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Measuring Belonging and Connection to Schools Among Latino/a Parents

by

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Abstract

Parent experiences of belonging and connection to their children’s school have important implications for children’s academic outcomes. Experiencing a sense of belonging and connection may be more challenging among Latino/a families, relative to White families, due to cultural, linguistic, and institutional barriers that are disproportionately experienced by Latino/a families in many schools in the US. There are no available measurement tools to index Latino/a parents’ experiences of belonging and connection that have been subject to psychometric and cultural validation studies. Using a mixed methods approach, this project examines the psychometric properties of extant self-report questionnaires among Latino/a parents to guide the measurement of belonging and connection in schools in valid, reliable, and culturally relevant ways. Our results explore Latino/a parent and educator definitions of belonging and connection to school. We demonstrate that the adapted Psychological Sense of School Membership scale is a promising candidate self-report measure to index Latino/a parent experiences of belonging and connection. We also propose specific changes to measurement tools to address the barriers that many Latino/a parents face, such as limited bilingual capacities among school and limited time to participate in traditional parent roles such as after-school activities and volunteering due to work obligations.

Keywords: parent connection, belonging, school engagement, Latino/a parents, equity
Measuring Latino/a Parent Belonging and Connection to Schools

The need to belong has been identified as a fundamental motivation for human behavior (Baumeister & Leary, 1995) and having a connection to a community is one important way to satisfy this need (Battistich, Solomon, Kim, Watson, & Schaps, 1995). Broadly, belonging can be defined by feelings of being accepted and valued by others (Willms, 2000). Intertwined with belonging are the ideas of connection and community (Slaten, Ferguson, Allen, Brodrick, & Waters, 2016; Osterman, 2000). School is one of the main social contexts in which students and families participate for many years. Evidence suggests that a family’s experiences of belonging and connection to school are important for student academic, emotional, and health outcomes (Slaten et. al. 2014). Experiencing a sense of belonging and connection may be more challenging among Latino/a families, relative to White families, due to cultural, linguistic, and institutional barriers that are disproportionately experienced by Latino/a families in many schools in the US (De Gaetano, 2007; Dreby, 2015; Perreira, Chapman & Stein, 2006). To investigate the experience of belonging and connection among Latino/a families requires measurement methods that are reliable, valid, and culturally meaningful among Latino/a families. No self-reports measures of school belonging or connection were found in the literature review that have been validated with Latino/a families in the US. Using a mixed methods approach, this project examines the psychometric properties of extant self-report questionnaires among Latino/a parents to guide the measurement of belonging and connection in schools in valid, reliable, and culturally relevant ways.

The Meaning and Benefits of School Belonging and Connection

The constructs of belonging, connection, and community are all linked, especially in terms of a student or parent’s relationship to school. Although they are similar, belonging, or an individual’s sense of personal relatedness to others, may refer to a deeper human need for
interpersonal relationship (Baumeister & Leary, 1995). Connection appears to be broader construct, defined by Markowitz as “encompassing both a sense of belonging and social support” (Markowitz, 2016, p. 299). Community has been defined as a “shared psychological sense of coherence at a school” (Belenardo, 2001, p. 34) based on common beliefs, feelings and relationships or “a feeling of belongingness within a group” (Osterman, 2000, p. 323). Belenardo (2001) identified six dimensions that define a sense of community for parents and teachers in schools: shared values, commitment, a feeling of belonging, caring, interdependence, and regular contact. Other research supports a multi-dimensional model of community among students at school and highlights the importance of caring and supportive relationships with other students and teachers, and student autonomy to influence the classroom (Battistich et. al., 1995).

For students, having a sense of belonging to school is an important protective factor for health, and mental and emotional well-being (Rowe & Stewart, 2009). Multiple studies have demonstrated that school connection is associated with fewer symptoms of depression and better overall health among high school students (Bond et. al., 2007; Joyce & Early, 2014). Undergraduate students with a higher sense of belongingness also report higher self-esteem and well-being (Steger & Kashdan, 2009). Among adolescents, studies demonstrate that parent-family connectedness and perceived school connectedness is protective against risky health behaviors and emotional distress (Resnick et al., 1997). Academically, a sense of belonging has been associated with higher engagement and participation in school activities among elementary students (Goodenow, 1993). Wehlage et al. (1989) found that a student’s perception that he or she is a member at school was key to engagement and drop-out prevention. In summary, having a connection and sense of belonging to one’s school is important for student engagement, academics, and overall health.
The importance of the sense of belonging and community among adults in children’s lives also is clear. For parents, specifically, having a connection to their child’s school is important for their child’s engagement and academic performance. In a study on parent perceptions of school climate, Schuler et al. (2014) identified three ways in which parent perceptions of school can influence their children. First, parents’ perceptions of school can influence the child’s perception of school, which is important to how much the child engages and participates in school. Second, parent perceptions can influence how much families and parents are involved with the school. Lastly, parents are the ones that ultimately make decisions as to where to send their children to school. Additionally, Griffith (1998) found that parents who perceive their child’s school to be safe, positive, and empowering tend to be involved more. Parental involvement in turn is associated with higher academic achievement among their children (Fan & Chen, 2001). It is clear from the available research that a parent’s connection to his or her child’s school is important to the child’s academic success. Since neither home nor school alone is the sole contributor to a child’s development, there has been a recent emphasis for school administrators to focus on creating a partnership with the whole family (Meece & Eccles, 2010; Patrikakou, 2016). To reach, engage, and understand the needs of families, the literature highlights the importance of being responsive to the sociocultural context of families within a community (Valdez, Ramirez Stege, Martinez, D’Costa, & Chavez, 2017). Posey-Maddox and Haley-Lock (2016) emphasize that parent engagement cannot be a one-size fits all approach and schools must understand their families’ cultural and economic contexts.

