EXAMINING THE EFFECTIVENESS OF FAMILY INVOLVEMENT ON ENGLISH LEARNERS' ACADEMIC AND SOCIOEMOTIONAL OUTCOMES: A SYSTEMATIC LITERATURE REVIEW, HIERARCHICAL LINEAR MODELS, AND A STRUCTURAL EQUATION MODEL

A Dissertation

by

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ABSTRACT

This dissertation focuses on examining the association between family involvement, school support, and English learners' (ELs) socioemotional and academic outcomes at the early childhood stage. Through the systematic literature review and two empirical studies, this dissertation provides unique evidence in understanding how family involvement associates with children's academic and socioemotional well-being during early childhood among the ELs. In first study, I used a systematic review to examine how spontaneous and interventional family involvement in children's education can influence EL children's socioemotional, behavioral and academic outcomes. The results from the 23 included studies suggest that, with parent-directed or educators-guided practices, children's performance in the corresponding academic area and competencies improved or was significantly better than children without parental interventions. However, the effects on socioemotional or behavioral competencies are inconclusive. In the second and third studies, I utilized Early Childhood Longitudinal Study: Kindergarten-2011 (ECLS-K: 20111) data among kindergarteners for statistical analysis. In the second study, I utilized 15 hierarchical linear models to analyze the different levels of family involvement among English learners (ELs) and non-EL families. In addition, these models serve to reveal the association between family involvement, school outreach and children's self-control and interpersonal skills, and if ELs and non-ELs show differentiated performance in these two skills. Overall, ELs and non-ELs did not show a statistical difference in self-control, and non-ELs had better personal interaction skills. EL families had higher educational expectation on children,

and non-EL families involved more in home and school activities. Furthermore, family involvement in school had negative effects on both self-control and personal interaction, and school support to families had positive associations on both socioemotional outcomes. In the third study, I used a structural equation model among 1,569 EL kindergarteners. Through this model, I examined the effects of family involvement at home, parents/caregivers' expectations, and school support on academic and socioemotional performance. The results showed that family involvement in home did not have significant effects on socioemotional or academic outcomes. On the other hand, parents/caregivers' expectations had significant positive association with both outcome constructs, and school support to EL families only showed positive effects on socioemotional performance.

DEDICATION

It seems to be a closure when it's done, but it precludes a new chapter of my life.

To all of my family, mentors, and friends,

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ABBREVIATIONS

CFI	Comparative fit index
ECLS-K	Early Childhood Longitudinal Study: Kindergarten
EL	English learners
ELL	English language learners
ERIC	Education Resources Information Center
FAST	Families and Schools Together
HLM	Hierarchical linear modeling
IMPACCT	Integrated Migrant Parent and Child Computer Training
IRT	Item response theory
L1	First language
LAS	Language Assessment Scale
LLAB	Linguistic and Language Behavior Abstract
NAEP	National Assessment of Educational Progress
NEP	Non-English proficient
OLS	Ordinary Least Squares
*Pre*LAS	Preschool Language Assessment Scale
PTA	Parent-teacher association
PTA	Readiness Center
RMSEA	Root mean square error of approximation
SEM	Structural equation modeling

SES	Socioeconomic status
TLI	Tucker–Lewis index

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CHAPTER I

INTRODUCTION

Educators have long sought to explain inequality in children's academic outcomes and life success, particularly among the minority groups. Compared to their English native counterparts, English learners (ELs) have experienced educational disadvantages (Slates et al., 2012). ELs encounter linguistic and cultural barriers as they navigate in the schooling process in the United States (Daniel-White, 2002; Dávila et al., 2017). In addition, parents/caregivers[1] of ELs represent a heterogenous population and many of them have limited educational experience, which can constrain their capacity in assisting their children's education (Arias & Morillo-Campbell, 2008). Certain factors including parents/caregivers' educational level and household income are barely manipulatable to educators. However, parents/caregivers' expectations, attitudes and practices are more feasible to be enhanced, and they represent points of leverage that may contribute to children's development (Epstein et al., 2018; Reynolds, 1992).

Family involvement is one of the most critical and primary contributors to children's academic success and socioemotional competences (Benner et al., 2016; Wilder, 2014). Given family context being the earliest and most immediate environment to child's development, parents/caregivers' involvement in child growth starts as early as the birth of a child and it will continue all the way along through childhood into

[1] This study uses "parents/caregivers" rather than "parents" solely. The primary reason is because a considerable number of children, i.e. 442, 995, are in foster care, as estimated on September 30, 2017 in the United States. These children live with their relatives, or other non-relative foster parents (Children's Bureau, 2019). The term "parents" commonly refers to biological parents only, using "parents/caregivers" is to addresses the dissertation to both biological parents and legal guardians.

adulthood. In addition, the impact of family involvement can be of comparable importance to the formal schooling (Epstein, 1995; Van Voorhis, Maier, Epstein, & Lloyd, 2013).

Researchers have recognized the significance that early childhood (from preschool to grade 3) development influence students' well-being and success in adulthood (e.g. Landry, Smith, Swank, Assel, & Vellet, 2001; Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2010). In 1991, the National Education Goals Panel set up the goal to have all children receive high-quality early education to be ready for school. Heckman & Masterov (2004) have contended that, investment on children at early ages can be most rewarding in terms of the whole life span. Specifically, an indispensable component of such investment is to empower minority and low-income parents/caregivers so that they can facilitate their children's schooling and developmental processes (Hill et al., 2018).

Before children start schooling, family dynamics and rearing practices prepare children for their academic life (Froiland, 2011). With parents/caregivers' purposeful investment (e.g. advocating the importance of learning, talking to children with complete sentences, and telling stories) children can adapt to school better. Once they are in school, parents/caregivers' involvement in responsive reading activities can help children's reading competencies and establish an interactive, warm relationship between their children, which increases young children's positive socioemotional development (Zarate, 2007).

Furthermore, as children start the schooling process, parents/caregivers'

emphasis on education and high expectations on academic achievement will create a positive home learning environment (Yeh, 2019). Research findings indicate that children whose parents/caregivers are responsive to child development will attend classes more regularly and show better social and behavioral skills at school (Alexander, Cox, Behnke, & Larzelere, 2017). For instance, Hill et al. (2004) research has shown that parents/caregivers' academic involvement was related to fewer behavioral problems. Núñez et al. (2015) revealed significant association between students' homework behaviors and their perceived parental homework involvement.

In addition, the positive home environment fosters children's studying habits at home and leads to academic success in school. Throughout the process in school, these children are more likely to earn higher grades, enroll in a higher-level program, have greater chances to graduate (Hill & Tyson, 2009; Mapp, 2014).

Statement of the Problem

The Achievement Gap Between ELs and non-ELs

The ELs are a large and the fastest-growing student population in the United States. In the 2004-05 school year, the number of ELs was about 4.3 million, accounting for 9.1 percent of the total number of students. During the 2014-15 school year, the number increased to 4.6 million, accounting for 9.4 percent of the total student population. Among them, 77.1% are Hispanics and nearly 60% are from low-income families in which parents have "disproportionately" limited levels of education (McFarland et al., 2017; National Council of Teachers of English, 2008).

Compared to non-ELs, the EL group has lower academic performance in all subjects, including English reading, writing, and mathematics (Marian et al., 2013; National Center for Education Statistics, 2016; Olszewski-Kubilius et al., 2004). In the National Assessment of Educational Progress (NAEP) of 2002-2011, there was a significant gap between ELs and non-ELs in reading tests, and this gap between these two groups persisted between these nine years. For example, in 2011, the gap between ELs and non-ELs in the fourth grade was 36 points; and the gap between the eighth-grade students was 44 points. In mathematics, the average grades for ELs and non-ELs in the fourth grade was 54 points and 89 points, respectively. This was a difference of 35 points which indicates a wide gap in achievement. Furthermore, despite the fact that ELs' national high-school graduation rate rose from 62.9% in 2014-15 to 66.9% in 2016-17, they still lag behind compared to the overall national rate of 84.6% (National Center for Education Statistics, 2019).

Barriers of EL Family Involvement at School

A vital factor leading to EL children's underperformance is the barrier their families encounter while trying to be involved in their children's education. Researchers have identified the differences between EL families involvement and non-EL families (e.g. Froiland & Davison, 2014; Hoff-Ginsberg & Tardif, 1995; Snyder-Hogan, 2010). The level of EL family involvement, particularly those from low socioeconomic backgrounds, is insufficient to support their children' academic success at school. Specially, EL parents/caregivers did not provide as much resources such as books and other learning tools, and opportunities of higher-level communication with children

compared to non-EL families (Harris & Robinson, 2016; Smith et al., 2008). As a result, ELs always face serious academic challenges as they proceed from early childhood to secondary grades.

EL parents/caregivers encounter linguistic and cultural challenges: they have difficulties understanding and speaking English. This impedes effective two-way communication between these families and the school personnel (Smith, Stern, & Shatrova, 2008). In many schools, the teachers speak limited or no Spanish, and some schools do not provide interpreters to parents. Teachers and parents can barely share information on children's learning progress, goals, and plans mutually. Furthermore, minority parents are more likely to feel unwelcomed at school, which further leads to less participation and connection to schools and teachers (Bang, 2009; Daniel-White, 2002; Froiland & Davison, 2014). Consequently, these parents/caregivers show a lack of knowledge of the operation of the school, and often times, they find it difficult to establish trust with teachers (Smith et al., 2008).

EL students, the majority of whom are Hispanic, have "less knowledge of the 'rules' that operate within them"(Crosnoe & Ansari, 2015, p.3). EL parents/caregivers may also often find themselves unfamiliar with the communication approaches to schools and with the accessibility to educational resources. This is because the formal education system has its paradigm that differentiates itself from the minority families' practices as it pertains to children (Wong & Hughes, 2006). Many EL students and their parents have been martialized and asked to participate "in a system that does not promote or encourage their own family values"(Daniel-White, 2002, p.3). This system

narrows parents/caregivers' involvement within the scope of the mainstream perception and disregards the families' cultural and social resources. Additionally, the cultural unfamiliarity makes EL parents/caregivers' interaction with their children potentially less effective compared to the mainstream parents/caregivers who experience a closer cultural and linguistic match and alignment with preparation for formal schooling (Daniel-White, 2002; Ishimaru et al., 2016).

Traditionally, family involvement is perceived in a narrow way that only considered parents/caregivers' participation in school or do school-like, academically-relevant activities at home (Daniel-White, 2002; Gonzalez et al., 1995). Some educators holding the traditional perspective on family involvement expected parents/caregivers to play the role of children's first teachers at home and to take the responsibility to help children with homework, teach children basic literacy skills and provide educational materials for use at home. However, many parents/caregivers need capacity building and more resources as educational and language proficiency level might hinder their involvement. These activities expected from parents/caregivers are undoubtedly beneficial to the child's development. But if parents/caregivers do not adhere to their roles as children's teacher at home, they are regarded as uncaring about children's education by schools (Daniel-White, 2002; Niehaus & Adelson, 2014; Valdes, 1996). It is important to note that although some EL parents/caregivers do not get involve in these activities, they have different patterns of interactions with their children, which may lead to a deficit perspective by educators toward these parents. Deficit perspective can result in biases and misunderstanding and can possibly overshadow teachers' and schools'

attention on the barriers EL parents/caregivers encounter and impact the interaction between home and school environments (Aikens & Barbarin, 2008).

Hispanic children have parents/caregivers who believed that involvement happens in informal home activities: helping with homework, reading to children, and listening to children read (Smith et al., 2008); but they tend to participate less in school related activities. Furthermore, Hispanic parents/caregivers highly respect teachers and consider teachers as the authority in delivering knowledge. Therefore, these parents focus their effort on their own roles to teach morals, values, and good behaviors to their children. Hispanic parents/caregivers' conservative attitude to intervening with children's education has always been interpreted as low-involvement when in reality it may involve cultural differences considering parents/caregivers' role in formal education of their children (Daniel-White, 2002; Smith et al., 2008). For example, many of these parents/caregivers' point of reference is their home country's culture, where they regard teachers as the authority, and any meddling into their domain is seen as challenging such authority (Drummond & Stipek, 2004). In addition, when a different understanding of involvement cumulates with the language hindrance, the discussion might occur between the school culture and the Hispanic home culture, and neither side value nor understand the other (Campos et al., 2011).

Significance of This Study

This dissertation included three independent empirical studies that focuses on the effectiveness of family involvement among the EL students at early childhood stage. Childhood development is a process that involves cognitive and non-cognitive growth.

Apart from academic learning, socioemotional and behavioral competencies are also significant to children's well-being and future development. Socioemotional competence is vital for ELs to build self-resilience. However, the existing literature emphasize extensively on the effectiveness of parents/caregivers' involvement on children's academic outcomes. To fill this gap in literature, the three studies will include children's socioemotional outcomes in the analysis. The second study particularly, will use children's self-control and interpersonal skills as the outcome variables, respectively.

The first empirical study is a systematic literature review aims at understanding what family involvement practices are effective on ELs' academic, socioemotional and behavioral performance. This study makes unique contribution to the literature pool regarding the significance of family involvement on early childhood development among the EL learners

In both second and third studies, I utilized the data from Early Childhood Longitudinal Studies: Kindergarten-2011 (ECLS: K-2011) from the kindergarten waves. I examined 15 hierarchical linear models (HLM) in study 2 to understand the differentiated level of family involvement between EL and non-EL parents/caregivers. In addition, I analyzed how family involvement is associated with socioemotional performance between EL and non-EL children.

The third empirical study provides important information on how family-school partnership functions on EL children's academic and socioemotional outcomes. Through the structural equation model (SEM) analysis, I differentiated the ethnicity and family factors (i.e. one parent or guardian family compared to two parents/caregivers) among

the EL population in order to gather more detailed evidence on this underperformed student group (Good et al., 2010).

Theoretical Framework

Social constructivism sees knowledge as actively constructed by learners in response to interactions with environmental stimuli. Vygotsky (1978) identified human learning as a social process and the origination of human intelligence in the society or culture. Interaction between people and their surroundings is essential to knowledge building. As the most immediate environment, family in which child-parent/caregiver interplay happens, can generate knowledge and trickle it down to the children (Walqui, 2006; Vygotsky, 1978). Since all knowledge is co-constructed interactively and is strengthened through implementation (e.g., activities), parents/caregivers' collaboration with child and guidance on practicing what the child have known enables knowledge construction (Walqui, 2006).

According to Vygotsky, language and culture are essential in human intellectual development and in people's perception of the world since they are the lenses through which people experience, communicate, and understand reality (Vygotsky, 1978).

The Overlapping Spheres Theory provides an explanation of how family, school, and community collaboratively influence child development (Epstein, 1995). Epstein states that home, school, and community should be drawn together and organize partnership activities to "engage, guide, energize and motivate students to produce their own success" (Epstein, 2018, p.12). Frequent interactions between home, school, and community deliver the information to students that people around them attach

importance to education and collaborate with one another. The closer the three spheres connect, the more likely students will achieve success in school and in life (Epstein, 1995; Epstein, Galindo, & Sheldon, 2011; Epstein et al., 2018).

Although Bronfenbrenner (1977) has included family, schools, and peers as immediate environments for youngsters; family influence on children starts prior to schooling, and family members are the ones that children firstly establish emotional attachment. Family factors make the most initial influence on children's academic and life success (Tully et al., 2017).

Structure of the Dissertation

This dissertation included three separate manuscripts that addresses family involvement and children's outcomes. The first manuscript is a systematic review that synthesized empirical studies and aims at revealing the effects of different types of family involvement among ELs children at their early childhood stage (from 3-5 years).

Both the second and the third studies are quantitative studies. I utilized the kindergarteners' information from the Early Childhood Longitudinal Studies-Kindergarten: 2011 (ECLS-K:2011) for model analysis. In the second study, I conducted hierarchical linear models to analyze the effect of family involvement on children's social interaction and self-control competence. By analyzing multiple models, I am interested in the association between school outreach efforts to families and children's socioemotional outcomes, and the mediation effects of family involvement between such association. This study serves to understand the differences between ELs and non-EL children's outcomes, and the different levels of their parents/caregivers' involvement in

their education.

In the third study, I utilized a structural equation model (SEM) to examine family involvement factors among the EL population. I explored how family involvement at home and parents/caregivers' expectation on children's degree were associated with EL children's academic and socioemotional outcomes. This study provided important information on how family-school partnership functions on the EL group.

CHAPTER II

THE EFFECTS OF FAMILY INVOLVEMENT ON ENGLISH LEARNERS' OUTCOMES AT THE EARLY CHILDHOOD STAGE: A SYSTEMATIC LITERATURE REVIEW

Introduction

Early childhood is a critical period for human growth. Both cognitive and non-cognitive (i.e., socioemotional and behavioral) competencies development starts at this stage and they will continue to impact the process of individual development in their later lifetime. For instance, children's academic, social and behavioral performance at early age can predict school success, mental well-being and future socioeconomic status (St. Clair & Jackson, 2006).

The interaction between children and their surroundings shape their developmental processes (Shonkoff & Phillips, 2000). Among all the factors that influence childhood development, family is a vital because parents/caregivers are the most immediate people who interact with their children every day. Positive family involvement indicates not just being present at certain events or checking children's homework as requested by teachers. More importantly, involvement requires caregivers to be aware of their importance in child's education, in another word, their attitudes and behavior toward child education can impact their children's engagement in educational activities (Fantuzzo et al., 2004; Reynolds, 1992). Parents/caregivers' involvement refers to actions that directly or indirectly contribute to children's development in domains such as physical, cognitive, social and emotional well-being (Gonida & Vauras, 2014; Ma et al., 2016; Xu et al., 2010).

Research has shown positive association between children's outcomes and parents/caregivers' involvement in children's education (Castro et al., 2015; Fan & Chen, 2001; Jeynes, 2017). Family involvement has shown effects on academic performance such as

children's increased language (e.g. Cheung, Kan, Winicour, & Yang, 2018), mathematic (e.g. Powell, Son, File, & San Juan, 2010), writing competence, and academic success in general (Harris & Robinson, 2016). Besides, family involvement can positively influence children's work habits (e.g. O'Donnell & Kirkner, 2014) and self-concept (e.g. Niehaus & Adelson, 2014). These findings suggest that children whose parents/caregivers involve more in their education can show better performance in a variety of developmental domains including social, emotional, and academic competency.

However, English learners' (ELs) parents/caregivers were reported to show a lack of involvement. These parents/caregivers from diverse racial, linguistic and cultural backgrounds, have limited or no English proficiency (Alexander, Entwisle, Blyth & McAdoo, 1988; Drummond & Stipek, 2004; Smith, Stern, & Shatrova, 2008), therefore, they experience linguistic and cultural barriers as they communicate with the school. The barriers might hinder mutual interaction and result in these parents/caregivers' lack of trust and lack of knowledge regarding operation and expectations in school (Smith et al., 2008). Often time, these parents/caregivers feel unwelcomed and marginalized in children's schools. Ethnic minority students' unpreparedness and failure at schools is partly due to their parents/caregivers' limited educational involvement (Harris & Robinson, 2016; Smith et al., 2008). Family environment, that should be a protective factor to childhood development, might therefore become a negative influence on EL children.

The status quo requires a deeper understanding on effective practices that ELs' caregivers can participate in order to remedy the children's underperformance and to facilitate their children's education. Through a systematic searching method, this review synthesizes different

types of family involvement activities and training programs that EL parents/ caregivers have participated; and examines the effectiveness of these practices.

Theoretical Framework

Bronfenbrenner's Ecological System and Epstein's Overlapping Spheres explain human development in relation to people's surroundings, and they both place children at the center of the interconnection and dynamic external environments (Bronfenbrenner, 1986; Epstein, 1995). In the ecological system, the family and the school are in the microsystem and their interaction locates in the mesosystem. Although the microsystem is the immediate surrounding that has a significant impact on childhood development, students show more academic, social, and behavioral gains when mesosystemic intervention (home and school) is used, in contrast to microsystemic intervention alone (Zins et al., 2004). The overlapping spheres emphasize the partnership between home, school, and community. The three stakeholders should be drawn together and organize partnership activities to "engage, guide, energize and motivate students to produce their own success" (Epstein, 2018, p.12). The closer the three spheres connect, the more likely students will achieve success in school and in life (Epstein, 1995; Epstein, Galindo, & Sheldon, 2011; Epstein et al., 2018).

The significance of socioemotional well-being has been widely recognized by researchers. Self-control is the competency of self-adaptation of thoughts, feelings, and actions so as to produce an optimal fit between self and world (Tangney et al., 2004). Children with higher self-control capacity are more likely to get assignments done on time, prevent emotional distractions from impeding performance, and use time efficiently (Duckworth et al., 2019). Thus, self-control facilitates children to concentrate in tasks and to focus on schoolwork, which further enhances

academic performance. In addition, as children regulate themselves, they perform fewer problematic behaviors and more prosocial practices toward other people (Campbell et al., 2016).

Likewise, interpersonal skills also contribute to school performance. Interpersonal skills refer to prosocial behaviors such as positive interaction with surrounding people, especially with peers, cooperative playing, learning, and sharing. Previous research has revealed the significance of children's peer relations as they adapt to school life (Mcclelland et al., 2006; McClelland & Morrison, 2003).

Literature Review

Theory on family involvement in education rarely distinguishes between EL and non-EL groups. However, the existence of numerous empirical studies that focused on the EL group has made a systematic review in understanding the types and effectiveness of EL family involvement possible (e.g. Niehaus & Adelson, 2014; Roberts, 2008).

Family Involvement and Childhood Development

It is undoubtful that family involvement is significant to children's education and development (Baydoun, 2015; Benner et al., 2016; Gilbert et al., 2017). Studies have extensively confirmed family involvement, especially at early ages, have positive impacts on different aspects for children. For instance, parents/caregivers' academic expectation significantly contributes to children's academic attainment in early elementary stage (Loughlin-Presnal & Bierman, 2017). In addition, if disadvantaged parents/caregivers can receive treatment from professionals and actively implement strategies learned to their children, the children are more likely to show significantly better life outcomes, and the treatment can be most optimal when children are in early childhood stage (i.e. 3-8 years old) or younger (García et al., 2016).

Yet many family factors such as parents/caregivers' educational level, household

income, and ethnicity are almost impossible for change, other factors including parents/caregivers' beliefs, expectations, and behaviors, can be amenable to change with appropriate interventions. Current studies mostly focus on these changeable factors among parents/caregivers to identify approaches that enhance their involvement.

According to Epstein (1995), parent-school partnership is comprised of six types, including learning at home, parenting, volunteering, school-parents/caregivers communicating, and decision making in school context. As studies have revealed that parents/caregivers' expectation on child education has strong association with children's academic performance(e.g. Fan & Chen, 2001; Hill & Tyson, 2009), it is often considered as a manifestation of parents/caregivers' educational engagement.

Before children enter the school context, caregivers are the first teachers who navigate their children in life and in learning. Higher level of parental involvement at the childhood often associates with children's better literacy competence, (Castro et al., 2015; Kessler, 2010), higher-order thinking, social behaviors (Benner et al., 2016; Van Voorhis et al., 2013). The influence from family is long-lasting, thus, involvement at early ages not only impact child's current behavioral and academic performance, but can predict child's future academic outcome, chance of higher education, and their success in life (Benner et al., 2016; Spees et al., 2017).

English Learners (EL) and their Parents/caregivers' Involvement

In the United States, the EL group is a large and the fastest growing student population. This highly diverse group has nearly 60% children coming from low-income families in which parents/caregivers have "disproportionately" limited levels of education (McFarland et al., 2017; National Council of Teachers of English, 2008). Despite some ELs might have developed communicative skills in English, they still struggle with academic language. In addition to

linguistic issues, compared to non-ELs, EL children show weaker academic performance in all subjects, including English reading, writing, and mathematics (Marian et al., 2013; National Center for Education Statistics, 2016; Olszewski-Kubilius et al., 2004).

Thus, caregivers' participation in education can be extremely vital for EL children. Since increased involvement and sensitivity can balance out negative impacts (e.g., underdeveloped cognitive competency, children unpreparedness to schooling, and lacking interpersonal skills) brought in by parents/caregivers' low educational level and limited monetary resources (Green et al., 2007; Guralnick, 2006). The key premises of family involvement require caregivers to have a mindset as co-educators, recognize the significance of education for their children, and understand the difference parents/caregivers can make in teaching the value of education to their children (Hoover-Dempsey et al., 1995).

Unfortunately, EL caregivers were reported to show less involvement, particularly in the school context (Baird, 2015). Yet often times, the parents/caregivers were more unable to engage rather than unwilling to. Coming from another background, language barriers and cultural gaps between EL parents/caregivers and teachers alienate both sides from smooth communication (Daniel-White, 2002; Weiss et al., 2009). In many schools, the teachers speak limited or no Spanish, and some schools do not provide interpreters to parents/caregivers. Therefore, parents/caregivers of EL and ESL children experience harder time being engaged in two-way communication to school(Smith, Stern, & Shatrova, 2008). As a result, resources and information on education from schools are not fully reached to these families (Fugas, 2016).

With minimum communication, mutual trust can barely be established. Minority parents/caregivers felt not being encouraged, and that the knowledge they possessed was not valued by the school (Bang, 2009; Daniel-White, 2002; Froiland & Davison, 2014). Hence,

minority parents/caregivers are more likely to feel unwelcome at school, which further leads to less participation and connection to schools and teachers.

