive and destructive and this is argued by Bhana (2009) as male hegemony conception that leads teachers to believe in "rugged or mugger" boys. Teachers, who experience more conflicting relationship with boys, also give more disciplinary referrals to them (Saft & Pianta, 2001). High dependency on the teachers results into more negative long term academic and social consequences for boys than for girls (Pianta, 1999).

Relationship differences in gender are also accompanied by ethnic differences in teacher-child relationship. Gallagher, Kainz, Vernon-Feagans, and White (2013) reported that teachers' perception of their relationship with the children were influenced by children's behavior and literacy skills. They also reported that boys and African American students were more likely to have conflictual relationship with their teachers. And an important finding was that African American children had poor relationship with teacher despite controlling for behavior and literacy skills. Thus, ethnicity along with gender plays an important role in teacher-child relationship. Similar results about boys being rated more with behavior problems and forming more conflictual relationship with teachers especially the ethnic minority group boys were also reported (Graves and Howes, (2011). They also reported that when ethnic match between the teacher and children were taken into the consideration such differences were not seen. Ewing and Taylor (2009) revealed a significant gender differences in a study on teacher-child relationship. Girls were not only rated as higher in teacher-child relationship closeness but also in school competence. Boys, on the other hand, were reported higher on aggressive-hostile and anxious-fearful behaviors. Boys were also reported low on school competence and teacher dependency relationship in boys was associated with anxious-fearful behaviors. In boy's close, teacher-child relationship was related to lower hostile and aggression behaviors. It was found that girls benefited more from the teacher-child relationship closeness. This may be because young girls were more responsive towards teachers and thus benefit more from their instructions (Baker, 2006).

Theoretical Frameworks on Teacher-Child Relationships

Bio ecological Model of Development

Bornferberner and Morris (1998) viewed development of the child as interaction of the individual with environment and presented Bioecological Model of Development. He first presented the ecological model of development with five systems, namely: (a) microsystem; (b) mesosystem; (c) exosystem; (d) macrosystem; and (e) chronosystem. The centre of this model was microsystem, which is marked by direct interaction of the child with the social context. The child interacts regularly over a period of time, with family, peers, teachers, and school. These interactions are all direct and face-to-face interactions; they occur repeatedly and become more complex over the period of time. Enclosing the microsystem is the mesosystem that constitutes the linkages and experiences among contexts of microsystem like family and school, family and teachers, family and peers, individual and teachers, etc. Exosystem, on the other hand, is broader in nature and also affects the individual (child) and his social context (family, teacher, peers, and school). In this system, the child does not play an active role but the effect on him/her is indirect and bidirectional. Thus, the characteristics of the person functions are both as a product of development and as an indirect producer (Lerner & Busch-Rossnagel, 1981). The effect of culture, socio-economic status, and gender are enclosed in macrosystem. Hence, this system plays an important role in shaping child's belief and values. The most outward and distal effect is of chronosystem, which is marked by the effect of socio-historical events in human development. This system explains how the life processes change over the person's course of life. Bornferberner theory explains the interaction between the child and its social context and lays the foundation for understanding the complex nature of interactions of the individual and his environment.

Ecological and Dynamic Model of Transition

Another approach to study teacher-child interaction was given by Rimm-Kaufman and Pianta (2000) in their proposed Ecological and Dynamic Model of Transition. This model acknowledges the difficulties of transition of children into kindergarten and identifies child characteristics, direct and indirect effect of social context effects transition, and school outcomes of child. This model emphasizes that the transition to school is marked and defined by many changes in interactions among child, family, school, classroom, and community. An important characteristic of this model is that it is dynamic in nature and recognizes not only child's immediate experience in school in forming his/her relationships with teacher but also how parents, teachers, and children interact with each other and how these interactions bring dynamic change over a period of time. Along with the change in the interaction between child, family, teachers, and community over a period of time child age, cognitive and social development also brings in variance in the outcomes. This is explained by the difference a child faces at home and school. At home, his/her achievements are always evaluated in terms of how he/she did in relation to his/her past records. So, the response received is always positive. Whereas, once in school, child is evaluated in relation to other children in class in terms of his/her academic achievement, his/her emotions, ability to please teachers and make friends, and adjustment to the school culture, he/she also is subjected to the role of culture, gender, and class expectations and soon realizes that not all children receive same response from teachers.

These interactions become patterned over time and produce trajectories that are more or less fixed over time (Alexander & Entwisle, 1988). So, this stabilization of trajectories increases the likelihood of particular outcomes. If the experience and expectations contribute to the formation of strained and negative relationships between home and school, then these systems cannot work in coordination to produce positive outcomes for the child and thus affect his/her development negatively (Adelman, 1996). Thus, this model emphasizes that links between home and school are as important as home and school environment itself.

Attachment Theory Perspective

Another approach to the teacher-child relationship is based on attachment theory (Bowlby, 1982). This approach is based on the fact that there is continuity between the quality of childhood relationships and teacher-child relationship later in the school. According to attachment theory as child grows up, he/she forms attachment relationships with significant adults other than parents (Bowlby, 1984). These secure relationships with the secondary caregivers (teachers) can compensate for insecure attachment relationship with mothers. These secure relationships have long lasting effect on child's socio-emotional development and are characterized by actively seeking out for the attachment figures in time of stress (Ainsworth, 1989). Types of attachments to teachers are parallel to attachments formed between parents and children. Secure, avoidant, resistant, and near secure are the four types of attachment formed between the child and teacher (C. Bergin & D. A. Bergin, 2009). In secure attachment type relationship, the children trust their teachers and actively share their activities with teachers. In avoidant type of relationship, the child actively avoids teacher and does not seek him/her in his/her discomfort whereas in resistant attachment relationships the child is irritable, demanding and impatient with teachers. In nearly secure attachment relationship, child does not trust teacher but comply with classroom rules and activities. As in parent-child relationship, the secure teacher-child relationship leads to more socially competent children and children having distant or avoidant relationship with mothers usually form nearly secure or avoidant relationship with teachers (Howes & Ritchie, 1999). This model like Pianta has defined teacher-child relationship into various types but focuses more on this as an extension of parent-child relationship. According to this approach, teachers like mother's guide, soothe, and care for children in the school environment. But this approach lacks the dynamic factor of time in it. Relationships change and mature along with time as children understanding of social world and cognitive challenges change.

