

Perspectives on Early Childhood Psychology and Education

Volume 6
Issue 2 *Universal Social, Emotional, and
Behavioral Screeners for Preschool Students: A
Systematic Review*

Article 7

November 2022

Educando a Nuestros Hijos: Examining Latinx Parental Stress Factors and Parental Engagement in Head Start Preschools

Agustina Bertone

Erin Dowdy

Madeline Spiess

Follow this and additional works at: <https://digitalcommons.pace.edu/perspectives>

Recommended Citation

Bertone, Agustina; Dowdy, Erin; and Spiess, Madeline (2022) "Educando a Nuestros Hijos: Examining Latinx Parental Stress Factors and Parental Engagement in Head Start Preschools," *Perspectives on Early Childhood Psychology and Education*: Vol. 6: Iss. 2, Article 7.

Available at: <https://digitalcommons.pace.edu/perspectives/vol6/iss2/7>

This Article is brought to you for free and open access by DigitalCommons@Pace. It has been accepted for inclusion in Perspectives on Early Childhood Psychology and Education by an authorized editor of DigitalCommons@Pace. For more information, please contact nmcguire@pace.edu.

Educando a Nuestros Hijos: Examining Latinx Parental Stress Factors and Parental Engagement in Head Start Preschools

Agustina Bertone, Erin Dowdy, and Madeline Spiess

Abstract

This study sought to understand Latinx parental stress factors as they relate to three types of parental engagement (PE; foundational education, school participation, and supplemental education) in preschool. Stress was examined in the form of global stress and acculturative stress (English competence pressure and pressure to acculturate). Spanish- and English-speaking Latinx parents ($N = 189$) of children enrolled in Head Start completed self-report surveys. Hierarchical linear regression results demonstrated that global stress significantly predicted foundational education and supplemental education, but not school participation behaviors. English competence pressure did not significantly predict any type of PE and pressure to acculturate only significantly predicted supplemental education behaviors. Findings have implications for developing family-school partnerships with Latinx parents of preschool children.

Keywords: *parental engagement, Latinx, preschool, educación, parent involvement*

In recent decades, there has been increased acknowledgement of the importance of early childhood development (Yoshikawa et al., 2016). One important factor that can impact children from a young age is parental engagement (PE), or the extent to which parents carry out activities and tasks to support their children's social-emotional, behavioral, and academic development (Yamamoto et al., 2016). There are many ways in which parents support their children's development in the home and as it relates to their child's schooling (Marschall & Shah, 2016). There are also factors that impinge on parents' abilities to engage (Arias & Morillo-Campbell, 2008; Kelly-Vance

et al., 2006). Despite an extensive literature base demonstrating the importance of PE, more research is needed to understand the impact of a range of factors on PE in preschool (Mendez et al., 2004; Waanders et al., 2007) and to specifically understand PE of Latinx families. This study seeks to understand PE of Latinx preschool families by examining how parental global stress and acculturative stress relate to PE.

Parental Engagement (PE)

Parental engagement, also known as *parental involvement*, is a multidimensional concept encompassing a range of parental behaviors and activities that can occur in different contexts, including schools, home, and through academic socialization (Marschall & Shah, 2016; Wang & Sheikh-Khalil, 2014). Parents engage through school when volunteering in a child's classroom, communicating with teachers and administrators, and participating in school events. Home engagement includes making time and space for homework and providing stimulating activities for children (Marschall & Shah, 2016). Academic socialization includes "the communication of parental expectations about schoolwork and the importance of education, encouragement of educational and career goals, and making plans and preparations with adolescents that support their future goals" (Wang & Sheikh-Khalil, 2014, p. 611).

Extensive research on PE and student outcomes provides evidence of the positive effects of PE, with benefits for students regardless of race, culture, or ethnicity. PE has been found to be associated with positive youth development (Castro et al., 2015; Wang & Sheikh-Khalil, 2014), higher academic achievement (e.g., Altschul, 2011; Sheldon & Epstein, 2005), and positive mental health outcomes (Wang & Sheikh-Khalil, 2014). Specific to preschools, PE has been associated with preschoolers' mental health (Fantuzzo et al., 2004), positive social interactions (Fantuzzo et al., 1999), and lower classroom behavior difficulties (Fantuzzo et al., 2004).

Research has also examined barriers to PE at the individual and contextual levels. For example, positive climate in families' neighborhoods (e.g., community friendliness, safety, and interest in education) has been associated with an increase in PE behaviors carried out at home and school (Smith et al., 1997). Parent education level has also been shown to impact PE, as parents with lower educational attainment identify this as a barrier to PE with their child's school (Floyd, 1998; Zarate, 2007). Additionally, time constraints and the English language have been documented as consistent barriers to PE (Kelly-Vance et al., 2006). Relatedly, socio-economic status (SES) is associated with PE, with parents from higher-SES backgrounds having higher rates of school involvement than their lower-SES peers (Hornby & Lafaele, 2011; Malone, 2017). However, these associations cannot be separated from systemic and contextual barriers faced by low-SES and less educated families (e.g., time constraints, lack of resources, and language obstacles) that impede PE at school (Hornby & Lafaele, 2011; Malone, 2017). Cultural misperceptions of the role of home and school are also a barrier to PE, as some parents may be showing respect for authority when they do not impose themselves on their child's school (Nicolau & Ramos, 1990). Barriers to PE have been researched but given the positive outcomes associated with PE, it is critical to examine other potential barriers.

Limitations of Previous PE Research

The traditionally-studied definition of PE is problematic for various reasons. Historically, most researchers have collected data on PE utilizing samples of highly westernized, White, middle-class families (Goodall & Montgomery, 2014). However, schools serve an increasingly diverse student population, with Latinx children accounting for 27% of children enrolled in U.S. public schools (National Center for Education Statistics, 2020), highlighting the importance of studying PE from Latinx families' perspectives. Additionally, PE has been narrowly defined with a primary focus

on the school context. This perspective limits the scope of PE to behaviors that may be more accessible to parents in the dominant culture, actively ignoring the efforts by parents from minoritized backgrounds (Baquedano-López et al., 2013; Hill & Torres, 2010), and failing to acknowledge the strengths of Latinx families and their cultural vantage point regarding PE behaviors.

Latinx Perspective on Parental Engagement

Latinx parents make great efforts to support their children's growth and success, often in ways that are unseen by, misunderstood by, or do not receive merit from schools (Goodall & Montgomery, 2014; Hill & Torres, 2010). There can be misconceptions about Latinx families and children from educators' perspectives (Miller et al., 2016), and little awareness of Latinx PE behaviors (Goldenberg, 2014; Irizarry, 2015). For example, a widely endorsed cultural value in the Latinx community is the concept of *educación* (Auerbach, 2006). *Educación* is a form of PE and refers to parental emphasis on children's manners and congruent socialization in accordance with Latinx values and expectations, as well as emphasis on social-emotional, cognitive, and academic development (Reese et al., 1995). This particular Latinx value deviates from the direct English meaning of "education" because there is as much (or more) weight given to a child's development of morality, integrity, and honesty as there is to academic development (Reese et al., 1995). Latinx parents may informally engage with their children's schooling, providing advice about experiences through cultural narratives and encouraging hard work and respect within school contexts to achieve school- and career-related goals (Auerbach, 2007). Set apart from formal school involvement, these PE behaviors contribute largely to character and temperament development, a valued aspect of Latinx culture (LeFevre & Shaw, 2012). Reese and colleagues (1995), in interviews with Latina mothers of preschool children, found mothers to place less emphasis on academic activities (i.e., learning to read, acquiring more words), with more emphasis on

respect, understanding the difference between right and wrong, and good manners as fundamental skills to have before entering school. This distinction is reflective of Latinx cultural values and parenting standards, with development of personal dispositions and social-emotional functioning signifying parental success (Calzada et al., 2012). Traditional evaluation of PE within school settings fails to capture culturally-unique PE behaviors, instead focusing on established U.S. norms of engagement (Baquedano-López et al., 2013).