**School Belonging and Connection among Latino/a Parents**

The Latino/a population is one of the fastest growing ethnic minority groups in the United States (Montaño & Metcalfe, 2003) and according to U.S. Census data, Latino/a youth under 18 years old are the fastest growing segment of the U.S. population (Perreira, Chapman, &
Latino/a parents face cultural, linguistic, and institutional barriers within many school systems in the US. For example, immigration and citizen status, limited parental education and unfamiliarity with the United States educational system are some of the socioeconomic barriers that parents may face (De Gaetano, 2007; Dreby, 2015; Perreira, Chapman & Stein, 2006). Although there are no studies that report the prevalence of discrimination among Latino/a parents in school systems, research with over 2500 Latino/as adults from the National Latino and Asian American Study estimates around 30% of Latino/as have experienced racial discrimination in their everyday life (Pérez, Fortuna, & Alegría, 2008).

Various studies have investigated how the lack of bilingual resources, such as provided translated documents or including translators at events, creates a linguistic barrier for parents who do not speak English as their first language. (De Gaetano, 2007; Perreira, Chapman & Stein, 2006). In a 3-year intervention with Latino/a parents in New York, De Gaetano discusses how the US educational system promotes the “language and values of the dominate group” (De Gaetano, 2007, pg. 148). Their series of workshops with parents placed language and culture at the center of engaging Latino/a parents and recognized “that their culture, ethnicity, and language were critical areas that needed to be understood, emphasized, and celebrated if we wanted to reach them as partners in their children’s schooling (De Gaetano, 2007, pg. 60).

Perreira and colleagues (2006) conducted interviews with 18 Latino/a immigrant parents about the challenges of becoming an American parent (Perreira, Chapman, & Stein, 2006). One theme that emerged was the challenge of learning English. They state: “Without the ability to communicate, parents felt helpless, alienated, and unable to advocate on behalf of their children” (Perreira, Chapman, & Stein, 2006, pg. 1395-1396). Additionally, the disconnect between cultural norms at home and the school environment are often a source of tension for Latino/a families (González, Andrade, Civil, & Moll, 2001; Moje, et al., 2004). González and colleagues...
use the funds of knowledge approach to help bring math to household practices through home visits. They recognize that for many minority students, classroom cultural and linguistic patterns can be very different from cultural and linguistic community patterns (González, Andrade, Civil, & Moll, 2001). Their assumption is that “classroom learning can be greatly enhanced when teachers learn more about their students and about their students’ households” (González, Andrade, Civil, & Moll, 2001, pg. 116).

For parents, these institutional barriers can result in greater disengagement, feelings of isolation and lack of connectedness between schools and families (Toldson & Lemmons, 2013; LeFevre & Shaw, 2011). Olivos argues that “For Latino parents, limited parent and community engagement must be understood as a consequence of social inequities which remain unaddressed in the institutional context of public education” (Olivos, 2004, pg. 352). Since parent engagement and connection with school is a strong predictor of a child’s academic success (Barnard, 2004; Jeynes, 2003), institutional barriers that disengage parents from schools may contribute to poorer academic and emotional outcomes among children.

In the past decade, systematic attempts have been made to engage Latino/a families such as workshops on community, greater inclusion of culture, translators to address the language barrier and many other methods (De Gaetano, 2007; Henderson, Mapp, Johnson, & Davies, 2007). Parent engagement attempts, however, may be ineffective if they are not sensitive to diverse cultural perspectives and values. Viewing all parental involvement in the same way without attention to culture may mask “the complexity of needs, the roles that ethnic minority parents are playing, or the constraints that impede their involvement” (Crozier, 2001, p. 329). This “one size fits all” perspective can result in “deficit models” that focus on perceived deficits or weaknesses in a parent (De Gaetano, 2007). Attempting to change the behavior of Latino/a parents through such a deficit model often results in school staff perceiving Latino/a parents as
uncaring, incompetent, or submissive (Crozier, 2001; De Gaetano, 2007). This perspective is ultimately unsuccessful as it relies on beliefs based on middle-class, European American families (Calzada, 2010) and ignores the fact that Latino/a families and White, middle class school personnel may differ in their definitions of involvement (Zarate, 2007; LeFevre & Shaw, 2011). For example, schools in the United States often value formal involvement (volunteering, attending school events, helping with field trips), while Latino/a families have been shown to be involved in more informal ways (emotional support, helping with homework, providing a place to study, etc.) (Zarate, 2007; LeFevre & Shaw, 2011). If not understood and acknowledged, the mismatch in expressions of involvement can result in a deficit model that discounts the contributions of Latino/a families and isolates them even further.

An alternative to the deficit model is a strength-based approach which focuses on the strengths that parents of diverse cultural backgrounds bring to the school setting. Two strength-based models include Social Capital Theory (Noguera, 2001) and the Cultural Wealth Model (Yosso, 2005). Noguera’s Social Capital Theory (2001) focuses on building relationships of trust between parents and school staff, where parents are respected in the education of their children. For example, research shows that Latino/as highly respect teachers and trust the American education system (Auerbach, 2007); however, bringing up a concern to a teacher could be disrespectful because it challenges the teacher’s authority (Quezada, Díaz, & Sánchez, 2003). Social Capital Theory might encourage a school to build strong relationships with these parents and encourage open communication. Yosso’s Cultural Wealth Model (2005) describes and learns from the cultural knowledge, skills, abilities, and contacts of socially marginalized groups that are often unacknowledged. These strength-based approaches view different methods of parental engagement (including both formal and informal approaches) as equally valuable. In fact, research suggests that both formal, school-based support, and informal, home-based
support, are significant predictors of student achievement (LeFevre & Shaw, 2011). A strengths-based approach looks to learn with and from parents to cultivate a school culture that welcomes and supports all families.