In addition, many EL parents/caregivers may have little familiarity with U.S. schools and the rules that operate within them (Crosnoe & Ansari, 2015). They often find themselves unfamiliar with the communication approaches with school and community, and how to access to external resources (Wong & Hughes, 2006). With such gap being imposed, many ELs and their parents/caregivers have been martialized and asked to participate "in a system that does not promote or encourage their own family values"(Daniel-White, 2002, p.3). Often times, it narrows parental involvement within the scope of the mainstream perception only and disregard the families' cultural and social resources. Furthermore, given the cultural differences the minorities encounter in the United States, their interaction with children might not be as effective as that of the mainstream parents/caregivers in alignment with their children's formal schooling (Daniel-White, 2002; Ishimaru et al., 2016). Therefore, researchers need to reveal effective methods that effectively facilitate EL parents/caregivers' involvement in child education. This study in hand can contribute significantly to determine strategies that parents/caregivers can use to help their EL children in academic tasks and socioemotional development.

The Current Study

As discussed above, the significance of family involvement and influence on children's performance has been extensively studied. Despite that researchers have promoted family involvement and taken it as a remedy to children's academic, social and behavioral problems (Epstein et al., 2018; Gonida & Vauras, 2014; Xia, 2009); family involvement among the EL group, is still not exhaustively examined (Froiland & Davison, 2016). This study aims to

understand what types of family involvement predict EL children's positive outcomes, which can be a theoretical basis that drives to recommendations for schools, districts and parents/caregivers.

This systematic review serves to answer three research questions: (1) what are the approaches and practices that EL parents/caregivers use to become involved in their children's education? (2) What are the methods that schools, researchers and/or other educational institutes use to facilitate EL parents/caregivers' involvement? (3) What are the outcomes associated with each type of involvement, and if the outcomes are positive, negative, or inconclusive?

Method

I utilized a systematic literature review process to explore the association between EL parents/caregivers' involvement and their children's outcomes. A systematic literature review aims at "reducing bias by identifying, appraising, and synthesizing all relevant studies on a particular topic" (Uman, 2011, p.57). The following procedures were followed to conduct this systematic review: raising research questions, identifying key words and searching in databases, screening titles and abstracts, obtaining and reading the articles in full text, extracting data, analyzing data, and reporting the findings (Boland et al., 2017).

Operational Definition

In this study, the three terms: English learners, family involvement and children's outcomes are defined as follows.

English Learners

I define ELs as children who speak a first language other than English; or children who come from an English-speaking environment yet show limited English proficiency and are identified as English learners by testing. I will use the information in the retrieved articles to identify the participants' EL status.

Family Involvement

The inclusion criteria for family involvement is an adjustment from Epstein's six types of involvement: parenting, communicating, volunteering, learning at home, decision making and collaborating with the community (Epstein, 1995). To capture a comprehensive picture of family involvement in child's education, this study include following components: (1) Enhancing children's academic performance via involvement in home, school activities, or family programs; (2) Assisting children's socioemotional skills via involvement in home, school activities, or family programs; (3) Maintaining positive relationship and connect to school personnel and other parents/caregivers; (4) Involving or initiating community or other activities that are relevant to child's development (e.g., bring children to tutor sessions or visit the museum); and (5) Showing and setting up expectation or aspiration to children.

Child's Outcomes

In this study, I distinguishes children's cognitive between noncognitive outcomes (Borghans et al., 2008). Cognitive ability refers to children's language competence (e.g. oral reading, reading comprehension, and vocabulary skills), mathematic competence, and other academic outcomes (e.g., writing skills). Noncognitive skills include academic behavior (e.g. attending classes), learning strategies (e.g. metacognitive skills), socioemotional skills (e.g. interpersonal skills and self-regulation), and behaviors.

Study Selection

To start with, I implemented a systematic searching in five major electronic databases that index education research: Education Resources Information Center (ERIC), PsychInfo, Linguistic and Language Behavior Abstract (LLAB), Education Source and ProQuest Dissertation and Thesis. The searching terms were to ensure that the included articles focused on

family involvement among EL children during early childhood. To create the searching terms, the ERIC Thesaurus was used for identifying synonyms and other subject terms before searching. The searching terms were categorized in three clusters. The first cluster comprised of terms associated with family involvement. The second cluster were terms to describe English learners and English second language speakers. The third cluster were to restrict children's age at the early childhood level. The words in each cluster are shown below.

Cluster 1: parent* involvement/parent* engage*/parent* particip*/family involvement/ family engage*/ family participat*/ family program*.

Cluster 2: English language learn*ELL*/English learner*/EL*/English as a second language/ESL*/second language learn*/bilingual learner*/dual language learner*

Cluster 3: elementary/primary/children/pre-K/Prekindergarten/ kindergarten/ first grade/second grade/ third grade/and grade 1/2/3

Each of these clusters were placed in separate fields of the databases' search interfaces. The words within the clusters were separated by the Boolean operator OR, and each field was connected by the Boolean operator AND. Search terms comprising of multiple words were enclosed with quotation marks. An asterisk was used at the end of some terms in order to indicate to the database to search multiple forms (e.g., learner, learners, learning). The parameters of the databases were set to search for these terms in the title or abstract. The searching was adjusted to different databases based on their codes.

Figure 1 is a flowchart (Moher et al., 2009) that displays the procedure of article selection for this systematic review. A total of 2,706 articles were imported to Rayaan (Ouzzani et al., 2016), a software designed for systematic review. 614 duplicates were identified and resolved, 2,092 articles were reviewed for title and abstract based on the following criteria:

1. Each article has to be an empirical study.
2. The study has to be conducted in English-speaking countries (i.e., The United States, Canada, the United Kingdom, New Zealand, or Australia).
3. The target samples are EL students at the early childhood stage, i.e., EL children who are 3-8 years old.
4. The study must measure or observe the association between family involvement (parents/caregivers or other caregivers' involvement) and children's outcomes, including academic, social, emotional and behaviors.
5. Family involvement has to be identifiable from other factors such as school effects.

The criterion restricted regions to ensure that the participants are children from English-native-speaking countries, and the studies focus on children who needs extra assistance in learning English from these areas.

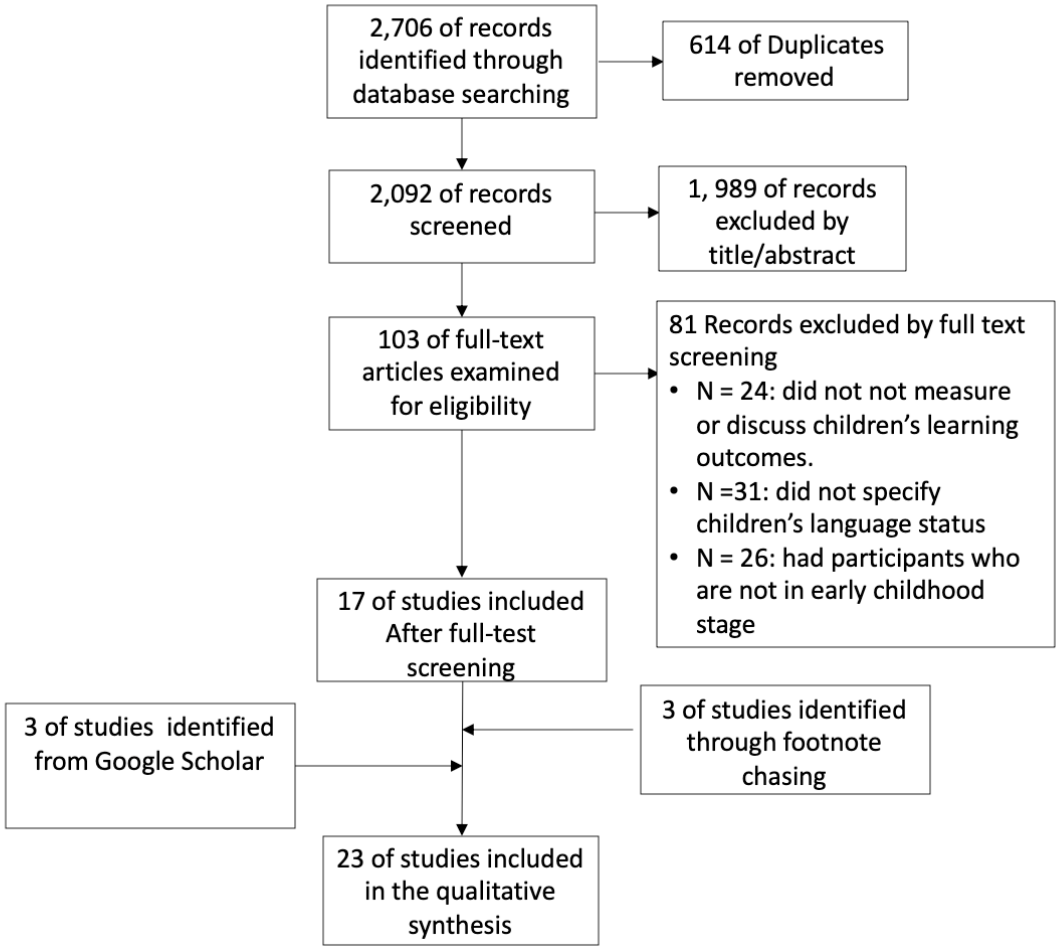

Figure 1. Flow Chart for Article Inclusion

Considering that studies with French first-language (L1) speakers in Canada fit the inclusion criteria. Yet French is also an official language in Canada (Mougeon, 2015), French-speakers in Canadian context are essentially different from ELs who encounter hard time navigating themselves in education system in the United State or the United Kingdom. This study will focus on the underrepresented EL groups and therefore exclude the studies with French L1 speakers in Canada.

After the first-round screening, 103 records remained and were further screened for inclusion. During this stage, I invited another rater, who is in the educational psychology field, and has received training on systematic literature review. Two raters reviewed the full texts and had eight conflicts, with an inter-rater Cohen's kappa of 0.73, which indicated that substantial agreement was achieved (Viera & Garrett, 2005). Both raters reviewed and discussed conflicts and finally reached agreements on exclusion. The full-text screening yielded 17 results. The 85 studies were excluded for the following reasons (1) did not measure or discuss children's learning outcome; (2) did not specify the children's language status; and (3) participating children were not on early childhood stage.

I also implemented footnote chasing to examine the references in the included articles. This process yielded three more articles. Three more studies were identified via searching through Google Scholar. Table 1 shows the strategies for literature searching.

Table 1. Strategies for Searching the Literature

Computer and / or Search of Electronic Databases and Resources
ERIC (Educational Resources Information Center database; includes Resources in Education and Current Index to Journals in Education
PsycINFO Psychological Abstracts
Education Source
ProQuest Dissertations & Theses Global
Linguistics and Language Behavior Abstracts (LLBA)
Google Scholar
Footnote Chasing
References in journals from nonreview articles
References from nonreview articles not published in journals
References in review articles
References in books/book chapters

Article Coding and Analysis

The included articles were read, coded and inputted in a literature matrix created in Excel. Each article was coded for author, year, title, publication name, country, population, grade level/age, research type, research instruments, involvement type(s), outcome type(s), data analysis, results, and measurement assurance. The literature matrix along with any additional notes taken was used in the synthesis of the studies that follows.

Coding Interrater Reliability

The two raters independently coded for each of the above categories of the studies. The raters discussed the categories and then coded each article independently. Interrater reliability was calculated for each of the categories, and the two raters had an inter-rater Cohen's kappa being 0.69 for all categories, indicating that marginally substantial agreement was achieved (Viera & Garrett, 2005). The two raters discussed each discrepancy, and all disagreements were resolved during the discussion by referring to the original articles.

Results

This current systematic review included 23 articles, 21 of them were conducted in the United States, and two were in Canadian context. I did not set time constrain when searching through electronic databases. After screening and excluding, the publication date for the included articles ranged from 1985 to 2019. 1980 to 1989 had one article; 1990 to 1999 had two articles; 2000 to 2009 had 10 articles; and 2010 to 2019 had 11 articles. Across the 25 years, the years with the most publication on the discussed topic is 2002, which yielded three included articles. In terms of publication type, 10 of the articles are from peer-reviewed journals, nine are doctoral dissertations, two articles are reports, one article is a master thesis, and one is a book chapter. Table 2 and Table 3 each presents the information of all the articles. Specially, Table 2 shows

authors, year of publication, category of children's outcome(s), category of publication type, research method, and country. Table 3 displays detailed information on participants, date source(s), data analysis methods, type of family involvement, outcome results, and quality assurance. The following section present a summary on the following characteristics: participants, research design, and types of parental/ caregivers' involvement and students' outcomes.

Table 2 Summary of year, outcome type, publication type, research method, and country

		Publication type				Research Method		Country	
Study by Outcome Types	Year	Journal article	Dissertation /Thesis	Book chapter	Report	Experimental	Observational	United States	Canada
Academic outcomes									
Brasel	2008		√				√	√	
Cheung et al.	2018	√					√	√	
St. Clair & Jackson	2006	√				√		√	
Elorriaga	2006		√			√		√	
Espinosa	2018		√			√		√	
Garcia	2006		√			√		√	
Hammer et al.	2003	√					√	√	
Hartsock & Battles	2004		√				√	√	
Hindin	2001		√			√		√	
Linsley et al.	1993				√		√	√	
Mushi	2001				√		√	√	
Pelletier & Corter	2005	√				√			√
Pérez-Leroux et al.	2011			√			√		√
Roberts	2008	√				√		√	
Stiles	2010		√				√	√	
Tang	2012	√					√	√	
Wollman-Bonilla	2001	√					√	√	
Academic and Socioemotional outcomes									
Busco	1991		√			√		√	
Kessler	2010		√			√		√	
Long	2017		√				√	√	
Niehaus & Adelson	2014	√					√	√	

Table 2 (Continued)

		Publication type				Research Method		Country	
Study by Outcome Types	Year	Journal article	Dissertation /Thesis	Book chapter	Report	Experimental	Observational	United States	Canada
Behavioral Outcomes									
Rangel	2016		√			√		√	
Behavioral and Socioemotional Outcomes									
Valdez	2013	√				√		√	

Table 3 Summary of participants and numbers, data analysis, involvement type, outcome results, and quality assurance

Study	Participants	Data Source(s)	Data Analysis Methods	Involvement Type(s)	Outcome Result(s)	Quality Assurance
Brasel (2008)	145 2nd graders and their parents/caregivers.	1. Parent questionnaire 2. Criterion Reference Competency Test for reading	Quantitative: descriptive and linear regression	General family involvement	A statistically significant correlation between children's test scores in reading comprehension and family involvement.	Split-half internal consistency and Cronbach's alpha for the parents/caregivers' survey
Busco (1991)	124 children from 1st grade to 3rd grade and their parents/caregivers.	1.the Spanish Assessment of Basic Education (SABE) 2. Behavioral Academic Self-Esteem	Quantitative: descriptive and ANOVA	Parents/caregivers' participation in literacy program	No significant difference between gains in vocabulary, comprehension scores and self-esteem measurements of the treatment and control groups.	The validity and reliability of students' measurement SABE were discussed
Cheung et al. (2018)	92 prekindergarten children and their parents/caregivers.	1.Parent questionnaire 2. vocabulary assessment with children	Quantitative: Descriptive and multiple regression	Use of language at home	The amount of L1 and L2 used across some home activities (e.g., dinner, playing with family, reading out loud) predicted children's conceptual vocabulary knowledge.	Not discussed
St. Clair & Jackson (2006)	19 families in treatment group, and 23 families in control groups, the children were from kindergarten to 1st grade	1.Woodcock-Muñoz Language Survey (WMLS) on broad English language skills 2.Nebraska State Reading Assessment	Quantitative: Descriptive and ANOVA	Family involvement training	Children from families that participated in the parent involvement training program scored significantly higher on language measures than children in the control group.	Reliability and construct validity on WMLS
Elorriaga (2006)	8 kindergarten to 2nd grade level children and their parents/caregivers.	1. Dynamic Indicators of Basic Literacy Skills (DIBELS Test), 2. Questionnaire, 3. Observation, 4. field notes 5. interview	Qualitative: Content analysis	Graduate student assisted parents/caregivers to mentor their children in computer skills	Parents/caregivers reported that the experience helped their children to improve reading skills.	Construct validity, internal validity, external validity and reliability were each addressed

Table 3 (Continued)

Study	Participants	Data Source(s)	Data Analysis Methods	Involvement Type(s)	Outcome Result(s)	Quality Assurance
Espinosa (2018)	17 preschoolers and their parents/caregivers	1. Children's mathematic performance 2. Pre/post interview 3. School visit	Qualitative: Family surveys, classroom observation, interview with teachers, teachers' notes research journal and anecdotes	Parent utilize Take-Home Math Literacy Bag that facilitate children's math learning	The program has a positive effect on children's language and literacy development that is sustained in the elementary school years. Most children also increased their skills in counting and shape recognition.	Not discusses
Garcia (2006)	70 preschoolers and their parents/caregivers	1.TAKS Reading, 2.TAKS Mathematics, 3.TerraNova, and 4.TerraNova SUPERA. All in both Spanish and English versions	Quantitative: descriptive statistics	Parents/caregivers participation in the home instruction for parents/caregivers of preschool youngsters (HIPPY) program	In terms of the TAKS assessment, a statistically significant difference between the control and treatment group were found in reading performance, but not in math. In the TerraNova and TerraNova SUPERA assessment, the treatment group outperformed the control in reading, vocabulary, composite language scale, mathematics and math computation skills.	Internal validity and external validity of the experimental design were addressed
Hammer et al. (2003)	15 Spanish L1 children and their parents/caregivers; mean age =3 years and 8 months.	1. Home activity questionnaire, 2. Test of reading ability	Quantitative: Pearson correlation coefficient and Mann-Whitney	Use of language at home	The relationship between children's performance on early English literacy and home environment was not statistically significant.	Cronbach's alpha was reported for the home activity questionnaire.
Hartsock & Battles (2004)	38 EL and 21 NEP 3rd graders and their parents/caregivers	1.Number of assignments completed 2. Test score in Stanford math test	Quantitative: descriptive and Pearson correlation coefficient	Parents/caregivers tutoring in math assessment	Positive, moderate to high correlation (NEP r=0.57, EL r=0.49) between parent-tutored finished assignment and children's Stanford math test scores.	Reliability and validity of LAS test and Standard 9 tests were discussed
Hindin (2001)	8 2nd graders and their parents/caregivers	Children's oral reading performance	Quantitative: descriptive analysis on the pre- and post-performance	Home-reading intervention	Children improved in word reading, oral reading, and reading fluency. They showed positive changes in error rate.	Not discussed

Table 3 (Continued)

Study	Participants	Data Source(s)	Data Analysis Methods	Involvement Type(s)	Outcome Result(s)	Quality Assurance
Kessler (2010)	49 families, 25 in control, 24 in treatment, from k to 4th grade	Measurement on children's reading, school attendance and school behavior.	Quantitative: descriptive, t-test and ANOVA	parent participation in family training program	Significant difference between control and treatment groups in reading and behavior. Yet no statistical difference found in the attendance behavior between the two groups.	Not discussed
Linsley et al. (1993)	14 pre-kindergarteners and their parents/caregivers	Children's Pre-LAS scores	Quantitative: descriptive	Minutes of parents/caregivers read to children	Moderate correlation between the total minute parents/caregivers read to their children and children's performance in pre-LAS English test.	Not discussed
Long (2017)	295 3- and 4-year-old children and their parents/caregivers	1.Parent survey, 2. Children's English proficiency (PPVT-III and WJ-III), 3. Children's socioemotional development (the ECERS-R)	Quantitative: Descriptive, and multiple regression	Parental involvement in school activities (volunteering, attending PTA, helping on field trips, and fundraising)	No direct relationship between family school involvement and children's aggressive adjustment problems. Family school involvement inversely predicted children's internalizing and externalizing behaviors.	Utilizing well-established measurement scales. Calculated Cronbach's alpha for used measurements.
Mushi (2001)	32 pre-k to kindergarteners and their parents/caregivers	Observation on children's utterance	Quantitative: descriptive	Number of joint parent-child activity and number of parent utterance without joint activity.	Positive correlation between parents/caregivers-child joint activities and children's utterance and new words in speaking.	Not discussed
Niehaus & Adelson (2014)	1020 3rd graders and their parents/caregivers	Early Childhood Longitudinal Study: K-1998	Quantitative: descriptive and structural equation modeling	parents/caregivers' participation in school events and communication with their children's teachers.	More family involvement was associated with fewer social and emotional problems among ELs. Family involvement was more strongly related to socioemotional skills than to academic achievement among EL children.	Internal validity of the ECLS survey and outcome measurements

Table 3 (Continued)

Study	Participants	Data Source(s)	Data Analysis Methods	Involvement Type(s)	Outcome Result(s)	Quality Assurance
Pelletier & Corter (2005)	186 4-year-old children and their parents/caregivers	Interviews, surveys outcome measurements teacher ratings on the Early Developmental Instrument (EDI), and by parent ratings.	Mixed method: Descriptive and ANOVA Content analysis on interviews	Parents/caregiver' participation in readiness center (RC)	ESL children who had RC experience scored significantly higher than other ESL children.	Discussed the criteria for interpreting findings based on Reynold's (2004) theory.
Pérez-Leroux et al. (2011)	17 families and 23 children with the mean age of 5 years 2 months	Parent questionnaires, children's interviews and children's speech samples	Mixed method: descriptive, and content analysis on interviews and speech samples	Home language environment created by parents/caregivers	Language input conditions are the most relevant determinant factor to children's language outcomes. Input conditions for younger children depend primarily on language practices of household members, i.e., the frequency they speak in each language during children's language transmission process.	correlation between parents/caregivers' rating and children's language task to validate parents/caregivers' ratings in surveys
Rangel (2016)	743 1st grade ELLs, 376 in control and 367 in treatment	1.Strengths and Difficulties Questionnaire (SDQ) 2.Parent's interview	Mixed method: descriptive, multilevel growth curve modeling, inductive analytic techniques	Parents/caregivers' participation in Families and Schools Together (FAST) program	EL students at FAST schools had more positive behavior ratings, on average, than their peers at control schools.	Addressed the validity of SDQ, an established instrument by citing previous studies
Roberts (2008)	33 preschoolers and their parents/caregivers	Pretest and posttest overall storybook, vocabulary tasks, weekly vocabulary tests, Peabody picture vocabulary test, test Preschool IDEA oral language proficiency test, and caregiver language and literacy survey.	Quantitative: descriptive and effect sizes	Home story reading by parents/caregivers	Primary-language storybook reading in the home was as effective as home story book reading in English for promoting English vocabulary acquisition in preschool English learners.	Not discussed

Table 3 (Continued)

Stiles (2010)	5 families, 8 children who are from kindergarten to 2nd grade	Visiting the participating families; observing, and parent journals	Qualitative: content analysis on interview, observation and parents/caregivers' journals	Parents/caregivers' interaction with children in mathematic activities	Observed positive problem solving at home, child helps with chores relevant to mathematic concepts (e.g. measure the ingredients), and understanding of mathematic concepts (e.g. pay at the grocery)	Replication of events as reliability; extensive time in the field, negative case analysis, dense descriptions, feedback from others and respondent validation as validity.
Tang (2012)	72 children from kindergarten to 3rd grade, and the parents/caregivers of their children	children's Letter-Word recognition skills	Quantitative: descriptive, and OLS regression	Family involvement in school-based activities	The study compared the literacy performance in kindergarten and in 3rd grade and found that increased family involvement appeared to be consequential for children's 3rd grade literacy growth.	Addressed the validity of the Letter-word recognition, a subscale of the Woodcock–Johnson Psycho-Educational Battery-Revised, an established instrument by citing previous studies
Valdez et al. (2013)	3091 first graders and their parents/caregivers	Two surveys for parents/caregivers. Pre-surveys on social capital. Post-surveys on social capital, children's emotional and behavioral functioning, and parents' language dominance	Quantitative: correlation and latent profile analysis	Parents/caregivers participated in the FAST program.	FAST program did not have an effect, on children's emotional and behavior functioning, although FAST did increase parents/caregivers' social capital for the most isolated of parents/caregivers, those who are Spanish-dominant.	
Wollman-Bonilla (2001)	4 parents /caregivers and their children with the age of 5 years 8 month to 7 years and 1 month	weekly participant-observation in one classroom; interviews with teachers, family members and children; collection of journal messages and replies; and collection of related classroom artifacts	Qualitative: content analysis	Parental involvement in writing instruction	Families have significant 'funds of knowledge' to contribute to children's literacy learning processes. Families often modeled genres that were uncommon in children's reading experience, can provide children's only regular models of other socioculturally valued genres.	Not discussed

Participants

Participants in all the studies were children and their parents/caregivers. Authors of several studies conducted teacher interview or questionnaires to obtain more information about the participating families (e.g. Pelletier & Corter, 2005; Rangel, 2016). Six articles included both EL and English-native/ dominant students in the same study (i.e. Hammer, Miccio, & Wagstaff, 2003; Hindin, 2002; Long, 2017; Pelletier & Corter, 2005; Valdez, Mills, Bohlig, & Kaplan, 2013; Wollman-Bonilla, 2001), but the analysis separated EL's performance from the other groups. A total of 4,744 EL children and 4,732 caregivers were examined in the included 23 articles. Two of the studies had families with more than one child participants (i.e. Pérez-Leroux, Cuza, & Thomas, 2011; Stiles, 2010).

Research Design

Two types of methodological design were utilized in these included articles: (1) observational studies (N=12) that measured the association between parents/caregivers' involvement and child's outcomes, and (2) experimental studies (N=11) that examined the effectiveness of parents/caregivers participated interventional programs/activities on child's outcomes. The analytical methods for the included articles were quantitative (N=16), qualitative (N=4) and mixed method (N=3).

Family Involvement and Children's Outcomes

Three specific types of parental/caregivers' involvement that fall underneath the operational definition were analyzed: (1) direct involvement in academic learning (i.e. parent/caregivers initiated tutoring or/and enhance parenting skills in family programs) (N=16), (2) involvement in school, and (N=3) (3) parents/caregivers building connections with teachers and other parents/caregivers (N=3). Finally, Brasel (2008) did not distinguish family

involvement in school and at home and examined parental/caregivers' involvement activities in general.