Research examining the Latinx value of *educación* has demonstrated that being *bien educado* (well-educated) predicts high social skills ratings in preschool children (Zucker & Howes, 2009). Although PE has historically focused solely on how parents interact with their children's academic-related activities (e.g., reading to their children), *educación* includes and prioritizes fostering children's social-emotional development and socialization. This latter component appears to be a unique aspect of *educación* (Reese et al., 1995), which may be particularly important in the preschool context given the focus on social skills and social-emotional development in early childhood education (Bulotsky-Shearer et al., 2016).

Together, two researchers in the field developed a scale, *PE of Families from Latino Backgrounds* (PEFL; McWayne & Melzi, 2014), which integrates the concept of *educación* with more traditional views of PE. McWayne and Melzi (2014) identified four domains of PE that parents of Latinx backgrounds living in the U.S. engage in: *foundational education*, *school participation*, *supplemental education*, and *future-oriented teaching*. Foundational education, the domain intended to measure *educación*, evaluates the extent to which parents teach children how to behave appropriately in social situations and interact with others, acquire academic knowledge, and teach about the family's culture (McWayne & Melzi, 2014). School participation is more aligned with the traditional definition of PE and evaluates how much parents engage in activities held at their children's school (e.g., volunteering on field trips). Supplemental

education evaluates whether parents embed extracurricular activities as a form of enrichment in their children's lives. Future-oriented teaching examines the extent to which parents teach their children the value of education. The PEFL considers Latinx families' perspectives from inception and can evaluate how culturally-salient forms of PE are demonstrated by Latinx families (McWayne & Melzi, 2014). Furthermore, this scale allows for conversations about PE to incorporate a wider range of culturally-relevant behaviors.

Global Stress

Although families support their children's development in a variety of ways, there are factors that can impact their ability to engage in PE behaviors. Global stress is defined as the extent to which experiences and situations individuals face are perceived as stressful (Cohen et al., 1983). Parents can experience a range of stressors, including marital, financial, job, and parenting stress (Belsky, 1984) and different forms of stress can affect parenting behaviors. For instance, marital stress has been associated with harsher punishments in childrearing (Kemper & Reichler, 1976), decreased parental dependability and availability (Harold et al., 2004), less monitoring behaviors from fathers, and overall lower parental consistency across mothers and fathers (Elam et al., 2017). Less financial stress is associated with more positive parenting behaviors for fathers (Ponnet et al., 2016) and parent behaviors have been found to mediate the association between family income and behavior concerns in children (Linver et al., 2002). A range of stressors have the potential to impact parent mental health, how parents engage in their children's development, and the extent of engagement behaviors in various contexts (i.e., home vs. school; Camacho-Thompson et al., 2016). Studies examining this relation among Mexican-American families have shown that parents with greater financial stress reported increased levels of depressive symptoms (Gilbert et al., 2017) and lower levels of PE at home and in school (Camacho-Thompson et al., 2016; Gilbert et al., 2017). The

present study examines how global stress impacts PE behaviors for Latinx families.

Beyond expected forms of everyday stress, Latinx families are at increased risk for a range of additional stressors. Latinx preschoolers and their parents may also be influenced by systems of oppression and disparities present in their daily environments (Reese et al., 2000), which can further compound global stress. Daily experiences of racism, including overt discrimination and microaggressions, contribute to one's level of psychological distress and mental health (Williams, 2018). Additionally, approximately 26% of Latinx children in the U.S. lived in poverty as of 2017 (Kids Count Data Center, 2019). Homelessness or poor housing conditions, access to underserved schools, and/or risk of violence exposure are a few of the factors associated with poverty (Lima et al., 2010). Latinx families may experience financial and economic difficulties, such as food insecurity, lack of medical care, and insufficient mental health services (Palermo et al., 2017). Parents who are economically strained are likely to experience higher levels of stress, which can make the demands of parenthood even more difficult for some Latinx families (Ceballo et al., 2012). The higher risk of experiencing these forms of stress can increase Latinx parents' global stress.

Immigration factors can also greatly impact Latinx families (Ramírez García, 2012) and affect their levels of global stress. Approximately 19 million of the estimated 56.5 million Latinx individuals in the U.S. were born outside of the U.S. (Flores et al., 2017). Oftentimes, families arriving in the U.S. have fled harsh conditions in their home country, such as violence, drug trades, and severe poverty. Children and families may experience trauma from past living situations, migration and arrival to the U.S., or a combination of all (Perreira et al., 2006). Latinx families can also experience fewer social support networks that were once available to them in their home country, (Perreira et al., 2006) which has been shown to be associated with less involvement in at-home activities (Grolnick et al., 1997). In addition, families may experience concerns of

documentation and deportation of their family members (Shear & Nixon, 2017).

Because the range of stressors Latinx families experience is unique to every parent, this study used global stress as an overall measure of parents' perceived stress. Global stress can occur as a result of any of the factors mentioned above, including work, financial pressures, marital stress, family factors, living conditions, poverty, food insecurity, and lack of medical and mental health care, among others. The field has not yet examined how global stress may impact PE in preschool for Latinx parents, which may allow schools to understand the role of stress on parents' involvement in their children's development, schooling, and upbringing.

Acculturative Stress

Parents of Latinx backgrounds often face the added stress of acculturation, as many Latinx individuals immigrate to the U.S. or may be the children or grandchildren of immigrants (Romero et al., 2014). *Acculturation* is defined as a multidimensional process of "cultural change that occurs when two cultural groups come into contact" (Castillo et al., 2015; p. 1), which includes acquiring the values, traditions, and practices of a new country and/or culture. Each person undergoing adaptation to a new country or environment actively or implicitly chooses which values, traditions, and practices of their home country they maintain, while choosing which values, traditions, and beliefs from their new country to integrate into their life (Schwartz et al., 2010). This process of acculturation does not only impact immigrants; children who are born in the U.S. to immigrant parents and their children's children can experience impacts of navigating two or more cultures and developing their identities, and they may feel the removed effects of the experiences of earlier generations (Fuller & García Coll, 2010)

The process of acculturation can result in acculturative stress. Acculturative stress is the stress that results from undergoing the process of adapting to a new culture and reconciling one's current

values, beliefs, and traditions in light of new influences (Berry, 2006). Acculturation stressors include adjusting to new cultural expectations, learning a new language, reconciling cultural differences from one's country of origin and destination country, experiencing discrimination, and balancing the influence of multiple (often conflicting) cultural expectations and values (Torres et al., 2012). Acculturative stress can affect many facets of families' lives, including jobs, education, and family cohesion (Ramirez Garcia, 2012). For example, families can experience stress as a result of learning English or having difficulty acquiring English, or experiencing language barriers in their professions and everyday life (Perreira et al., 2006).

Researchers posit that aspects of acculturative stress, such as difficulties understanding English and "differences in cultural norms and cultural capital" can act as barriers to PE (Arias & Morillo-Campbell, 2008; p.1), but there is not much research in this area. This study seeks to understand the role of two types of stress derived from the process of acculturation: *English competence pressure* and *pressure to acculturate*. *Pressure to acculturate* is the pressure families feel to carry out activities in line with American values. Parent-reported acculturative stress has not been explicitly examined in association to PE. However, research delineates two aspects associated with the process of acculturation that can impact PE: parents knowing how the American school system functions (Zarate, 2007) and parental value differences (Arias & Morillo-Campbell, 2008). Further understanding the role of acculturative stress in PE can provide insights on how American expectations of engagement may impact PE behaviors.