Given that there are cultural differences in parental involvement between Latino/a families and white families, a strengths-based approach is necessary for schools to learn from Latino/a parents. For schools to create a strong partnership with Latino/a families and support the academic progress of their children, they must have an accurate understanding of parents’ perspectives on school belonging and connection. Therefore, a first step in building school engagement is accurate measurement to describe how families experience connection and belonging to the school. Specifically, there is a need for measurement tools that focus on Latino/a parents’ experiences of connection.

**Measurement of School Belonging and Connection among Latino/a Parents**

To effectively measure the constructs of school belonging and connection among Latino/a parents requires measurement scales that are reliable, valid, and culturally relevant. Reliability answers the question of “how consistent or reproducible are the scores that an instrument produces?” (Supino & Borer, 2014, p. 165). Of particular relevance to this project is internal consistency, which assesses the consistency among the items within a scale that is designed to measure a single construct. If a scale is measuring one construct, its items should correlate highly and positively (Supino & Borer, 2014). Internal consistency reliability is typically reported using Cronbach’s alpha, where alpha coefficients of 0.70 are often considered the minimum standard (McMillan & Schumaher, 2001).

Validity, or the degree to which the instrument measures the actual parameter of interest (Supino & Borer, 2014), can be measured in a variety of ways. Face validity, or whether or not a measure appears to be relevant to the construct at hand, can be assessed through expert opinion
with questions like: “Does the assessment look as though it will measure what it is supposed to measure? Does it seem well designed?” (Supino & Borer, 2014, p. 162). Content validity, or how well the items cover the subject of interest, can be assessed by asking for participants’ definition of the construct at hand and comparing this definition with the items included in the measurement scale (Supino & Borer, 2014). Both face validity and content validity of an instrument can be assessed through qualitative research, such as with a semi-structured interview to explore the views, experiences, beliefs and/or motivations of individuals on a specific topic (Gill et al., 2008). Semi-structured interviews provide a rich source of data that allow researchers to better understand a construct in addition to the results of quantitative instruments (Silverman, 2000).

In addition to reliability and validity, it is necessary to address the cultural properties of a measurement instrument, such as its cultural relevancy. One part of making a scale culturally relevant is translating it to the participant’s native language. In addition to literal translation, it may be important to culturally adapt the questions so that they maintain equivalence in meaning (Epstein, Santo, & Guillemin, 2015). For example, the Health Assessment Questionnaire asks people if they can sit in their bathtub as one item to measure functioning among people with rheumatoid arthritis (Epstein, Santo, & Guillemin, 2015). The Thai version of this questionnaire replaced the question with one about the ability to sit and pay homage to a sacred image, since bathtubs are not commonly used (Osiri, Deesomchok, & Tugwell, 2001). Epstein et. al. (2015) recommend using more than one translator to bring various perspectives to the table, and other researchers have recommended a committee of translators that review and discussion independent translations to reduce bias (Hambleton & Kanjee, 1995). Epstein et. al. (2015) refer to cross-cultural adaptation as a “collaborative effort that involves input from qualified translators, clinicians, and patients” (p. 438) and highlight the importance of pilot testing the
translated measure. In using measurement questionnaires cross-culturally, it is important to consult with multiple experts about the intended meaning of questions to make sure this meaning is retained.

Knowledge of the psychometric and cultural properties of measures of school belonging and connection among Latino/a parents is extremely limited. Little empirical research has examined how to measure parental experiences of belonging or connection and even less exists specifically about Latino/a parents. We identified only ten measurement scales in the literature, six of which included samples of Latino/a parents. None of these directly indexed school connection or belonging among parents. Instead, available measures index other related constructs such as perceptions of student belonging to school, parental empowerment, parental involvement, and closeness. See Table 1 for a summary of the key characteristics of extant scales, including reliability and validity, and cultural specificity among Latino/a populations.

**Student Belonging.** Since few measurement scales on parent belonging were found in the literature, measurement scales of student belonging to school were also reviewed. Measures of student belonging look at “the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment” (Goodenow, 1993, p. 80) or “the social, emotional, and physical sense of membership students experience within the school setting” (Street, 2013, p. 18). Four self-report scales were identified as measures of student belonging to school: The Psychological Sense of School Membership scale, the Patterns of Adaptive Learning Scale, an unnamed scale from the National Longitudinal Study of Adolescent Health, and the Perceived Control at School Scale.

Goodenow’s (1993) Psychological Sense of School Membership Scale (PSSM) is the most widely cited measure of student connection to school. The scale includes 18 questions and is scored on a scale from 1 to 5, where 5 represents the highest levels of connection. According
to PsycINFO, it is cited in 847 other papers and has been used with a wide range of student populations, including Latino/a adolescents. The PSSM also has high internal consistency among suburban students, with $\alpha=0.875$ in one sample and $\alpha=0.884$ in another (Goodenow, 1993). For urban students, $\alpha=0.803$ was for the English version and $\alpha=0.771$ for the Spanish version (Goodenow, 1993). These internal consistency reliability values are consistent with the recommendations that in order to be reliable, $\alpha$ should be greater minimally greater than 0.70 (McMillan & Schumaher, 2001). The PSSM also has been used and validated in Latino/a populations (Gaete, Montero-Marín, Rojas-Barahona, Olivares & Araya 2016; Abubakar et. al., 2015).