All the studies but two addressed children's academic outcomes. Among these 21 articles, 17 of them focused solely on academic performance; and 14 measured children's language and literacy competencies. One study reported EL children's mathematic competence, one study focused on children's competence with computer, and one study looked into multiple areas (e.g. reading and math) of learning outcomes. Two studies focused on socioemotional outcomes in addition to academic performance, and two studies looked at both behavioral and academic outcomes. One study focused exclusively on behavioral performance, and one article had both socioemotional and behaviors as outcomes. Specific types of children's outcomes will be presented in relation to family involvement approaches. Figure 2 shows a brief summary of the included 23 articles.

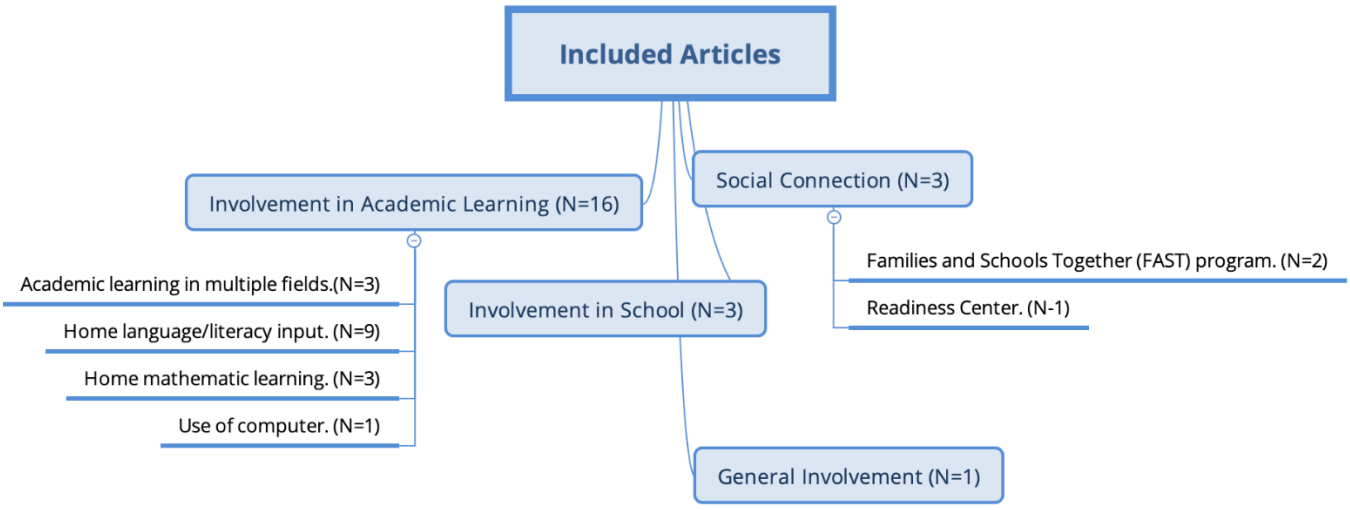

Figure 2. Summary of included articles

Family Involvement in Academic Learning

The learning activities mentioned in the articles can be classified into four domains: (1) parents/caregivers assist with children's academic in multiple fields, (2) home language and literacy input, (3) parents/caregivers tutor children's mathematics, and (4) parents/caregivers facilitate children use of computer.

Academic Learning in Multiple Fields. Three family programs focused on the association between parental/caregivers' involvement in children's multiple academic competencies. Garcia (2006) recruited parents/caregivers into a home instruction program. The assessment results showed that the treatment group outperformed the control group in reading, vocabulary, composite language scale, mathematics and math computation skills. Kessler (2010) examined the Abra Family Program that strengthened the family-school partnership by providing training and school information to parents/caregivers. Children in the treatment group showed better reading scores and behaviors compared to the control group. Yet no difference was found in participants' school attendance rate. Espinosa (2018) provided Take-Home Math Literacy Bag and supporting instruction to families in order to enhance children's language, literacy, counting, and recognition skills. The results showed positive effects among children on the four areas.

Home Language/Literacy Input. The nine studies that examined home language input can be classified into two categories: (1) family language environment and (2) parents/caregivers involvement in literacy activities.

In the first category, Hammer et al. (2003) looked into language used at home and the frequency of child's home literacy activities via questionnaire; yet the relationship between children's performance on early English literacy and home environment was not statistically significant. Pérez-Leroux et al. (2011) measured parents/caregivers' language competence and

language environment at home. The results showed a positive association between the frequency of family members use a language and children's language outcomes. Cheung et al. (2018) examined the use of Cantonese (L1) and English (L2) at home by examining questionnaire given to parents/caregivers. The finding suggested that the amount of L1 and L2 used across some home activities (e.g., dinner, playing with family, reading out loud) predicted children's conceptual vocabulary knowledge.

In the second category, Busco (1991)'s study examined a family literacy program. This program helps parents/caregivers in the treatment group to instruct Spanish literacy book to children. The results showed that children in the treatment group had higher gains in vocabulary, comprehension and self-esteem scores, yet the gains were not statistically significant. Linsley and Linsley (1993) measured the correlation between the length (by minutes) that parents/caregivers read to their children and children's LAS scores, and found a strong, positive correlation. Mushi (2001) analyzed the association between the number of parent/caregiver-child joint activities, numbers of parent utterance to children, and children's utterance. The results showed strong and positive correlation. Wollman-Bonilla (2001) observed and analyzed parents/caregivers' facilitated writing activities, the findings revealed that the minority families have significant funds of knowledge as they often modeled genres that were uncommon in children's reading experience, "thereby providing children's only regular models of other socioculturally-valued genres" (p.187). Hindin (2002) measured the effects of parents/caregivers' home reading on children and found that children improved on an independent reading measure in word reading, oral reading, and reading fluency. St. Clair & Jackson (2006) provided 25 one-hour sessions that facilitated parents/caregivers' interaction with children at home. This family program invited educators to model tutoring children's literacy.

Students whose parents/caregivers were in the family involvement training program had significant higher scores on overall Broad English ability test and every sub-test component (e.g. picture vocabulary, verbal reasoning and writing). Roberts (2008) guided parents/caregivers to provide primary- or English language home storybook-reading treatment to their children. This study found that children had substantial gains of words from the storybook reading experiences. In addition, home story reading in a L1 was as effective as reading in English in English vocabulary gains.

Home Mathematic Learning. Three studies focused on math learning activities at home. Hartsock & Battles (2004) examined the correlation between parental/caregivers' assistance in the completion of mathematic homework and children's mathematic achievement among the NEP and EL groups respectively. The correlation for both groups were positive and moderate. Stiles (2010) observed parent-child interaction in math activities, and found positive problem solving happened at home. Last but not least, Espinosa (2018) examined a 4-week bilingual (Spanish/English) family math program for Hispanic EL families. The findings showed that participants improved in shape recognition, counting skills, and increased visits to the math center.

Use of Computer. One study, i.e. Elorriaga (2006) implemented Integrated Migrant Parent and Child Computer Training (IMPACCT), in which graduate student assisted parents/caregivers to mentor their children in computer skills on a weekly basis. The intervention fostered parents/caregivers and children's computer skills and had statistically significant gains on children's reading skills.

Social Connection

Three programs were implemented to enhance parents/caregivers' social relationship with schools, their children, or other parents/caregivers. Valdez et al. (2013) and Rangel (2016) examined the Families and Schools Together (FAST) program that strengthens connection between parents/caregivers and their children. In this program, parents/caregivers and children participated in 12 core processes that promoted social connection. Pelletier and Corter (2005) enrolled parents/caregivers in the Readiness Center that aimed at "building long-lasting lasting collaboration among schools, families, and communities" (p.91). The results showed that EL children who had Readiness Center experience scored significantly higher than other EL children in overall outcomes, language and teacher-child interaction.

Involvement in School

Three studies measured parental/caregivers' school involvement as a predicting factor. Tang, Dearing, & Weiss (2012) measured children's literacy in kindergarten and at the 3rd grade, they found that increased family involvement in school may be predictive to children's third grade literacy growth. Niehaus & Adelson (2014) found that higher level of EL family involvement in school was linked with fewer social and emotional problems and better academic outcomes. Long (2017) measured parental/caregivers' involvement in school organized activities such as PTA and fund-raising. The results revealed that more parental/caregivers' involvement predicted fewer energy behavior problems, despite with a small effect size. Yet such association was not found with other internalizing or externalizing problems.

General Involvement

One study, Brasel (2008) utilized parent/caregiver questionnaire to measure the degree of family involvement in school and at home. A correlation measurement found statistically

significant results between children's reading comprehension tests and parental/caregivers' overall involvement.

Discussion

This review aims at synthesizing different types of family involvement among early childhood ELs and investigating the effectiveness of these involvement practices on children's outcomes. Because of the limited number of articles and the substantial variations in their methodologies, I could not conduct a meta-analysis; thus, the findings should be interpreted with caution.

The findings on parents/caregivers' involvement in EL children's education align with the results from previous synthetic research, that the effects of family involvement on children's academic outcomes were generally positive (e.g. Castro et al., 2015; Fan & Chen, 2001; Jeynes, 2012; Jeynes, 2017). Despite previous meta-analysis has repeatedly confirmed the positive influence from parents/caregivers' involvement, this study made unique contributes to the literature by identifying the EL children at the early childhood stage.

A total of 21 studies looked into the effects of a variety types of family involvement on children's academic outcomes. 17 of them focused on family involvement in literacy (e.g. reading with the children, and home language use), and mathematic learning (e.g. tutoring mathematics to children). Two studies examined the association between family involvement in school and children's academic performance. One study examined general parents/caregivers' involvement, and one study found the relation between a computer training program among parents/caregivers and children's academic gains. The rest two studies implemented FAST program and compared the behavioral and socioemotional outcomes of children from participating families and non-participating peers.

The results from these studies all showed that, with parent/caregiver-directed or educators-guided intervention, children's performance in the corresponding academic area improved or was significantly better than children without parents/caregivers' interventions (e.g.,Cheung et al., 2018; Mushi, 2001; Stiles, 2010). The findings falsify the deficiency perspective toward EL families by proving that EL parents/caregivers' impact can be positive, even without educators' assistance (e.g. Cheung et al., 2018; Tang et al., 2012).

ELs' home culture is valuable assets. To EL children, use of both English and home language by parents/caregivers' and siblings are conductive to their development in general language and English competency (e.g., Cheung et al., 2018; Pérez-Leroux et al., 2011). The studies also revealed that EL families have their unique fund of knowledge such as language and genre of writing, and the knowledge can be passed down to the next generation as the parents/caregivers interact and tutor their children (Cheung et al., 2018; Wollman-Bonilla, 2001).

In addition, the findings also indicated the importance of school outreach. Parents/caregivers cannot operate child education on their own, especially for EL parents/caregivers who had difficulties in English, and felt themselves being unwelcomed at school (Daniel-White, 2002; Froiland & Davison, 2014). Rangel (2016) and Valzes (2013)'s parental involvement programs involved educators' demonstration on parent-children interaction, and instruction on strategies that parents/caregivers can use while working with children, and why are these approaches helpful. Such partnership optimizes parents/caregivers' practices and empowers their parenting skills, thus bringing more beneficial influence on their children.

However, the results on children's social and behavioral outcomes were unclear. Specially, certain effects of family involvement on socioemotional and behavioral outcomes

were positive, yet other results were negative. Specially, Niehaus & Adelson (2014) found that family involvement had significant effects on children's behavioral problems: when parents/caregivers involved more in EL children's education, these children reported fewer social and emotional problems. In Rangel (2016), EL children who have participated in FAST program showed more positive behavior ratings, than their peers at control schools. Even though Long (2017) did not find direct relationship between family school involvement and children's aggressive problems, this study found that when parents/caregivers had higher level of school involvement, children showed fewer internalizing and externalizing behavioral problems. Valdez et al. (2013) that also examined the effects of FAST program, did not show significant effects of the program on children's emotional and behavior functioning. Kessler (2010) showed family involvement to have positive impact on disciplinary behavior, yet no significant influence on internalizing and externalizing behavioral problems (Kessler, 2010). Finally, Busco (1991) did not found significant difference between gains of treatment and control students in children's self-esteem.

Strengths and Limitations

To our knowledge, this is the first systematic review of studies with the primary outcome of measuring and predicting parent engagement in children's education that are specifically focused on early childhood EL population.

Unlike other synthesis studies that focused solely on reviewing literature for children's cognitive outcomes (e.g. Fan & Chen, 2001; Jeynes, 2017), this review did not place any restrictions on the type of children outcomes. Therefore, the study can be inclusive of non-cognitive outcomes such as socioemotional and behavioral performance. By restricting the age level, we wanted to focus on the early childhood stage, which is a vital stage of child

development in both physical and mental perspectives. Additionally, parents/caregivers show higher degree of involvement at this time period.

The number of empirical researches focusing on parental involvement and EL children's social, emotional and behavioral outcomes is quite limited. Among all the included studies, only five of them examined the topic. To uncover the familial influence on children's non-cognitive competence development, we are hoping more studies to be conducted.

As we only identified 23 studies, our ability to draw firm conclusions is limited. As such, all findings stemming from this review should be viewed as preliminary in nature. Furthermore, some limitations of our findings should be noted. Firstly, there were not enough studies included in this review that consistently defined variables (both predictors of engagement, and stages of parental engagement), and that employed similar methods of analysis, to permit a meta-analysis to estimate effect sizes. In addition, the exclusion of article not in English may filtered some articles on parental involvement among the ELs. Finally, though we made efforts to retrieve all articles on the topic through the use of major databases that are inclusive of the bulk of literature, these databases are limited by the journals they index.

Conclusion

This systematic literature review consolidated segments of the current research studying the association between family involvement and children's outcomes. This review included 23 studies that met the inclusion criteria. These studies revealed that, in general, various types of family involvement, including training programs and spontaneous practices at home, can influence upon children's academic, socioemotional and behavioral outcomes.

More than half of the reviewed studies examined parents/caregivers' tutoring or participation in academic relevant activities in English language, reading, writing and

mathematics, and showed positive associations. Based on these studies, we learned that not only interventional practices, spontaneous involvement such as talk to children and can have positive impact on children development.

There are five English native-speaking countries worldwide, yet based on our searching, no articles meeting with the inclusion criteria were not found in the contexts of Britain, New Zealand, or Australia. A potential reason leading to this phenomenon is that immigration and ELs are more prevailing in the North America. However, these three countries also include large numbers of non-English speaking population, and some of the children are confronting with academic and socioemotional issues. We are looking forward to seeing more research conducted with a diverse population in different national contexts.

The current literature in the association between parental involvement and EL early children's socioemotional outcomes is lacking in the areas. Given that the importance of early childhood social competence to children's development (Campbell et al., 2016), we believe more research is needed to uncover the connection between family influence on early EL children's social skills.

CHAPTER III

FAMILY INVOLVEMENT, SCHOOL OUTREACH, AND CHILDREN'S SOCIOEMOTIONAL OUTCOMES

To better facilitate English learners (ELs) to succeed in the U.S. educational system requires educators to be aware of the existing gaps between ELs and non-ELs (National Center for Education Statistics, 2019). In addition, educators need to understand the barriers EL children encounter, which might be causes of such gaps. For instance, the cultural and linguistic mismatch between ELs and school personnel(Daniel-White, 2002).

EL children, who only acquire limited English proficiency are reported to encounter severe psychological stressors (Halle et al., 2014; Han & Huang, 2010), and exhibit more socioemotional problems compared to native non-EL peers (Crosnoe, 2007; Niehaus & Adelson, 2014).

Since children's social relationship establishment starts with their interaction with parents/caregivers and other family members, family has the primary impact on children's development at the early childhood stage. Family involvement comes in a variety of types, for instance, involvement at home in reading and tutoring, expressing educational expectations, and participation in school activities. To understand how different types of involvement can affect children's socioemotional outcomes can educators and parents/caregivers to conduct effective practices in both school and home contexts.

This study used a nationally representative sample from the ECLS-K:2011 database, utilizing a multilevel structural equation model to analyze the effects of school and family efforts for educational involvement on students' socioemotional gains. This study contributes to the literature by examining if EL and non-EL students differ in social competence with the support from the home environment and the school-family partnership. If the outcomes show statistically significant differences between ELs and non-ELs, schools and families might need to consider integrating socioemotional learning components through a school-home partnership to facilitate the underperformed group (Brackett & Rivers, 2014).

Theoretical Framework

Bronfenbrenner's Ecological System and Epstein's Overlapping Spheres explain human development in relation to people's surroundings, and they both place children at the center of the interconnection and dynamic external environments (Bronfenbrenner, 1986; Epstein, 1995). In the ecological system, the family and the school are in the microsystem and their interaction locates in the mesosystem. Although the microsystem is the immediate surrounding that has a significant impact on childhood development, students show more academic, social, and behavioral gains when mesosystemic intervention (home and school) is used, in contrast to microsystemic intervention alone (Zins et al., 2004). The overlapping spheres emphasize the partnership between home, school, and community. The three stakeholders should be drawn together and organize partnership activities to "engage, guide, energize and motivate students to produce their own success" (Epstein, 2018, p.12). The closer the three spheres connect, the more likely

students will achieve success in school and in life (Epstein, 1995; Epstein, Galindo, & Sheldon, 2011; Epstein et al., 2018).

The significance of socioemotional well-being has been widely recognized by researchers. Specifically, self-control refers to the competency of self-adaptation of emotion and behaviors so as to produce optimal fit between self and world (Reed & Rothbart, 1984). Children with higher self-control capacity are more likely to interrupt their undesired behaviors, therefore, they can produce positive outcomes in multiple aspects in life (Duckworth et al., 2019).

Interpersonal skill is the competence to communicate and interact different people, including parents/caregivers, siblings, teachers and peers. Interpersonal capacity plays a significant role in schooling since it predicts children's ability to collaborate with peers in group project, and it also impacts the way children negotiate with teachers when they have questions. With better interpersonal skills, children can maintain positive relationship, and might tend to interact more frequently with others. These skills facilitate children to make friends, and establish tighter bounds with school (McClelland & Morrison, 2003).

Literature Review

Self-control is an intra-personal skill that regulates one's emotions and behaviors to achieve one's goals (Guirguis & Antigua, 2017; Winsler et al., 2014), and interpersonal capacity is a social interaction skill, consisting of social awareness and communicative skills, which facilitates to establish positive relationships (Elias et al., 1997; Powell et al., 2010). Self-control and interpersonal capacity each display the

emotional and social aspects of children's development. The interaction and relationship between children and key adults (e.g. parents and teachers) has a significant influence on children's development (Christenson & Reschly, 2010; El Nokali et al., 2010). Better interpersonal skills mean that children can reach out to adults to receive more support, and they can work collaboratively with capable people. Such process facilitates learning, since learning is derived from interpersonal activity that emphasizes the importance of collaboration.

Significance of Socioemotional Competence

Cultivating socioemotional skills at an early stage lays the foundation for children's later development (Denham, 2003; Heckman & Masterov, 2004). Socioemotional competencies in kindergarten not only contributes to children's well-being and academic performance in early childhood (Denham et al., 2014; Niehaus & Adelson, 2014), but also predicts later psychological status (Bornstein et al., 2010), learning outcomes (Denham, 2003) and chances to pursue higher education (Halle et al., 2014; Winsler et al., 2014).

Family Background and Involvement and Child Socioemotional Competence

In the United States, family background impacts children's social competence through three intertwined factors: language status, socio-economic status (SES) and immigration status (Han, 2010; Han & Huang, 2010). ELs coming from disadvantaged and/or immigrant families are confronted with undesirable housing conditions and insecure neighborhoods (Evans & English, 2002); which makes them vulnerable to socioemotional distress (Halle et al., 2014; Han & Huang, 2010; Niehaus & Adelson,

2014). Further, parents/ caregivers' involvement in education, a dynamic factor, functions as a remedy for children's underperformance (Froiland et al., 2013). Children, including ELs have shown fewer social and emotional problems when their parents/caregivers are involved positively in their education. The results from El Nokali et al. (2010) suggest that improvements in family involvement associates with declines in children's problem behaviors and improvements in social skills. Niehaus & Adelson (2014) study have shown that EL children from families with more involvement in school tended to display fewer internalizing and externalizing problems.

Family involvement can occur at home (e.g. learning at home and expressing educational expectations), in the school (e.g. volunteering and contact school teachers) and in the community (Epstein, 1995; Fantuzzo et al., 2004; Grolnick & Slowiaczek, 1994; Hoover-Dempsey et al., 2005; Walker Shenker & Hoover-Dempsey, 2010). In another word, family involvement is multidimensional. This nature limits researchers from drawing a complete understanding of the family influence on children's development when only examining individual factors (Galindo & Sheldon, 2012).

Parents/caregivers' educational expectation on their children is a significant predictor to children's academic achievement (Fan & Chen, 2001; Hill & Tyson, 2009; Jeynes, 2005). High educational expectations are usually associated with more communication and caring on topics related to education. Conducting these practices at an early age can better prepare children for schooling (Froiland et al., 2012). Both empirical studies and meta-analysis have provided sufficient evidence. For instance, Froiland & Davison (2014) has shown positive effects from parental expectations on

children's school outcomes (standardized path coefficient=0.444), which has been stronger than SES (standardized path coefficient=.24). Furthermore, Castro et al. (2015) implemented moderation analysis in meta-analysis and found parental high academic expectations for children to be one of the strongest family involvement characteristics of children's academic performance.

School Outreach, Family-School Relation, and Child Socioemotional Competence

Schools have a significant impact on parents/caregivers' perception of their responsibility toward children's education (Christenson & Reschly, 2010; Hoover-Dempsey et al., 2005). Outreach to families will reinforce parents/caregivers' role as co-educators and motivate their involvement (Christenson & Reschly, 2010). Providing assistance (e.g. family literacy programs and child-care services during PTA) can send out messages of advocating school-family partnership (Ankrum, 2016; Campos et al., 2011; Epstein, 1995).

Schools and teachers that welcome EL families provides more opportunities to include EL parents/caregivers. Through regular mutual communication, these schools are more likely to engage EL families in school events and activities. These practices can have further impact on EL parents/caregivers: their inclusion in school context enhances their sense of belonging, and these parents/caregivers are more likely to take the initiation to facilitate children's education in both school and home context (Braley et al., 2009). Such partnership facilitates EL children's socioemotional well-being. Specifically, Niehaus & Adelson (2014) found that with higher school outreach efforts, EL children displayed fewer internalizing and externalizing behavioral problems.

Research Questions

The goal of the study is to extend previous research by analyzing the effects of school practices that engage families, family involvement at home and in school on EL children's gains in self-control and interpersonal capacity. This study is guided by four research questions: (1) Do EL and non-EL families show different levels of involvement in home, school, and in educational expectation to children? (2) To what extent is each family involvement indicator (i.e., home involvement, school involvement, and expectation on children's education) associated with students' self-control and interpersonal competence gains? (3) Does a higher level of school outreach for families, associate with children's self-control and interpersonal competence gains? Is the relationship between school outreach to families and socioemotional gains mediated by family involvement? (4) Do EL and English-native children's self-control and interpersonal competence gains differ due to the effects of family involvement and school outreach for families?

Method

The data used in this study were from Early Childhood Longitudinal Study Kindergarten Class of 2010-2011(ECLS-K:2011), sponsored by the National Center of Education Statistics. This nationally representative sample included 18,174 children clustered within 1,036 public schools and 283 private schools. The dataset focused on children's development status, including their home and school experiences, growth and learning. The ECLS-K: 2011 collected data from children, parents/caregivers, teachers, and school administrators. Thus, it enables researchers to explore how the family (e.g.,

parent-child home interactions), and the school (e.g., school outreach efforts to families) characteristics relate to children's development through questionnaires, interviews and assessments conducted to students, teachers, school leaders and parents (Galindo & Sheldon, 2012; Tourangeau et al., 2015).

Handling Missing Data

Table 4 shows the information with missingness for all the variables. The data are hierarchical in nature, and can lead to dependency between individual observations; which violates the independence assumption of Ordinary Least Sqaures (OLS) regression. Single-level treatment for missing cases and data analysis can result in biased parameter estimates (Hancock & Mueller, 2013). Therefore, I used multiple imputation of multilevel missing data algorithm (based on Markov Chain Monte Carlo techniques) with mice package in R for all the relevant variables across individual and school levels. (Grund et al., 2018; Weirich et al., 2014).

Table 4. Weighted descriptive statistics for the ECLS-K sample.

Key analytical variables	Mean or %	SD	% of missing
Self-control competence wave 1	3.09	0.62	19.5
Self-control competence wave 2	3.18	0.64	0
Interpersonal skills wave 1	3	0.63	18.7
Interpersonal skills wave 2	3.13	0.65	0
Family involvement in school	1.45	0.21	23.4
Family involvement at home	2.96	0.46	24.5
Parents' educational expectations	5.24	1.21	24.3
School outreach effort	3.12	0.46	10.4
English Learners%	9.34		10.2
Level-1 control variables (students and families)			
Gender: female (%)	48.94%		0.2
Age at kindergarten entry (in months)	67.49	4.46	10.3
Family socioeconomic status	-0.04	0.81	10.9
Number of siblings	1.49	1.11	23.2
Race/ethnicity (%)			0.18
White	48.48		
Black	12.98		
Hispanic	24.53		
Asian	7.8		
Other	6.21		
Family type (%)			23.2
Two biological/adapted parents	77.91		
Single parent	19.96		
Other	2.14		
Level-2 control variables (schools)			
Kindergarten enrollment size	3.37	1.66	8.5
School type (%)			5.2
Public	79.09		
Catholic	8.5		
Other religious	5.19		
Other private	5.03		
Composition race			11.1
Mean White non-Hispanic	0.54	0.34	
Mean Black non-Hispanic	0.15	0.24	

Table 4 (Continued)

Key analytical variables	Mean or %	SD	% of missing
Mean Hispanic	0.21	0.27	
Mean Asian	0.4	0.61	

Participants

After conducting multiple imputation procedures, I dropped observations who did not have teacher-reported self-control (2,378) and interpersonal skills (2,375) scores in spring semester (wave 2) from the original ECLS-K:2011 sample. The analysis for self-control as the outcome included 15,796 students from 1,052 schools and that for interpersonal skill included 15,799 students from 1,053 schools. The sample for this study included 49.01% female children. In terms of ethnicity, 48.66% of the participants are non-Hispanic White, 12.98% are non-Hispanic African American, 24.48% are Hispanic, 7.8% are Asian, and 6.18% are other ethnical groups (i.e., Native Hawaiian/ Pacific Islander, American Indian/Alaska Native, and two or more races). Most participating students were non-ELs (90.2%). About 69.97% of the students lived in homes with parents (two biological or adopted). The average number of siblings at home was 1.50.