English competence pressure is defined as the pressure families feel to learn English and when interacting with individuals who speak English. This type of acculturative stress has been studied, albeit not much, in association to PE. In a qualitative study that included 105 Spanish-speaking parents, Kelly-Vance et al. (2006) found that Spanish-speaking parents reported English language

barriers as one of the top barriers out of 70 barriers examined. Similarly, Smith, Stern, and Shatrova (2008) found that language barriers were the biggest reported obstacle to PE in schools in a sample of Latinx parents in the rural Midwest. A third qualitative study by Zarate (2007) found that for Spanish-speaking parents, “language was an insurmountable barrier to participation in their children’s academic tasks” (p. 9). Congruently, a study by Gilbert et al. (2017) demonstrated that parents with lower levels of English language proficiency engaged in less home-based academic behaviors. Other researchers have mentioned that difficulties speaking or understanding English are barriers for parents (Arias & Morillo-Campbell, 2008; Hyslop, 2000). Given that Latinx parents of preschool children may be experiencing varying levels of language proficiency and pressure to acculturate, more research is needed to understand how different forms of acculturative stress impact PE.

Present Study

This study seeks to understand two types of acculturative stress (i.e., English competence pressure and acculturative stress) in a moderation context because it is unknown if different types of acculturative stress can impact the strength between global stress and different forms of PE (i.e., foundational education, school participation, and supplemental education).

Method

Participants

Parents of preschool children ages three to five across 20 Head Start programs and who identified as Latinx/o/a and/or Hispanic were invited to participate in the study. Of 693 children who attend Head Start programs in Central California, 220 families participated in the study (31.7%). Of the 220 participating families, 189 participants had complete data which were used in this study. The majority of participating parents identified as female ($n = 179$,

95%). In regard to marital status, 108 participants were married/partnered (57%), 63 identified as single (33%), and 16 were separated/divorced (9%). Education level varied across participants, with 43% having less than a high school education, 26% having earned a high school diploma, 23% with some college or professional training, 5% with a college degree, and 2% with graduate school experience. In regard to parent generational status, 71% of participating parents were born outside of the U.S., 23% are first generation, 3% are second generation, and 3% are third generation and beyond. SES data were not collected for individual families, but the majority of families who attended this program were from economically disadvantaged backgrounds.

In regard to child demographics, child generational status was reported as follows: 7% were born outside of the U.S., 61% are first generation, 23% are second generation, and 7% are third generation. Fifty-three percent of children of participating parents were identified as female and 50% were not parents' first child in preschool.

Procedure

Following Institutional Review Board and Head Start approval, Latinx families were recruited through Head Start preschools. They completed four measures and demographic information (all available in both Spanish and English), and received ten dollars in compensation for their time. Researchers were available to answer questions in English and Spanish.

Measures

Perceived Stress Scale - 14 (PSS-14; Cohen, Kamarck, & Mermelstein, 1-983). The PSS-14 is a 14-item measure that evaluates individuals' perceived global stress. This scale asks about general feelings and experiences that can cause stress for the individual instead of particular sources of stress (i.e., finances, marital concerns, parenting, and work problems). Using a five-point scale with response options of *Never* (0), *Almost Never* (1), *Sometimes* (2),

Fairly Often (3), and *Very Often* (4), individuals evaluate the extent to which they perceive they experienced certain thoughts and feelings in the past month (e.g., "In the past month, how often have you found that you could not cope with all the things that you had to do?"). Lee (2012) reviewed the psychometric information of studies through 2012 that used the PSS-14, and reported that in the twelve studies that used the PSS-14, Cronbach's alphas of all studies were above .75). The PSS-14 has demonstrated adequate ability to detect levels of stress among diverse populations, including pregnant Latinx women (Cohen, 1988; Remor, 2006; Silveira et al., 2013). This scale has demonstrated adequate reliability estimates and convergent validity with measures of anxiety and depression (Baik, 2019; Lee, 2012).

Generally, the PSS-14 scale has been used as a unidimensional scale with one overall score created, despite increasing evidence of a two-factor structure present with positively worded items grouped into one factor and negatively worded items comprising the second factor (Lee, 2012). Research focusing on the Spanish-language version of the survey has demonstrated conflicting factor structure results (Baik et al., 2017; Lee, 2012). Due to previous conflicting factor structures across samples (Baik et al., 2017; Siqueira Reis et al., 2010), confirmatory factor analysis (CFA) was run with the current sample to identify whether a one-factor model or two-factor model was the best-fitting solution for this scale. A two-factor solution demonstrated the most adequate fit for this measure, with the removal of items 4, 5, and 12 ($\chi^2(43) = 95.22$; RMSEA = .074 [.054, .094]; CFI = .941, TLI = .925). The items in the negatively-worded items factor were used to create a mean score for the analyses of this study. As a result, a mean score was calculated of the negatively-worded factor items (items 1, 2, 3, 8, 11, and 14) and used as the determinant of parents' perceived stress, which is the predictor of the six models tested in this study.

PE of Families of Latino Backgrounds (PEFL; McWayne & Melzi, 2014). The PEFL is a 43-item scale intended to measure PE with

children's learning and schooling. The PEFL evaluates four dimensions of familial educational engagement: foundational education (20 items), supplemental education (12 items), school participation (8 items), and future-oriented teaching (3 items). This study used three subscales: foundational education, school participation, and supplemental education. Items are on a four-point scale (*never, rarely, sometimes, and frequently*). The validity and reliability of this scale have been evaluated, with internal consistency scores all above .71 and the PEFL subscales demonstrating significant associations to expected variables, such as access to resources, social support, and parents' education level (McWayne et al., 2018; McWayne & Melzi, 2014). Previous research has confirmed a 4-factor model with adequate fit statistics ($X^2(854) = 1134.70$, ($p < .001$); RMSEA = .031 [.026, .035]; CFI = .958, TLI = .956 (McWayne et al., 2018). In this study, a CFA was conducted to confirm the originally established 4-factor structure (McWayne & Melzi 2014). The model demonstrated good fit after the removal of item 11 ("I or someone in my home speaks to my child in English"; $X^2(815) = 1121.04$, ($p < .001$); RMSEA = .041 [.035, .047]; CFI = .908, TLI = .903). As such, the mean score of supplemental education consisted of 11 items. Cronbach's alpha was .90 across the entire scale, and Cronbach's alpha of the individual subscales were: .81 (foundational), .80 (school participation), and .82 (supplemental).

Multidimensional Acculturative Stress Inventory (MASI; Rodriguez et al., 2002). The MASI is a 36-item scale that measures individuals' acculturative stress, including struggling with experiences related to speaking both English and Spanish, discrimination, reconciling multiple cultures, and feeling pressure as a result of the process of adapting to a new country and/or culture. This measure is comprised of four subscales: *Spanish Competence Pressure* (7 items), *English Competence Pressure* (7 items), *Pressure to Acculturate* (7 items), and *Pressure Against Acculturation* (4 items). Individuals are asked to reflect on whether they have experienced a particular scenario in the past three months and then answer on a 5-point

scale, ranging from 1 (not at all stressful) to 5 (extremely stressful), or they can select "No" (does not apply). Internal consistency of the subscales of the MASI have been found to be within acceptable ranges (Rodriguez et al., 2002; Torres, 2010). Validity evidence has been demonstrated, with MASI overall scores and three of the four subscales (all except Pressure to Acculturate) correlating appropriately with individuals' generational status and number of years living in the U.S. (Rodriguez et al., 2002). In a recent study measuring intercultural competence among Latinx adults, the MASI has adequately predicted acculturative stress at 6-month follow-up and was significantly correlated with levels of acculturation and depression (Driscoll et al., 2020). A CFA was conducted to confirm the originally proposed 4-factor model structure (Castillo et al., 2015). A two-factor model with the factors of English Competence and Pressure to Acculturate demonstrated good fit indices, after the removal of five items ($\chi^2(26) = 58.056$, ($p < .001$); RMSEA = .075 [.049, .101]; CFI = .960, TLI = .945). For this study, two separate mean scores were calculated and used as moderators. English competence pressure was calculated using items 1, 4, 8, 10, and 11 (Cronbach's alpha = .89). Pressure to acculturate was created using items 17, 22, 25, and 33 (Cronbach's alpha = .70).