Proposed Conceptual Framework: Cultural Framework for Teacher-Child Relationships

The present conceptual framework model uses the Contextual System Model and Bourdieu's theory of "Habitus, Field, and Capital" to understand the teacher-child interactions and various factors that directly or indirectly affect these relationships.

Contextual System Model

Pianta (1999) proposed Contextual System Model (CSM) to describe how children do in school and how they form pattern of interactions and factors that affect these interactions. CSM is divided into two parts, child/family system and child/schooling system which are composed of different subordinate systems that interact with child and effects his/her development and in turn regulates activities with respect to one another and goal of schooling as denoted by the loop between the two system.

Child as a system

CSM depicts child/family are various subsystems (family, peer, and school) within the single system are referred to as "context of development". Thus, in a child/family system, child is linked to family which are then together linked to other contexts, like neighborhood, community, child care, extended family, peer group, cultural organizations, etc., that influence the behavior and adaptation of the child. Even at the family level, there are multiple factors like parent education, parental marital status, number of siblings, quality of home

environment and materials, and stimulations available at home that influence the development of child. At the level of child, these domains of development include cognitive, social, and emotional development. Child actively constructs meanings of his/her social world, adapts changes, seeks challenges, and thus emerges in capacities within the interaction with context.

School as a system

School is also associated with various subordinate systems and factors (like classrooms, peers, teachers, principal, school coordinators, school policy, etc.) that affect the development of the child. Within the boundaries of school, the child is influenced by peers and teachers, curriculum followed, programme available but within the domains of classroom the interactions are more oriented between teacher and child and to some extent peers. The classroom management by the teacher, instructional approach of teacher and appropriateness of material used in class, teacher sensitivity towards the need of child, grouping of children, rules and expectations clearly marked and conveyed to children, and structuring of classroom have been found to effect teacher-child interactions.

External factors affecting the school system are neighbors and community in which the school is located and on a broader level the larger systems embedded in culture and subculture of community like the government and educational policies affect the system.

According to Pianta (1999), teacher-child interactions in this dyadic relationship system are asymmetrical in nature. Child has not cognitively matured and thus, the teacher has more of the responsibility of maintaining and improving the relationship. Thus, the quality of these interactions and in turn relationships is shouldered to a large extent by the teachers. These relationships are also influenced by the teacher's belief and practices. These relationships with regular feedback processes during daily interactions form their own identity and involve the interaction of individual features (like heredity, gender, personality, developmental history, etc.) of both teacher and child.

Bourdieu's Theory of "Habitus, Field and Capital"

Pierre Bourdieu has described in his out of practice theory the concept of habitus, field, and capital that explains much of the human behavior especially in terms of culture and formation of cultural stereotypes. We are adapting the part of this framework to understand the role of culture in teacher expectations and interaction with child in teacher-child relationship and how it in turn affects the child outcomes.

Bourdieu's defined habitus as the way of individual approaching and reacting in a circumstance in accordance to one's past experiences (Bourdieu, 1977). According to him, individuals are free to act and think but their choices are constrained by their past knowledge and experience. A child might be free to make choice about how he/she reacts to a particular situation, but his/her possible range of choices is limited by what he/she knows from her/her past experience or observation of such situations. Habitus is thus history turned into the nature. As in words of Bourdieu (1977),

in each of us, in a varying proportion, there is a part of yesterday's man; it is yesterday's man who inevitably predominates in us, since the present amounts to little compared with the long past in the course of which we were formed and from which we result. (p. 79)

Thus, habitus unconsciously organizes our social experiences. It also helps us develop the way we develop and internalize the way we think, approach, and act in the social worlds. Thus, in short, we can say that habitus by

constraining our choices encourages us to think and behave in certain way.

Capital, on the other hand, has been defined as the materialistic and social gains by the individuals. Bourdieu had defined four types of capital. The economic capital marks the materialistic gain that a person acquires in his/her lifetime in Marxist sense. The cultural capital consists of knowledge by the individual about the legitimate ways of behaving in a society. It is marked by cultural values and can be used to attain respect and status in society. It helps person to exert more power and influence in the society. The third capital, as defined by Bourdieu, is the social capital which relates to gaining the resources via the relationship formed with significant others. It helps the person to elevate his/her social status and thus increase his/her self-perception of his/her worth and capabilities. The fourth kind of the capital is defined as symbolic capital. The symbolic capital basically leads to the honour and prestige and is acquired by attaining the other types of capital to be termed and recognized as legitimate by the others. Thus, these four types of capital are intertwined in a way that acquisition of one helps in acquisition of the others. For example, with acquiring of wealth, the person has more access to acquire higher quality education and thus gaining the cultural capital as well as social status. Others recognize this in turn by giving power and respect thus associating it with the symbolic capital.

The same theory applies to the relation not only found in social class but also in gender and race of individual. Boys are considered different from girls not only in their physical strength but also intellectual abilities (Connolly, 2002). Similarly, is the white dominance stereotype that is common in the society? White skin sometimes is represented as a symbolic capital and can influence the teacher-child relationship. Teacher may think under the symbolic capital influence that white children as being more intellectual and cognitively developed than black children thus bringing more educational opportunities for white than others. Black children may not be able to develop the trusting relationship with children as his/her perception of them is biased by the symbolic capital of white skin.

Field on the whole gives the dimension and context to theory where Bourdieu describes field as a special form of social arena where occurs a struggle to acquire specific form of capital. In words of Paul Connolly (2002),

The forms of cultural capital associated with femininity may be valued among a group of girls but will be decisively devalued among the group of boys. In the wider context of the classroom, being street-wise and aggressive may confer status on a boy among his peers but will signal trouble to a teacher, who may well adapt a punitive stance to this type of behavior. (p. 94).

Thus, field helps in distinguishing between the contexts where certain forms of the capital gains value and sense and where the same becomes devalued. So, field is a special arena where the struggle between the specific forms of capital takes place. Thus, when we are in school, it is particular field where the struggle is between the dominant type of cultural capitals like the “ideal pupil” (Bourdieu, 1985). Education, on the other hand, is considered as a process of transmitting the cultural arbitrary through defined pedagogical actions (Bourdieu & Passeron, 1990). So, children in the classroom are identified as pupils and field is not only addressed as network of social relationships but also across time and space. The pedagogical authority of teachers is reflected in the classroom arrangement where teacher and children face each other, and two-way interaction is shared making it dynamic. It also reinforces the social nature of relationships during the processes of transmitting cultural values.