Variables Used in the Study

Level 1 Outcomes and Predictors

Level 1 predictors include five major variables and constructs: individual child's socioemotional competency that is reported by teachers in 2010 Fall, family involvement in school activities, family involvement at home, parents' expectation to their children, and children's EL status. Self-control and interpersonal skills reported in 2011 Spring are included as outcomes in this analysis. Below is the detailed information for each variable or construct.

Students' Socioemotional Skills (Two Waves). Self-control was a composite score developed from four items (α= 0.81 for 2010 Fall, and α= 0.82 for 2011 Spring); and interpersonal skill scores were developed from five questions (α= 0.86 for 2010 Fall, and α= 0.87 for 2011 Spring). These scores were graded by the teachers of participating children.

Family Involvement in School (2011 Spring). This variable is an average score of eight items (0 = no and 1 = yes, α= 0.87) that inquired parents/caregivers' participation in school-related activities. It includes attending an open house or back to school night; a meeting of PTA, PTO, or parent–teacher–student organization; a meeting of the parent advisory group or policy council; a regularly-scheduled parent–teacher conference or meeting with teachers; school or class events; acting as a volunteer in the classroom or at the school; serving on a school committee; and participating in fund raising.

Family Involvement at Home (2010 Fall). The 12 questions on family involvement at home are on a 4-likert scale where 1 = never to 4 = everyday (α= 0.77). These questions looked into the frequency of parent/caregiver-child interaction on 12 weekly activities: read books, tell stories, sing songs, do art and crafts, do chores, play games or do puzzles, talk about nature or do science projects, build things with children, play sports, practice reading, writing and working with numbers, parent read books to children, children look at picture books outside of school, and children read or pretend to read outside of school.

Parents/Caregivers' Educational Expectations for Their Children (2010 Fall). Parents/caregivers' expectation is an ordinal variable referring to the highest educational degree parents/caregivers believed their child would obtain (1 = receive less than a high school diploma to 7 = get a PhD, MD, or other higher degree).

Students' Language Status. Preschool Language Assessment Scale (*Pre*LAS) was used to identify participants' language status. Children who came from non-English native families took *pre*LAS, that included two sections, Simon Says and Art Show. The total score for *pre*LAS test is 20. Children who earned total scores below 16 were ELs, and those scored 16 and above were non-ELs (Duncan & De Avila, 1998).

Level 2 Predictor

The analyses only included one level 2 predictor: the school outreach effort to families. This school-level composite variable was the mean of six items that asked the frequency of six activities that schools provided to children and families, reported by school administrators. The answers were on a 5-likerd scale, where 1 = never, and 5= 7 or more times a year (α= 0.83). The six activities were : PTA PTO or parent-teacher student organization meetings, information on child standardized assessment scores sent home, teacher-parent conferences, home visit to do one-on-one parent education, school performance to which parents are invited, and classroom programs like class plays, book nights, or family math nights.

Background Variables

Certain student, family, and school background variables were included in the analysis to control for background factors. Children's gender, age of enrollment in

kindergarten, and race were children characteristics. The race groups were coded as Hispanic, African American, Asian and other groups (e.g. American natives, Hawaii & Pacific Islanders and multi-races). Family factors include parents' marital status (categorical), parents' type (categorical), children's number of siblings (continuous) in household, and family socioeconomic status (SES) (continuous, ranging from -3 to 3). Marital status was coded as separated, divorced or widowed, never married, and civil union/domestic partnership with married couples as the comparison group. Parents/caregivers type was coded as one biological/adoptive parent only and other guardian, with two parents as the comparison group. SES is a composite score built in the survey, and it was calculated using the following five components (1) parent/guardian 1's education; (2) parent/guardian 2's education; (3) parent/guardian 1's occupational prestige score; (4) parent guardian 2's occupational prestige score; and (5) household income.

The school level variables are school types (i.e., public, catholic, other religious, and other private), racial composition average (i.e. percent of White, Hispanic, African American, American natives, Hawaii & Pacific Islanders, and Asian students), and school enrollment size.

Data Analysis

Before model analysis, I examined descriptive information for all the variables; measured the bivariant correlation between each variable that is included in the model; and calculated the Intraclass correlation (ICC) for each outcome variables in the null model to check cluster effects within schools.

Model analysis

The model was analyzed in STATA 16 (StataCorp, 2017). The research questions of interest involved the measurement of variables that are at an individual level and school level, therefore, this study utilized two-level hierarchical linear models (HLM) to capture intra-class dependency (Hancock & Mueller, 2013). Students and their parents/caregivers represent the level-1 units and schools are the level-2 units. Individuals within the same social contexts, such as students in one school, tend to be alike compared to students who were randomly selected to participate. Level-2 variances can be accounted to in HLM analysis. Though the ECLS-K dataset included teachers' data (i.e., students nested within classrooms and classrooms nested within schools), HLM requires at least two units per cluster (i.e. two teachers per school), and there were several schools in the ECLS-K data with only one kindergarten teacher. A three-level model analysis is therefore not feasible.

To examine the effects of school outreach on family involvement, three models (Models 1, 2, and 3) were tested using family involvement at school, family involvement at home, and parents/caregivers' educational expectations on their children as outcome variables, respectively. These models controlled for student, family, and school background variables. In addition, the three models controlled for children's self-control scores obtained from the 2010 fall semester at kindergarten. All family involvement variables were treated as continuous variables in the HLM models.

To analyze whether family involvement was associated with students' socioemotional gains from fall to spring of kindergarten, I estimated four models for

each socioemotional outcome—teachers reported self-control (Models 4, 5, 6, and 7), teachers reported interpersonal skills (Model 8, 9, 10, and 11). The first three models included each of the family involvement (i.e., family involvement at home, family involvement in school, and parents/caregivers' expectation on children's education level) variable separately, whereas the fourth model included all three family involvement variables simultaneously. The socioemotional performance rated in 2010 fall semester were included in the regression models as a control variable to capture children's gains. The scores obtained from the following spring semester were the dependent variables. All the models included level-1 (student and family level) background variables as controls.

Next, to analyze whether school supports were associated with students' socioemotional gains, and if the associations were mediated by family involvement factors, I estimated two models for each outcome. The first models included the school support measure only to estimate the association of school factor and student socioemotional gains prior to adjusting for family influences (Models 12 and 14 for self-control and interpersonal skills, respectively). Then I included all the three measures of family involvement and school support variable to analyze whether school's outreach to families was associated with students' gains and whether these relationships were mediated by family involvement (Models 13 and 15 for self-control and interpersonal skills, respectively). All of the measurements controlled for child, family, and school background variables. The most parsimonious equation is as below:

Level-1 Model:

$$Y_{ij}(socioemotional\ outcomes\ wave\ 2) = \beta_{0j} + \beta_{1j}(socioemotional\ outcomes\ wave\ 1) + \beta_{2j}(involvement\ in\ school) + \beta_{3j}(involvement\ at\ home) + \beta_{4j}(parents' expectation) + \beta_{5j}\Sigma(level\ 1\ background) + e_{ij}$$

Level-2 Model:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(school\ outreach\ efforts) + \gamma_{02}\Sigma(school\ background) + U_{0j}$$
$$\beta_{1j} = \gamma_{10} + U_{1j}$$
$$\beta_{2j} = \gamma_{20}(school\ outreach\ efforts) + U_{2j}$$
$$\beta_{3j} = \gamma_{30} + U_{3j}$$
$$\beta_{4j} = \gamma_{40} + U_{4j}$$

I then followed Zhang, Zyphur and Preacher (2009) to study an upper level mediation (when the association between level-2 variable and level-1 outcome is mediated by level-1 variables) and used the Bootstrapping test to examine the mediation effects.

Results

Analyses of the ICC of the unconditional models (i.e., models without predictors) revealed that 14.9% of the variance in family involvement in school-related activities was explained by schools. The school variances in parents/caregivers' educational expectations, and home involvement in educational activities at home were 8.8% and 3.7%, respectively.

In addition, the ICC for self-control and interpersonal skills were also calculated. The results showed 10.7% and 9.6% of the variances in self-control and interpersonal skill were attributed to school characters, respectively.

The results showed that the school effects have accounted a consideration variance for family involvement activities, and children's performance in self-control and interpersonal skills.

Association Between School Outreach to Families and Involvement

Table 5 shows the results of the three models that examined the relationships between school outreach to families and the three indicators of family involvement (i.e., family involvement in educational activities at home, family involvement in school-related activities, and parents/caregivers' educational expectations). The independent variable for the three models is administrators' report of school outreach to families, and the dependent variables are the family involvement indictors, respectively. All the level-1 and level-2 controlling variables were controlled. The unstandardized coefficients of regression estimates were reported.

Table 5. HLM regression fixed and random estimates of family involvement from school outreach efforts.

	PI school	PI home	Education Expectations
	Model 1	Model 2	Model 3
Fixed effect coefficients intercept	1.38** (0.03)	2.99** (0.07)	5.44** (0.19)
Level-2 key variable			
School Support	0.02** (0.00)	0.00 (0.01)	0.06* (0.03)
Level-1 key variable			
English language speaking	0.04** (0.01)	0.13** (0.01)	-0.15** (0.04)
Level-1 control variables			
Female	0.00 (0.00)	0.00 (0.01)	0.12** (0.02)
Age at kindergarten entry	0.00 (0.00)	0.00** (0.00)	0.00 (0.00)
Hispanic	-0.02** (0.00)	-0.08** (0.01)	0.36** (0.03)
Black	-0.02** (0.01)	-0.04** (0.01)	0.37** (0.04)
Asian	-0.08** (0.01)	-0.15** (0.02)	0.39** (0.04)
Other	-0.02** (0.01)	-0.01 (0.02)	0.29** (0.04)
Number of siblings	-0.01** (0.00)	0.00 (0.00)	-0.05** (0.01)
Overall socioeconomic status	0.07** (0.00)	0.04** (0.01)	0.35** (0.01)
One parent family	-0.01* (0.01)	-0.02 (0.01)	-0.06 (0.03)
Other guardians	-0.04** (0.01)	-0.03 (0.03)	-0.26** (0.07)
Parents separated	-0.02** (0.01)	0.00 (0.02)	0.07 (0.05)
Parents divorced	-0.04** (0.01)	0.02 (0.01)	-0.06 (0.04)
Parent(s) never married	-0.04** (0.01)	0.02 (0.02)	-0.01 (0.04)
Parents civil union	-0.03** (0.01)	-0.03 (0.02)	0.05 (0.05)

Table 5 (Continued)

	PI school Model 1	PI home Model 2	Education Expectations Model 3
Level-2 control variables			
Kindergarten enrollment	0.01** (0.00)	0.00 (0.00)	0.03** (0.01)
Mean Hispanic	0.00 (0.00)	0.00** (0.00)	0.01** (0.00)
Mean Black	0.00** (0.00)	0.00 (0.00)	0.00** (0.00)
Mean Asian	0.00* (0.00)	0.00** (0.00)	0.00* (0.00)
Public school of choice	0.02* (0.01)	0.01 (0.00)	-0.03 (0.04)
Catholic school	0.26** (0.03)	0.00 (0.06)	-0.45** (0.17)
Other private school, religious affiliation	-0.16** (0.02)	0.02 (0.04)	0.18 (0.12)
Random effect coefficient			
Level-1 variance (between students)	0.04	0.2	1.37
Level-2 variance (between schools)	0	0	0.04

Note: *p<0.05. **p<0.01.

The results revealed that parents/ caregivers of ELs had significantly different levels of involvement in the three types of activities compared to parents/caregivers of non-ELs. non-EL parents/caregivers showed higher level of involvement in home and school activities compared to EL families, which were 0.15- and 0.13-units higher, respectively (Model 1 and Model 2). By contrast, EL families expressed higher educational expectation to their children, which was 0.04 units higher compared to non-EL parents/caregivers (Model 3).

In Model 1 and 3, school support to families had statistically significant positive associations with family involvement at school, and parents/caregivers' expectations. The results suggest that school outreach efforts to families and children might "paid off" in involving parents/caregivers in education and interact with school and their children. With all the other variables being controlled, each unit increase on school supports was associated with a 0.02 and 0.06 unit increase of family involvement in school activities and on educational expectation, respectively. The relationships between school supports and parents/caregivers' family involvement at home was but not statistically significant.

Parent/caregiver type and marital status has significant positive association with family involvement in school, compared to two parent/caregiver families, all other families (i.e. one parent family and other guardian) showed lower level of involvement in school. In addition, compared to married parents/ caregivers, parents with other marital status (i.e., separated, divorced or widowed, never married, and civil union/domestic partnership) involved less frequently in school events/activities. In comparison to White families, Hispanic, Black, Asian and families of other groups all

had statistically significant lower level of involvement in school and educational expectation to their children. In addition, White parents showed statistically higher level of involvement in home activities compared to all ethnical minority groups, though the differences between other group was not statistically significant.

Family Involvement and Self-Control and Interpersonal Skill Gains

Table 6 reports four models for each achievement outcome: self-control and interpersonal skills. The first three models tested each of the family involvement measures separately, and the last model included all the family involvement measurements to check their simultaneous, independent effects. All the level-1 background variables were controlled in each model.

Table 6. HLM regression fixed and random estimates of students' achievements from family involvement.

	Self-control				Interpersonal skills			
	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Fixed effect coefficients								
Intercept	1.15** (0.07)	1.06** (0.07)	1.06** (0.07)	1.10** (0.08)	1.23** (0.08)	1.05** (0.07)	1.14** (0.07)	1.18** (0.08)
Level-1 key variables								
Involvement at school	0.04* (0.02)			0.04* (0.02)	0.08** (0.02)			0.07** (0.02)
Involvement at home		0.01 (0.01)		0.01 (0.01)		0.03** (0.01)		0.02** (0.01)
Educational expectations			0.01 (0.00)	0.00 (0.00)			0.00 (0.00)	0.00 (0.00)
English language speaking	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.03* (0.02)	0.03* (0.02)	0.04* (0.02)	0.03 (0.02)
Level 1 control variables								
Teacher reported scores at wave 1	0.61** (0.01)	0.61** (0.01)	0.61** (0.01)	0.61** (0.01)	0.62** (0.01)	0.62** (0.01)	0.62** (0.01)	0.62** (0.01)
Age at kindergarten entry	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Female	0.08** (0.01)	0.09** (0.01)	0.08** (0.01)	0.01** (0.01)	0.12** (0.01)	0.12** (0.01)	0.12** (0.01)	0.12** (0.01)
Number of siblings	0.01* (0.00)	0.01* (0.00)	0.01* (0.00)	0.01* (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Overall socioeconomic status	0.01 (0.01)	0.01* (0.01)	0.01* (0.01)	0.01* (0.01)	0.01 (0.01)	0.02** (0.01)	0.02** (0.01)	0.01* (0.01)
Hispanic	0.02 (0.01)	0.02 (0.01)	0.01 (0.01)	0.00 (0.01)	0.03** (0.01)	0.02** (0.01)	0.03** (0.02)	0.04** (0.01)
Black	-0.09** (0.01)	-0.09** (0.01)	-0.09** (0.01)	-0.09** (0.01)	-0.08** (0.01)	-0.07** (0.01)	-0.07** (0.01)	-0.07** (0.01)
Asian	0.05** (0.02)	0.05** (0.02)	0.04** (0.02)	0.05** (0.02)	0.00 (0.02)	0.00 (0.02)	-0.01 (0.02)	0.00 (0.02)
Other	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	0.00 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)
One parent family	-0.03** (0.01)	-0.04** (0.01)	-0.04** (0.01)	-0.04** (0.01)	-0.05** (0.01)	-0.05** (0.01)	-0.05** (0.01)	-0.05** (0.01)
Other guardian(s)	-0.11** (0.03)	-0.11** (0.03)	-0.11** (0.03)	-0.11** (0.03)	-0.11** (0.03)	-0.11** (0.03)	-0.11** (0.03)	-0.11** (0.03)

Table 6 (Continued)

	Self-control				Interpersonal skills			
	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Parents separated	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	0.00 (0.02)	0.00 (0.02)	0.00 (0.02)	0.00 (0.02)
Parents divorced	-0.04** (0.02)	-0.05** (0.02)	-0.05** (0.02)	-0.05** (0.02)	-0.01 (0.02)	-0.02 (0.02)	-0.01 (0.02)	-0.01 (0.02)
Parent(s) never married	-0.03* (0.01)	-0.04* (0.01)	-0.04* (0.01)	-0.04* (0.01)	-0.03* (0.01)	-0.03* (0.01)	-0.03* (0.01)	-0.03* (0.01)
Parents civil union	-0.04 (0.02)	-0.04 (0.02)	-0.04* (0.02)	-0.03 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.03 (0.02)	-0.02 (0.02)
Random effect coefficients								
Level-1 variance (between students)	0.21	0.21	0.21	0.21	0.23	0.23	0.23	0.23
Level-2 variance (between schools)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Compared to EL children, non-EL children showed higher level of self-control and interpersonal skills across all the eight models. But the coefficients were only statistically significant among the three models that measured interpersonal skills, controlled by individual family involvement construct/variable. In the measure of each family involvement variable (i.e., family involvement in school--Model 4, family involvement at home—Model 5, parents/caregivers' education expectation to children – Model 6) and children's self-control, only parents/caregivers' involvement in school showed significantly positive association. Each unit increase in parents/caregivers' educational expectations was associated with 0.04 points increase in self-control. The associations between family involvement in school and children's demonstration of interpersonal skills was also significant (model 8), each unit increase in family involvement in school was associated with 0.08 points gain in children's interpersonal skills.

In addition, the association between family involvement at home and interpersonal skills is statistically positive, and each unit increase in family involvement at home was associated with 0.03 points increase in children's interpersonal skills (Model 9). Parents/caregivers' expectation on education did not show significant association with either socioemotional outcome.

In terms of the models with all the family involvement measures (Model 7 and 11), family involvement in school remained statistically significant in Model 7 and 11. The association between parent/caregivers' home involvement and children's interpersonal skills was significantly positive in Model 7 as well. The results suggest that

the associations between family involvement in school and children's self-control as well as interpersonal skills, and involvement at home and children's interpersonal skill gains are robust.

Table 7 indicates that several individual level characteristics included as covariates in these models had important effects on self-control and interpersonal skills. Female children showed significantly higher level of self-control and interpersonal skills performance across all the models. Whereas, compared to children who live with two parents, being in one parent families or raised by other guardians had statistically negative impact on children's self-control and interpersonal skills across all the models. In addition, compared to married couples, parents that are never married also had statistically negative impact on children's self-control and interpersonal competencies on all the models. More siblings had significantly positive impact on children's self-control, but not on interpersonal performance. Compared to White peers, Black children showed statistically less gains on self-control and interpersonal skills. Asian children showed statistically more gains in all the self-control models compared to White students, and no statistical difference was shown in interpersonal skill models.

School Support to Families and Socio-Emotional Achievement Gains

Though this study confirms that family involvement has significant association with children's self-control and interpersonal relation performance, it will further explore the association between school supports to families and students' socioemotional achievement in kindergarten. Table 8 shows the results of the four models that tested such associations.

Table 8. HLM regression fixed and random estimates of students' achievements from school outreach efforts.

	Self-control		Interpersonal skills	
	Model 12	Model 13	Model 14	Model 15
Fixed effect coefficients	1.00**	1.02**		
	(0.09)	(0,10)		
Level-1 key predictors				
Involvement at school		0.04		0.07**
		(0.02)		(0.02)
Involvement at home		0.00		0.02**
		(0.01)		(0.01)
Educational expectations		0.00		-0.01
		(0.00)		(0.00)
English language status	0.01	0.00	0.04*	0.03
	(0.01)	(0.01)	(0.02)	(0.02)
Level-2 key variables				
School support	0.05**	0.04**	0.03**	0.03**
	(0.01)	(0.03)	(0.01)	(0.01)
Random effect coefficients				
Level-1 variance	0.21	0.21	0.23	0.23
Level-2 variance	0.02	0.02	0.02	0.02

The key independent variable of interest in these models is administrators reported school outreach to parents/caregivers and children, and this variable is at the school level. In addition to student, family, and school covariates, Models 13 and 15 included parents/caregivers' educational expectations, involvement in school, and involvement at home to analyze the mediating power of the family involvement variables.

Table 7 shows significant positive associations between school outreach and students' gains in self-control and interpersonal skills (Models 12 and 14). After controlling for previous achievement and all other background variables, each unit increase on school outreach was associated with a 0.05 and 0.04 unit increase in self-control and interpersonal skills, respectively. Regardless of their starting skills in the fall, students showed greater gains in self-control and interpersonal skills on average, if they attended schools that reached out family more often for school communications and interactions.

In models 13 and 15, I added the family involvement indicators to analyze whether these variables mediated the relationship between school outreach efforts to families and children's socioemotional gains. After including family involvement indicators in the models, the associations between school outreach activities and socioemotional outcomes in self-control and interpersonal skills remained statistically significant, although the magnitude of the school outreach coefficient decreased. After including all family involvement measures, the gains of self-control and interpersonal skills due to school outreach were 0.05 and 0.03 points, respectively.

All the family involvement variables are not statistically significant in the self-control model, and parents/caregivers' expectation on children's education is non-significant for both self-control and interpersonal skills. Therefore, I only tested the association between children's interpersonal skills and school outreach mediated by family involvement at home and in school. After running two separate tests for each mediator, the Bootstrapping test indicated that the effects from school outreach on children's interpersonal competence gains were significantly mediated by family involvement in school (Bootstrapping test statistic =4.63, $p<0.001$) and at home (Bootstrapping test statistic =2.82, $p=0.005$). Both effects are partial mediation. The results indicated that school outreach efforts had an independent and positive effects on children's interpersonal skill gains in kindergarten beyond family involvement.

Since all the variances are statistically significant, there is still unexplained variability in this model. Based on Snijders and Bosker's (1999) formula, 43.4% of the total variance in children's self-control and 42.9% of the total variance in interpersonal performance were explained by this model, respectively. In addition, 41.6 % of the variance of school mean on self-control and 41.6% of the variances of school mean on interpersonal skills were explained by the model, respectively.

Discussion

The results support the assumptions guiding the study that the interactions of people across both home and school contexts can explain certain variance of children's gains in socioemotional competencies in kindergarten. In addition, children's language status does have an impact on their interpersonal competence in school context.

Previous studies showed that EL children often experience psychological stress and emotional issues compared to their non-EL peers (Evans & English, 2002). Such disparity in socioemotional status can ultimately lead to EL children's absence and dropping out from school(McLoyd, 1990), contributing to the achievement gap between the EL group and the English native population. To facilitate EL children's school success, researchers have been debating on the extent to which educational disparities are related to the home environment and school-initiated family-school partnership (Reschly & Christenson, 2012). This study contributes to this discussion by examining whether family involvement was impacted by children's language status. In addition, this study examined the extent to which school outreach to parents/caregivers and family involvement were associated with children's self-control and interpersonal skill gains in kindergarten.

Family Involvement of ELs and Non-ELs' Parents/Caregivers

The results from this study suggest that EL families showed less participation in school events and in home activities, which aligns to the findings from previous research that compared the level of school participation between EL and non-EL families (e.g. Harper & Pelletier, 2010; Ishimaru et al., 2016; Smith, Stern, & Shatrova, 2008). The interplay between EL family and school is dynamic. EL parents had the desire to comply with schools' expectations for communication and attendance at school meetings (Lo, 2009; Sutterby et al., 2007), yet their participation maybe hindered by linguistic and cultural barriers (Crosnoe & Ansari, 2015; Daniel-White, 2002). Yet since the data from family involvement were parents/caregivers self-reported, it is important for further

studies to understand family involvement from both parents/caregivers' and teachers' aspects. Teachers might hold different perspective on family involvement compared to parents/ caregivers' understanding and evaluation on their own involvement activities.

In the current study, EL parents/caregivers had higher educational expectations in children's future degree compared to non-EL parents/caregivers. Since the majority of the EL families in the current study were also Hispanic, the results in this study aligned with previous findings that showed Hispanic parents to have high expectations for their children's education (e.g., Baydoun, 2015; Valdes, 1996).

Parents/ caregivers of non-EL children participate more in educational activities at home compared to EL children's families. Quite limited studies looked at parents/caregivers' home involvement of EL children, and to my best knowledge, none has compared EL families to non-EL families in home involvement indictor. Thus, this finding made a unique contribution in this area, and more studies on this topic are expected to help identify the position for this article among the pool of literature.

Family Involvement and EL and Non-EL Children's Socioemotional Gains

Literature revealing the association between family involvement and children's socioemotional outcomes is limited. Consistent with previous studies of students in higher grades (e.g. El Nokali et al., 2010), the findings from this study showed statistically significant association between certain family involvement factors and children's early socioemotional gains. On average, children whose parents with frequent home involvement were more likely to outperform their peers who did not have such support from family members in interpersonal skills. The result might indicate that

children can possibly master interpersonal skills as parents/caregivers engage their children in a series of interactive activities such as playing games, building crafts, and reading books.