Analytic Plan

All data were entered into Statistical Packaging for the Social Sciences Version 25.0 (SPSS; IBM, 2018). Mean imputations on less than 1% of the overall data points were conducted for variables that were considered missing-at-random and were done by calculating the average of the remaining variables for the respective measure. Intraclass correlation coefficient analyses (ICC) were conducted using Hierarchical Linear Modeling 7.0 (HLM 7) software to ensure that there were no significant differences in PE across Head Start Program for data collected from each site (Scientific Software International, Inc, Skokie, IL). Confirmatory Factor Analyses (CFA) were conducted on each measure of interest using Mplus 8

(Muthén & Muthén, 2014). CFAs were carried out to ensure adequacy of the measurement model for each of the measures included in the moderation analyses of this study.

Six hierarchical regression models were conducted using SPSS 25 PROCESS 3.3 (Hayes, 2017) to test the moderations of English competence pressure and pressure to acculturate on the associations between parental global stress and three different types of PE. Child age, child gender, parent generational status, and parent educational level were included as covariates in each of the three models to control for their influence on foundational education, school participation, and supplemental education. Child age and child gender identity were included due to research findings that PE behaviors evolve as children get older (Núñez et al., 2015) and that parents may treat their children differently based on their gender and demonstrate different parental behaviors because of their child's gender identity (Schoppe-Sullivan et al., 2013). Similarly, parent educational level was included because research has shown that parents with lower educational attainment feel this is a barrier to engagement with their child's school (Floyd, 1998) and because research has generally demonstrated effects of parent educational level on PE behaviors (Zarate, 2007). Child gender and generational status (i.e., parents born outside of the U.S. ($n = 135$) and parents who identify as 1st, 2nd, and 3rd generation ($n = 54$) in a second group) were dummy-coded to aid interpretation.

Results

Preliminary Analyses

ICC analyses conducted in HLM 7.0 demonstrated no significant differences in PE (foundational education, school participation, and supplemental education) across Head Start programs, so analyses proceeded in SPSS 25. Descriptive statistics for each variable were examined for violations of assumptions of normality, including means, standard deviations, skewness,

and kurtosis. All variables were within expected ranges (Byrne, 2013), with the exception of the variable pressure to acculturate (skewness 2.48, kurtosis 7.1).

Child age, child gender, parent educational status, and parent generational status were added as covariates to all six hierarchical linear regression models. Child age and child gender were not significantly associated to any type of PE. Parental educational level was not significantly associated with foundational education, but it was significantly associated with supplemental education for models with both English competence pressure (.09) and pressure to acculturate (.09). Thus, parents with higher levels of education demonstrated higher levels of supplemental education. Parental educational level was also significantly associated with school participation (.10) when pressure to acculturate was the type of acculturative stress included in the model. However, the same was not found when English competence pressure was included in the model, with parent educational level not predicting school participation when English language pressure was included in the model. Parent generational status was significantly associated with school participation for models with both English competence pressure (-.33) and pressure to acculturate (-.34), such that parents who had been born in the U.S. demonstrated less school participation behaviors than immigrant parents. Parental generational status was not significantly associated with foundational education nor supplemental education.

Main Effects

Hierarchical linear regression results demonstrated that the main effect of global stress on foundational education was significant in both the model with English competence pressure (-.05) and the model with pressure to acculturate (-.04), such that as parents experienced higher levels of global stress, they demonstrated lower levels of foundational education behaviors. The main effect of global stress on school participation was not significant

in either model, which demonstrated that level of global stress experienced by parents did not significantly predict how much parents partook in school participation behaviors. Lastly, the main effect of global stress on supplemental education was significant in both models (-.12, -.13), meaning that parents experiencing higher levels of global stress demonstrated significantly lower levels of supplemental education.

English competence pressure was examined as a main effect on the three types of parent engagement. English competence pressure was not significantly associated to any form of PE. Results indicate that regardless of the amount of English competence pressure parents felt, parents did not demonstrate significantly different levels of foundational education, school participation, or supplemental education. See Table 1 for more information.

Pressure to acculturate was also examined as a main effect on the three types of PE. Results demonstrated that pressure to acculturate did not significantly predict levels of foundational education nor school participation. However, pressure to acculturate significantly predicted supplemental education (-.23), such that higher levels of pressure to acculturate predicted lower levels of supplemental education (see Table 2).

English Competence Pressure as a Moderator

The first hierarchical linear regression model examined the effect of English competence pressure on the association between parental global stress and foundational education (See Table 1). Results demonstrated that the entire model accounted for 7% of the variance in foundational education ($R = .26$; $r^2 = .07$; $F(7, 181) = 1.80$; $p = .09$). The interaction between English competence pressure and global stress, which allows for understanding of the moderation effect of English competence pressure on the association between global stress and foundational education was trending toward significance, $p = .09$. Conditional effects of the moderator were examined. Findings demonstrated that there

is a significant moderating effect with low and moderate levels of English competency pressure ($p < .01$; $p = .01$, respectively). That is, as global stress increases, a decrease in foundational education is observed. Results indicate, however, that the decrease in foundational education is steeper (larger negative slope) for lower levels (both at the mean and 1 standard deviation below the mean) of English language competency pressure. None of the covariates significantly predicted foundational education.

The second model examined the effect of English competence pressure on the association between parental global stress and school participation (See Table 1). The model accounted for 4% of the variance in school participation ($R = .28$; $r^2 = .08$; $F(7, 181) = 2.23$; $p = .03$). English competence pressure did not moderate the association between parental global stress and school participation ($p = .63$).

The third model examined the effect of English competence pressure on the association between parental global stress and supplemental education (See Table 1). The model accounted for 13% of the variance in supplemental education ($R = .37$; $r^2 = .13$; $F(7, 181) = 4.00$, $p < .001$). English competence pressure did not moderate the association between parental global stress and school participation ($p = .26$).

Pressure to Acculturate as a Moderator

The fourth model examined the effect of pressure to acculturate on the association between parental global stress and foundational education (See Table 2). The model accounted for 6% of the variance in supplemental education ($R = .24$; $r^2 = .06$; $F(7, 181) = 1.59$, $p = .14$). Pressure to acculturate did not significantly moderate the association between global stress and foundational education.

Table 1. Main Effects and Moderation Results with English Competence Pressure as Moderator

Effect	Estimate	Bootstrap SE	t	p	95% CI bias corrected	
					LLCI	ULCI
Moderation of English competency on global stress and foundational education						
Model 1: Simple moderation	3.95	.13	31.05	.000	3.70	4.20
Covariates						
Child's Gender	-.04	.03	-1.41	.16	-.10	.02
Child's Age	-.03	.03	-1.06	.29	-.08	.03
Parent Educational Level	.00	.02	.26	.79	-.03	.04
Parent Generational Status	.04	.04	.99	.32	-.04	.11
Global Stress	-.05	.02	-2.42	.02	-.09	-.01
English competence pressure	-.00	.02	-.28	.78	-.03	.02
GlobalStressXEngCompPressure	.03	.02	1.76	.08	.00	.06
Moderation of English competency on global stress and school participation						
Model 2: Simple moderation	3.05	0.41	7.39	.00	2.24	3.86
Covariates						
Child's Gender	-.12	.10	-1.27	.21	-.32	.07
Child's Age	-.13	.09	-1.45	.15	-.31	.05
Parent Educational Level	.08	.05	1.48	.14	-.02	.18
Parent Generational Status	-.33	.12	-2.77	.01	-.56	-.09
Global Stress	-.04	.07	-.54	.59	-.17	.09
English competence pressure	-.03	.05	-.56	.58	-.12	.07
GlobalStressXEngCompPressure	-.02	.05	-.49	.63	-.12	.07
Moderation of English competency on global stress and supplemental education						
Model 3: Simple moderation	3.68	.27	13.44	.00	3.14	4.23
Covariates						
Child's Gender	-.12	.06	-1.88	.06	-.25	.01
Child's Age	-.11	.06	-1.83	.07	-.23	.01
Parent Educational Level	.09	.03	2.53	.01	.02	.15
Parent Generational Status	-.05	.08	-.69	.49	-.21	.10
Global Stress	-.12	.04	-2.68	.01	-.20	-.03
English competence pressure	-.05	.03	-1.49	.14	-.11	.02
GlobalStressXEngCompPressure	.04	.03	1.14	.26	-.03	.10

Note. * $p < .05$; ** $p < .001$. SE = Standard Error. LLCI = Lower limit confidence interval. ULCI = Upper limit confidence interval.