Thus, habitus becomes a source of series of moves that are organized as strategies within field to gain the various capitals. The dominant culture transmits its value in the way of interaction and instruction between

teacher and children. This establishes habitus as a socially constituted system of cognitive and motivated structures (Brubaker, 1993).

Cultural Framework for Teacher-Child Relationships

CSM and Bourdieu's theory thus form the basis of cultural model of teacher-child relationships. This framework used in this study define teacher-child interaction in terms of characteristics of teacher and children that they bring to the classroom system and form dynamic relationship with each other that changes across space and time. Pianta recognized effects of culture as the distal factors affecting the teacher-child relationship along with community, neighborhood, and government educational policies. Bourdieu, on the other hand, considers culture as a form of capital and more powerful capital for the dominant culture. It is subconsciously a part of individual and guides him/her in its action. According to him/her culture, gender and socio-economic status are all forms of capital and in classroom, there is constant struggle for recognition and acquisition of these various forms of capital. Dominant culture finds its way of representation in the pedagogical authority and takes form of symbolic capital. Also, pedagogical authority can produce its own specific symbolic effect exerted in the pedagogical communications (Bourdieu & Passeron, 1990). This can be seen in the studies where white teacher follow colorblind attitude but use the white cultural norms to teach and interact with child (Howard, 2010; Boutle, Lopez-Roberison, & Powes-Costralo, 2011). The symbolic capital defines the stereotypes and prejudices between the various ethnic groups and gender stereotypes within the society at large and how they play a role in classroom and teacher perceptions and expectations. But this theory is focusing only on the social conditions of which class and culture, as symbolic capital is a product. The "choices", which constitute culture, makes sense only when connected to the root culture but in social terms can lead to formation of various misunderstandings when compared to the other cultures in universe. Therefore, although these frameworks and theories are providing this research a lens to examine teacher-child relationship within the classrooms, but it also emphasizes on the need for the framework that understands the uniqueness of multicultural nations like Singapore.

Singapore preschools are not divided by class and culture and thus the framework needs to consider these unique mixes of population of both teacher and children in a way that helps to improve the early childhood education for both teachers and children together and helps them in bonding with each other. After a through literature review and understanding of CSM and Bourdieu's theory of habitus, field, and capital, this research proposes to develop the theoretical framework where culture is not a distal factor but a proximal factor within the classroom and also culture and class are not the only factors guiding the pedagogical work. According to the proposed framework for teacher-child relationships in early childhood, the context, culture, gender, and socio-economic status of children are few factors that play an important role in formation of teacher-child relationship within the classroom but are also influenced by various other factors, like teacher expectations, teacher sensitivity, teacher education, and teacher efficacy beliefs when studied with lens of classroom processes.

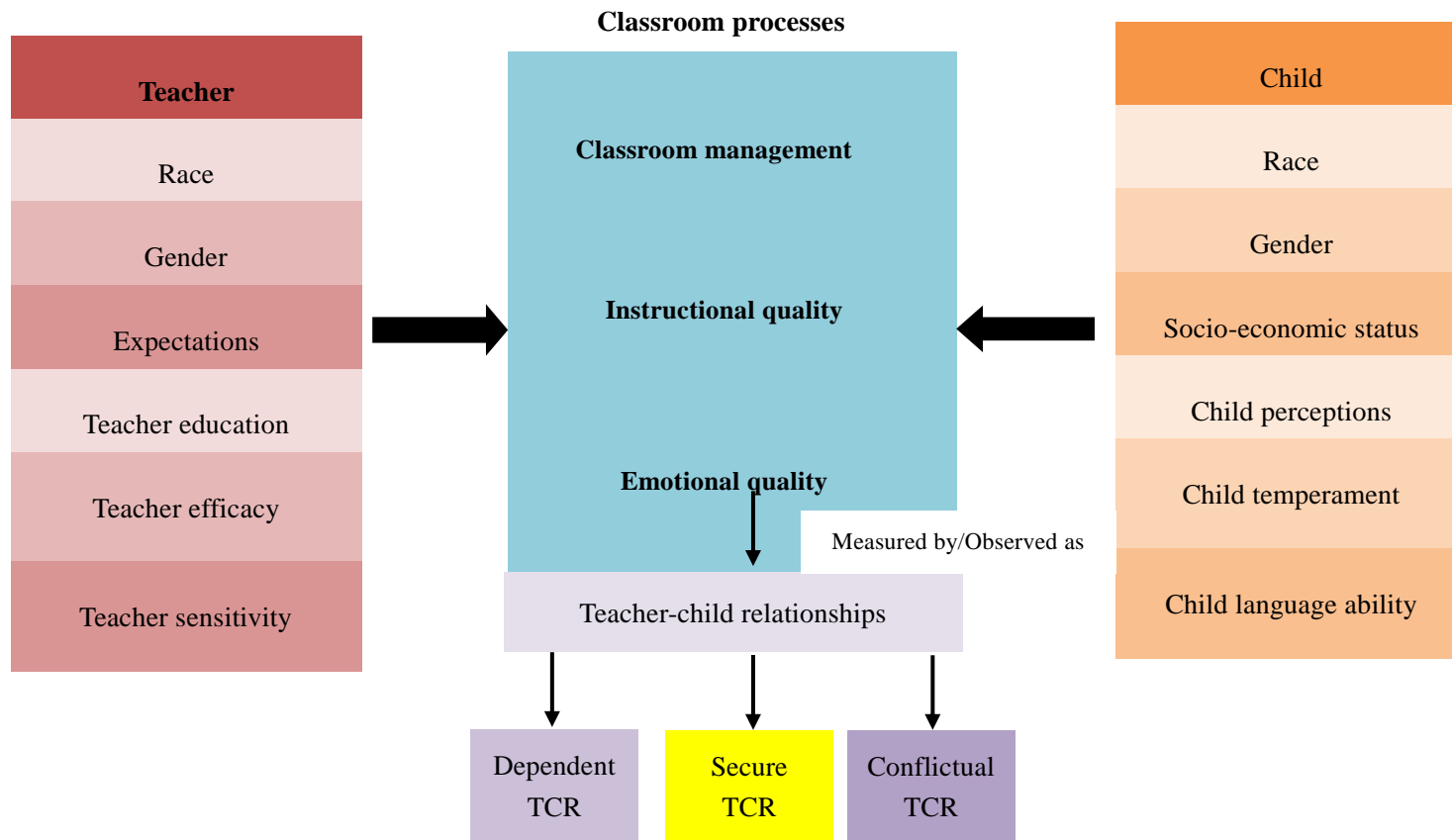


Figure 1. Proposed conceptual framework: Cultural framework for teacher-child relationships.