The results from the analysis showed positive associations between parents/caregivers' school involvement and children's self-control and interpersonal competencies, which were consistent with the findings from Niehaus and Adelson (2014). Niehaus & Adelson (2014) used the ECLS-K:1998 dataset and revealed that higher level of family school involvement with third graders was associated with less internalizing and externalizing problems. Other studies examining the associations between family involvement in school and children's academic achievement have also shown positive relationships (e.g. Marschall, 2006).

Although the results from this study together with previous studies have shown the effectiveness of family involvement on child education (e.g., Castro et al., 2015; Froiland & Davison, 2014; Hill et al., 2004), further studies focusing on the quality of family involvement in school are still necessary. All these studies inquired if family members have ever participated/gone to certain events or the frequency of each involvement activity. However, a higher frequency on family involvement might not be equivalent to high quality involvement. Mixed-method research that collect comments and feedback from teachers, parents/caregivers and children can be important in understanding the quality of participation.

Since to my best knowledge, no extant literature associates educational expectation to children's socioemotional outcomes, I will connect the finding to previous

studies that examined academic outcomes in relation to parents/caregivers' expectation. Several studies yielded moderate and positive effects. Moreover, meta-analyses have found that the effects of educational expectation on children's academic performance had the largest effect sizes among other family involvement factors such as tutoring assignment and participating in school activities. (e.g.Fan & Chen, 2001; Froiland et al., 2012; Loughlin-Presnal & Bierman, 2017). However, in this study, the relationships between parents/caregivers' expectation on children's future educational level showed very small positive impact on self-control and interpersonal skills, and the effects were not significant.

One possible explanation to this result is that parents/caregivers' educational expectation on children may impact on academic outcomes, yet the influence on socioemotional development is less significant. In addition, besides expectation, other factors may play a key role in affecting children's self-control and interpersonal skills.

School Outreach to Family and Children's Self-Control and Interpersonal Skill Gains

I examined the relationship between school outreach and children's socioemotional gains after controlling for background covariates. The findings showed that school administrators' reports of school outreach to involve families in their children's education was associated with student's better self-control and interpersonal competencies among kindergarteners.

Bronfenbrenner' s ecological system has emphasized the interplay between human development and a variety of contexts, including family, school and society

(Bronfenbrenner, 1977; Bronfenbrenner & Morris, 2006), one single agent cannot explain the overall impact from the external contexts on child development (Epstein et al., 2018; Galindo & Sheldon, 2012). The impact from school on children can be mediated by parents/caregivers' involvement activities in education. Whereas only family involvement in school and at home on children's interpersonal capacity were partial mediators of the school influence. It reveals that the family involvement factors might impact children's self-control and interpersonal competence differently, and the mediation effects are not complete. One possible explanation is that parents/caregivers who participate more in the measured home involvement activities (i.e. playing games, building crafts, and storytelling) are more likely to model interpersonal practices to their children. The interplay between parents/caregivers and children can enhance children's social skills at home, and such competence is transferrable to the school context.

The Bootstrapping analysis yielded partial mediation between school outreach efforts and children's interpersonal capacity gains via family involvement at school and at home. One explanation for this finding is that schools spared more efforts to assist parents/caregivers and their children have, on average, students that show higher interpersonal skill gains. When schools create a more positive school climate that is welcoming to parents/caregivers and students, students might communicate more with teachers and peers in such climate. Further studies are necessary in understanding how school supportive practices to families can indirectly affect children's social and emotional performance in the school contexts.

Another possible explanation is the school support efforts fosters

parents/caregivers' parenting skills. Since the school support composite variable included home visit and family educational programs. By offering such practices to families, parents/caregivers can receive suggestions from educators on parenting, they are more likely to be supportive and communicative to their children in daily life. As the facilitative interaction increase, their children can gain interpersonal skills at home.

This study addressed several gaps in the literature on family involvement and early education, making an important contribution by showing that children's socioemotional performance at early age is, in part, a function of parents/ caregivers' efforts to involve in their children's education, and schools' efforts to engage families. The findings would support the idea that teachers and administrators should implement practices including school and family activities to inform and engage families to reinforce the idea that they are a part of children's education.

Limitations

The data used in the study were from a survey rather than randomized control experiments, the relationships between family involvement, school outreach and children's self-control and interpersonal skills are not causal relationships. There are chances that this study omitted key variables that are associated with children's self-control and interpersonal outcomes.

Also, since the school outreach variable represented principals' leadership or attitudes about family involvement. Despite that the analysis included schools' concentration of minority students and enrollment size to control for certain school-level characteristics, future studies are needed to directly measure other variables that can

indicate independent, unbiased measurement of school outreach.

Even though significant associations were found between family involvement in home, at school and school outreach on children's socioemotional gains, it is important to note that all of these measures largely focused on quantitative indicators of involvement and support as a set of basic activities, rather than on the quality of experiences and interactions that the students and parents have across home and school contexts.

Conclusions

In this study, a nationally representative database was utilized for HLM so as to examine the effects of family involvement on children's self-control and interpersonal skills among kindergarteners. This study highlighted the significance of considering language background when examining family effects as EL and non-EL parents/caregivers showed differentiated levels of involvement in their children's education.

The findings from this study indicated that the interaction between school and family had significant effects on children's self-control and interpersonal capacity. Therefore, to enhance socioemotional competence among students at the early childhood stage, school personnel needs to reach out to parents/caregivers and facilitate their participation in school events, voluntary activities, and mutual communication with teachers. Further, family involvement does not function by parents/caregivers alone, educators are also responsible to encourage parents/caregivers to be co-educators for child development.

Finally, this study considered gender, ethnicity and family background differences, and found differentiated socioemotional outcomes. The student group is diverse, and educators need to pay attention to those underperformed subpopulations including male students, Black children, and children who live with only one parent/caregiver. The findings from this study indicated that these groups are more likely to show lower performance in self-control and interpersonal compared to other peers.

CHAPTER IV

FAMILY INVOLVEMENT, SCHOOL SUPPORT, AND ENGLISH LEARNERS' ACADEMIC AND SOCIOEMOTIONAL OUTCOMES

The increment of English learners (ELs), together with their academic struggles and socioemotional stress, has led to debates on how to promote their performance in learning and building positive interpersonal relationships. ELs share one characteristic, that they are all in need of increasing their English proficiency (Center for Applied Linguistics, 2019), but they differ in aspects such as the first language, socioeconomic status (SES), and cultural backgrounds. ELs include immigrants and long-established language minority communities such as the Hispanics and Native Americans (Arias & Morillo-Campbell, 2008). This group of students often experience difficulties as they receive education in the English-dominant school context. They can hardly succeed academically in English-only classrooms (Meyer et al., 2004). Starting at a young age, the achievement gap is salient between EL and their mainstream peers (Gilbert et al., 2017).

Family influences at the kindergarten year are essential to child development. Home practices in tune with a child's experiences in classroom or childcare facility helps to establish a tight connection between what is learned at school and what takes place at home (Van Voorhis et al., 2013). Such a connection is the key to child development and supports students' further academic, socioemotional and behavioral performance and skills. A home context that facilitates interpersonal capacity development and learning

will enable the child to transfer the skills they use at home to the school context (Housman, 2017).

Studies focusing on the association between family involvement on EL children's outcomes has shown significant effects. Specifically, a higher level of parental involvement may positively impact children's academic and socioemotional wellbeing (Gonida & Vauras, 2014); schools' outreach also plays a significant role to incentivize parents' participation in education (Boonk et al., 2018).

However, schools struggle to meet the unique instructional and linguistic needs of EL students, and communities with large EL populations experience the challenge of interacting with and including EL parents/caregivers (Tarasawa & Waggoner, 2015). One of the reasons is that family-school partnership have had a middle-class character, and educational policy enforcing parental involvement often generalizes one model of family-school relations, yet ignores the diversity of family and leaving their culture behind (De Carvalho, 2000). Research has found that parents/caregivers of English learners feel uncomfortable, unwelcomed, and being marginalized in school (Alexander et al., 2017; Campos et al., 2011).

Schools fulfilling EL families' language needs and being responsive to their culture show signs to welcome the EL families. For instance, providing translation to facilitate the communication between EL parents/caregivers and school personnel, which enables both sides to exchange information on child education (Mitra, 2006). These practices help parents/caregiver to be more knowledgeable of school activities, policies,

and resources; which further empowers parents/caregivers and establishes close relationships and mutual trust between family and school (Delgado et al., 2012).

Theories have emphasized the significance of different types of family involvement (e.g. having high expectations, participating in school events and assisting children to learn at home) on EL children's development. Yet limited empirical studies have focused on the association between family involvement and EL children's socioemotional performance. Despite Niehaus & Adelson (2014) examined the association between family involvement and children's academic and social outcomes, they did not examine an important construct: parents/caregivers' involvement at home. Since EL parents/caregivers may show less participation in school events (Georgis et al., 2014), to understand their interaction with children at home will provide important information on their level and approaches of involvement in children's education.

This study in hand will include family home involvement construct (e.g. storytelling, playing sports, and building crafts with children) as one of the predicting factors to understand the association between parents/caregivers' involvement and EL children's outcomes. Other family involvement characteristics are participating in a variety of school events, and educational expectation on children. In addition, this study expands the most attention upon student learning outcomes to a more comprehensive understanding of EL children's well-being in both academic and socioemotional performance.

Theoretical Framework

Bronfenbrenner's Ecological System is the theoretical foundation that supports

this study (Bronfenbrenner, 1977). According to this system, human development is influenced by the environment and the interaction between the contexts in which individuals experience growth. The two most influential contexts to human development are microsystem and mesosystem that consists of the immediate environments. Family and the school each locate in the microsystem and their interaction is a part of the mesosystem. Within the microsystem, family and school can impact childhood development via separate practices; and in the mesosystem, they influence children through a collaborative partnership. It is when home and school collectively intervene with the children, that children are more likely to show enhanced academic, social, and behavioral gains (Zins et al., 2004). The current study used the ecological model as the lens to understand the academic and socioemotional outcomes of EL children at both the microsystem level (i.e., the family and school involvement) and the mesosystem level (i.e., the home-school connection).

Literature Review

Researchers have found several issues concerning EL children's educational attainment. First, 70% of the ELs enrolled in schools are represented in only 10% of the schools nationwide (Cohen et al., 2005). The statistics indicates that some schools are aggregated with a high percentage of ELs, and these schools are more likely to provide extra language and academic supports to EL students. Yet, in schools with smaller concentrations of ELs, EL students might be in a disadvantageous situation as the school did not provide as much assistance. Many EL children do not receive sufficient language support that they need to understand academic contents (Niehaus & Adelson, 2014).

Secondly, teachers working with EL students, even those from bilingual education programs have reported to have received little training in teaching these students (Menken & Solorza, 2013). Within such a disadvantageous context, EL children are more vulnerable to failure along the schooling process. To tighten the tie between school and family becomes increasing important for EL children's development.

EL children who speak a first language other than English constantly encounter challenges in their schooling process: they learn content subjects as their non-EL peers do; but at the same time, ELs need to learn English. Some EL students have difficulties in academic English, yet for others, daily communication in English can pose a problem (Grant & Wong, 2003). Although some ELs can engage in conversational communication in English, they still find it difficult to understand and use academic languages in content areas, particularly with mathematics and science (Lee et al., 2011).

Researchers examining the effects of family involvement on children's outcomes have found positive results in multiple aspects. Increased level of parental involvement with children in learning can enhance children's self-regulation skills (Grolnick & Slowiaczek, 1994). Parents/caregivers' involvement in responsive reading activities with their children enhances young children's positive emotion, reading (Fantuzzo et al., 2000), and math competence (Van Voorhis et al., 2013).

In the United States, nearly 60% of ELs are from low-income backgrounds, and their parents received limited education (Grantmakers for Education, 2013). Although these background variables can affect children's development; parents/caregivers' attitudes and behavior, can be crucial to children's achievement and can overcome the

negative influences of other disadvantageous factors (National Literacy Trust, 2011). For instance, Flouri & Buchanan (2004) and Fan & Chen (2001) have concluded that parents/caregivers' involvement in their child's literacy practices to be a more powerful factor for child's academic success compared to family background variables, such as SES and family size.

Instead of focusing solely on parents/caregivers' participation in school-relevant work, parental involvement is multidimensional that includes different types of home activities such as storytelling, gaming, doing handcrafts (Fan & Chen, 2001; Galindo & Sheldon, 2012). Involvement requires parents/caregivers to have a mindset of engagement, to recognize the significance of parents' guided education, and to understand the differences parents/caregivers can make as they optimize parenting. Parents/caregivers' perceptions on parenting shape their ideas about the kinds of engagement activities they might undertake (Hoover-Dempsey et al., 1995, 2005).

Family School Partnership

Mesosystem includes family and school interaction, and each agent does not function on its own (Bronfenbrenner, 1977). When the interactions between school and family are proximal to children, their connection will significantly contribute to children's educational success. A positive relationship between school personnel and parents/caregivers contributes to parents/caregiver' sense of being welcomed and valued, which in turn enhance better educational achievement among children (Hampden-Thompson & Galindo, 2017).

As a significant agent of education, school needs to reach out to parents/caregivers to enhance their involvement. Yet teachers who mentioned about parental involvement skills typically described strategies limited to managing difficult parents/caregivers, instead of strategies that foster more meaningful involvement (Niehaus & Adelson, 2014). Oftentimes, teachers take a unidimensional perspective toward parental involvement, and consider parents/caregivers' participation in school activities as involvement (Daniel-White, 2002).

Likewise, parents/caregivers who want to establish positive relationship with the school, are not always sure of the approaches they could use to be recognized and valued by the school personnel (Xia, 2009). This has been especially true for the minority groups, Hispanics, EL families, and those from low SES backgrounds (LaRocque et al., 2011). This uncertainty also leads to decreased involvement for parents/caregivers from diverse backgrounds.

School Outreach to EL Families

Schools face the challenge of communicating with EL family. Compared to native family, EL parents/caregivers encounter obstacles to involve themselves in child education, specifically, lack of English proficiency, limited educational level, and disconnection to the school culture (Arias & Morillo-Campbell, 2008). These issues impede effective two-way communication between EL parents/caregivers and the school (Smith, Stern, & Shatrova, 2008). Moreover, teachers have limited or no proficiency in EL children's home language. When interpreters are not provided, which is often the

case, teachers and parents/caregivers can barely get through information on children's learning progress to each other (Fugas, 2016).

When communication is minimum, mutual understanding becomes hard to establish. Minority parents/caregivers feel not being encouraged, and the knowledge they possess is not valued by the school (Bang, 2009; Daniel-White, 2002; Froiland & Davison, 2014). Hence, minority parents/caregivers feel unwelcome at school more frequently, which further leads to less participation and connection to schools. Consequently, school personnel often found EL parents/caregivers show a lack of school involvement.

Schools as professional education agents, have the responsibility to facilitate inclusion of EL parents/caregivers in both home and school contexts for their children's education. Family involvement in children's development cannot operate in isolation, school efforts needs to play a part since they have impacts on families' attitudes, beliefs, and practices in education. When schools create a friendly environment and increase their frequency to reach out to the EL families, parents/caregivers will be fueled with the sense of empowerment. Naturally, they are more likely to take their role as co-educators and facilitators at home, and to participants in school events (Hampden-Thompson & Galindo, 2017). A welcoming school climate requires school personnel to show positive attitudes toward EL families, facilitate their access to the school (e.g. provide interpreter and translators), and support interpersonal contact and two-way communication (e.g. pay home visits) (Arias & Morillo-Campbell, 2008).

Family Involvement and Children's Outcomes

More involvement at home and in school indicates parents/caregivers' emphasis on education, which motivates their children to be engaged in learning activities, and can further enhances children's performance. The majority of research examining EL children's educational outcomes focused on academic performance (e.g. Loera, Rueda, & Nakamoto, 2011; Yeo, Ong, & Ng, 2014). However, other children's characteristics, such as socioemotional competencies, are also vital to educational achievement. (Jennings & DiPrete, 2010).

In sum, socioemotional skills contribute to better school outcomes both socially and academically, and they facilitate the ability to manage good behaviors (Alzahrani et al., 2019). Enhancing socioemotional competence will benefit children to gain positive attitudes toward themselves and others, to contribute their self-efficacy and persistence in confrontation with tasks and difficulties (CASEL, 2019; Cho et al., 2019). These characteristics are conducive for EL children to build resilience and to persist in a disadvantageous environment. As children build resilience, high self-esteem and self-efficacy, they are more likely to engage and overcome challenges in schoolwork. In addition, socioemotional competence goes hand in hand with children's academic outcomes (Zins et al., 2004). Social and emotional competence is related to communication skills. Therefore, EL children possessing higher socioemotional skills are more likely to collaborate with others, and to seek for help when they encounter difficulties in school work (Winsler et al., 2014). In addition, young children with strong socioemotional skills can recognize their behaviors and handle them in positive ways (Alzahrani et al., 2019).

Considering the significance of socioemotional well-being, it is important to include children's socioemotional factors when examining EL children's experiences in school and home.

Research Questions

This quantitative analysis serves to answer three research questions. (1) Is more school support toward EL families associated with higher level of family involvement at home? (2) Is a higher level of school support to EL families associated with students' positive academic and socioemotional outcomes? (3) Is a higher level of parents/caregivers' home involvement and educational expectation on children associated with students' better positive academic and socioemotional outcomes?

Method

The Early Childhood Longitudinal Study Kindergarten Class of 2010–2011(ECLS-K:2011) data were used for model analysis. The ECLS-K:2011 data involves questionnaires and surveys with family, school and children; it also included scores on children's cognitive assessment that all revealed children's development status. The ECLS-K: 2011 enables researchers to explore how the family (e.g., parent-child home interactions), and the school (e.g., school support to families) characters relate to children's cognitive (e.g. reading and math performance) and non-cognitive development (e.g., socioemotional outcomes) (Galindo & Sheldon, 2012; Tourangeau et al., 2015).

A stratified clustered design were implemented for data collection, where the individual data (students and families) were nested within the school data (Tourangeau

et al., 2015). This nationally representative sample included 18,174 children clustered within 1,036 public schools and 283 private schools (Tourangeau et al., 2015).

The sample for this study was comprised of EL children who participated in the ECLS-K:2011 survey in kindergarten year (2011–2012 school year). Children who were from non-English native families were administered Preschool Language Assessment Scale (*pre*LAS) to identity their EL status at the entry of kindergarten. *Pre*LAS incorporated two sections, Simon Says and Art Show, and each section constitutes 10 items. The total score for *pre*LAS test is 20. In this study, the total scores of *pre*LAS (Duncan & De Avila, 1998) are used with a cutoff-point of 16 to distinguish English learners (*pre*LAS toal <16) between non-English learners (*pre*LAS total ≥16).

Handling Missing Data

Table 9 shows the the information with missingness and descriptive statistics for all the variables. Since the data are hierarchical in nature, it can lead to dependency between individual observations and violate the independence assumption of Ordinary Least Squares (OLS) regression. Single-level treatment for missing cases and data analysis can result in biased parameter estimates (Hancock & Mueller, 2013). Therefore, I used multiple imputation of multilevel missing data algorithm (based on Markov Chain Monte Carlo techniques) with mice package in R for all the relevant variables across individual and school levels. (Grund et al., 2018; Weirich et al., 2014).

Table 7. Weighted descriptive statistics for the ECLS-K:2011 sample

Key analytical variables	Mean or percentage	SD	% of missing
Outcome variables			
Reading score wave 2	57.16	11.31	5.23%
Mathematic score wave 2	38.15	11.62	92.73%
science score wave 2	24.11	4.12	15.55%
Self-control competence wave 2	3.06	0.66	15.30%
Personal interaction competence wave 2	2.95	0.69	16.12%
Predicting Variables			
Previous Academic Outcomes			
Reading score wave 1	44.48	6.52	7.27%
Mathematic score wave 1	24.99	8.17	10.90%
Previous Socioemotional Outcomes			
Self-control competence wave 1	2.93	0.67	22.12%
Personal interaction competence wave 1	2.74	0.69	23.33%
Family Involvement at Home (frequency)			
tell stories	2.7	0.93	30.27%
sing songs	2.87	1.01	30.15%
help to do arts and crafts	2.74	0.99	30.27%
involve child in household chores	2.84	1.1	30.27%
play games	2.66	0.94	30.27%
talk with children about nature	2.08	0.96	30.27%
build things with children	2.28	0.98	30.27%
do sports with children	2.7	0.99	30.27%
practice reading, writing or working with numbers	3.39	0.84	30.27%
read books to children	2.9	0.9	30.27%
Educational expectation	5.44	1.48	30.27%
School Support to non-English Speaking Families			
translators are available	1.08	0.27	16.51%

Table 7 (Continued).

provides translations of written communications	1.1	0.3	16.70%
home visit	1.54	0.5	16.70%
a worker assists in enrolling children	1.57	0.5	17.46%
organized meetings	1.43	0.49	16.83%
Controlling variables			
Level 1 Controlling Variables			
Age (in month)	66.33	4.52	0.19%
female (%)	45.83%		0.25%
composite family SES	0.4	0.42	88.15%
Race (percentage)			0.13%
White, non-Hispanic	10.91%		
Hispanic	66.75%		
Black	5.11%		
Asian	14.81%		
All other groups	1.34%		
School Type (percentage)			2.10%
Regular public school	96.16%		
catholic school	1.63%		
other religious school	1.50%		
other private school	0.72%		
Level 2 Controlling Variables			
School size	3.88	1.45	16.25%
EL student percentage	34.56	26.4	20.65%
Title 1 funded school (percentage)	89.39%		18.93%

Note. EL = English learner; SES = socioeconomic status.
Family SES is a composite score built in the survey, and it was calculated using the following five components (1) parent/guardian 1's education; (2) parent/guardian 2's education; (3) parent/guardian 1's occupational prestige score; (4) parent guardian 2's occupational prestige score; and (5) household income, and it ranges from -3 to 3.
School size is an ordinal variable, where 1=0 to 40, 2= 41 to 60, 3=61 to 80, 4= 81 to 100, 5=101 to 140, and 6=141+.

Participants

The results from *Pre*LAS test indicated 1, 569 children to be English learners (i.e., children who scored less than 16). The majority of the sample are Hispanic, that makes 66.73% of the total sample. Asian are 14.85%, non-Hispanic White are 10.9%, non-Hispanic Black are 5.1%, and the rest 2.43% are other ethnical groups (i.e., Native Hawaiian/ Pacific Islander, American Indian/Alaska Native, and two or more races). Among all the participants, 45.63% are Female. The means, standard deviations and percentages for all observed variables are shown in Table 9.

Variables and Constructs for Measurement

The following information in the survey were used for model analysis: (1) children's academic outcomes (reading, mathematics and science test scores); (2) children's socioemotional competence (self-control and interpersonal skills); (3) family involvement at home; (4) parents/caregivers' expectation on children's highest degree; (5) school outreach efforts to involve EL families; and (6) variables that were controlled for. Table 9 has listed all the variables with titles and detailed information.

Table 7. List of Early Childhood Longitudinal Study (ECLS-K:2011) Variables Used

Outcome Variables	Data Sources	Variable Descriptions
Academic Outcomes	Child	
X2RSCALK1		Child's reading IRT scale score in Kindergarten (wave 2)
X2MSCALK1		Child's mathematic IRT scale score in Kindergarten (wave 2)
X2SSCALK1		Child's science IRT scale score in Kindergarten (wave 2)
Prosocial Behaviors	Teacher	
X2TCHCON		Teachers reported children's self-control (wave 2)
X2TCHSOC		Teachers reported children's interpersonal skills (wave 2)
Predicting Variables		
Family Involvement at Home	Parents/Caregivers	In a typical week, how often do you or any other family member do the following things to your child
P1TELLST		tell stories?
P1SINGSO		sing songs?
P1HLPART		help to do arts and crafts?
P1CHORES		involve child in household chores
P1GAMES		play games
P1NATURE		talk with children about nature
P1BUILD		build things with children
P1SPORT		do sports with children
P1NUMBRS		practice reding, writing or working with numbers
P1READBK		read books to children
Educational Expectation	Parents/Caregivers	How far in school do you expect your child to go?
P1EXPECT		
School Support for EL Families	School Administrators	Are the following practices available to EL families?
S2TRANSL		translators are available to parents and/or meetings
S2TRINWRT		translations of written communications are provided
S2HOMVST		home visit to non-English language families

Table 9 (Continued)

Outcome Variables	Data Sources	Variable Descriptions
S2OUTRCH		an outreach worker assists in enrolling children first entering school
S2MEETSP		conducts special parent meeting
Controlling variables		
Level 1 controlling variables		
Previous Outcomes		
X1RSCALK1	Children	Child's reading IRT scale score in Kindergarten (wave 1)
X1MSCALK1	Children	Child's mathematic IRT scale score in Kindergarten (wave 1)
X1TCHCON	Teacher	Teachers reported children's self-control (wave 1)
X1TCHSOC	Teacher	Teachers reported children's interpersonal skills (wave 1)
X1KAGE_R	Children	Children's age by month
X_CHSEX_R	Children	Children's gender
X12SESL	Parents/Caregivers	Composite family socioeconomic status
X_RACETH_R	Parents/Caregivers	Children's race, dummy coded
Hispanic		
Black		
Asian		
All other groups		
X2KSCTYP	Parents/Caregivers	School type, dummy coded
catholic school		
other religious school		
other private school		
Level 2 controlling variables		
S2KINTOT	School Administrators	School size
S2TTI	School Administrators	School Title 1 funding status
S2TOTELL	School Administrators	Percentage of EL students

Academic Outcomes

Direct cognitive assessment measured children's academic outcomes, and this study used item response theory (IRT) scale scores in reading, mathematics, and science in both 2010 Fall and 2011 Spring semesters at kindergarten. The measurement was conducted in a two-stage method, in which the first stage was a routing section that included items with a variety range of difficulty. The results of the first stage assessment determined the sequential test that identified low, middle or high difficulty to participating children. Then the second-stage tests administered appropriate questions for the children based on their demonstrated level from the previous stage (Tourangeau et al., 2015).