Table 2. Main Effects and Moderation Results with Pressure to Acculturate as Moderator (*N* = 189)

Effect	Estimate	Bootstrap		t	p	95% CI bias corrected	
		SE				LLCI	ULCI
Moderation of pressure to acculturate on global stress and foundational education							
Model 4: Simple moderation	3.96	.13		30.39	.00	3.71	4.22
Covariates							
Child's Gender	-.05	.03		-1.51	.13	-.11	.01
Child's Age	-.03	.03		1.15	.25	-.09	.02
Parent Educational Level	.00	.02		.24	.81	-.03	.04
Parent Generational Status	.03	.04		.90	.37	-.04	.10
Global Stress	-.04	.02		-2.06	.04	-.09	-.00
Pressure To Acculturate	-.03	.03		-1.23	.22	-.09	.02
GlobalStressXPressureToAcculturate.04		.03		1.36	.17	-.02	.09
Moderation of pressure to acculturate on global stress and foundational education							
Model 5: Simple moderation	2.94	.42		7.00	.00	2.12	3.78
Covariates							
Child's Gender	-.11	.10		-1.10	.29	-.30	.09
Child's Age	-.12	.09		-1.29	.20	-.03	.06
Parent Educational Level	.10	.05		1.94	.05	-.00	.20
Parent Generational Status	-.34	.12		-2.94	.00	-.57	-.11
Global Stress	-.02	.07		-.24	.81	-.16	.12
Pressure To Acculturate	-.10	.09		-1.13	.26	-.27	.07
GlobalStressXPressureToAcculturate.01		.09		.14	.89	-.16	.18
Moderation of pressure to acculturate on global stress and foundational education							
Model 6: Simple moderation	3.88	.29		13.60	.00	3.32	4.44
Covariates							
Child's Gender	-.12	.06		-1.79	.08	-.24	.01
Child's Age	-.11	.06		-1.83	.07	-.23	.01
Parent Educational Level	.09	.03		2.91	.00	.03	.16
Parent Generational Status	-.05	.08		-.70	.49	-.20	.10
Global Stress	-.13	.05		-2.56	.01	-.23	-.03
Pressure to Acculturate	-.23	.11		-2.01	.05	-.45	-.00
GlobalStressXPressureToAcculturate.07		.05		1.27	.21	-.04	.17

Note. * $p < .05$; ** $p < .001$. SE = Standard Error. LLCI = Lower limit confidence interval. ULCI = Upper limit confidence interval.

The fifth model examined the effect of pressure to acculturate on the association between parental global stress and school participation (See Table 2). The model accounted for 8% of the variance in supplemental education ($R = .29$; $r^2 = .08$; $F(7, 181) = 2.39$, $p = .02$). Pressure to acculturate did not moderate the relation between global stress and school participation.

The sixth model examined the effect of pressure to acculturate on the association between parental global stress and supplemental education (See Table 2). The entire model accounted for 15% of the variance in supplemental education ($R = .38$; $r^2 = .15$; $F(7, 181) = 4.00$, $p < .001$). Global stress ($-.13$) and pressure to acculturate ($-.23$) both significantly predicted the extent to which parents engaged in supplemental education: higher levels of global stress and pressure to acculturate were associated with significantly lower levels of supplemental education. Pressure to acculturate did not moderate the association between global stress and foundational education.

Discussion

This study sought to understand the association between parental global stress and PE. Contrary to expectations, global stress did not significantly predict school participation. However, global stress did significantly predict foundational education and supplemental education, such that parents with higher levels of global stress engaged in less foundational education and supplemental education behaviors. This finding provides evidence against the notion that Latinx parents who do not demonstrate PE behaviors do not care about their children's development or schooling (Chavez-Reyes, 2010; Valencia & Black, 2002). Instead, this study highlights how global stress impacts their engagement and is consistent with literature on how parental stress impacts parenting behaviors (Rodgers, 1998). Traditionally held beliefs about Latinx parents within the context of education have been harmful, and schools have paid little attention to the factors that can impact PE for Latinx parents (Goodall & Montgomery, 2014). Despite the

known positive benefits of PE including positive youth development (Castro et al., 2015; Wang & Sheikh-Khalil, 2014), prosocial peer play (Fantuzzo et al., 1999), and academic achievement (Altschul, 2011), the literature has not thoroughly attended to factors that may be impacting PE in the Latinx community, such as lack of knowledge of the American education system, acculturative stress, or differences in cultural values (Arias & Morillo-Campbell, 2008; Zarate, 2007). It will be important for schools to recognize that global stress impacts foundational education and supplemental education PE behaviors for Latinx parents.

This study also investigated the role of two types of acculturative stress (English competence pressure and pressure to acculturate) on three types of PE. As expected, English competence pressure did not significantly predict the extent to which parents engaged in foundational education behaviors. Since foundational education behaviors are carried out predominantly at home, it was not expected that pressures associated with learning and knowing English would impact this type of PE. This aligns with previous findings that Latinx parents have great interest in their children's learning and development (Hill & Torres, 2010). For Latinx families, high emphasis on educación means that parents, regardless of this type of acculturative stress (English competence pressure), still demonstrate high foundational education behaviors. This finding provides important evidence that parents are involved in a form of PE not commonly studied in the literature. Latinx parents partake in their children's upbringing to the extent that is culturally relevant for them, although this has historically not been acknowledged by school staff, teachers, and administrators (e.g., Chávez-Reyes, 2010).

Results also demonstrated that English competence pressure and pressure to acculturate did not predict parental levels of school participation. Research has consistently noted English language barriers as one of the barriers to school participation in parents (Gilbert et al., 2017; Zarate, 2007). As such, this was a surprising finding. However, Head Start programs, from which the

current sample was drawn, acknowledge the importance of parent involvement and have formalized components of their program that focus on parent engagement with a child's schooling and development (U.S. Department of Health and Human Services, 2000). Hence, the expectations and built-in programming from within Head Start may motivate parents, regardless of English competence pressure and pressure to acculturate, to be engaged in their children's development directly through their preschool. Furthermore, the Head Start programs in this study are situated in regions with large Latinx communities, which may insulate families from pressures and stressors of acculturation. Additional research is needed to understand if these same findings hold in geographical regions where Latinx families are in the minority.

English competence pressure did not significantly predict supplemental education behaviors. Pressure to acculturate, however, did significantly predict supplemental education behaviors. Interestingly, supplemental education was the only type of PE that was significantly predicted by pressure to acculturate. Given that supplemental education activities include involving their child in extracurricular activities and interfacing with their community, it is possible that parents experience dissonance between their own cultural experiences and values and those available for their children. As a parent feels more pressure to acculturate to American societal values, they may feel less inclined to engage in traditional American supplemental education activities. The activities encompassed by supplemental education need further research to better understand how and why pressure to acculturate impacts these PE behaviors.