Future Directions

Although previous research has discovered many factors affecting teacher-child relationships, but the proposed framework helps to understand these factors in depth through lens of classroom processes in preschools and kindergartens in context of various domains and not just country specific.

The conceptual framework also presses on the need to re-evaluate the methods and designs to measure to these factors in classroom and measure the dynamic changes over the period of time.

The testing of this conceptual framework allows further modification in the present model and adding to the existing knowledge.

The conceptual framework also helps policy-makers to understand the impact and how it is can be improved for both teachers and children for the overall development and enhancement of teaching and learning outcomes and developing a balanced individual.

Conclusion

The literature till date on the teacher-child relationship has been investigated to recognize several factors affecting teacher-child relationships in the preschool classrooms. Various Theoretical frameworks were also explored and a cultural framework for teacher-child relationships was proposed in this paper. The aim of the paper was to enable researchers to investigate the teacher-child relationships through a framework with a cultural lens in an ethnically and socioeconomically diverse Classroom which is not country specific or any dominant culture specific. Such framework is important as culture is a lens through which we consciously or unconsciously see and try to understand the world.

References

- About, F. E. (1988). *Children and prejudice*. New York: Blackwell.
- Adelman, H. S. (1996). Restructuring education support services and integrating community resources: Beyond the full. *School Psychology Review*, 25(4), 431.
- Ainsworth, M. D. S. (1989). Attachments beyond infancy. *American Psychologist*, 44, 706-716.
- Alexander, K. L., & Entwisle, D. R. (1988). Achievement in the first 2 years of school: Patterns and processes. *Monographs of the Society for Research in Child Development*, 53(2), 1-140.
- Alexander, K. L., Entwisle, D. R., & Thompson, M. S. (1987). School performance, status relations, and the structure of sentiment: Bringing the teacher back in. *American Sociological Review*, 52(5), 665-682.
- Amidon, E. J., & Hunter, E. (1967). *Verbal interaction in the classroom*. Mimeographed: Project on Student Teaching, Temple University.
- Baker, J. A. (2006). Contributions of teacher-child relationships to positive school adjustment during elementary school. *Journal of School Psychology*, 44(3), 211-229.
- Bartolomé, L. I. (1994). Beyond the methods fetish: Toward a humanizing pedagogy. *Harvard Educational Review*, 64, 173-194.
- Battistich, V., Solomon, D., Watson, M., & Schaps, E. (1997). Caring school communities. *Educational Psychologist*, 32, 137-151.
- Bergin, C., & Bergin, D. A. (2009). Attachment in the classroom. *Educational Psychology Review*, 21, 141-170.
- Bhana, D. (2009). Boys will be boys: What do early childhood teachers have to do with it? *Educational Review*, 61(3), 327-339.
- Birch, S. H., & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology*, 35(1), 61-79.
- Birch, S. H., & Ladd, G. W. (1998). Children's interpersonal behaviours and the teacher-child relationship. *Developmental Psychology*, 34, 934-946.
- Blair, K. A., Denham, S. A., Kochanoff, A., & Whipple, B. (2004). Playing it cool: Temperament, emotion regulation, and social behavior in preschoolers. *Journal of School Psychology*, 42(6), 419-443.

- Bohn, C. M., Roehrig, A. D., & Pressley, M. (2004). The first days of school in the classrooms of two more effective and four less effective primary-grades teachers. *The Elementary School Journal*, 104(4), 269-287.
- Boulton, M. J. (1997). Teachers' view on bullying: Definitions, attitudes and ability to cope. *British Journal of Education Psychology*, 67(3), 223-233.
- Bourdieu, P. (1977). *Outline of theory of practice*. Cambridge, UK: Cambridge University Press.
- Bourdieu, P. (1985). The social space and the genesis of groups. *Theory and Society*, 14(6), 723-744.
- Bourdieu, P., & Passeron, J. C. (1990). *Reproduction in education, society and culture* (Vol. 4). London: Sage.
- Boutte, G., Lopez-Robertson, J., & Powers-Costello, B. (2011). Moving beyond colorblindness in early childhood classrooms. *Early Childhood Education Journal*, 39(5), 335-342.
- Boutte, G., Lopez-Robertson, J., & Powers-Costello, B. (2011). Moving beyond colorblindness in early childhood classrooms. *Early Childhood Education Journal*, 39(5), 335-342.
- Bowlby, J. (1982). *Attachment and loss* (Vol. 1). New York: Basic Books.
- Bowlby, J. (1984). Violence in the family as a disorder of the attachment and caregiving systems. *The American Journal of Psychoanalysis*, 44(1), 9-27.
- Bowman, M., Donovan, S., & Burns, M. (Eds.) (2000). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press.
- Bracken, B. A., & Crain, R. M. (1994). Children's and adolescents' interpersonal relations: Do age, race, and gender define normalcy? *Journal of Psychoeducational Assessment*, 12(1), 14-32.
- Bredenkamp, S., & Copple, C. (Eds.). (1997). *Developmentally appropriate practice in early childhood programs* (Rev. ed). Washington, DC: National Association for the Education of Young Children.
- Bronfenbrenner, U., & Morris, P. (1998). The ecology of developmental processes. In W. Damon & R. Lerner (Eds.), *Handbook of child psychology (Vol. 1): Theoretical models of human development* (5th ed., pp. 993-1028). New York: Wiley.
- Brubaker, R. (1985). Rethinking classical theory: The sociological vision of Pierre Bourdieu. *Theory and society*, 14, 745-775.
- Brubaker, R. (1993). Social theory as habitus. In C. Calhoun, E. LiPuma, & M. Postone (Eds.), *Bourdieu: Critical perspectives*. Chicago: University of Chicago Press.
- Buss, K., Gingles, J., & Price, J. (1993). Parent - teacher temperament ratings and student success in reading. *Reading Psychology*, 14(4), 311-323.
- Caspi, A., & Silva, P. A. (1995). Temperamental qualities at age three predict personality traits in young adulthood: Longitudinal. *Child Development*, 66(2), 486-498.
- Cassidy, D. J., Hestenes, L. L., Hegde, A., Hestenes, S., & Mims, S. (2005). Measurement of quality in preschool child care classrooms: An exploratory and confirmatory factor analysis of the early childhood environment rating scale-revised. *Early Childhood Research Quarterly*, 20(3), 345-360.
- Chaikin, A. L., Sigler, E., & Derlega, V. J. (1974). Nonverbal mediators of teacher expectancy effects. *Journal of Personality and Social Psychology*, 30(1), 144.
- Chung, L. C., Marvin, C. A., & Churchill, S. L. (2005). Teacher factors associated with preschool teacher-child relationships: Teaching efficacy and parent-teacher relationships. *Journal of Early Childhood Teacher Education*, 25(2), 131-142.
- Clark, C. M. (1988). Asking the right questions about teacher preparation: Contributions of research on teacher thinking. *Educational Researcher*, 17(2), 5-12.
- Connolly, P. (2002). *Racism, gender identities and young children: Social relations in a multi-ethnic, Inner City Primary School*. London: Routledge.
- Cooper, H. M., & Tom, D. Y. H. (1984). Teacher expectations research: A review with implications for classroom instruction. *The Elementary School Journal*, 85(1), 76-89.
- Coplan, R. J., Prakash, K., O'Neil, K., & Armer, M. (2004). Do you "want" to play? Distinguishing between conflicted shyness and social disinterest in early childhood. *Developmental Psychology*, 40(2), 244-258.
- Crosnoe, R., Morrison, F., Burchinal, M., Pianta, R., Keating, D., Friedman, S. L., & Clarke-Stewart, K. A. (2010). Instruction, teacher-student relations, and math achievement trajectories in elementary school. *Journal of Educational Psychology*, 102(2), 407.
- Curby, T. W., Rimm-Kaufman, S. E., & Ponitz, C. C. (2009). Teacher-child interactions and children's achievement trajectories across kindergarten and first grade. *Journal of Educational Psychology*, 101(4), 912-925.
- Dean, J. (2016). Recruiting young volunteers in an area of selective education: A qualitative case study. *British Journal of Sociology of Education*, 37(4), 643-661.