There has been much research on the internal structure of the 18 items in the scale using factor analysis to investigate subscales. See Table 2 for a summary of nine papers examining PSSM factors. When Goodenow published the scale in 1993, she proposed it as a single-factor measure. However, she categorized items into several large groups such as perceived liking, personal acceptance, and inclusion, respect and encouragement for participation, and sense of belonging. Within these categories, items measured the perceived response of other students, teachers and other people within the school (Goodenow, 1993). More recent papers have provided support for one factor: belonging (Abubakar et. al., 2015; Gaete et. al., 2016); although other studies report that the PSSM has three factors. Specifically, the first factor analysis found three factors--belonging, rejection, and acceptance (Hagborg, 1994), and a later study found three similar factors--caring relationships, acceptance, and rejection (You et. al., 2011). The caring relationships factor was based on relationships with adults. Ye & Wallace (2004) list identification and participation in school, fitting in with peers, and connection to teachers; and Togari et. al. (2011) describe acceptance by teachers, acceptance by students, and belonging.
Two studies that used a Chinese version of the PSSM found two factors: school belonging and feelings of rejection (Cheung & Hui, 2003; Cheung, 2004).

The 1995 edition of Patterns of Adaptive Learning Scale (PALS; Midgley et al., 1995) is a four-item scale measuring student belonging and has been used in one study that examined school belonging and psychological and behavioral functioning in school in a sample of 8th grade students (Roeser, Midgley, & Urdan, 1999). However, after the 1995 manual of PALS and the Roser et al. study (1999), the scale appears to have been dropped from the PALS manual (Midgley et al., 2000). No internal consistency reliability information was available.

A third scale measuring student belonging was developed by Anderman (2002) for the National Longitudinal Study of Adolescent Health. This is a five-question scale that was used in a large study of over 58,000 students from around the country with diverse ethnic backgrounds (Anderman, 2002). The scale has been shown to have relatively good internal consistency ($\alpha=0.78$) (Anderman, 2002).

Lastly, the Perceived Control at School scale (Adelman, Smith, Nelson, Taylor & Phares, 1986) measures students’ beliefs in their competence to affect change in the school environment. The 16-question scale is intended to measure five control areas: students’ decision-making abilities, reactions to students’ efforts to act autonomously, availability of options and choices, fairness of the rationale for limits, and ability of students to counter control efforts of others (Adelman et al., 1992). In a sample of students ranging from age 9 to 19 enrolled in special education programs, $\alpha=0.80$; however, for a regular education sample, Cronbach’s alpha was 0.69, which is lower than accepted standards (McMillan & Schumaher, 2001).

**Parental Empowerment.** Empowerment generally refers to an individual’s sense of control and mastery over their lives (Zimmerman & Rappaport, 1988). Empowerment may be closely related to the construct of self-efficacy, and in a study examining mothers of young
adolescents in inner-city Philadelphia, parental self-efficacy was shown to be related to academic success and psychosocial development of their children, especially in minority and disadvantaged families (Ardelt & Eccles, 2001). Cattaneo and Chapman (2010) describe parental empowerment as three components: self-efficacy, knowledge, and competence. The 15-item Parent/Guardian Empowerment at School Scale is based on this model (Ball, 2014). Self-efficacy is defined as a person’s judgment of their capabilities to organize and execute certain actions. Knowledge includes understanding of the local school system and parent roles and responsibilities within it (e.g. “I understand how the school system in my community is organized” or “I am able to work with schools and educators to decide what services my child needs in school”). Competence refers to parents’ perceptions of the abilities to make decisions regarding their child’s education (e.g. “I tell professionals what I think about services being provided to my child at school”). This scale has good internal consistency reliability for all three factors and the overall scale had a Cronbach’s alpha of $\alpha=0.91$ (Ball, 2014).

Other researchers have investigated parent empowerment at different levels, such as family level, within various communities, or at a broader political level (Koren, DeChillo, & Friesen, 1992; Kim & Bryan, 2017). The Family Empowerment Scales developed by Koren et al. (1992), is classically used for families whose children have emotional disabilities and measures empowerment on the family, service system, and community levels. It includes 34 statements and 12 of these focus on parents’ attitudes, knowledge, and behaviors about the service system for disabilities. While the Cronbach’s alpha was strong, $\alpha=0.88$, $\alpha=0.87$, $\alpha=0.88$ for the three subscales (Koren et. al., 1992), the focus on the system for disability services has limited its use in general school settings.

The measurement scale developed by Kim and Bryan (2017) focused on personal parent empowerment and community parent empowerment. Their 18-question scale included many
items assessing areas including community participation, community belonging, self-determination, consciousness, and sense of meaning of school. The scale was used in a national sample of diverse parents from the Parent and Family Involvement Survey (Kim & Bryan, 2017). Despite the use of the scale in a diverse sample, inspection of items raises questions about cultural relevance for Latino/a parents. Many of the community participation items (“Have you participated in school fundraising?”, “Have you served on a school committee?”, “Have you attended a parent-teacher organization meeting?”) reflect a definition of engagement associated with white, upper middle-class parents that may not be inclusive of working parents and those who provide informal types of involvement. This may be of particular concern given research, discussed earlier, that suggests that Latino/a families tend to be involved in informal ways in their children’s education (Zarate, 2007; LeFevre & Shaw, 2011).

**Parental Involvement.** Parent involvement in schools can be seen as a combination of four factors: basic obligations such as providing food, clothing, shelter, and safety, school-to-home communications, parent involvement at the school, and parent involvement in learning activities at home (Epstein, 1987). Parental involvement has been correlated with higher academic achievements in children (Fan & Chen, 2001). Two questionnaires measuring involvement were identified: Parent-Teacher Involvement Questionnaire and Parent Involvement Survey (Fast Track, 2003; Griffith, 1998).

The Fast Track project followed a large sample of students from across the country from kindergarten through high school and measured a wide range of student, parent, and teacher variables (Fast Track, 2003). The Parent-Teacher Involvement Questionnaire used in Fast Track was a 26-item measure of parent involvement in their child’s education, satisfaction with their child's school and frequency of contact with teacher (Fast Track, 2003). There is also a
corresponding 21-item measure for teachers (Fast Track, 2003; Kohl, Lengua, & McMahon, 2000). No reliability information was available.