The moderating effects of two types of acculturative stress were examined to understand whether they accounted for part or all of the relation between global stress and different types of PE. Acculturative stress was not expected to impact parents' ability to engage in all types of PE (i.e., foundational education), but different types of acculturative stress were expected to differentially affect specific PE behaviors. However, pressure to acculturate did not moderate the association

between global stress and school participation, nor between global stress and supplemental education. Most surprisingly, English competence pressure did not moderate the association between global stress and school participation nor the association between global stress and supplemental education. Conditional effects demonstrated that English competence pressure moderated the association only for levels of acculturative stress one standard deviation below the mean and at the mean, but not for parents experiencing high levels of acculturative stress. Although this finding was only approaching significance, it may be indicative of the argument that parents who may have additional stressors of adapting to a new country, despite schools that do not recognize their efforts at home, continue to focus strongly on foundational education behaviors at home even when demonstrating high levels of global stress.

Limitations

In light of the findings of this study, limitations must be noted. First, the majority (91.5%) of participating families identified as Mexican and/or Mexican American; findings of this study may not be generalizable to Latinx individuals from other Latin American countries; and more research is needed to examine if these findings are consistent across Latin American subgroups. This study was also conducted in Central California and more research is needed in other geographical locations of the U.S. All participants were recruited from Head Start programs, which have specific initiatives to increase PE and seek to actively involve parents in children's schooling on multiple levels (U.S. Department of Health and Human Services, 2000). Although this setting has been identified as an ideal place to study PE (Waanders et al., 2007), research on PE in Latinx families of preschool children needs to be conducted in other preschools that may not necessarily prioritize the same initiatives. Furthermore, due to lack of variability and availability of SES data for this sample in Head Start programs, this study was unable to examine SES as a predictor of PE. Future research should examine

SES in relation to PE, examining its moderating properties within the context of Latinx familial and cultural values.

Another significant limitation relates to the measures used in this study and the measurement of acculturative stress in particular. Despite the multidimensional nature of acculturative stress (Rodriguez et al., , 2002), the present study only targeted two dimensions of acculturative stress, English competence pressure and pressure to acculturate. Additionally, the previously-researched factor structures of the measures used to examine acculturative stress, global stress, and supplemental education did not fit our data, consistent with other research highlighting poorly-fitting factor structures. As such, CFAs were carried out to ensure adequacy of the measurement model for each of the measures included in our moderation analyses; however, replication is needed. Future research should prioritize examining validity as a unified construct for measures of acculturative stress, global stress, and supplemental education. Further refinement of the MASI scale, especially in regard to concurrent validity with other measures of acculturative stress, as noted by previous researchers (Castillo et al., 2015; Rodriguez et al., 2015), is needed. In order to more fully understand the impact of parental stress factors on parental engagement, additional measurement refinement of these constructs is needed.

Implications for Practice and Research

The findings of this study have implications for working with Latinx families and supporting their PE behaviors. The finding that global stress predicted both foundational and supplemental education behaviors provides evidence that parents are not necessarily negligent and apathetic about their children's schooling (Valencia & Black, 2002), and there are, in fact, contextual factors (e.g., global stress) that may impede them from partaking in the range of PE behaviors. Further understanding the stress Latinx parents may be encountering can help schools to build empathy for Latinx families and eliminate the myth that Latinx parents who don't demonstrate

certain PE behaviors don't care about their children's development and schooling (Chávez-Reyes, 2010). Schools can develop initiatives that consider families' home experiences and seek to streamline activities for parents within their everyday lives. Although PE has been historically framed as behaviors that parents engage in to fulfill school needs, schools should work in partnership with families to acknowledge barriers to their participation and how they can support parents in facilitating their children's development (Waanders et al., 2007).

Schools across the U.S. have often struggled with applying a culturally-responsive approach when conceptualizing PE (Baquedano-Lopez et al., 2013). Schools may wish to reframe their approach to be more culturally-responsive, with a nuanced comprehension of Latinx families' experiences, needs, and cultural values. In the present study, most families endorsed many foundational education behaviors, such as teaching their children to respect others, share, and how to ask for help. Although schools have not traditionally acknowledged foundational education as a form of PE, schools need to strive for cultural receptivity and expand their perspective on what it means for parents to be actively engaged.

Preschools are often the first experience parents have with their children's schooling and it may be an especially critical time to engage parents in a positive, supportive, and culturally-responsive manner (Baquedano-Lopez et al., 2013). In doing so, preschools can help to gain the trust and confidence of Latinx parents from the outset of their children's educational trajectory. Preschools may consider asking for parent feedback, incorporating parents' opinions and thoughts into the curriculum and educational programming for their children, and teaching advocacy skills to support their children's needs in the school context (Zarate, 2007). When schools actively work to engage parents in preschool, they can help set families on a strong trajectory as they move into primary school.

The findings of this study have implications for policy at the state and school district level. Schools can work to empower parents who may not have gone through the American schooling system and/or who may not have had the opportunity to receive schooling themselves. Currently, parents hold mandated rights in the education codes of some U.S. states. For example, part of California's new school funding law requires school districts to get parent perspectives and opinions for the implementation of funding (California Department of Education, 2021). It is morally and ethically imperative that state legislators and school districts hold schools accountable in finding ways to partner with Latinx parents, including those who may feel discouraged from participating in school initiatives, and give them a platform for their voices to be heard (Zarate, 2007). States need to implement laws that hold school districts accountable for carrying out school-family partnership initiatives for children from *all* backgrounds.

Conclusion

It is critical to understand the factors that impact PE behaviors of Latinx parents and the range of behaviors that Latinx parents engage in with the larger goal of supporting all children's positive development. In this study, global stress, pressure to acculturate, parent generational status, and parent educational level were four factors found to predict levels of varying types of PE. Future research needs to focus on the barriers and facilitators (e.g., positive school climate and accessible Spanish-speaking staff) to different forms of PE. In the meantime, school-wide supports can be implemented that consider the many ways Latinx families support the development of their children. By being responsive to the cultural values, familial efforts, personal experiences, and nuances present in the Latinx community, schools can work with families to bridge the gap from school to home environments and set Latinx children up for success from their very first experience in (pre)school.

Author Note

We would like to thank the families and schools who generously contributed their time to this project. We have no known conflict of interest to disclose. The data that support the findings of this study are available from the corresponding author, Agustina Bertone, upon reasonable request. This work was supported by the Society for the Study of School Psychology Dissertation Grant. The opinions expressed are those of the authors and do not represent views of the Society for the Study of School Psychology.

Correspondence concerning this article should be addressed to Agustina Bertone, Division of Population Behavioral Health, University of California Los Angeles, 760 Westwood Plaza, Room A8-153, Los Angeles, CA 90095. Email: dr.agustinabertone@gmail.com

References

- Altschul, I. (2011). Parental involvement and the academic achievement of Mexican American youths: what kinds of involvement in youths' education matter most? *Social Work Research, 35*(3), 159-170. doi: 10.1093/swr/35.3.159
- Arias, M. B., & Morillo-Campbell, M. (2008). Promoting ELL parental involvement: Challenges in contested times. Online Submission.
- Auerbach, S. (2006). "If the student is good, let him fly": Moral support for college among Latino immigrant parents. *Journal of Latinos and Education, 5*(4), 275-292. doi:10.1207/s1532771xjle0504_4
- Auerbach, S. (2007). From Moral Supporters to Struggling Advocates: Reconceptualizing Parent Roles in Education Through the Experience of Working-Class Families of Color. *Urban Education, 42*(3), 250-283. doi: 10.1177/0042085907300433
- Baik, S. H., Fox, R. S., Mills, S. D., Roesch, S. C., Sadler, G. R., Klonoff, E. A., & Malcarne, V. L. (2019). Reliability and validity of the Perceived Stress Scale-10 in Hispanic Americans with English or Spanish language preference. *Journal of Health Psychology, 24*(5), 628-639. doi: 10.1177/1359105316684938
- Baquedano-López, P., Alexander, R. A., & Hernandez, S. J. (2013). Equity issues in parental and community involvement in schools: What teacher educators need to know. *Review of Research in Education, 37*(1), 149-182. doi: 10.3102/0091732X12459718
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development, 55*, 83-96.
- Berry, J. W. (2006). Acculturative stress. In: Wong, P. T. P. & Wong, L. C. S., (Eds.)