- Dixon, L., Wu, S., & Daraghmeh, A. (2012). Profiles in bilingualism: Factors influencing kindergartners' language proficiency. *Early Childhood Education Journal*, 40(1), 25-34.
- Donohue, K. M., Perry, K. E., & Weinstein, R. S. (2003). Teachers' classroom practices and children rejection by their peers. *Applied Developmental Psychology*, 24(1), 91-118.
- Donovan, M. S., & Cross, C. T. (2002). *Minority students in special and gifted education*. Washington, DC: National Academies Press.
- Doyle, W. (1986). Classroom organization and management. In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. 392-431). New York: Macmillan.
- Early, D. M., Maxwell, K. L., Burchinal, M., Alva, S., Bender, R. H., Bryant, D., ... Zill, N. (2007). Teachers' education, classroom quality, and young children's academic skills: Results from seven studies of preschool programs. *Child Development*, 78(2), 558-580.
- Emmer, E. T., & Stough, L. M. (2001). Classroom management: A critical part of educational psychology, with implications for teacher education. *Educational Psychologist*, 36(2), 103-112.
- Erickson, M. F., & Pianta, R. C. (1989). New lunchbox, old feelings: What children bring to school? *Early Education & Development*, 1, 35-49.
- Evans, M. A. (1992). Control and paradox in teacher conversations with shy children. *Canadian Journal of Behavioural Science/Revue Canadienne des Sciences du Comportement*, 24(4), 502-516.
- Ewing, A. R., & Taylor, A. R. (2009). The role of child gender and ethnicity in teacher-child relationship quality and children's behavioral adjustment in preschool. *Early Childhood Research Quarterly*, 24(1), 92-105.
- Farah, M. J., & Noble, K. G. (2005). Socio-economic influences on brain development: A preliminary study. In U. Mayr, E. Awh, & S. W. Keele (Eds.), *Developing individuality in the human brain: A tribute to Michael I. Posner* (pp. 189-208). Washington, D.C.: American Psychological Association.
- File, N., & Kontos, S. (1993). The relationship of program quality to children's play in integrated early intervention settings. *Topics in Early Childhood Special Education*, 13(1), 1-18.
- Fontaine, N. S., Torre, L. D., Grafwallner, R., & Underhill, B. (2006). Increasing quality in early care and learning environments. *Early Child Development & Care*, 176(2), 157-169.
- Gable, S. (2002). Teacher-child relationships throughout the day. *Young Children*, 57(4), 42-46.
- Gallagher, K. C., Kainz, K., Vernon-Feagans, L., & White, K. M. (2013). Development of student-teacher relationships in rural early elementary classrooms. *Early Childhood Research Quarterly*, 28(3), 520-528.
- Garbarino, J. (1992). The meaning of poverty in the world of children. *American Behavioral Scientists*, 35(3), 220-237.
- Gay, G. (2002). Culturally responsive teaching in special education for ethnically diverse students: Setting the stage. *Qualitative studies in Education*, 15(6), 613-629.
- Gerber, E. B., Whitebook, M., & Weinstein, R. S. (2007). At the heart of childcare: Predictors of teacher sensitivity in centre-based childcare. *Early Childhood Research Quarterly*, 22(3), 327-346.
- Goodchild, S., & Gloger, D. (2005). When four-year olds were asked to pick a troublemaker from these pictures guess who they chose? *Independent*, p. 8.
- Goodwin, A. L. (1997). Multicultural stories: Preservice teachers' conceptions of and responses to issues of diversity. *Teacher Education*, 32(1), 117-145.
- Grant, C. A. (1988). The persistent significance of race in schooling. *The Elementary School Journal*, 88(5), 561-569.
- Graves, S. L., Jr., & Howes, C. (2011). Ethnic differences in social-emotional development in preschool: The impact of teacher-child relationships and classroom quality. *School Psychology Quarterly*, 26(3), 202-214.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625.
- Hamre, B. K., Pianta, R. C., Downer, J. T., & Mashburn, A. J. (2008). Teachers' perceptions of conflict with young students: Looking beyond problem behaviors. *Social Development*, 17(1), 115-136.
- Haney-Lopez, I. F. (2003). *Racism on trial: The Chicano fight for justice*. Cambridge, MA: Harvard University Press.
- Hartley, B. L., & Sutton, R. M. (2013). A stereotype threat account of boys' academic underachievement. *Child Development*, 84(5), 1716-1733.
- Heath, S. B. (1983). *Ways with words: Language, life and work in communities and classrooms*. Cambridge: Cambridge University Press.
- Heisner, M. J., & Lederberg, A. R. (2011). The impact of child development associate training on the beliefs and practices of preschool teachers. *Early Childhood Research Quarterly*, 26, 227-236.