The Parent Involvement Survey (Griffith, 1998) is a 41-item scale that polls parents on eight categories: Informed parents, empowered parents, involved parents, school climate, school safety, academic instruction, student recognition, and overall satisfaction with the school. This scale includes a wide range of information about the quality of the education and student programs and parent relationships with the school and is not specifically focused on parent connection and belonging to schools. Overall, measures of formal parental involvement may be more of a reflection of parents’ time, socioeconomic status, and cultural views about what involvement means, rather than the experience of belonging or connection with the school (Calzada, 2010; LeFevre & Shaw, 2011).

Closeness. Lastly, closeness is an important distinguishing factor in interpersonal relationships (Aron, Aron & Smullan, 1992). Closeness has been defined as a multidimensional construct including amount of time together, variety of interactions together, and influence of the other on one’s decisions, activities, and plans (Aron, Aron & Smullan, 1992). Aron et. al. (1992) developed the IOS scale as a simple measure of closeness to address limitations of other scales designed to measure interpersonal closeness.

In contrast to the other measures of related constructs, the IOS scale is visual (See Figure 1). Respondents are shown seven pairs of circles (a “self” circle and an “other” circle), which each overlap to different extents. They are asked to select the image that best represents their relationship with the other. It was originally designed to show how close a person is to another person based on the concept of overlapping selves.

The IOS has been widely used because of its simplicity and brevity, and it is currently cited by over 1800 other papers on PsycINFO. In the original publication and validation of the
scale, Aron and colleagues report a test-retest reliability of \( r = .83 \) in a sample of college students (Aron, Aron, & Smollan, 1992). Additionally, the IOS showed convergent validity with another measure of closeness, including the Relationship Closeness Inventory (Berscheid, Snyder, & Omoto, 1989). It was originally used in undergraduate college populations to measure the perceived closeness between one adult and another. The IOS has been applied to a variety of settings, including educational settings in which a student’s perceived relationship with his or her teacher was the focus (Newberry & Davis, 2007; Davis, Gabelman, & Wingfield, 2011; Sarkova, 2010). Davis, Newberry and Davis (2007) used the IOS to understand how elementary school teachers conceptualize their relationship with each student. In choosing the proper measurement technique, Newberry and Davis (2007) talked about how language to describe closeness has previously been “more or less socially desirable, prescribed connotations” (Newberry & Davis, 2007, p. 1967). A pictorial representation like the IOS has the potential to overcome some of the limitations of language. Gabelman and Wingfield (2011) used the IOS scale to understand how low-income African-American first-grade students viewed their relationships with their teachers. They chose this measure so that unfamiliar language would not be a barrier for the young students.

**The Current Project**

There exists a clear paucity of reliable, valid, and culturally sensitive self-report instruments measure Latino/a parent belonging or connection with their child’s schools. As reviewed, there are many instruments that assess related constructs, but none specifically assess the extent to which parents feel a sense of belonging or connection to the school. The current project aims to contribute to the study of parent belonging and connection to schools by examining the validity, reliability, and cultural relevance of potential measures of school belonging and connectedness among Latino/a parents, using a mixed method approach.
As a preliminary step, we selected candidate measures from the set reviewed previously based on the following criteria. First, we were interested in measurement tools that tapped the constructs of parent connection or belonging (as opposed to many of the scales, which focus on parent empowerment and parent involvement). Second, we chose measurement scales with internal consistency reliability greater than at least 0.70 (McMillan & Schumaher, 2001). Third, we chose measurement tools that have been used and validated in previous studies that included some Latino/a populations. Fourth, we selected scales that were short, based on pragmatic considerations of doing applied research in educational settings (fewer than 20 items). Based on these considerations, the IOS scale (Aron, Aron, & Smollan, 1992) and a version of the PSSM scale (Goodenow, 1993) were determined to be the best candidates to explore as candidates for investigation among Latino/a parents. The PSSM scale was adapted to measure parent, as opposed to student, sense of school membership.

The IOS has never been applied to measure the closeness between a person and an institution such as a school. Although the construct of closeness is slightly different from parent belonging or connection, it captures the strength and depth of the parent-school relationship in a way that asking about parental involvement does not. We selected the IOS because of its simplicity and visual nature. Research has demonstrated that the richness and nuance of language can have limitations (Dansereau & Simpson, 2009) such as the need for analytic thinking and breaking down the language into smaller parts (Unnava & Burnkrant, 1991). Although words are verbal codes that take time to understand and process, pictures are labelled more spontaneously (Paivio, 1986). Complex patterns can be difficult to understand with written and spoken language, but humans naturally recognize patterns visually, especially with ideas of similarity, proximity, continuation, symmetry, closure, and common boundary (Dansereau & Simpson, 2009). Therefore, using images to ask questions may allow participants to respond more quickly
and intuitively, rather than thinking analytically. Additionally, in a Spanish-speaking population where many measurement tools must be translated, the visual nature of the IOS also offers value by reducing complexities and confounds. For example, translation from English to Spanish might result in the communication of slightly different ideas or concepts. A visual measurement tool does not need to be translated and therefore conveys the exact same idea to everyone.

The PSSM is a widely-used scale to measure student belonging and there is a large body of research about its internal structure. Because there is not much consensus in this body of literature on the number and types of sub-factors within PSSM, Abubakar et. al. (2015) identify a need to resolve ambiguities in what populations items on the scale refer to, especially when using the scale in different cultural contexts. Although it has never been adapted for parents, we chose it because it clearly focuses on the construct of interest and has established reliability and validity in many student populations.