- Handbook of Multicultural Perspectives on Stress and Coping* (pp. 287-298). Springer. doi: 10.1007/0-387-26238-5_12
- Bulotsky-Shearer, R., Lopez, L. & Mendez, J.L. (2016). The validity of interactive peer play competencies for Latino preschool children from low-income households. *Early Childhood Research Quarterly*, 34, 78-91. doi:10.1016/j.ecresq.2015.09.002
- Byrne, B. M. (2013). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Routledge.
- California Department of Education (Updated 2021). *Title I, Part A Parent and Family Engagement*. Retrieved on May 19, 2019 from <https://www.cde.ca.gov/sp/sw/t1/parentfamilyinvolve.asp>
- Calzada, E. J., Huang, K.-Y., Anicama, C., Fernandez, Y., & Brotman, L. M. (2012). Test of a cultural framework of parenting with Latino families of young children. *Cultural Diversity & Ethnic Minority Psychology*, 18(3), 285–296. doi: 10.1037/a0028694
- Camacho-Thompson, D. E., Gillen-O’Neel, C., Gonzales, N. A., & Fuligni, A. J. (2016). Financial strain, major family life events, and parental academic involvement during adolescence. *Journal of Youth and Adolescence*, 45(6), 1065–1074. doi: 10.1007/s10964-016-0443-0
- Castillo, L. G., Cano, M. A., Yoon, M., Jung, E., Brown, E. J., Zamboanga, B. L., ... & Whitbourne, S. K. (2015). Factor structure and factorial invariance of the Multidimensional Acculturative Stress Inventory. *Psychological Assessment*, 27(3), 915-925. doi: 10.1037/pas0000095
- 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. doi: 10.1016/j.edurev.2015.01.002
- Ceballos, R., Huerta, M., & Epstein-Ngo, Q. (2012). Parental and school influences promoting academic success among Latino students. In J. L. Meece & J. S. Eccles (Eds.), *Handbook of research on schools, schooling, and human development* (pp. 293–307). New York: Routledge. doi: 10.1007/978-3-319-43645-6_21
- Chavez-Reyes, C. (2010). Inclusive approaches to parent engagement for young English language learners and their families. *Yearbook of the National Society for the Study of Education*, 109(2), 474-504.
- Cohen, S. (1988). Perceived stress in a probability sample of the United States. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of health* (pp. 31–67). Sage Publications, Inc.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 385-396.

- Driscoll, M. W. & Torres, L. (2020). The protective roles of Latinx intercultural competence and acculturation on acculturative stress and depression: A brief longitudinal study. *Journal of Latinx Psychology, 8*(2), 161–177. doi: 10.1037/lat0000138
- Elam, K. K., Chassin, L., Eisenberg, N., & Spinrad, T. L. (2017). Marital stress and children's externalizing behavior as predictors of mothers' and fathers' parenting. *Development and Psychopathology, 29*(4), 1305-1318.
- Fantuzzo, J., McWayne, C., 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.
- Flores, A., López, G., & Radford J. (2017). *Facts on U.S. Latinos, 2015*. Pew Research Center. Retrieved from <http://www.pewhispanic.org/2017/09/18/facts-on-u-s-latinos-trend-data/>
- Floyd, L. (1998). Joining hands: A parental involvement program. *Urban Education, 33*(1), 123-135.
- Fuller, B. & García Coll (2010). Learning from Latinos: Contexts, families, and child development in motion. *Developmental Psychology, 46*(3), 559-565. doi: 10.1037/a0019412
- 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. doi: 10.1002/pits.22067
- Goldenberg, B. M. (2014). White teachers in urban classrooms: Embracing non-white students' cultural capital for better teaching and learning. *Urban Education, 49*(1), 111-144. doi: 10.1177/0042085912472510
- Goodall, J., & Montgomery, C. (2014). Parental involvement to parental engagement: A continuum. *Educational review, 66*(4), 399-410.
- Grolnick, W. S., Benjet, C., Kurowski, C. O., & Apostoleris, N. H. (1997). Predictors of parent involvement in children's schooling. *Journal of Educational Psychology, 89*(3), 538-548. doi: 0022-0663/97/
- Harold, G. T., Shelton, K. H., Goeke-Morey, M. C., & Cummings, E. M. (2004). Marital conflict, child emotional security about family relationships and child adjustment. *Social Development, 13*(3), 350-376.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Publications.
- Hill, N. E., & Torres, K. (2010). Negotiating the American dream: The paradox of aspirations and achievement among Latino students and engagement between their families and schools. *Journal of Social Issues, 66*(1), 95-112. doi: 10.1111/j.1540-4560.2009.01635.x

- Hornby, G., & Lafaele, R. (2011). Barriers to parental involvement in education: An explanatory model. *Educational Review*, 63(1), 37–52. doi:10.1080/00131911.2010.488049
- Hyslop, N. (2000). Hispanic parental involvement in home literacy. ERIC Clearinghouse on Urban Education. EDO-UD-93-3.
- Irizarry, J. (2015). *Latinization of US schools: Successful teaching and learning in shifting cultural contexts*. Routledge. doi: 10.4324/9781315633763
- Kelly-Vance, L., Nero, C., Casas, J. F., Ryan, C. S., Ryalls, B. O., Kurien, S. A., & Ferguson, A. (2006). Parental involvement in education: A comparison of English and Spanish speaking parents. *The New Mexico Review*, 14, 15-25.
- Kemper, T. D., & Reichler, M. L. (1976). Father's work integration and types and frequencies of rewards and punishments administered by fathers and mothers to adolescent sons and daughters. *The Journal of Genetic Psychology*, 129(2), 207-219.
- Kids Count Data Center (2019). *Children in poverty by race and ethnicity in the United States*. Retrieved on May 24, 2019 from: <https://datacenter.kidscount.org>
- Lee, E. H. (2012). Review of the psychometric evidence of the perceived stress scale. *Asian Nursing Research*, 6(4), 121-127.
- LeFevre, A. L., & Shaw, T. V. (2012). Latino parent involvement and school success: Longitudinal effects of formal and informal support. *Education and Urban Society*, 44(6), 707–723. doi: 10.1177/0013124511406719
- Lima, J., Caughy, M., Nettles, S.M., & O'Campo, P.J. (2010). Effects of cumulative risk on behavioral and psychological well-being in first grade: Moderation by neighborhood context. *Social Science & Medicine*, 71(8), 1447-1454. doi: 10.1016/j.socscimed.2010.06.02
- Linver, M. R., Brooks-Gunn, J., & Kohen, D. E. (2002). Family processes as pathways from income to young children's development. *Developmental Psychology*, 38(5), 719.
- Malone, D. (2017). Socioeconomic status: A potential challenge for parental involvement in schools. *Delta Kappa Gamma Bulletin*, 83(3), 58-62.
- Marschall, M. J., & Shah, P. R. (2016). Linking the process and outcomes of parent involvement policy to the parent involvement gap. *Urban Education*, 1-31. doi: 10.1177/0042085916661386
- McWayne, C., & Melzi, G. (2014). Validation of a culture-contextualized measure of family engagement in the early learning of low-income Latino children. *Journal of Family Psychology*, 28(2), 260–266. doi: 10.1037/a0036167
- McWayne, C., Foster, B., & Melzi, G. (2018). Culturally embedded measurement of Latino caregivers' engagement in Head Start: A tale of two forms of engagement. *Early Education and Development*, 1-23. doi: 10.1080/10409289.2018.1442094