- Hinde, R. (1987). *Individuals, relationships, and culture*. New York: Cambridge University Press.
- Howard, T. C. (2010). *Why race and culture matter in schools: Closing the achievement gap in America's classrooms*. New York: Teachers College Press.
- Howes, C. (2000). Social-emotional classroom climate in child care, child-teacher relationships and children's second grade peer relations. *Social Development*, 9(2), 291-204.
- Howes, C., & Hamilton, C. E. (1994). Children's relationships with peers: Differential associations with aspects of the teacher-child relationship. *Child Development*, 65(1), 253-263.
- Howes, C., & Ritchie, S. (1999). Attachment organizations in children with difficult life circumstances. *Development and Psychopathology*, 11(2), 251-268.
- Howes, C., & Shivers, E. M. (2006). New child-caregiver attachment relationships: Entering childcare when the caregiver is and is not an ethnic match. *Social Development*, 15(4), 574-590.
- Howes, C., Burchinal, M., Pianta, R., Bryant, D., Early, D., Clifford, R., & Barbarin, O. (2008). Ready to learn? Children's pre-academic achievement in pre-Kindergarten programs. *Early Childhood Research Quarterly*, 23(1), 27-50.
- Huaqing Qi, C., & Kaiser, A. P. (2004). Problem behaviors of low-income children with language delays: An observation study. *Journal of Speech, Language & Hearing Research*, 47(3), 595-609.
- Hyun-Joo, J., Langill, C. C., Peterson, C. A., Luze, G. J., Carta, J. J., & Atwater, J. B. (2010). Children's individual experiences in early care and education: Relations with overall classroom quality and children's school readiness. *Early Education & Development*, 21(6), 912-939.
- Johnson, R. D. (2005). An empirical investigation of sources of application-specific computer-self-efficacy and mediators of the efficacy-performance relationship. *International Journal of Human-Computer Studies*, 62, 737-758.
- Justice, L. M., Cottone, E. A., Mashburn, A., & Rimm-Kaufman, S. E. (2008). Relationships between teachers and preschoolers who are at risk: Contribution of children's language skills, temperamentally based attributes, and gender. *Early Education & Development*, 19(4), 600-621.
- Kagan, D. M. (1992). Professional Growth among preservice and beginning teachers. *Review of Educational Research*, 62(2), 129-169.
- Kagan, J., & Snidman, N. (1998). Childhood derivatives of high and low reactivity in infancy. *Child Development*, 69(6), 1483.
- Kagan, J., Snidman, N., & Arcus, D. M. (1992). Initial reactions to unfamiliarity. *Current Directions in Psychological Science*, 1(6), 171-174.
- Karuppiah, N. (2010). *Multicultural education: Identifying training needs of pre-school teachers*. Saarbrücken: Lambert Academic Publishing.
- Keogh, B. K. (2003). *Temperament in the classroom: Understanding individual differences*. Baltimore: Paul H. Brookes Publishing Co.
- Kern, L., & Clemens, N. H. (2007). Antecedent strategies to promote appropriate classroom behavior. *Psychology in the Schools*, 44(1), 65-67.
- Kesner, J. E. (2000). Teacher characteristics and the quality of child-teacher relationships. *Journal of School Psychology*, 38(2), 133-149.
- Kochanska, G. (1991). Patterns of inhibition to the unfamiliar in children of normal and affectively ill mothers. *Child Development*, 62(2), 250.
- Kontos, S., & Wilcox-Herzog, A. (1997). Teachers' interactions with children: Why are they so important? *Young Children*, 52(2), 4-13.
- Koomen, H. M. Y., Verschueren, K., van Schooten, E., Jak, S., & Pianta, R. C. (2012). Validating the student-teacher relationship scale: Testing factor structure and measurement invariance across child gender and age in a Dutch sample. *Journal of School Psychology*, 50(2), 215-234.
- Ladd, G. W., Birch, S. H., & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70(6), 1373.
- Lam, M. S., & Pollard, A. (2006). A conceptual framework for understanding children as an agent in the transition from home to kindergarten. *An International Research Journal*, 26(2), 123-141.
- Leckman, J. K., Mayes, L. C., & Cohen, D. J. (2002). Primary maternal preoccupation revisited: Circuits, genes and the crucial role of early life experience. *South African Psychiatry Review*, 5(2), 4-12.
- Lederberg, A. R., Ryan, H. B., & Robbins, B. L. (1986). Peer interaction in young deaf children: The effect of partner hearing status and familiarity. *Developmental Psychology*, 22(5), 691-700.