This study aims to address the following questions. First, how do Latino/a parents and educators define belonging and connection to schools and are there differences in the way that these two populations define belonging and connection to school? We look to learn from the experiences of and barriers to belonging and connection among Latino/a parents.

Second, what is the reliability of the adapted PSSM scale? We are specifically interested in the internal consistency of the scale and how the 11 items on the adapted PSSM fit together. We hypothesize that the adapted PSSM scale will have high internal consistency (greater than 0.7). We hypothesize that results from the factor analysis of the adapted PSSM scale will have only one factor (belonging) based on previous research that supports a one-factor model of the PSSM (Goodenow, 1993; O’Farrell & Morrison; Abubakar et. al., 2015; Gaete et. al., 2016).

Third, what is the validity and cultural specificity of the PSSM and the IOS? Do parents and educators perceive the adapted PSSM scale (Goodenow, 1993) to be a face and content valid
tool for measuring parent belonging/connection? Similarly, do they see areas for improvement in the validity and cultural relevancy of the scale? Based on its widespread use in Latino/a populations (Gaete et. al., 2016; Abubakar et. al., 2015), we hypothesize that the adapted PSSM scale will be a useful tool to measure Latino/a parent experiences of belonging and connection to school. Also, how do parents and educators interpret the IOS (Aron, Aron, & Smollan, 1992) and do they think the scale does a good job at measuring parent belonging/connection? Research has shown that the IOS correlates with other measures of closeness such as the Relationship Closeness Inventory (Berscheid, Snyder, & Omoto, 1989) and that the scale can be used to effectively measure a student’s perceived relationship with his or her teacher (Newberry & Davis, 2007; Davis, Gabelman, & Wingfield, 2011; and Sarkova, 2010). Therefore, we hypothesize that parents and educators will perceive the IOS to be a useful tool to capture some aspects of Latino/a parent experiences of belonging and connection to school; however, we believe it may lack some specificity since parents are not given a way to explain their answer. Furthermore, to explore cultural relevance, we asked to what extent do parents and educators find the IOS and adapted PSSM to be useful tools to capture their lived experiences of belonging and connection to school among Latino/a parents? Drawing on Funds of Knowledge research (Moll, Amanti, Neff, & Gonzalez, 1992), we aim to focus on the lived experiences of families, learning about school culture from their perspectives, and the educators with whom they work.

Method

Setting

The current project was conducted at the University of Colorado Boulder in partnership with a community-based organization, El Centro Amistad. The project is a sub-study of a larger project focused on the evaluation of the effectiveness of a new program for Latino/a parents called Escuela de Madres y Padres. This curriculum teaches mindfulness, emotion regulation,
and other skills to Latino/a parents with children enrolled in certain elementary schools. These skills are designed to help parents support their children’s academic and social-emotional development and address contemporary stressors and disparities in access to education, health, and social support resources that disproportionately impact Latino/a students and families. These skills are adapted from Dialectical Behavior Therapy (DBT; Linehan, 1993) with a culturally responsive lens focusing on contextual relevance, equity, and school engagement. We partnered with two elementary schools. At School 1, there is a unique family resource center to help families with a variety of situations. In the 2016-2017 school year, School 1 had around 60% Hispanic students and 32% Caucasian students. School 2 is a bilingual school where most staff is bilingual, and classes are taught both in English and in Spanish. School 2 had 57% Hispanic students and 35% Caucasian students.

Participants

Parents. A total of 30 parents, 8 males and 22 females, were recruited from two schools. Information about the participants’ age, number of children, marital status, education level, income, and working status are presented in Table 4.

These parents had children in pre-kindergarten-5th grade and were able to speak Spanish. Inclusion criteria included availability to attend all Escuela de Madres y Padres classes, age 18 or older, and self-identification as being new to the school system in the United States. There were no exclusion criteria. Parents ranged in age from 26 to 42 years, with most in their mid-30s ($M=35.53$, $SD=4.26$). Participants varied widely in their education levels, ranging from completion of primary school to advanced graduate. The distribution of education level was positively skewed, with the median level being a high school degree or GED. Participant income levels similarly varied, ranging from below $30,000 a year to more than $100,000. The median income level was between $30,001 and $50,000 a year.
Parents were compensated $50 for their time in completing approximately an hour of surveys for the larger study, which included the measures for this study. A subset of these parents (n=12; 50% women) was selected based on the availability of the first author and parents to participate in a brief interview. The parents who completed the interviews received $25 for their time.

**Educators.** Additionally, educators (n=20), including teachers, school staff, and administrators, were recruited from the schools to complete a survey about their views of parent connection to their schools. Five of these educators were from School 1 while 15 were from School 2. Educators received a $5 Amazon gift card for completing the online survey.

**Procedures**

Parents were recruited through flyers and school-sponsored informational meetings. After an initial recruitment meeting, parents enrolled in the larger study by completing informed consent and initial baseline data. After the study was explained to them in Spanish, all participants gave written informed consent to participate in the study, to be interviewed, and to have their interview be recorded.

To explore parent definitions of belonging and connection and to test the validity of the measurement scales, a subset of parents completed a 5-10-minute interview in either Spanish or English with a bilingual member of the research team. The interview questions were developed and translated into Spanish by the first author and then reviewed by three native Spanish speakers on the research team. Additionally, the questions were reviewed by the directors of El Centro Amistad to assess if the proposed questions for the parents were culturally relevant. Revisions were made until consensus was achieved by reviewers on translation and cultural relevance of items.
To understand educator definitions of belonging and connection and their opinions of the usefulness of the two measurement scales, educators were asked to complete a paper-and-pencil or web-based survey. Educators were recruited in-person or via email with the help of school district partners.

We administered two questionnaires to Latino/a parents to measure their experience of belonging and connection to their child’s school and to investigate the psychometric properties of the two measurement scales. Participants completed initial data measures orally or on paper in Spanish with a trained, bilingual member of the research team.