- Mendez, J. L., Stillman, L., LaForett, D. R., Wandersman, A., & Flaspohler, P. (2004). Neighborhood influences favoring the growth and development of young children. *A Blueprint for the Promotion of Prosocial Behavior in Early Childhood*, 113-139.
- Muthén, L. K., & Muthén, B. O. (1998-2014). *Mplus user's guide* (6th Ed.). Los Angeles, CA: Muthén & Muthén.
- National Center for Education Statistics (2020). Racial/ethnic enrollment in public schools. *The Condition of Education, 2020*. Retrieved from: [chrome-extension://efaidnbmnnnibpajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fnces.ed.gov%2Fprograms%2Fcoe%2Fpdf%2Fcoe_cge.pdf&clen=78315&chunk=true](https://efaidnbmnnnibpajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fnces.ed.gov%2Fprograms%2Fcoe%2Fpdf%2Fcoe_cge.pdf&clen=78315&chunk=true)
- Nicolau, S., & Ramos, C. L. (1990). Together is better: Building strong relationships between schools and Hispanic parents. Washington, DC: Hispanic Policy Development Project. (ED 325 543)
- Núñez, J. C., Suárez, N., Rosário, P., Vallejo, G., Valle, A., & Epstein, J. L. (2015). Relationships between perceived parental involvement in homework, student homework behaviors, and academic achievement: differences among elementary, junior high, and high school students. *Metacognition and Learning*, 10(3), 375-406.
- Palermo, F., Ispa, J. M., Carlo, G., & Streit, C. (2017). Economic hardship during infancy and US Latino preschoolers' sociobehavioral health and academic readiness. *Developmental Psychology*, 1-13.
- Perreira, K.M., Chapman, M.V., & Stein, G.L. (2006). Becoming an American parent: Overcoming challenges in a new immigrant Latino community. *Journal of Family Issues*, 27(10), 1383-1414. doi: 10.1177/0192513X06290041
- Ponnet, K., Wouters, E., Goedemé, T., & Mortelmans, D. (2016). Family financial stress, parenting and problem behavior in adolescents: An actor-partner interdependence approach. *Journal of Family Issues*, 37(4), 574-597.
- Ramirez Garcia, J.L. (2012). Mental health care for Latino immigrants in the U.S.A. and the quest for global health equities. *Psychological Intervention*, 21(3), 305-318. doi: 10.5093/in2012a27
- Reese, L., Balzano, S., Gallimore, R., & Goldenberg, C. (1995). The concept of educación: Latino family values and American schooling. *International Journal of Educational Research*, 23, 57-81. doi:10.1016/0883-0355(95)93535-4
- Reese, L., & Gallimore, R. (2000). Immigrant Latinos' cultural model of literacy development: An evolving perspective on home-school discontinuities. *American Journal of Education*, 108, 103-134. doi: 10.1086/444236
- Schoppe-Sullivan, S. J., Kotila, L. E., Jia, R., Lang, S. N., & Bower, D. J. (2013). Comparisons of levels and predictors of mothers' and fathers' engagement with their pre-school-aged children. *Early Child Development and Care*, 183(3-4), 498-514.

- Siqueira Reis, R., Ferreira Hino, A. A., & Rodriguez Añez, C. (2010). Perceived stress scale: Reliability and validity study in Brazil. *Journal of Health Psychology, 15*(1), 107-114.
- Skokie, IL: Scientific Software International, Inc; 2011. *Hierarchical Linear & Nonlinear Modeling* (for Windows) computer program. Version 7.
- Remor, E. (2006). Psychometric properties of a European Spanish version of the Perceived Stress Scale (PSS). *The Spanish Journal of Psychology, 9*(1), 86-93. doi: 10.1017/S1138741600006004
- Rodgers, A. Y. (1998). Multiple sources of stress and parenting behavior. *Children and Youth Services Review, 20*(6), 525-546.
- Rodriguez, N., Myers, H.F, Mira, C.B., Flores, T., & Garcia-Hernandez (2002). Development of the Multidimensional Acculturative Stress Inventory for adults of Mexican origin. *Psychological Assessment, 14*(4), 451-461. doi: 10.1037/1040-3590.14.4.451
- Rodriguez, N., Flores, T., Flores, R. T., Myers, H. F., & Vriesema, C. C. (2015). Validation of the Multidimensional Acculturative Stress Inventory on adolescents of Mexican origin. *Psychological Assessment, 27*(4), 1438-1451. doi:2048/10.1037/pas0000125
- Romero, M., Hondagneu-Sotelo, P., & Ortiz, V. (2014). *Challenging fronteras: Structuring Latina and Latino lives in the US*. Routledge. doi: 10.4324/9781315865775
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *American Psychologist, 65*(4), 237-251. doi: 10.1037/a0019330
- Shear, M. D., & Nixon, R. (2017). New Trump deportation rules allow far more expulsions. *The New York Times, 21*.
- Sheldon, S. B., & Epstein, J. L. (2005). Involvement counts: Family and community partnerships and mathematics achievement. *The Journal of Educational Research, 98*(4), 196-207.
- Silveira, M. L., Pekow, P. S., Dole, N., Markenson, G., & Chasan-Taber, L. (2013). Correlates of high perceived stress among pregnant Hispanic women in Western Massachusetts. *Maternal and Child Health Journal, 17*(6), 1138-1150. doi: 10.1007/s10995-012-1106-8
- Smith, E. P., Connell, C. M., Wright, G., Sizer, M., Norman, J. M., Hurley, A., & Walker, S. N. (1997). An ecological model of home, school, and community partnerships: Implications for research and practice. *Journal of Educational and Psychological Consultation, 8*(4), 339-360. doi: 10.1207/s1532768xjepc0804_2
- Smith, J., Stern, K., & Shatrova, Z. (2008). Factors Inhibiting Hispanic Parents' School Involvement. *Rural Educator, 29*(2), 8-13.

- Tinkler, B. (2002, April). *A review of literature on Hispanic/Latino parent involvement in K-12 education*. Retrieved April 16, 2019, from <https://files.eric.ed.gov/fulltext/ED469134.pdf>
- Torres, L. (2010). Predicting levels of Latino depression: Acculturation, acculturative stress, and coping. *Cultural Diversity and Ethnic Minority Psychology, 16*(2), 256. doi: 10.1037/a0017357 U.S. Department of Health and Human Services. (2000). *Head Start performance standards* (1304.40). Washington, DC.
- Valencia, R. R. & Black, M.S. (2002). “Mexican Americans don’t value education!” On the basis of myth, mythmaking, and debunking. *Journal of Latinos and Education, 1*(2), 81-103.
- Waanders, C., Mendez, J.L, & Downer, J. (2007). Parent characteristics, economic stress, and neighborhood context as predictors of parent involvement in preschool children’s education. *Journal of School Psychology, 45*, 619-636. doi:10.1016/j.jsp.2007.07.003
- Wang, M. T., & Sheikh-Khalil, S. (2014). Does parental involvement matter for student achievement and mental health in high school? *Child Development, 85*(2), 610-625. doi: 10.1111/cdev.12153
- Weiss, S.J., Goebel, P., Page, A., Wilson, P., & Warda, M. (1999). The impact of cultural and familial context on behavioral and emotional problems of preschool Latino children. *Child Psychiatry and Human Development 29*(4), 287-301. doi: 10.1023/A:1021397032359
- Williams, D. R. (2018). Stress and the mental health of populations of color: Advancing our understanding of race-related stressors. *Journal of Health and Social Behavior, 59*(4), 466-485. doi: 10.1177/0022146518814251
- Yamamoto, Y., Holloway, S. D., & Suzuki, S. (2016). PE in children’s education: Motivating factors in Japan and the US. *School Community Journal, 26*(1), 45-66.
- Yoshikawa, H., Weiland, C., & Brooks-Gunn, J. (2016). When does preschool matter? *The Future of Children, 26*(2), 21-35. doi: 10.1353/foc.2016.0010
- Zarate, M. E. (2007). *Understanding Latino Parental Involvement in Education: Perceptions, Expectations, and Recommendations*. Los Angeles, CA: Tomas Rivera Policy Institute.
- Zucker, E., & Howes, C. (2009). Respectful relationships: Socialization goals and practices among Mexican mothers. *Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health, 30*(5), 501-522. doi: 10.1002/imhj.20226]