The reading test measured children's basic skills (e.g., letter recognition, rhyming words, and word recognition), vocabulary, and reading comprehension. The mathematic tests assessed children's "conceptual knowledge, procedural knowledge, and problem solving"(Tourangeau et al., 2015, p.2-6). In addition, the science assessment incorporated multiple domains, including "physical sciences, life sciences, environmental sciences, and scientific inquiry"(Tourangeau et al., 2015, p.2-6).

Socioemotional Competence

The socioemotional construct included two variables, self-control and interpersonal skills, drawn from parent interview were included as children's socioemotional competence. Self-control is an intra-personal skill that regulates one's emotions, cognitive , and behaviors to achieve goals (Guirguis & Antigua, 2017; Winsler et al., 2014), and interpersonal skill is an social interaction competence, consisting of social

awareness and communicative skills, whose aim is to establish positive relationships (Elias et al., 1997; Powell et al., 2010).

Self-control was derived from four questions (α= 0.81 for 2010 Fall, and α= 0.82 for 2011 Spring), and interpersonal skill was drawn from five questions (α= 0.86 for 2010 Fall, and α= 0.87 for 2011 Spring). Both constructs are 4-point scales ranging from 1 = not at all true to 4 = very true. The model analysis controlled for children's socioemotional and academic performance in 2010 Fall semester for socioemotional and academic outcomes, respectively.

Parent/Caregiver Interview

Parents/caregivers completed interviews when children were in kindergarten, and the implementation procedure made bilingual interviewers available for parents/caregivers who did not speak English (Tourangeau et al., 2015). In this model, family involvement predictors were parents/caregivers' home involvement construct and their expectation on children's educational attainment. The home involvement construct was measured in 2010 Fall that asked about the frequency of 10 home activities that parents did with their children weekly (e.g. tell stories, play games, and read books to the children). The reliability of this construct was α= 0.76.

Parents/caregivers' expectation on children's educational attainment asked how far in school do they expect their child to go, and the answers ranged from 1 to 7 where 1=receive less than high school diploma, and 7= To finish a Ph.D., MD, or other advanced degree.

School Administrator Questionnaire

School administrators or substitute personnel finished the school surveys. These questionnaires "were hard-copy paper completed by the school principal/administrator and/or his or her designee"(Tourangeau et al., 2015, p.2-17) in the spring semester of kindergarten. This study used school administrators' answers on five types of outreach activities as school support construct. These Yes or No questions asked if the school has implemented the following activities to EL families: (1) make translators available to parents/caregivers in meetings; (2) provide translations of written communications; (3) pay home visit, (4) assign an outreach worker to assist in enrolling children first entering school; and (5) conduct special meeting with EL families. The Cronbach's alpha of this construct is 0.58.

Background Variables

Certain student, family, and school background variables were controlled for in model analysis. Children's gender, age of enrollment in kindergarten, and race were the children characteristics. The race groups were coded as Hispanic, African American, Asian and other groups (e.g. American natives, Hawaii & Pacific Islanders and multi-races). Family factors include parent/caregiver type (categorical), and family SES. Specifically, SES is a composite score built in the survey, and it was calculated using the following five components (1) parent/guardian 1's education; (2) parent/guardian 2's education; (3) parent/guardian 1's occupational prestige score; (4) parent guardian 2's occupational prestige score; and (5) household income. Parent/caregiver type was coded as one biological/adoptive parent only and other guardian to be comparable to two parents/caregivers. In addition, school type was dummy coded (catholic, other religious,

and other private as compared to regular public schools) and controlled at individual level.

The school level variables racial composition average (i.e. Percent of White, Hispanic, African American, American natives, Hawaii & Pacific Islanders, and Asian students), school enrollment size, percentage of EL students, and Title 1 funding status.

Data Analysis

Since the research questions of interest involved the measurement of latent constructs and analysis of causal paths among constructs, structural equation modeling (SEM) was chosen as the most appropriate analytic technique.

Model fit indices were used to identify if the models fit well with the data, in which X^2 statistics, the root mean square error of approximation (RMSEA), the Tucker–Lewis index (TLI) the comparative fit index (CFI) were will be reported and examined. A good model fit will show RMSEA values less than .05 (Browne & Cudeck, 1993), CFI and TLI values greater than .90 (Marsh, Hau, & Wen, 2004). Because the X^2 statistic is sensitive to sample size, that larger sample size often associates with higher likelihood to have statistically significant results, it is important to look at the other two fit indices so as to draw a more precise conclusion on the model fit.

The sample consisted of individual students nested in schools, which violates the assumption of independence. The analysis will account for the clustering effect by using "TYPE = COMPLEX" analysis in Mplus to adjust the standard errors in the model (Muthén & Muthén, 2019).

Building the Structural Model

This model estimated causal paths among the five latent constructs. Specifically, causal paths are estimated from school support to EL parents/caregivers and children, academic and socioemotional outcomes. Paths are also specified from family school involvement and home involvement to academic achievement, and socioemotional performance. School support to EL families have effects on parents/caregivers' school involvement. Finally, the two outcome constructs (i.e., academic achievement, and socioemotional outcomes) are correlated. Figure 2 shows the estimated model with all the key variables and constructs.

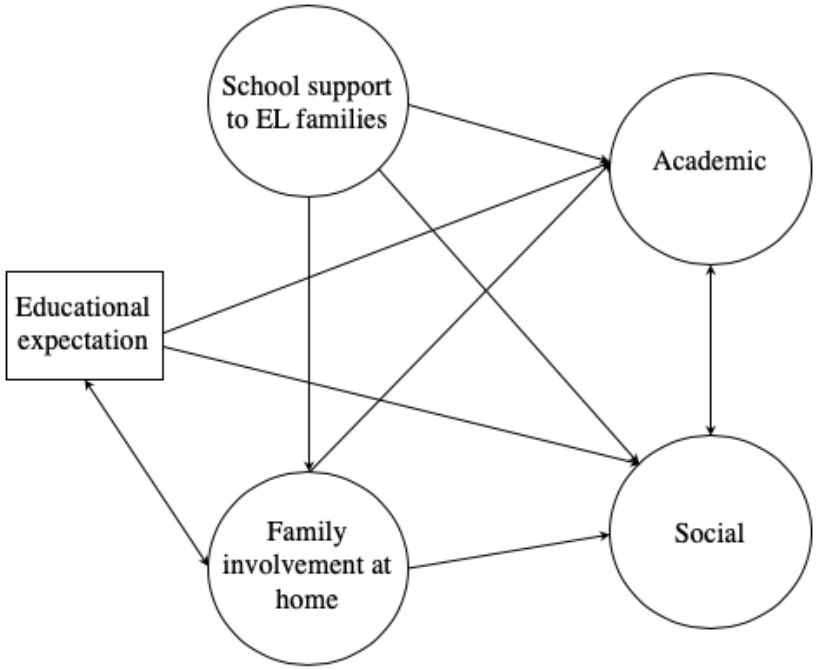

Figure 3. The structural equation model

Modification Index

The original model did not fit quite well with the data. To enhance the model fitting, I checked the modification index to identify additional paths that can be added. The results showed a total of seven paths that can be fixed. Specifically, three correlation paths among the four school support variables: (1) translation provided for meetings correlated with translation available for written materials; (2) translation available for written materials correlated with outreach assistance in enrolling children first entering school; and (3) outreach assistance in enrolling children first entering school correlated with pay home visit). Two correlation paths between involvement in home variables: (1) tell stories to children correlated with read books to children; and (2) read book to children correlated with practice numbers. In addition, two more paths from level 2 controlling variables on school support construct were added: (1) the effect from school enrollment size; and (2) Title 1 status on the school support construct.

Results

Descriptive Statistics

Table 10 and Table 11 each presents the correlations among the five key constructs and variables, and the correlation between covariates and the key constructs and variables, respectively. Some statistically significant associations between the variables and constructs were of note. Parents/ caregivers' involvement at home had positive correlation between children's academic outcomes. School support to EL families had positive correlation between socioemotional outcomes, yet its association between family involvement at home was negative. There was no statistically significant

correlation was found between school support and students' academic outcomes. Parents' educational expectation showed significant positive correlation between students' academic achievement and socioemotional outcome.

Table 8. Pearson correlations between major variables/constructs

Variable/Construct	1	2	3	4	5
1. Academic achievement	1				
2. Socioemotional outcomes	0.257**	1			
3. Home involvement	0.059**	-0.046	1		
4. School support	0.038	0.147**	-0.115**	1	
5. Educational expectation	0.133**	0.132**	-0.021	0.031	1

Note: *p<0.05. **p<0.01.

Table 9. Pearson correlations between major variables/constructs and covariates

	Academic achievement	Socioemotional Outcomes	Home involvement	School support	Educational expectation
Level 1 controlling variables					
SES	0.0535*	0.168**	0.122**	-0.066**	-0.023
Gender	0.087**	0.209**	-0.052*	0.055*	0.061*
Age	0.042	-0.014	0.019	0.065**	-0.113**
Catholic school	0.011	0.012	-0.002	-0.210**	0.068**
Other religious school	0.062*	-0.019	-0.029	-0.208**	0.041
Other private school	0.058*	-0.045	0.042	-0.102**	-0.005
Hispanic	-0.067**	0.158**	-0.103**	0.229**	0.161**
Asian	0.181**	0.014	-0.036	-0.111***	0.02
Black	-0.090**	-0.117**	0.036	0.061*	-0.070*
Other ethnicity	-0.070**	-0.123**	0.080**	-0.099**	-0.056*
Level 2 controlling variables					
Title 1 School	0.038	-0.011	0.054*	0.216**	0.024
School Size	-0.021	0.081**	-0.033	0.351**	0.006
Hispanic students' percentage	-0.003	0.129**	-0.087**	0.268**	0.234
EL students' percentage	0.044	0.107**	-0.113**	0.299**	0.187**

Note. EL = English learner; SES = socioeconomic status

*p<0.05. **p<0.01.

Several correlations between the key constructs and covariates were also statistically significant. Composite SES had positive associations between children's academic achievement, socioemotional outcomes, and home involvement. Yet the correlation between school support to EL families was negative.

School type showed an impact on the school level support to EL families. Catholic schools, other religious schools, and other private schools provided less help compared to regular public schools. In addition, Non-Catholic religious schools and other types of private schools both had positive correlation between academic achievement compared to regular public schools.

Structural Path Analyses

The results from the SEM model showed the following fit statistics: CFI = 0.902, TLI =0.890, and RMSEA = 0.048. The chi-square was ($\chi 2(513) = 7402.325$, $p< 0.01$). According to the model fit indexes, overall, the model showed acceptable fit with the data. The path effects from each exogenous construct/variable on the endogenous variables are shown in Table 12.

Table 10. The effects from exogenous factors on endogenous factors

Exogenous →Endogenous	Direct effect	Indirect effect	Total effect
Family involvement at home → Children's academic outcomes	0.021	N/A	0.021
Family involvement at home → Children's socioemotional outcomes	-0.005	N/A	-0.005
Educational expectation → Children's academic outcomes	0.061**	N/A	0.061**
Educational expectation → Children's socioemotional outcomes	0.032**	N/A	0.032**
School support → Children's academic outcomes	0.064	0.003	0.067
School support → Children's socioemotional outcomes	0.164**	0.001	0.165**
School support → Family involvement at home	-0.178**	N/A	-0.178**

Note: *p<0.05. **p<0.01

The association between school support and family involvement at home is negative ($b = -0.178$, $p < 0.001$), indicating that EL parents/caregivers interacted and engaged less with their children when schools provided more support services to EL families.

The relationship between children's academic outcome and socioemotional competency was significantly positive ($b = 0.191$, $p < 0.001$). Family involvement in home showed non-significant associations between both children's academic outcomes ($b = 0.021$, $p = 0.376$), and the socioemotional construct ($b = -0.005$, $p = 0.851$). Home involvement construct included multiple questions that might directly influence children's academic and socioemotional outcomes. For instance, questions have asked the frequency that parents read books to children, practiced with numbers, these could help with children's reading and mathematics performance. In addition, some questions inquired playing games, sports, and building crafts; these activities involved personal interaction between parents and children. Therefore, further study needs to be conducted to understand why its association between socioemotional outcomes is negative and statistically non-significant.

Results on the association between children's outcomes and school support provided to EL families showed differentiated effects on socioemotional and academic constructs. Specifically, school support had a significantly positive effect on socioemotional outcomes ($b = 0.164$, $p = 0.004$), and a non-significant positive effect on academic achievement ($b = 0.064$, $p = 0.306$). Such findings indicate that EL children showed better socioemotional performance when they attended schools that provided

more accommodation to EL families.

The indirect effects from school support via family involvement were not significant on both children's academic performance (b=0.003, p=0.403) and socioemotional outcomes (b=0.001, p=0.887). These findings revealed that, the school outreach on home involvement construct did not have significant association with these particular EL children's outcomes.

Results showed significantly positive effects of parents/ caregivers' expectation on both children's academic attainment (b = 0.061, p <0.001) and their socioemotional outcomes (b = 0.032, p = 0.002). The findings revealed that when parents/caregivers expected their children to achieve higher educational degrees, their children could attain more academic and socioemotional gains at the kindergarten.

There are other controlling variables that showed significant association between children's academic and socioemotional outcomes. Age at kindergarten entry had significantly negative association between children's academic performance (b= -0.011 p =0.010). The finding indicates that with one month later when children entered the kindergarten, they would show an average of 0.011 unit decrease in their academic achievements. Gender had significant effect on children's socioemotional outcomes: girls performed significantly better than boys (b=0.163, p<0.001). Although family SES did not have significant effect on the academic factor (b= -0.021, p =0.583), it has a positive effect on children's socioemotional competence (b= 0.230, p<0.001). It reveals that children who came from higher SES families were more likely to exhibit better self-control and interpersonal skills at school. Children's academic outcomes were positively

associated with school type. The association between ethnicity and school type did not yield statistically significant effects on either academic or socioemotional outcomes.

The three school level controlling variables, title 1 funding status, school enrollment size, and percentage of EL students did not show statistically significant association between socioemotional outcomes. Regarding with their effects on children's academic perform the percentage of EL in school had significantly negative effects on academic construct (b= -0.144, p=0.035). The result indicates that one percentage increase in school's total EL students' population can predict 0.144 unit decrease of children's academic achievement on average.

Discussion

The Ecological System (Bronfenbrenner, 1977; Bronfenbrenner & Morris, 2006) was used as a theoretical lens in understanding the association between children's development, family involvement and school support among the EL population at the kindergarten level. Results from descriptive analysis and the structural equation model yielded the following findings. First, several school- and individual-level characteristics were significantly associated with the frequency of school support to EL families, and with EL students' outcomes. Second, schools with more frequent help were associated with lower level of parents/ caregivers' involvement among EL families. Third, children with better socioemotional performance showed better academic outcomes. Fourth, the associations between school level support and children's academic and socioemotional outcomes both yielded positive results. Finally, children's academic outcomes were positively associated with socioemotional performance. Each of these findings will be

discussed in the following, along with interpretation of the results and their connection to previous studies and theories.

Student- and School-Level Characteristics

The findings of school-level variables associated showed that EL families received more support when their children attended schools that were Title I schools, with larger enrollment sizes, and with larger EL population percentage. The finding was consistent with previous studies on EL children (Cosentino de Cohen et al., 2005; Niehaus & Adelson, 2014), that EL children are more likely to receive more support when they attend schools of high EL percentage and larger enrollment size. In consistent with previous finding, the present study also revealed that Hispanic ELs attended schools with more support as compared to Black, Asian/Pacific Islander ELs and other minority groups, which might be because the majority of EL children are Hispanic (Niehaus & Adelson, 2014; Zehler et al., 2003), and speak Spanish as their first language. Schools are more likely to accommodate to their linguistic needs. Such finding reveals that EL children with non-Spanish first language are more difficult to have access to school support that targeted to EL families.

School Support to EL Families, Family Involvement at Home, and Children's Outcome

School support to EL families positively predicted children's socioemotional outcomes, which is consistent with previous findings. Schools providing EL families with bilingual resources can enhance school-family communication and establish positive relationship. As EL parents/caregivers feel being welcomed and valued in

school context, they pass down such feeling of being safe to their children, and the children can show better social and emotional performance at school.

The overlapping sphere theory (Epstein, 1991) has emphasized the significance of family-school partnership, and either stakeholder can optimize children's development along. Since most of the EL children came from an ethnical minority background, their parents can encounter barriers in schools in the United States. Specifically, they did not show as adequate involvement in children's education in both school and family contexts as other mainstream parents. The finding that school level support was associated with less frequent family involvement at home was somehow counterintuitive. However, this does not necessarily mean that school support would not empower EL parents/ caregivers and encourage them to participate more in children's education. Since this study is a cross-sectional analysis that did not involve any intervention, the results could not be deduced as causal relationship. One possible explanation to this counterintuitive result might be that children whose parents/caregivers involved less at home were more likely to come from lower SES background and attend Title 1 founded schools. These schools might spare more efforts to reach to EL families. However, the parents/caregivers might not have sufficient resources and knowledge for home education and interaction. Even though one of the school support methods was to pay home visit, schools need to implement more practices such as parenting training workshop and literacy programs to raise parents' awareness of participation in education.

The negligible effects from family involvement at home on both academic and

socioemotional achievement was surprising. Previous studies that focused on family involvement at home had different results regarding the impact on children's academic outcomes. For instance, Hindin (2002) measured the effects of parents'/caregivers' home reading on EL children, and found that children improved on an independent reading measure in word reading, oral reading, and reading fluency. Froiland, Powell, Diamond, & Son (2013) have examined the association between home literacy activity (shared reading and number of books at home) and children's literacy performance among the preschoolers. The resulted showed that home literacy predicted children's early literacy. However, Galindo & Sheldon's (2012) study examining multiple family involvement factors did not show statistically significant association between involvement at home and children's reading and mathematics performance.

It is highly likely that some other variables might further explain the relationships between family involvement at home and children's outcomes yet were not included in this model. For instance, family SES was positively associated with children's socioemotional performance. As a variable of SES, household income can impact prenatal resources such as housing, nutrition, and parents/caregivers' educational levels influence parents/caregivers' parenting styles and competence. All these factors are important in predicting children's early childhood development status and can impact children's academic and socioemotional conditions.

Parents/Caregivers' Educational Expectations and Children's Outcomes

In this study, parents/caregivers' expectation on children's future educational attainment (i.e., the highest degree their children can obtain) positively predicted both

academic and socioemotional outcomes. Previous meta-analysis examining the association between children's academic attainment and family involvement factors have found that parents/caregivers' educational expectation was the strongest predictor (Castro et al., 2015; Fan & Chen, 2001).

El Nokali et al. (2010) examined a family involvement construct including multiple variables (e.g. parents/caregivers volunteer in school, address the importance of education, and sharing the same goal with the school). The finding showed that children from highly involved families had enhanced social competencies and fewer behavior problems. However, the current literature examining the association between parents/caregivers' expectation and children's socioemotional outcomes was quite insufficient. This study in hand has contributed to the literature by finding that parents/caregivers' higher educational expectation can predict an increasing trend on children' social and emotional functioning.

Academic and Socioemotional Outcomes

This study also examined the how did between EL children's socioemotional performance related to their academic outcomes. The finding revealed that children's socioemotional outcomes were positively associated their academic achievement. This finding was consistent with extant literature that demonstrated significant links between socioemotional status including interpersonal relationship in school and self-regulation competence and academic achievements (Cristóvão et al., 2013; Niehaus et al., 2017)

Children with better self-control can regulate their behaviors and concentrate more in learning. Therefore, they are more likely to outperform peers with lower self-

control competency (Smyth & Arigo, 2009). In addition, higher interpersonal skills enable children to show prosocial behaviors and establish trustworthy relationship between peers and teachers. Previous studies among students in early ages have shown that children with greater understanding of their own and others' emotions are more likely to obtain academic success (Zins et al., 2007). Since socioemotional skills can effectively foster learning interaction (Rhoades et al., 2011). In addition, self-control and interpersonal skills attenuates self-efficacy (Gist et al., 1991), which further facilitates learning behaviors and academic achievement.

Limitations

There are several limitations in the present study that warrant discussion. ECLS-K:2011 data included a large, nationally representative sample, and the data collection procedure was designed and implemented for a wide and general population. However, this study in hand focused solely on EL children, which was 8.64% of the total sample size. The stratification in data collection procedure might not drill down to the EL group. In addition, a large percentage (66.75%) of the EL children were Hispanic, which could limit the extent to which these findings apply to EL children from other ethnic and language background.

Secondly, both home involvement and school support focused on the frequency or existence of the activities, yet the quality of these constructs were not available in the measurements. There were no measures of parents/caregivers' involvement and school support from the students' perspectives to quality checking.

Finally, due to the nature of this cross-sectional design, the results could not be

extended as causal relationships. For instance, even though that school support for EL families and family involvement at home were negatively associated, we cannot conclude that higher level of school support can cause parents/caregivers' less frequent involvement in home activities. To disentangle the causal issues, future research can focus on longitudinal analyses that allows to pinpoint how one variable contributes to another over time.

Implications on Policies and Practices

This study makes contributions as it (1) including both school support, parents/caregivers' educational expectation, and family involvement at home among the EL children in one model; (2) examining not only academic achievement as a developmental outcome, but also socioemotional competencies. The findings are revealing on how parents and schools can best facilitate ELs and have provided significant implications for school administrators, teachers, and parents.

In this study, 63 students came from schools that reported themselves with 0% of ELs. Because the total EL percentage measurement ranged from zero to 100, and all results were integers, these children either accounted as a very small percentage of the total student body in their schools (i.e., less than 1%), or they were not identified as ELs by their schools. Both potential explanations possible revealed that these children and their families failed to receive the linguistic and other support they needed. In addition, 25.81% of the children among the sample attended schools reported to have 10% of or less EL children among the overall students in schools. Schools with a low proportion of EL children should implement in-depth examination on students who have limited

English proficiency and spear more efforts to understand their families. The information will enable the schools to offer essential help and accommodation to the children.

First, schools should focus on fostering parents/caregivers' expectation to their children. Given the contributions of parents/caregivers' educational expectation to students' academic and socioemotional development, school administrators and teachers should raise parents/caregivers' awareness of the significance of education and share high educational expectation with these parents/caregivers. Schools and teachers can encourage parents/caregivers to express high educational expectation with children, be clear in addressing the expectation (e.g. I hope you can obtain a master's degree in the future).

Second, school support to EL families has a significant effect on children's socioemotional outcomes. Schools should provide more resources and facilitative methods to reach out to EL families. Possible examples are providing interpreters in school events and parent-teacher conferences, making bilingual (or multilingual) materials are available for communication, and understanding more about EL families' needs and accommodate or help them with the help of community. For instance, for EL parents/caregivers with limited English proficiency, schools can recommend learning resources such as learning programs and bilingual books in local libraries.

Finally, schools implementing mentor programs for EL children can not only enhance children's overall well-being, but also empower parents/caregivers or other family members who have participated in the mentor programs (Caldarella et al., 2010). This program can recruit teachers, parents/caregivers or other family members and

provide them with trainings to interact with EL children. Mentors can benefit from the mentoring programs: they have increased learning experiences with other teachers or parents/caregivers, develop knowledge and skills, and express important values of their own (Randolph & Johnson, 2008). More importantly, when having the support and skills needed to negotiate in both home and school contexts, EL children will be more likely to be independent and resilient to overcome challenges they encounter (Herrera et al., 2011) .

Conclusions

This SEM analysis utilized the ECLS-K: 2011 data from the EL kindergarteners in order to understand the associations between family involvement in school, at home and parents/caregivers' expectations and children's academic as well as socioemotional outcomes. Consistent with previous findings, the results in this study confirmed the significant effects of parents/caregivers' educational expectation on children's academic outcomes (e.g. Castro et al., 2015; Fan & Chen, 2001; Jeynes, 2005), further, it also revealed positive association between educational expectation and ELs' socioemotional performance.

The findings have significant implications for educators in the fields of educational psychology. This study provided much needed information on the academic and socioemotional performance of EL children in U.S. schools. Apart from the predicting factors, children from different types of schools show significantly different levels of academic outcomes. In addition, socioemotional outcomes are positively associated with family SES.

The findings further address the significance of school support to families and EL children since school factors significantly predict EL students' socioemotional and academic well-being. Further, this results also indicate the necessity of maintaining school-family partnership so as to include parents/caregivers in EL children's education.

CHAPTER V

DISCUSSION AND CONCLUSIONS

This dissertation examined the issues through both educational and psychological lenses among one of the fasted growing student groups in the United States: English learners (ELs). The aim is to reveal the associations between ELs' attainments and family as well as school support. The three manuscripts utilized both qualitative and quantitative methods to explore the relationships between school support, family involvement at home, family involvement at school, parental expectation, and children's socioemotional as well as academic outcomes at the early childhood stage.

The first study is a qualitative review that systematically searched and examined the association between EL parents/caregivers' involvement and their children's outcomes. For the second and third study, I used the data drawn from students, parents/caregivers, teachers and school administrators in the Early Childhood Longitudinal Study: Kindergarten-2011 (ECLS: K-2011). Within the ECLS: K-2011 dataset, all individual level observations (children and parent/caregiver data) are nested with the school level data. To handle the cluster effect, the second study used hierarchical linear modeling, and the third study implemented structural equation modeling that accounted for the school variance. These two studies aim to understand the effects of school support with families, and family involvement on students gains in academic and socioemotional outcomes.