All study procedures were reviewed and approved by the University of Colorado Boulder Institutional Review Board and the school district research review office.

Measures

Participants completed demographic information about their race, income level, education level, the number and age of children, and marital status. Additionally, they completed the following two questionnaires to measure their experience of belonging and connection to school.

**Inclusion of Other in the Self Scale.** The IOS (Aron et. al., 1992) was used to measure parent feelings of closeness to their child’s school (see Figure 1). Parents were asked to “Circle the image that best describes your relationship with your child’s school.” Participants were required to pick among seven pairs of overlapping circles, one circle representing “yourself” and the other circle representing “your child’s school.” Option 1 shows no overlap between the respondent and their child’s school, whereas Option 7 shows the two circles almost entirely overlapping.

**Adapted version of Psychological Sense of School Membership Scale (PSSM).** The PSSM was adapted as described in Table 3 (Goodenow, 1993; Gaete et. al., 2016). Participants
responded to 11 items on a 5-point semantic differential scale where 1=not at all true and 5=completely true; higher scores indicate stronger levels of connection. The original PSSM was designed for adolescents; therefore, we adapted it for parents. We removed the five negatively-worded items based on the results of Gaete et. al. (2016) indicating that the negatively worded items created a methodological artifact. Specifically, their one-factor model showed an excellent fit with both exploratory and confirmatory factor analyses after the removal of the negatively worded items (Gaete et. al., 2016). Similarly, Ye and Wallace (2014) identified a method effect with the negatively worded items and taking wording effects into consideration improved the fit of their model. Other factor analyses identified factors with all positively worded items (Hagborg, 1994; Hagborg, 1998; Cheung & Hui, 2003). Additionally, we removed items 2 and 15 on the original PSSM scale (“People here notice when I’m good at something” and “People here know I can do good work”) because they were not relevant for parents. Goodenow (1993) identified them as a separate factor and Ye and Wallace (2014) eliminated them because they did not load into factor models, were cross-loaded, and confusing. We made these adaptations from a Spanish version of the PSSM that was translated and validated by Gaete et. al. (2016) that had 13 items with only positively-worded items and an internal consistency reliability of 0.92 (Gaete et. al., 2016).

**Semi-Structured Parent Interviews.** Trained research staff conducted semi-structured interviews that were developed in consultation with several bilingual experts. Appendix A lists the interview questions in both English and Spanish. Interviews were conducted in Spanish or English, depending on the preference of the participant. The parent semi-structured interview included four questions. Parents were asked first: “What does it mean to you to belong to the school community?” Next, parents were asked to review the items of the two self-report measures. They were told that the researchers were interested in learning how they interpreted
the items. To eliminate possible social desirability and agreement biases, participants were told that the researchers had not created these questions, that there were no “correct answers,” and that the researchers were interested in their opinion. Finally, to assess the validity of the two measures of belonging and connection, the parents were asked how good a job they thought both the two measures did at representing their connection to their child’s school.

Based on guidelines provided by Willis (2005, p. 48; 2014, p. 37), specific probes were used to get more information from the participants including meaning-oriented probes (e.g., “How well do these questions align with your definition of belonging?”), hypothetical probes (e.g., “Can you give an example of what a 7 would look like?”), process-oriented probe (e.g., “If you were trying to understand a family’s connection to the school, what would you ask?”), and specific probes (e.g., “Do these questions include everything you think relates to your connection to the school?”).

**Educator Survey.** Educators completed an online or in-person paper and pencil survey. Participants were asked to define parent connection to the school. Referencing the two self-report measures used in the study, educators were asked: “Do you think these scales would do a good job of measuring how connected parents are to their child’s school?” and “Do these scales cover the information you would want to know? Is there anything missing?” Appendix B presents the questions asked in the Educator Survey.

**Data Analysis**

To answer the research questions about parent and educator definitions of belonging and connection, and opinions about the IOS scale and the adapted PSSM scale, themes from the parent interview and educator survey responses were analyzed based on grounded theory and a framework approach. Lacey and Luff describe the five-step process of the framework approach: 1) familiarization with qualitative data, 2) identification of a thematic framework, 3) indexing, 4)
charting, and 5) mapping and interpretation (Lacey & Luff, 2001). This approach provides well-grounded information of the views of a population (Glaser & Strauss, 1967). The responses to the parent interview questions were transcribed by the first author in English and Spanish. The first author coded the interview and survey texts in both English and Spanish.

To test the psychometric properties of the adapted PSSM scale, Cronbach’s alpha (internal consistency reliability) was calculated. To understand the substructure of the adapted PSSM scale and to see how the 11 items on the scale fit together, an exploratory factor analysis was conducted.

To assess if parents and educators found the two scales to be useful tools to capture parent experience of belonging and connection to school, responses to the question “How well does this scale do at measuring how connected parents are to their child’s school?” were coded categorically (yes, unsure, or no) by the first author and another researcher. The initial inter-rater reliability was calculated to be 91.67%. The ratings were then discussed until the researchers reached consensus. The results from the educator survey were divided into five categories: extremely well, very well, moderately well, slightly well or not well at all.

Results

Table 7 presents the codebook that was used to code the parent interview data on the four major interview questions: definition of belonging, definition of connection, and perceptions of the PSSM scale and the IOS scale, along with example quotes from parents for each theme. Table 8 presents the codebook with example quotes from analysis of the educator surveys.

Definitions of Belonging and Connection

Parent Definitions

When asked to define belonging, 33% of parents (N=4) used the word “important” to describe the word. In their definition of connection, 42% of parents (N=5) used the word
Two parents explicitly said that they thought the constructs represented the same idea. Many parents identified both constructs as important, but in slightly different ways.