- Lerner, R. M., & Busch-Rossnagel, N. A. (1981). Individuals as producers of their development: Conceptual and empirical bases. In *Individuals as producers of their development* (pp. 1-36). New York: Academic Press.
- Lim, S. E. A. (1998). Preschools in Singapore: A historical overview. *Early Child Development and Care*, 144(1), 5-12.
- Maldonado-Carreño, C., & Votruba-Drzal, E. (2011). Teacher-child relationships and the development of academic and behavioral skills during elementary school: A within- and between-child analysis. *Child Development*, 82(2), 601-616.
- Mantzicopoulos, P. (2005). Conflictual relationships between kindergarten children and their teachers: Association with child and classroom context variables. *Journal of School Psychology*, 43(5), 425-442.
- Mantzicopoulos, P., & Neuhauser-Pritchett, S. (2003). Development and validation of a measure to assess head start children's appraisals of teacher support. *Journal of School Psychology*, 41(6), 431-451.
- Mashburn, A. J., & Pianta, R. C. (2006). Social relationships and school readiness. *Early education and development*, 17(1), 151-176.
- Mashburn, A. J., Hamre, B. K., Downer, J. T., & Pianta, R. C. (2006). Teacher and classroom characteristics associated with teachers' ratings of prekindergartners' relationships and behaviors. *Journal of Psychoeducational Assessment*, 24(4), 367-380.
- McIntyre, A. (1997). *Making meanings of whiteness: Exploring racial identity with white teachers*. New York: State University of New York Press.
- McKnow, C., & Weinstein, R. S. (2002). Modeling the role of child ethnicity and gender in children's differential response to teacher expectations. *Journal of Applied Social Psychology*, 32, 159-184.
- McKown, C. (2013). Social equity theory and racial-ethnic achievement gaps. *Child Development*, 84(4), 1120-1136.
- Merritt, E. G., Wanless, S. B., Rimm-Kaufman, S. E., Cameron, C., & Peugh, J. L. (2012). The contribution of teachers' emotional support to children's social behaviors and self-regulatory skills in first grade. *School Psychology Review*, 41(2), 141-159.
- Merton, R. K. (1948). The self-fulfilling prophecy. *The Antioch Review*, 8(2), 193-216.
- Murray, C., Murray, K. M., & Waas, G. A. (2008). Child and teacher reports of teacher-student relationships: Concordance of perspectives and associations with school adjustment in urban kindergarten classrooms. *Journal of Applied Developmental Psychology*, 29(1), 49-61.
- Murray, K. M., Waas, G. A., & Murray, C. (2008). Child race and gender as moderators of the association between teacher-child relationships and school adjustment. *Psychology in the Schools*, 45(6), 562-578.
- National Institute of Child & Human Development Early Child Care Research. (2005). A day in third grade: A large-scale study of classroom quality and teacher and student behavior. *The Elementary School Journal*, 105(3), 305-323.
- Nichd, E. (2003). Does amount of time spent in child care predict socio-emotional adjustment during the transition to kindergarten? *Child Development*, 74(4), 976-1005.
- O'Connor, E. E., Collins, B. A., & Supplee, L. (2012). Behavioral problems in late childhood: The roles of early maternal attachment and teacher-child relationship trajectories. *Attachment and Human Development*, 14(3), 265-288.
- Olson, K. R., Kinzler, K. D., Shutts, K., & Weisman, K. G. (2012). Children associate racial groups with wealth: Evidence from South Africa. *Child Development*, 83(6), 1884-1899.
- Olson, S. L., Sameroff, A. J., Kerr, D. C. R., Lopez, N. L., & Wellman, H. M. (2005). Developmental foundations of externalizing problems in young children: The role of effortful control. *Development and Psychopathology*, 17(1), 25-45.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307-332.
- Palermo, F., Hanish, L. D., Martin, C. L., Fabes, R. A., & Reiser, M. (2007). Preschoolers' academic readiness: What role does the teacher-child relationship play? *Early Childhood Research Quarterly*, 22(4), 407-422.
- Pang, V. O., & Sablan, V. A. (1998). Teacher efficacy: How do teachers feel about their abilities to teach African American students? In M. E. Dilworth (Ed.), *Being responsive to cultural differences: How teachers learn* (pp. 39-58). Thousand Oaks, CA: Corwin Press.
- Paro, K. M. L., Pianta, R. C., & Stuhlman, M. (2004). The classroom assessment scoring system: Findings from the prekindergarten year. *The Elementary School Journal*, 104(5), 409-426.
- Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., & Yazejian, N. (2001). *The relation of preschool child-care quality to children's cognitive and social developmental trajectories through second grade*. Retrieved from <http://libservy.nie.edu.sg/login.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=5548944&site=ehost-live&scope=site>

- Pianta, R. C. (1996). *Manual and scoring guide for the student-teacher relationship scale*. Charlottesville: University of Virginia.
- Pianta, R. C. (1999). *Enhancing relationships between children and teachers*. School Psychology Book Series: ERIC.
- Pianta, R. C., & Nimetz, S. L. (1991). Relationships between children and teachers: Associations with classroom and home behavior. *Journal of Applied Developmental Psychology*, 12(3), 379-393.
- Pianta, R. C., & Stuhlman, M. W. (2004). Teacher-child relationships and children's success in the first years of school. *School Psychology Review*, 33(3), 444-458.
- Pianta, R. C., & Walsh, D. J. (1996). *High risk children in schools: Constructing sustaining relationships*. Palo Alto, CA: Psychology Press.
- Pianta, R. C., Nimetz, S. L., & Bennett, E. (1997). Mother-child relationships, teacher-child relationships, and school outcomes in preschool and kindergarten. *Early Childhood Research Quarterly*, 12(3), 263-280.
- Pianta, R. C., Paro, K. M. L., Payne, C., Cox, M. J., & Bradley, R. (2002). The relation of kindergarten classroom environment to teacher, family, and school characteristics and child outcomes. *The Elementary School Journal*, 102(3), 225-238.
- Pianta, R. C., Steinberg, M. S., & Rollins, K. B. (1995). The first two years of school: Teacher-child relationships and deflections in children's classroom adjustment. *Development and Psychopathology*, 7(2), 295-312.
- Pianta, R. C., Howes, C., Burchinal, M., Bryant, D., Clifford, R. M., Early, D., & Barbarin, O. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions. *Applied Developmental Science*, 9(3), 144-159.
- Pigott, R. L., & Cowen, E. L. (2000). Teacher race, child race, racial congruence, and teacher ratings of children's school adjustment. *Journal of School Psychology*, 38(2), 177-195.
- Quay, L. C., & Jarrett, O. S. (1986). Teachers' interactions with middle- and lower SES preschool boys and girls. *Journal of Educational Psychology*, 78(6), 495-498.
- Richardson, V. (1996). From behaviorism to constructivism in teacher education. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 19(3), 263-271.
- Rimm-Kaufman, S. E., & Kagan, J. (2005). Infant predictors of kindergarten behavior: The contribution of inhibited and uninhibited temperament types. *Behavioral Disorders*, 30(4), 331-347.
- Rimm-Kaufman, S. E., & Pianta, R. C. (2000). An ecological perspective on the transition to kindergarten: A theoretical framework to guide empirical research. *Journal of Applied Developmental Psychology*, 21(5), 491-511.
- Rimm-Kaufman, S. E., Early, D. M., Cox, M. J., Saluja, G., Pianta, R. C., Bradley, R. H., & Payne, C. (2002). Early behavioral attributes and teachers' sensitivity as predictors of competent behavior in the kindergarten classroom. *Journal of Applied Developmental Psychology*, 23(4), 451-470.
- Robels de Meledendez, W., & Ostertag, W. (1997). *Critical multiculturalism: Rethinking multicultural and antiracist education*. Delmar: Boston, MA.
- Rosenthal, R. (1973). The mediation of Pygmalion effects: A four factor "theory". *Papua New Guinea Journal of Education*, 9(1), 1-12.
- Rosenthal, R. (1974). *On the social psychology of the self-fulfilling prophecy: Further evidence for Pygmalion effects and their mediating mechanisms*. New York: MSS Modular Publications.
- Rosenthal, R., & DePaulo, B. M. (1979). Sex differences in eavesdropping on nonverbal cues. *Journal of Personality and Social Psychology*, 37(2), 273.
- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils intellectual development*. New York: Holt, Rinehart & Winston.
- Rothbart, M. K., & Jones, L. B. (1998). Temperament, self-regulation, and education. *School Psychology Review*, 27(4), 479.
- Rothbart, M. K., Posner, M. I., & Kieras, J. (2006). Temperament, attention, and the development of self-regulation. In K. M. D. Philips (Ed.), *Blackwell handbook of early child development* (pp. 338-357). Malden, MA: Blackwell.
- Ryan, J. (1999). *Race and ethnicity in multi-ethnic schools: A critical case study*. Clevedon, UK: Multilingual Matters.
- Saft, E. W., & Pianta, R. C. (2001). Teachers' perceptions of their relationships with students: Effects of child age, gender, and ethnicity of teachers and children. *School Psychology Quarterly*, 16(2), 125-141.
- Schaffer, H., & Liddell, C. (1984). Adult-child interaction under dyadic and polyadic conditions. *British Journal of Developmental Psychology*, 2(1), 33-42.
- Sharpe, P. J. (1998). Aspects of preschool education in Singapore. *Early Child Development and Care*, 144(1), 129-134.
- Simpson, B. V. (2007). *Exploring the influence of educational television and parent discussions on improving children's racial attitudes*. Retrieved from <https://repositories.lib.utexas.edu>