Results

Study 1 results—systematic review

This systematic literature review literature confirmed that EL families have implemented a variety of methods to involve in their children's education. After systematic searching through five databases (i.e. Education Resources Information Center, PsychInfo, Linguistic and Language Behavior Abstract, ProQuest Dissertation & Theses, and Education Source) and screening according to the screening criteria, a total of 23 studies were yielded. All of the studies were conducted in English-native speaking nations (i.e., The United States and Canada), among ELs who were 3-8 years old. Among all the studies, the major two approaches of family involvement are school/researcher provided interventions (i.e. training, workshops) and parents/caregivers initiated spontaneous educational activities. The outcomes are children's social, emotional, behavioral or/and academic performances.

Studies looking into parents/caregivers' involvement and participation in literacy and mathematics showed positive influence on children's outcomes. While the effects of involvement activities on social and emotional outcomes varied: involvement had positive impact on certain emotions and behavioral functions, for instance, children's energy behavior (Tang et al., 2012) and disciplinary behavior (Kessler, 2010), yet not on others, such as school attendance (Tang et al., 2012), and internalizing and externalizing behavioral problems (Kessler, 2010). In addition, several school programs (e.g. Families and Schools Together (FAST) program) aimed at strengthening the connection between parents and children, schools, families, and communities, and the participating EL

children scored significantly higher than other ELs in overall outcomes, language and teacher-child interaction.

Studies examining family language input with EL children. The findings revealed the significance of home culture: children can benefit in general language and English competency when they were exposed to English or home languages at home (Cheung et al., 2018; Pérez-Leroux et al., 2011). In addition, EL families have their unique fund of knowledge such as language and genre of writing, and the parents/caregivers can be pass such knowledge down to their children as they tutor their children to write (Cheung et al., 2018; Wollman-Bonilla, 2001).

The findings from this review confirmed that the influence from parents/caregivers has a direct effect on child socioemotional, behavioral, and academic outcomes. There is a dire need for further development and testing of interventions that reduce socioemotional and behavior issues and enhance children's well-being in all aspects.

Study 2 results –HLM analysis.

The second study focused on children's socioemotional competencies, specifically their self-control and interpersonal capacity performance in school at the kindergarten level. To compare EL group with their non-EL peers, this study included all the samples from ECLS: K-2011 that have teacher-reported self-control and interpersonal scores.

Previous studies with minority and EL parents/caregivers' educational expectation on children had conflict findings. Some studies found that the minority

families had almost equally high expectations to child academic outcome compared to the mainstream parents/caregivers (e.g.Alexander, Entwisle, Blyth & McAdoo, 1988). Yet other studies showed that parents' expectation differs by SES status and ethnicity (Robinson & Harris 2014). Low SES parents, featured by lower educational levels, are likely to have more expectation on their children's job-hunting and earning rather than educational attainments (Benner et al., 2016). The result from study 2 showed that EL parents/ caregivers expressed higher educational expectation to their children, which provides further evidence to one side of the debate. Whereas, non-EL parents/caregivers involved more frequently in school and home activities. The findings are revealing that families do show different levels of family involvement in various forms of practices. Since EL parents/caregivers do hope their children can attain higher degrees, this can be a great starting point to motivate them to take actions in child's education.

In addition, non-EL children showed statistically higher level of interpersonal performance compared to EL children. This finding might be confirming that EL children encountered issues while communicating and interacting with teachers, due to their linguistic and cultural gaps.

The evaluation with school outreach efforts to families showed significantly positive effects on both children's self-control and interpersonal gains. After including family involvement variables in the models, the effects were still significant. Further, the follow-up Bootstrapping tests showed that family involvement in school and at home on children's interpersonal skills partially mediated the school influence. These findings might indicate that school efforts to help families can establish a welcoming

environment to parents/caregivers and children, which is conducive to both parents/caregivers' involvement and children's academic and socioemotional well-being.

Study 3–SEM analysis.

The third study focused solely on the EL children, looking at their socioemotional and academic outcomes in one structural equation model. In the ECLS: K-2011 dataset, 1,569 of the children were ELs when they entered kindergarten, and majority of the sample were Hispanic children, who were 66.73%. This SEM analysis included two key exogenous factors (i.e. family involvement at home, and school support to EL families) and one exogenous variable (i.e. parents/caregivers' educational expectation to children).

The findings showed that EL families received more support when their children attended schools that were Title I, with larger student numbers, and with larger EL population percentage. In addition, the SEM result found that family involvement at home construct did not have statistically significant effect on children's socioemotional or academic outcomes. While parents/caregivers' expectation had significantly positive effect on both socioemotional and academic performance. Finally, school support to EL families had positive association on children's socioemotional competencies, but not on academic outcomes.

Significance of this Study

Early childhood experiences can have significant impact on individuals' future academic attainment, socioemotional well-being, career development and life-long success (Hsieh, 2011). Understanding the interplay between family involvement and

school support factors and children's outcomes will enable researchers and teachers to plan effective programs and practices for EL children and their families. The results from this study showed that school outreach to families (e.g. paying home visit) has positive influence on children's self-control and interpersonal performance during kindergarten year. In addition, according to the findings from the systematic review, programs that enhances the connection among EL families, and between EL parents/caregivers and children has enhanced parents/caregivers' social competencies, which further positively impacted their children's prosocial behaviors (Valdez et al., 2013). Therefore, aside from enhancing communication with families, schools can support parents/caregivers by providing them with training programs and workshops. These approaches are more likely to empower parents/caregivers to become participants and facilitators in children's development.

Taken together, this dissertation contributes central insights into school support and family involvement and EL children's educational attainment in multiple aspects. Previous studies in the educational field examining the association between family impact focuses on academic outcomes. This study extends the literature on how family involvement affects children by including and examining children's social, emotional and behavioral performances. Different from previous studies that found EL children showed weaker socioemotional outcomes (e.g. Ji, 2018; Southgate & Roscigno, 2009), the second study found that EL children did not show weaker self-control competence. The findings revealed that EL children did not show weaker social and emotional performance in all measures. For instance, the EL children could regulate their behaviors

at school, and control their emotions as well as their non-EL peers. However, they did show weaker interpersonal skills, which might be due to the linguistic and cultural barrier in the American school contexts (Daniel-White, 2002).

Secondly, in general, the results from this study have been consistent with the previous research and showed that various types of family involvement can impact children's outcomes differently (e.g. Castro et al., 2015; Hill & Tyson, 2009; Jeynes, 2017).The results from the HLM analysis showed that parents/caregivers' involvement in school had negative effects on children's self-control and interpersonal outcomes. While the effect of home involvement was positive on interpersonal skills, and parents/caregivers' expectation did not show significant impact on self-control or interpersonal competence. Even though different types of family involvement functions might function differently, it is not plausible to separate them completely. The optimal practice is to enhance parenting skills and implement family involvement across school, home and even other contexts with high quality parenting. These findings imply that teachers, school administrators and researchers should examine and understand the different patterns of family involvement and how they might influence the student group they work with.

Beyond the substantive insights elucidated above, my empirical findings help fill important gaps in understanding family involvement at early childhood stage. First, I implemented a rigorous assessment in association between family involvement and socioemotional outcomes utilizing a large, nationally represented dataset. Previous studies of family involvement in the educational field primary focused on academic

outcomes

Limitations

Study 1 Limitations

This systematic literature review included only 23 studies, and 21 of these studies were conducted in the United States. This pool of literature constrains my conclusion and implication mostly within the U.S. context. In addition, the searching only yielded five studies that examined the association between family involvement and EL children's social, emotional and behavioral outcomes. To further understand the functioning of family influence on EL children's socioemotional and behavioral development, I am hoping more empirical studies on this topic to be conducted.

The scope of article searching, and inclusion also limited this study: I excluded articles not written in English, which may filter out some articles on family involvement among the ELs. Although I made efforts to search through the major databases to identify as many articles as possible, there are also chances a number of articles were excluded as the databases are limited by the journals they index.

Study 2 and 3 Limitations.

Both study 2 and 3 utilized the ECLS: K-2011 dataset, and certain limitations were brought by the nature of this survey data. The first limitation for the current two studies is that the data are correlational but not causal since all the data were observational. Therefore, the relationship between family and school involvement/support and children's outcomes can be bi-directional, in another words, children's socioemotional and academic well-being might also predict

parents/caregivers' frequency of involvement. Further interventional studies need to be conducted to understand the mutual influential relationship between children's outcomes and family involvement factors.

Secondly, the ECLS: K-2011 interviews and questionnaires aim at understanding the physical, mental and academic well-being of the students across the United States, it was not specifically designed to examine the developmental process among the EL groups. In another word, the EL group in these two studies might not be representative the EL population nationally. Therefore, I draw conservative implication based on the findings.

Third, parenting and school variables were assessed to see the presence or frequency of certain involvement/supportive practices, while the quality of these involvement practices were not reported. Our understanding on parents/caregivers' involvement should not stop at the point where the focus is on how many times they participated in certain activities, instead, the dynamic and interaction between them and the children are more important predictors that influence children's performance.

Last, the survey data reported by parents/caregivers, school administrators, and teachers might bring in certain biases. Family involvement variables were self-reported by children's parents or other family members, which might cause bias as parents/caregivers' perception of involvement might impact their impression on their actual involvement practices. Similar biases might also happen with school administrators reported supportive activities the school conducted with families. In

addition, the children's socioemotional outcomes were reported by their teachers. This both may lead to biased or inaccurate reporting.

Conclusion

This research study emphasized the impact of family involvement factors on children's academic, socioemotional and behavioral outcomes. The results provide support for the role of parent/caregiver training programs and involvement on academic practices and social connection with children, other families, and school personnel. Further, the first and the third studies have found that certain family involvement factors can positively influence the EL group.

The results of this study have several implications for school policy. Given the findings for family-school involvement variables, it is essential that teachers and administrators to be aware of the significance of including parents/caregivers. For example, school personnel can invite parents/caregivers to attend school events, to volunteer in school activities, and participate in training programs and workshops to enhance parenting skills (Harris & Robinson, 2016). An environment that optimizes child development requires the partnership between family and school, and the collaborative effects can benefit children's academic outcomes and socioemotional well-being in the early age. Moreover, the positive effects will last in the long run and facilitate people's future success.

Finally, it is important to notice the diversity of the EL population. Even though these children share certain similarities, and all have the needs to learn English, they come from different cultural and language backgrounds, and have parents/caregivers

with differentiated educational level and SES. On the one hand, educational policies in district and school level can hardly meet the immediate needs for all EL children and families. On the other hand, their background and experiences can provide sufficient information for educators in figuring out policies and practices to facilitate EL children's success in school through family involvement.

REFERENCES

Aikens, N. L., & Barbarin, O. (2008). Socioeconomic differences in reading trajectories: The contribution of family, neighborhood, and school contexts. *Journal of Educational Psychology*, *100*(2), 235–251. https://doi.org/10.1037/0022-0663.100.2.235

Alexander, J. D., Cox Jr., R. B., Behnke, A., & Larzelere, R. E. (2017). Is all parental "noninvolvement" equal? barriers to involvement and their relationship to Latino academic achievement. *Hispanic Journal of Behavioral Sciences*, *39*(2), 169–179. https://doi.org/10.1177/0739986317700837

Alexander, K. L., Entwisle, D. R., Blyth, D. A., & McAdoo, H. P. (1988). Achievement in the first 2 years of school: Patterns and processes. *Monographs of the Society for Research in Child Development*, *53*(2), 1–157. https://pubmed.ncbi.nlm.nih.gov/3226426/

Alzahrani, M., Alharbi, M., & Alodwani, A. (2019). The effect of social-emotional competence on children academic achievement and behavioral development. *International Education Studies*, *12*(12), 141–149. https://doi.org/10.5539/ies.v12n12p141

Ankrum, R. J. (2016). Socioeconomic status and its effect on teacher/parental communication in schools. *Journal of Education and Learning*, *5*(1), 167–175. https://doi.org/10.5539/jel.v5n1p167

Arias, M. B., & Morillo-Campbell, M. (2008). *Promoting ELL parental involvement: Challenges in contested times*. Education Public Interest Center. https://files.eric.ed.gov/fulltext/ED506652.pdf

Baird, A. S. (2015). Beyond the greatest hits: A counterstory of English learner parent involvement. *The School Community Journal*, *25*(2), 153–175. http://proxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2016-00631-008&site=ehost-live

Bang, Y. S. (2009). Helping all families participate in school life. *Young Children*, *64*(6), 97–99. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ868231&site=ehost-live

Baydoun, N. (2015). The perceived effect of parental participation on the academic achievement of female English as a second language middle school students in the Persian Gulf region. *Marriage and Family Review*, *51*(1), 22–38. https://doi.org/10.1080/01494929.2014.955939

Benner, A. D., Boyle, A. E., & Sadler, S. (2016). Parental involvement and adolescents' educational success: The roles of prior achievement and socioeconomic status. *J Youth Adolesc*, *45*(6), 1053–1064. https://doi.org/10.1007/s10964-016-0431-4

Boland, A., Cherry, G., & Dickson, R. (2017). *Doing a Systematic Review: A Student's Guide.* SAGE.

Boonk, L., Gijselaers, H. J. M., Ritzen, H., & Brand-gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement.

Educational Research Review, *24*, 10–30. https://doi.org/10.1016/j.edurev.2018.02.001

Borghans, L., Duckworth, A. L., Heckman, J. J., & Ter Weel, B. (2008). The economics and psychology of personality traits. *Journal of Human Resources*, *43*(4), 972–1059. https://doi.org/10.1007/BF00019387

Bornstein, M. H., Hahn, C. S., & Haynes, O. M. (2010). Social competence, externalizing, and internalizing behavioral adjustment from early childhood through early adolescence: Developmental cascades. *Development and Psychopathology*, *22*(4), 717–735. https://doi.org/10.1017/S0954579410000416

Brackett, M. A., & Rivers, S. E. (2014). Transforming students' lives with social and emotional learning. In *Handbook of Emotions in Education*. https://doi.org/10.4324/9780203148211

Braley, R., Slate, J. R., & Cavazos, J. (2009). Parental involvement and perceived at-risk student performance: Views from predominantly Hispanic parents. *International Journal of Educational Leadership Preparation*, *4*(1). http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1068501&site=ehost-live

Brasel, Y. (2008). *The relationship between parental involvement and reading comprehension performance of English language learners.* [Doctoral dissertation, Walden University]. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2008-99150-073&site=ehost-live

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, *32*(7), 513–531. https://psycnet.apa.org/record/1978-06857-001

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, *22*(6), 723–742. https://psycnet.apa.org/doiLanding?doi=10.1037/0012-1649.22.6.723

Bronfenbrenner, U., & Morris, P. (2006). The bioecological model of human development. In *Handbook of Child Psychology* (pp. 793–828). https://doi.org/10.4324/9781315646206-2

Busco, R. (1991). *The impact of a Hispanic parent involvement literacy program on limited-English-proficient students in grades 1, 2, and 3* [Doctoral dissertation, University of San Francisco]. https://doi.org/10.16953/deusbed.74839

Caldarella, P., Gomm, R. J., Shatzer, R. H., & Wall, D. G. (2010). School-based mentoring: A study of volunteer motivations and benefits. *International Electronic Journal of Elementary Education*, *2*(2), 199–216. https://eric.ed.gov/?id=EJ1052013

Campbell, S. B., Denham, S. A., Howarth, G. Z., Jones, S. M., Whittaker, J. V., Williford, A. P., Willoughby, M. T., Yudron, M., & Darling-Churchill, K. (2016). Commentary on the review of measures of early childhood social and emotional development: Conceptualization, critique, and recommendations. *Journal of Applied Developmental Psychology*, *45*, 19–41. https://doi.org/10.1016/j.appdev.2016.01.008

Campos, D., Huerta, M. E., & Delgado, R. (2011). *Reaching out to Latino families of English language learners*. Association for Supervision and Curriculum Development. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED522231&site=ehost-live

CASEL. (2019). *What is SEL?* https://casel.org/what-is-sel/

Castro, M., Expósito-Casas, E., López-Martín, E., Lizasoain, L., Navarro-Asencio, E., & Gaviria, J. L. (2015). Parental involvement on student academic achievement: A meta-analysis. *Educational Research Review*, *14*, 33–46. https://doi.org/10.1016/j.edurev.2015.01.002

Center for Applied Linguistics. (2019). *English learners*. http://www.cal.org/areas-of-impact/english-learners

Cheung, S., Kan, P., Winicour, E., & Yang, J. (2018). Effects of home language input on the vocabulary knowledge of sequential bilingual children. *Bilingualism: Language and Cognition*, *22*(5), 1–19. https://doi.org/10.1017/S1366728918000810

Children's Bureau. (2019). *Foster care statistics 2017*. https://www.childwelfare.gov/pubPDFs/foster.pdf

Cho, H., Wang, X. C., & Christ, T. (2019). Social-emotional learning of refugee English language learners in early elementary grades: Teachers' perspectives. *Journal of Research in Childhood Education*, *33*(1), 40–55. https://doi.org/10.1080/02568543.2018.1531449

Christenson, S. L., & Reschly, A. L. (2010). *Handbook of school-family partnership*. Routledge.

Cosentino de Cohen, C., Deterding, N., & Clewell, B. C. (2005). Who's left behind? Immigrant children in high and low LEP schools. In *Program for Evaluation and Equity Research*. http://www.urban.org/sites/default/files/alfresco/publication-pdfs/411231-Who-s-Left-Behind-.PDF

Cristóvão, A. M., Candeias, A. A., & Verdasca, J. (2013). Social and emotional learning and academic achievement in Portuguese schools: A bibliometric study. *Trends in Neuroscience and Education*, *2*, 107–110. https://doi.org/10.3389/fpsyg.2017.01913

Crosnoe, R. (2007). Early child care and the school readiness of children from Mexican immigrant families. *International Migration Review*, *41*(1), 152–181. https://doi.org/10.1111/j.1747-7379.2007.00060.x

Crosnoe, R, & Ansari, A. . (2015). Latin American immigrant parents and their children's teachers in US early childhood education programmes. *International Journal of Psychology*, *50*(6), 431–439.

Crosnoe, Robert, & Ansari, A. (2015). Latin American immigrant parents and their children's teachers in U.S. early childhood education programs. *International Journal of Psychology*, *50*(6), 1–15. https://doi.org/10.1007/s11065-015-9294-9.Functional

Daniel-White, K. (2002). Reassessing parent involvement: Involving language minority parents in school work at home. *Working Papers in Educational Linguistics*, *18*(1), 1–24.

Dávila, D., Noguerón, S., & Vasquez-Dominguez, M. (2017). The Latinx Family: Learning y La Literatura at the Library. *Bilingual Review*, *33*(5), 33–49. http://proxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=127142307&site=ehost-live

De Carvalho, M. E. (2000). *Rethinking family-school relations: A critique of parental involvement in schooling*. Routledge.

Delgado, R., Huerta, M. E., & Campos, D. (2012). Enhancing relationships with parents of English language learners. *Principal Leadership*, *12*(6), 30–34. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ975843&site=ehost-live

Denham, S. A. (2003). Social and emotional learning, early childhood. In T. P. Gullotta, M. Bloom, J. Kotch, C. Blakely, L. Bond, G. Adams, C. Browne, W. Klein, & J. Ramos (Eds.), *Encyclopedia of primary prevention and health promotion* (pp. 1009–1018). Springer US. https://doi.org/10.1007/978-1-4615-0195-4_147

Denham, S. A., Bassett, H. H., Zinsser, K., & Wyatt, T. M. (2014). How preschoolers' social-emotional learning predicts their early school success: Developing theory-promoting, competency-based assessments. *Infant and Child Development*, *23*(4), 426–454. https://doi.org/10.1002/icd.1840

Drummond, K. V, & Stipek, D. (2004). Low-income parents' beliefs about their role in children's academic learning. *The Elementary School Journal*, *104*(3), 197–213. https://doi.org/10.1086/499749

Duckworth, A. L., Taxer, J. L., Eskreis-winkler, L., Galla, B. M., & Gross, J. J. (2019). Self-control and academic achievement. *Annual Review of Psychology*, *70*, 373–399.

Duncan, S. E., & De Avila, E. A. (1998). *preLAS 2000*. CTB/McGraw-Hill Companies, Inc.

El Nokali, N., Bachman, H., & Votruba-Drzal, E. (2010). Parent involvement and children's academic and social development in elementary school. *Child Development*, *81*(3), 988–1005. https://doi.org/10.1111/j.1467-8624.2010.01447.x

Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., Kessler, R., Schwab-Stone, M. E., & Shriver, T. P. (1997). *Promoting social and emotional learning: Guidelines for educators*. Association for Supervision and Curriculum Development. http://books.google.com/books?hl=en&lr=&id=AOlqSwQPo9cC&oi=fnd&pg=PR5&dq=Rachael+Kessler&ots=GpKEJ_q5Vc&sig=7SDEQMpnURiu9cwkcJpf8J9CSD4

Elorriaga, M. (2006). *Computer use by Latino migrant families: Increasing K-2 children's reading skills through parent training*. [Doctoral dissertation, Nova Southeastern University].

Epstein, J. L. (1991). Effects on student achievement of teachers' practices of parent involvement. In S. B. Silvern (Ed.), *Advances in reading/language research: A research annual, Vol. 5: Literacy through family, community, and school interaction.* (pp. 261–276). Elsevier Science/JAI Press. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1998-07316-011&site=ehost-live

Epstein, J. L. (1995). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappa*, *76*(9), 701–712.

Epstein, J. L., Galindo, C. L., & Sheldon, S. B. (2011). Levels of leadership. *Educational Administration Quarterly*, *47*(3), 462–495. https://doi.org/10.1177/0013161x10396929

Epstein, J. L., Sanders, M. G., Sheldon, S. B., Simon, B. S., Salinas, K. C., Jansorn, N. R., Van Voohis, F. L., Martin, C. S., Thomas, B. G., Greenfeld, M. D., Hutchins, D. J., & Williams, K. J. (2018). *School, family, and community partnerships: Your handbook for action*. Corwin Press.

Espinosa, C. (2018). *Promoting mathematical literacy in Latino children through family involvement at school and at home* (Issue January) [Doctoral Dissertation, William Paterson University of New Jersey]. https://search.proquest.com/openview/c9083682c8a349005ec52149b5e2f27a/1?pq-origsite=gscholar&cbl=18750&diss=y

Evans, G. W., & English, K. (2002). The environment of poverty: Multiple stressor exposure, psychophysiological stress, and socioemotional adjustment. *Child Development*, *73*(4), 1238–1248. https://doi.org/10.1111/1467-8624.00469

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, *13*(1), 1–22.

Fantuzzo, J., McWayne, C. M., Perry, M. A., & Childs, S. (2004). Multiple dimensions of family involvement and their relations to behavioral and learning competencies for urban, low-income children. *School Psychology Review*, *33*(4), 467–480.

Fantuzzo, J., Tighe, E., & Childs, S. (2000). Family involvement questionnaire: A multivariate assessment of family participation in early childhood education. *Journal of Educational Psychology*, *92*(2), 367–376. https://doi.org/10.1037/0022-0663.92.2.367

Flouri, E., & Buchanan, A. (2004). Early father's and mother's involvement and child's later educational outcomes. *British Journal of Educational Psychology*, *74*, 141–153.

Froiland, J. M. (2011). Response to intervention as a vehicle for powerful mental health interventions in the schools. *Contemporary School Psychology*, *15*(1), 35–42.

Froiland, J. M., & Davison, M. L. (2014). Parental expectations and school relationships as contributors to adolescents' positive outcomes. *Social Psychology of Education*, *17*(1), 1–17. https://doi.org/10.1007/s11218-013-9237-3

Froiland, J. M., & Davison, M. L. (2016). The longitudinal influences of peers, parents, motivation, and mathematics course-taking on high school math achievement.

Learning and Individual Differences, *50*, 252–259. https://doi.org/10.1016/j.lindif.2016.07.012

Froiland, J. M., Peterson, A., & Davison, M. L. (2012). The long-term effects of early parent involvement and parent expectation in the USA. *School Psychology International*, *34*(1), 33–50. https://doi.org/10.1177/0143034312454361

Froiland, J. M., Powell, D. R., Diamond, K. E., & Son, S. H. C. (2013). Neighborhood socioeconomic well-being, home literacy, and early literacy skills of at-risk preschoolers. *Psychology in the Schools*, *50*(8), 755–769. https://doi.org/10.1002/pits

Fugas, M. T. (2016). *An investigation of the impact of parent and community involvement in middle schools in North Carolina that successfully serve Latino English Language Learners (ELLs)*. [Doctoral dissertation, University of North Carolina at Chapel Hill].

Galindo, C., & Sheldon, S. B. (2012). School and home connections and children's kindergarten achievement gains: The mediating role of family involvement. *Early Childhood Research Quarterly*, *27*(1), 90–103. https://doi.org/10.1016/j.ecresq.2011.05.004

García, J. L., Heckman, J. J., Leaf, D. E., & Prados., M. J. (2016). *The Life-cycle benefits of an influential early childhood program*. www.heckmanequation.org

Georgis, R., Gokiert, R. J., Ford, D. M., & Ali, M. (2014). Creating inclusive parent engagement practices: Lessons learned from a school community collaborative supporting newcomer refugee families. *Multicultural Education*, *21*(3), 23–27.

http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1045924&site=ehost-live

Gilbert, L. R., Spears Brown, C., & Mistry, R. S. (2017). Latino immigrant parents' financial stress, depression, and academic involvement predicting child academic success. *Psychology in the Schools*, *54*(9), 1202–1215. https://doi.org/10.1002/pits.22067

Gist, M., Stevens, C. K., & Bavetta, A. G. (1991). Effects of self-efficacy and post-training intervention on the acquisition and maintenance of complex interpersonal skills. *Personnel Psychology*, *44*(4), 837–861. https://doi.org/10.1111/j.1744-6570.1991.tb00701.x

Gonida, E. N., & Vauras, M. (2014). The role of parents in children's school life: Student motivation and socio-emotional functioning. *British Journal of Educational Psychology*, *84*(3), 349–351. https://doi.org/10.1111/bjep.12048

Gonzalez, N., Moll, L. C., Tenery, M. F., Rivera, A., Rendon, P., Gonzales, R., & Amanti, C. (1995). Funds of knowledge forteaching Latino households. *Urban Education*, *29*(4), 443–470.

Good, M. E., Masewicz, S., & Vogel, L. R. (2010). Latino English language learners: Bridging achievement and cultural gaps between schools and families. *Journal of Latinos and Education*, *9*(4), 321–339. https://doi.org/10.1080/15348431.2010.491048

Grant, R. A., & Wong, S. D. (2003). Barriers to literacy for language-minority children: An argument for change in the literacy education profession. *Journal of Adolescent & Adult Literacy*, *46*(5), 386–394. https://doi.org/10.1598/jaal.46.5.2

Grantmakers for Education. (2013). *Educating English language learners: Grantmaking strategies for closing America's other achievement gap*. https://doi.org/10.1002/pits.20398

Green, C. L., Walker, J. M. T., Hoover-Dempsey, K. V., & Sandler, H. M. (2007). Parents' motivations for involvement in children's education: An empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology*, *99*(3), 532–544. https://doi.org/10.1037/0022-0663.99.3.532

Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child Development*, *65*(1), 237–252.

Grund, S., Lüdtke, O., & Robitzsch, A. (2018). Multiple imputation of missing data for multilevel models: Simulations and recommendations. *Organizational Research Methods*, *21*(1), 111–149. https://doi.org/10.1177/1094428117703686

Guirguis, R., & Antigua, K. C. (2017). DLLs and the development of self-regulation in early childhood. *Cogent Education*, *4*(1), 1–16. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1168517&site=ehost-live

Guralnick, M. J. (2006). Family influences on early development: Integrating the science of normative development, risk and disability, and intervention. In K. McCartney & D. Phillips (Eds.), *Handbook of early childhood development* (pp. 44–61).

Halle, T. G., Whittaker, J. V., Zepeda, M., Rothenberg, L., Anderson, R., Daneri, P., Wessel, J., & Buysse, V. (2014). The social–emotional development of dual language learners: Looking back at existing research and moving forward with purpose. *Early Childhood Research Quarterly*, *29*(4), 734–749. https://doi.org/10.1016/j.ecresq.2013.12.002

Hammer, C. S., Miccio, A. W., & Wagstaff, D. A. (2003). Home literacy experiences and their relationship to bilingual preschoolers' developing English literacy abilities. *Language, Speech, and Hearing Services in Schools*, *176*(3), 139–148. https://doi.org/10.1016/j.physbeh.2017.03.040

Hampden-Thompson, G., & Galindo, C. (2017). School–family relationships, school satisfaction and the academic achievement of young people. *Educational Review*, *69*(2), 248–265. https://doi.org/10.1080/00131911.2016.1207613

Han, W. (2010). Bilingualism and socioemotioanl well-being. *Childern and Youth Services Review*, *32*(5), 720–731.

Han, W., & Huang, C. C. (2010). The forgotten treasure: Bilingualism and Asian children's emotional and behavioral health. *American Journal of Public Health*, *100*(5), 831–838. https://doi.org/10.2105/AJPH.2009.174219

Hancock, G. R., & Mueller, R. O. (2013). *Structural equation modeling: A second course*. Information Age Publishing.

Harper, S. N., & Pelletier, J. (2010). Parent involvement in early childhood: A comparison of English language learners and English first language families. *International Journal of Early Years Education*, *18*(2), 123–141. https://doi.org/10.1080/09669760.2010.496162

Harris, A. L., & Robinson, K. (2016). A new framework for understanding parental involvement: Setting the stage for academic success. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, *2*(5), 186–201. https://doi.org/10.7758/rsf.2016.2.5.09

Hartsock, X. (2004). *The relationship between parental assistance with homework and the mathematics achievement of Hispanic English language learners*. [Doctoral dissertaion, The George Washington University].

Heckman, J., & Masterov, D. V. (2004). The productivity argument for investing in young children. *Applied Economic Perspectives and Policy*, *29*(3), 446–493.

Herrera, C., Grossman, J. B., Kauh, T. J., & McMaken, J. (2011). Mentoring in schools: An impact study of big brothers big sisters school-based mentoring. *Child Development*, *82*(1), 346–361. https://doi.org/10.1111/j.1467-8624.2010.01559.x

Hill, N. E., Castellino, D. R., Lansford, J. E., Nowlin, P., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2004). Parent academic involvement as related to school behavior, achievement, and aspirations: Demographic variations across adolescence. *Child Development*, *75*(5), 1491–1509.

Hill, N. E., & Tyson, D. F. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, *45*(3), 740–763. https://doi.org/10.1037/a0015362

Hill, N. E., Witherspoon, D. P., & Bartz, D. (2018). Parental involvement in education during middle school : Perspectives of ethnically diverse parents, teachers, and students. *The Journal of Educational Research*, *111*(1), 12–27.

Hindin, A. D. (2002). *How parents can help their children with reading: The effectiveness of a home repeated-reading intervention*. [Doctoral dissertation, Boston University].

Hoff-Ginsberg, E., & Tardif, T. (1995). Socioeconomic status and parenting. In M. H. Bornstein (Ed.), *Handbook of Parenting* (pp. 161–188). Lawrence Erlbaum Associates, Inc.

Hoover-Dempsey, K. V., Walker, J. M., Sandler, H. M., Whetsel, D., Green, C. L., Wilkins, A. S., & Closson, K. (2005). Why do parents become involved? Research findings and implications. *The Elementary School Journal*, *106*(2), 105–120.

Housman, D. K. (2017). The importance of emotional competence and self-regulation from birth: a case for the evidence-based emotional cognitive social early learning approach. *International Journal of Child Care and Education Policy*, *11*(1). https://doi.org/10.1186/s40723-017-0038-6

Hsieh, M. F. (2011). Learning English as a foreign language in Taiwan: students' experiences and beyond. *Language Awareness*, *20*(3), 255–270.

http://proxy.library.tamu.edu/login?url=https://search.proquest.com/docview/1010702980?accountid=7082

Ishimaru, A. M., Torres, K. E., Salvador, J. E., Lott, J., Williams, D. M. C., & Tran, C. (2016). Reinforcing deficit, journeying toward equity: Cultural brokering in family engagement initiatives. *American Educational Research Journal*, *53*(4), 850–882. https://doi.org/10.3102/0002831216657178

Jeynes, W. H. (2005). A meta-analysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban Education*, *40*(3), 237–269. https://doi.org/10.1177/0042085905274540

Jeynes, W. H. (2012). A meta-analysis of the efficacy of different types of parental involvement programs for urban students. *Urban Education*, *47*(4), 706–742. https://doi.org/10.1177/0042085912445643

Jeynes, W. H. (2017). A meta-analysis: The relationship between parental involvement and Latino student outcomes. *Education and Urban Society*, *49*(1), 4–28. https://doi.org/10.1177/0013124516630596

Ji, X. (2018). *Examining the influence of early home literacy environment and socioemotional competence development on reading achievement* [Doctoral dissertation, Texas A&M University]. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2018-26096-001&site=ehost-live

Kessler, J. (2010). *The effects of family involvement training for English language learners in an elementary school* [Doctoral dissertation, Trevecca Nazarene University]. https://pqdtopen.proquest.com/doc/1370975202.html?FMT=ABS

Landry, S. H., Smith, K. E., Swank, P. R., Assel, M. A., & Vellet, S. (2001). Does early responsive parenting have a special importance for children's development or is consistency across early childhood necessary? *Developmental Psychology*, *37*(3), 387–403. https://doi.org/10.1037/0012-1649.37.3.387

LaRocque, M., Kleiman, I., & Darling, S. M. (2011). Parental involvement: The missing link in school achievement. *Preventing School Failure: Alternative Education for Children and Youth*, *55*(3), 115–122. https://doi.org/10.1080/10459880903472876

Lee, J., Lee, Y. A., & Amaro-Jiménez, C. (2011). Teaching English Language Learners (ELLs) Mathematics in Early Childhood. *Childhood Education*, *87*(4), 253–260. https://doi.org/10.1080/00094056.2011.10523187

Linsley, I. E., & Linsley, J. (1993). *Proposed research on effective strategies used by parents to enhance learning and acquisition of English by their children*. https://files.eric.ed.gov/fulltext/ED358740.pdf

Lo, L. (2009). Perceptions of Asian immigrant families of children with disabilities towards parent involvement. In C. C. Park, R. Endo, & X. L. Rong (Eds.), *New perspectives on Asian American parents, students, and teacher recruitment* (pp. 1–23).

Loera, G., Rueda, R., & Nakamoto, J. (2011). The association between parental involvement in reading and schooling and children's reading engagement in Latino

families. *Literacy Research and Instruction*, *50*(2), 133–155. https://doi.org/10.1080/19388071003731554

Long, Y. (2017). *The influence of English proficiency on social adjustment in preschool English language learners*. [Doctoral dissertation, The University of Nebraska-Lincoln].

Loughlin-Presnal, J., & Bierman, K. L. (2017). How do parent expectations promote child academic achievement in early elementary school? A test of three mediators. *Developmental Psychology*, *53*(9), 1694–1708. https://doi.org/10.1037/dev0000369

Ma, X., Shen, J., Krenn, H. Y., Hu, S., & Yuan, J. (2016). A meta-analysis of the relationship between learning outcomes and parental involvement during early childhood education and early elementary education. *Educational Psychology Review*, *28*(4), 771–801. https://doi.org/10.1007/s10648-015-9351-1

Mapp, K. L. (2014). *Linking Family Engagement to Learning: Karen Mapp's "8 for 8."* Harvard Education.

Marian, V., Shook, A., & Schroeder, S. R. (2013). Bilingual two-way immersion programs benefit academic achievement. *Bilingual Research Journal*, *36*(2), 1–24. https://doi.org/10.1080/15235882.2013.818075

Marschall, M. (2006). Parent involvement and educational outcomes for Latino students. *Review of Policy Research*, *23*(5), 1053–1076. https://doi.org/10.1111/j.1541-1338.2006.00249.x

McClelland, M. M., & Morrison, F. J. (2003). The emergence of learning-related social skills in preschool children. *Early Childhood Research Quarterly*, *18*(2), 206–224. https://doi.org/10.1016/S0885-2006(03)00026-7

Mcclelland, M. M., Morrison, F. J., & Holmes, D. L. (2006). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly*, *15*(3), 307–329.

McFarland, J., Hussar, B., de Brey, C., Snyder, T., Wang, X., Wilkinson-Flicker, S., Gebrekristos, S., Zhang, J., Rathbun, A., & Barmer, A. (2017). *The Condition of Education 2017. NCES 2017-144*. National Center for Education Statistics.

McLoyd, V. C. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioemotional development. *Child Development*, *61*(2), 311–346.

Menken, K., & Solorza, C. (2013). Where have all the bilingual programs gone?!: Why prepared school leaders are essential for bilingual education. *Journal of Multilingual Education Research*, *4*, 9–39.

Meyer, D., Madden, D., & McGrath, D. J. (2004). *English language learner students in US public schools: 1994 and 2000 (NCES 2004-035).*

Mitra, D. L. (2006). Youth as a bridge between home and school: Comparing student voice and parent involvement as strategies for change. *Education and Urban Society*, *38*(4), 455–480. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ739396&site=ehost-live

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., Altman, D., Antes, G., Atkins, D., Barbour, V., Barrowman, N., Berlin, J. A., Clark, J., Clarke, M., Cook, D., D'Amico, R., Deeks, J. J., Devereaux, P. J., Dickersin, K., Egger, M., Ernst, E., … Tugwell, P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, *6*(7). https://doi.org/10.1371/journal.pmed.1000097

Mougeon, R. (2015). *French language in Canada*. Canadian Encyclopedia. https://www.thecanadianencyclopedia.ca/en/article/french-language

Mushi, S. (2001). *Acquisition of multiple language among children of immigrant families: Parents' role in the home-school language pendulum.* https://files.eric.ed.gov/fulltext/ED459622.pdf

Muthén, L. K., & Muthén, B. . (2019). *Mplus. Statistical analysis with latent variables: User's guide*. https://www.statmodel.com/download/usersguide/MplusUserGuideVer_8.pdf

National Center for Education Statistics. (2016). *Common core of data (CCD), local Education agency universe survey, 2015–16.*

National Center for Education Statistics. (2019). *Fast facts: High school graduation ratess*. https://nces.ed.gov/fastfacts/display.asp?id=805

National Council of Teachers of English. (2008). *2007 NCTE legislative platform*. http://www2.ncte.org/statement/2008legisplatform/

National Literacy Trust. (2011). *A research review: The importance of families and the home environment*. National Literacy Trust.

Niehaus, K., & Adelson, J. L. (2014). School support, parental involvement, and academic and social-emotional outcomes for English language learners. *American Educational Research Journal*, *51*(4), 810–844. https://doi.org/10.3102/0002831214531323

Niehaus, K., Adelson, J. L., Sejuit, A., & Zheng, J. (2017). Native language background and academic achievement: Is socioemotional well-being a mediator? *Applied Developmental Science*, *21*(4), 251–265. https://doi.org/10.1080/10888691.2016.1203790

Núñez, J. C., Suárez, N., Rosário, P., Vallejo, G., Valle, A., Epstein, J. L. %J M., & learning. (2015). Relationships between perceived parental involvement in homework, student homework behaviors, and academic achievement: Differences among elementary, junior high, and high school students. *Metacognition Learning*, *10*(3), 375–406.

O'Donnell, J., & Kirkner, S. L. (2014). The impact of a collaborative family Involvement program on Latino families and children's educational performance. *School Community Journal*, *24*(1), 211–234. http://eric.ed.gov/?q=Teacher+performance+and+educational+success&ft=on&id=EJ1032271%5Cnhttp://files.eric.ed.gov/fulltext/EJ1032271.pdf

Olszewski-Kubilius, P., Lee, S. Y., Ngoi, M., & Ngoi, D. (2004). Addressing the achievement gap between minority and nonminority children by increasing access to gifted programs. *Journal for the Education of the Gifted*, *28*(2), 127–158.

Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan-a web and mobile app for systematic reviews. *Systematic Reviews*, *5*(1), 1–10. https://doi.org/10.1186/s13643-016-0384-4

Pelletier, J., & Corter, C. (2005). Design, implementation, and outcomes of a school readiness program for diverse families. *School Community Journal*, *15*(1), 89–116. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ794810&site=ehost-live

Pérez-Leroux, A. T., Cuza, A., & Thomas, D. (2011). From parental attitudes to input conditions: Spanish-English bilingual development in Toronto. In K. Potowski & J. Rothman (Eds.), *Bilingual youth: Spanish in English-speaking societies* (pp. 149–173). John Benjamins Publishing Company.

Powell, D. R., Son, S. H., File, N., & San Juan, R. R. (2010). Parent-school relationships and children's academic and social outcomes in public school pre-kindergarten. *Journal of School Psychology*, *48*(4), 269–292. https://doi.org/10.1016/j.jsp.2010.03.002

Randolph, K. A., & Johnson, J. L. (2008). School-based mentoring programs: A review of the research. *Children & Schools, 30*(3), 177–185.

Rangel, D. E. (2016). *Parental relationships and social capital in the school-community context: A multiple method study with under-resourced Mexican-origin families* [The University of Wisconsin - Madison]. http://proxy.library.tamu.edu/login?url=https://search.proquest.com/docview/2099208736?accountid=7082

Reed, M. A., & Rothbart, M. K. (1984). Inhibitory self-control in preschool children. *Merrill-Palmer Quarterly*, *30*(2), 131–147.

Reschly, A. L., & Christenson, S. L. (2012). Moving from "context matters" to engaged partnerships with families. *Journal of Educational and Psychological Consultation*, *22*(1), 62–78.

Reynolds, A. J. (1992). Comparing measures of parental involvement and their effects on academic achievement. *Early Childhood Research Quarterly*, *7*(3), 441-462.

Rhoades, B. L., Warren, H. K., Domitrovich, C. E., & Greenberg, M. T. (2011). Examining the link between preschool social-emotional competence and first grade academic achievement: The role of attention skills. *Early Childhood Research Quarterly*, *26*(2), 182–191. https://doi.org/10.1016/j.ecresq.2010.07.003

Roberts, T. A. (2008). Home storybook reading in primary or second language with preschool children: Evidence of equal effectiveness for second-language vocabulary acquisition. *Reading Research Quarterly*, *43*(2), 103–130. http://10.0.6.62/RRQ.43.2.1

Shonkoff, J. P., & Phillips, D. A. (2000). *From neurons to neighborhoods: The science of early childhood development*. National Research Council. https://doi.org/10.7764/psykhe.23.2.739

Slates, S. L., Alexander, K. L., Entwisle, D. R., & Olson, L. S. (2012). Counteracting summer slide: Social capital resources within socioeconomically disadvantaged families. *Journal of Education for Students Placed at Risk*, *17*(3), 165–185. https://doi.org/10.1080/10824669.2012.688171

Smith, J., Stern, K., & Shatrova, Z. (2008). Factors inhibiting Hispanic parents' school involvement. *Rural Educator*, *29*(2), 8–13. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ869288&site=ehost-live

Smyth, J. M., & Arigo, D. (2009). Recent evidence supports emotion-regulation interventions for improving health in at-risk and clinical populations. *Current Opinion in Psychiatry*, *22*(2), 205–210. https://doi.org/10.1097/YCO.0b013e3283252d6d

Snyder-Hogan, L. E. (2010). *The role of parentaliInvolvement in the academic achievement of Latino youth.* [Doctoral dissertation, Temple University]. http://ezproxy.library.tamu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED521590&site=ehost-live

Southgate, D. E., & Roscigno, V. J. (2009). The impact of music on childhood and adolescent achievement. *Social Science Quarterly*, *90*(1), 4–21. https://doi.org/10.1111/j.1540-6237.2009.00598.x

Spees, L., Perreira, K. M., & Fuligni, A. (2017). Family matters: Promoting the academic adaptation of Latino youth in new and established destination. *Journal of Family Issues*, *38*(4), 457–479. https://doi.org/10.1177/0192513X16646592

St. Clair, L., & Jackson, B. (2006). Effect of family involvement training on the language skills of young elementary children from migrant families. *The School Community Journal*, *16*(1), 31–41.

https://pdfs.semanticscholar.org/1086/7d03e88265f5cc1f68b9d127f2c4756f449a.pdf

StataCorp. (2017). *Stata User 's guide release 16*. Stata Press Publication. https://doi.org/10.1111/j.1600-0447.2011.01711.x

Stiles, T. F. (2010). *A study of parent-child numeracy interaction in families of English language learners*. [Doctoral dissertation, Capella University].

Sutterby, J. A., Rubin, R., & Abrego, M. (2007). Amistades: The development of relationships between preservice teachers and Latino families. *School Community Journal*, *17*(1), 77–94. http://www.schoolcommunitynetwork.org/SCJ.aspx

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2010). *Early childhood matters: Evidence from the effective pre-school and primary education project.* Routledge.

Tang, S., Dearing, E., & Weiss, H. B. (2012). Spanish-speaking Mexican-American families' involvement in school-based activities and their children's literacy: The implications of having teachers who speak Spanish and English. *Early Childhood Research Quarterly*, *27*(2), 177–187. https://doi.org/10.1016/j.ecresq.2011.09.001

Tangney, J. P., Boone, A. L., & Baumeister, R. F. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, *72*(2), 173–212. https://doi.org/10.4324/9781315175775

Tarasawa, B., & Waggoner, J. (2015). Increasing parental involvement of English Language Learner families: What the research says. *Journal of Children and Poverty*, *21*(2), 129–134. https://doi.org/10.1080/10796126.2015.1058243

Tourangeau, K., Nord, C., Le, T., Wallner-Allen, K., Hagedorn, M. C., Leggitt, J., Narjarian, M., & Mulligan, G. M. (2015). *ECLS-K:2011 Kindergarten-first grade user's manual, public version*. http://nces.ed.gov/pubs2015/2015078.pdf

Tully, L. A., Piotrowska, P. J., Collins, D. A. J., Mairet, K. S., Black, N., Kimonis, E. R., Hawes, D. J., Moul, C., Lenroot, R. K., Frick, P. J., Anderson, V., & Dadds, M. R. (2017). Optimising child outcomes from parenting interventions: fathers' experiences, preferences and barriers to participation. *Bmc Public Health*, *17*(1), 1–14. https://doi.org/10.1186/s12889-017-4426-1

Uman, L. S. (2011). Systematic reviews and meta-analyses. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *20*(1), 57–59.

Valdes, G. (1996). *Con Respeto. Bridging the Distances between Culturally Diverse Families and Schools. An Ethnographic Portrait.* Teacher College Press.

Valdez, C. R., Mills, M. T., Bohlig, A. J., & Kaplan, D. (2013). The role of parental language acculturation in the formation of social capital: Differential effects on high-risk children. *Child Psychiatry & Human Development*, *44*(2), 334–350. https://doi.org/10.1038/jid.2014.371

Van Voorhis, F. L., Maier, M. F., Epstein, J. L., & Lloyd, C. M. (2013). *The impact of family involvement on the education of children ages 3 to 8: A focus on literacy and math achievement outcomes and social-emotional skills*.

Viera, A. J., & Garrett, J. M. (2005). Understanding interobserver agreement: the kappa statistic. *Family Medicine*, *37*(5), 360–363.

http://www1.cs.columbia.edu/~julia/courses/CS6998/Interrater_agreement.Kappa_statistic.pdf

Vygotsky, L. S. (1978). Interaction between learning and development. *Readings on the Development of Children*, *23*(2), 34–41.

Walker, J. M., Shenker, S. S., & Hoover-Dempsey, K. V. (2010). Why do parents become involved in their children's education? Implications for school counselors. *Professional School Counseling, 14*(1), 27–41.

Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework. *International Journal of Bilingual Education and Bilingualism*, *9*(2), 159–180. https://doi.org/10.1080/13670050608668639

Weirich, S., Haag, N., Hecht, M., Böhme, K., Siegle, T., & Lüdtke, O. (2014). Nested multiple imputation in large-scale assessments. *Large-Scale Assessments in Education*, *2*(1), 1–18. https://doi.org/10.1186/s40536-014-0009-0

Weiss, H. B., Bouffard, S. M., Bridglall, B. L., & Gordon, E. W. (2009). Reframing family involvement in education: Supporting families to support educational equity. In *Equity Matters. Research Review No. 5. Campaign for Educational Equity*. Teachers College, Columbia University.

Wilder, S. (2014). Effects of parental involvement on academic achievement : A meta-synthesis. *Educational Review*, *66*(3), 377–397. https://doi.org/10.1080/00131911.2013.780009

Winsler, A., Kim, Y. K. yon., & Richard, E. R. (2014). Socio-emotional skills, behavior problems, and Spanish competence predict the acquisition of English among

English language learners in poverty. *Developmental Psychology*, *50*(9), 2242–2254. https://doi.org/10.1037/a0037161

Wollman-Bonilla, J. E. (2001). Family involvement in early writing instruction. *Journal of Early Childhood Literacy*, *1*(2), 167–192. https://doi.org/10.1177/14687984010012003

Wong, S., & Hughes, J. (2006). Ethnicity and language contributions to dimensions of parent involvement shuk. *School Psychology Review*, *35*(4), 645–662. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2139999/

Xia, N. (2009). *Family factors and student outcomes* [Doctoral dissertation, The Pardee RAND Graduate School]. https://search.proquest.com/docview/305167815?accountid=10673%0Ahttp://openurl.ac.uk/redirect/athens:edu/?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+%26+theses&sid=ProQ:Education+Database&atitle=&title=Family+fac

Xu, M., Benson, S. N. K., Mudrey-Camino, R., & Steiner, R. P. (2010). The relationship between parental involvement, self-regulated learning, and reading achievement of fifth graders: A path analysis using the ECLS-K database. *Social Psychology of Education*, *13*(2), 237–269. https://doi.org/10.1007/s11218-009-9104-4

Yeh, E. (2019). Parent Matters : The impact of parental involvement on non-native English speakers ' postsecondary education enrollment. *School Community Journal*, *29*(1), 39–63.

Yeo, L. S., Ong, W. W., & Ng, C. M. (2014). The home literacy environment and preschool children's reading skills and interest. *Early Education and Development*, *25*(6), 791–814. https://doi.org/10.1080/10409289.2014.862147

Zarate, M. E. (2007). *Understanding Latino parental involvement in education: Perceptions, expectations, and recommendations*. https://doi.org/10.1111/j.1365-2389.2007.00985.x

Zehler, A., Fleischman, H., Hopstock, P., Stephenson, T., Pendzick, M., & Sapru, S. (2003). *Descriptive study of services to LEP students and LEP students with disabilities*. U.S. Department of Education.

Zhang, Z., Zyphur, M. J., & Preacher, K. J. (2009). Testing multilevel mediation using hierarchical linear models: Problems and solutions. *Organizational Research Methods*, *12*(4), 695–719. https://doi.org/10.1177/1094428108327450

Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2007). The scientific base linking social and emotional learning to school success. *Journal of Educational and Psychological Consultation*, *17*(2), 191–210.

Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (2004). *Building academic success on social and emotional learning: What does the research say?* Teachers College Press.