- Skiba, R. J., Michael, R. S., Nardo, A. C., & Peterson, R. L. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *The Urban Review*, 34(4), 317-342.
- Spencer, S. J., Steele, C. M., & Quinn, D. M. (1999). Stereotype threat and women's math performance. *Journal of Experimental Social Psychology*, 35(1), 4-28.
- Spilt, J. L., & Koomen, H. M. Y. (2009). Widening the view on teacher-child relationships: Teachers' narratives concerning disruptive versus nondisruptive children. *School Psychology Review*, 38(1), 86-101.
- Spilt, J. L., Koomen, H. M. Y., & Mantzicopoulos, P. Y. (2010). Young children's perceptions of teacher-child relationships: An evaluation of two instruments and the role of child gender in kindergarten. *Journal of Applied Developmental Psychology*, 31(6), 428-438.
- Sroufe, L. A. (1989). Relationships and relationship disturbances. In *Relationship disturbances in early childhood: A development approach*. New York: Basic Books.
- Stipek, D. J., & Daniels, D. H. (1988). Declining perceptions of competence: A consequence of changes in the child or in the educational environment? *Journal of Educational Psychology*, 80(3), 352-356.
- Stipek, D. J., Daniels, D., Galluzzo, D., & Milburn, S. (1992). Characterizing early childhood education programs for poor and middle-class children. *Early Childhood Research Quarterly*, 7, 1-19.
- Stuart, C., & Thurlow, D. (2000). Making it their own: Preservice teachers' experiences, beliefs, and classroom practices. *Journal of Teacher Education*, 51(2), 113-121.
- Stuhlman, M. W., & Pianta, R. C. (2002). Teachers' narratives about their relationships with children: Associations with behavior in classrooms. *School Psychology Review*, 31(2), 148.
- Tai, J. (2019). *Kids from needy families face risk of poorer outcomes: Study*. <https://www.straitstimes.com/singapore/kids-from-needy-families-face-risk-of-poorer-outcomes-study>
- Tan, C. (2007). Narrowing the gap: the educational achievements of the Malay community in Singapore. *Intercultural Education*, 18(1), 53-64.
- Tauber, R. T. (1997). *Self-fulfilling prophecy: A practical guide to its use in education*. Westport, CT: Greenwood Publishing Group.
- Thijs, J. T. (2005). Teachers' relationships and interactions with socially inhibited children (Unpublished doctoral dissertation, University of Amsterdam, Amsterdam).
- Thijs, J. T., Koomen, H. M. Y., & van der Leij, A. (2008). Teacher-child relationships and pedagogical practices: Considering the teacher's perspective. *School Psychology Review*, 37(2), 244-260.
- Valli, L. (1995). The dilemma of race: Learning to be color blind and color conscious. *Journal of Teacher Education*, 46(2), 120-129.
- Weinstein, R. S., & Middlestadt, S. E. (1979). Student perceptions of teacher interactions with male high and low achievers. *Journal of Educational Psychology*, 71(4), 421-431.
- Wentzel, K. R. (2002). Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development*, 73(1), 287-301.
- Werner, E. E. (1996). Vulnerable but invincible: High risk children from birth to adulthood. *European Child & Adolescent Psychiatry*, 5(1), 47-51.
- West, C., & Anderson, T. (1976). The questions of preponderant causation in teacher expectancy research. *Review of Educational Research*, 46, 613-630.
- Yoon, J. S. (2002). Teacher characteristics as predictors of teacher-student relationships: Stress, negative affect, and self-efficacy. *Social Behavior and Personality*, 30(5), 485.
- Zhang, X. & Sun, J. (2011). The reciprocal relations between teachers' perceptions of children's behavioral problems and teacher-child relationships in the first preschool year. *The Journal of Genetic Psychology: Research and Theory on Human Development*, 172(2), 176-198.
- Zhou, Q., Hofer, C., Eisenberg, N., Reiser, M., Spinrad, T. L., & Fabes, R. A. (2007). The developmental trajectories of attention focusing, attentional and behavioral persistence, and externalizing problems during school-age years. *Developmental Psychology*, 43(2), 369-385.