**Belonging.** Two themes emerged from parents’ definitions of belonging: *participation* and *student success*.

**Participation.** Half of participants (N=6) mentioned the ideas of being involved in school events and activities in their definitions of belonging. They used words such as “participating” and “involved” to describe their belonging to the school. One participant was quite clear in linking participating in school events to belonging:

> “Feeling a sense of belonging to the school means participating in the events that the school puts on” (Parent 3).

Another participant described being involved:

> “I want to be involved in everything that my daughter is going through and what she’s experiencing” (Parent 12).

For these parents, belonging to the school meant participating in school events and activities and being involved with their children through the process.

**Student Success.** The second theme of belonging is represented in parents’ comments about how they think belonging is important to help their children be successful in school. The language used centered around helping their children as much as possible. One parent said:

> “If I feel a sense of belonging to the school, I will be able to help my son” (Parent 1)

Another participant described how belonging to the school will help her children receive the best education possible.

> “To learn more about how to take care of my kids and give them the best education” (Parent 2)

Other parents described the benefits of their connection on the education of their children:
It will greatly help my kids if I feel a sense of belonging to the school, my kids will feel more comfortable with the school and the teachers and I feel like it will help with their future” (Parent 10)

Participants defined belonging as important to their children’s education and recognized the influence that they as parents have on this education.

Connection. In contrast to belonging, parents tended to view connection in more concrete, day-to-day terms. Two themes emerged from parents’ definitions of connection: communication and staying informed.

Communication. Within the theme of communication, half of parents (N=6) reported communication methods in their definitions of connection. Parents reported talking to the teachers, asking questions, having their concerns listened to, emails, and text messages as different forms of communications. One parent said:

“If I have a connection with the staff or the teachers of my daughter’s teachers, it’s going to help me as a parent know where to go for help or questions I have” (Parent 12).

Another parent specifically mentioned the impact that the emails and text messages had on her connection:

“Getting communications, so when we get emails from the principal or text messages, I feel that they care more about us and I feel more connected” (Parent 4).

Staying Informed. Additionally, parents saw connection as staying informed and up-to-date with the school process. They mentioned staying informed of their children’s education and staying up-to-date with all of the activities at the school.

“I’m going to be informed of what’s going on, the projects and things that they have” (Parent 10)
Another parent mentioned specifically staying informed as to their daughter’s academic progress:

“Ask how everything related to my daughter is going and if she’s doing well in school”

(Parent 3)

Lastly, one parent defined connection in terms of staying up-to-date on the educational activities:

“To stay up-to-date with all of the activities that the school has for our children and for the education of the children” (Parent 11)

These quotes highlight the ways in which parents view connection as a form of check-in with the school, to see how everything with their child is going and keep up-to-date on school-related events and activities for their child. The communication methods they described as part of their definitions serve to meet this goal of staying informed of the school process.

**Educator Definitions**

Educators reported belonging and connection as highly overlapping constructs. One educator specifically said: “See answer above. The same applies” (Educator 13).

**Belonging.** Four themes emerged from educators’ definitions of belonging: having a voice, especially in decision making; participation in school events; communication, and community.

**Having a Voice.** One educator said:

“It [belonging] means that parents have a voice and help make decisions at the school”

(Educator 7).

Another educator touched on the theme of voice and decision-making explaining that belonging means that parents are:

“Included in large and small decision making and their ideas are included in areas for growth” (Educator 2).
Participation. Educators also defined belonging in terms of parental participation. This is similar to a theme that emerged in parent definitions of belonging. One educator described this participation as:

“Parents are consistently encouraged to participate in classrooms, school committees, and other activities pertaining to their students as well as the school community”

(Educator 8).

Communication. Lastly, educators defined belonging in terms of communication and specifically communication about the student:

“Parent belonging here is based on constant, effective, and timely communication”

(Educator 7).

Connection. The four themes that emerged were having a voice; participation in school events and volunteering, communication, and the bilingual program at School 2.

Having a Voice. Language about having a voice was similar to the language used to define belonging. One educator said:

“It means that they feel welcomed, respected, heard and understood” (Educator 15)

Another educator emphasized the importance of listening to parental knowledge:

“Included in decision making. Voice is heard on important issues. Welcomed to bring all and any type of funds of knowledge to the child’s school” (Educator 2)

Participation. Again, educators discussed parental participation in school events and talked about parent volunteering in the classroom. One educator specifically mentioned participation in the classroom:

“Parents are also invited to participate in class and out depending on teacher”

(Educator 6)
**Communication.** Educators discussed connection in terms of communication, similar to belonging. One educator said:

"Parent connection is parents having a positive, open, and engaging connection with the staff and students here. It means that they feel welcomed, respected, heard and understood" (Educator 15)

**Bilingual Educators.** An additional theme that emerged about connection was the importance of bilingual personnel and programs. One educator explained how bilingual programs improve communication with parents:

"The fact that many of the staff are bilingual helps communication with them [parents]" (Educator 10).

Additionally, the availability of bilingual education was highlighted as part of enhancing connection:

"Most of the Latino families are connected to this school because we have a bi-literacy program and they want their children to become bilingual and bicultural" (Educator 5).

**Reliability and Factor Structure of PSSM**

To better understand the psychometric properties of the 11-item adapted PSSM scale, internal consistency reliability was calculated ($\alpha = .90$). To test the hypothesis that the adapted PSSM will have only one factor, belonging, an exploratory factor analysis (principal components analysis) was conducted with SPSS. Table 5 presents the correlation matrix and statistical significance of the correlations between the 11 items on the scale. Items 3 and 11 on the scale, both of which referred to people at the school being interested in or liking parents, showed high correlation with each other ($r=0.697$), but were not as strongly correlated with other items on the scale.
There was significant multicollinearity based on the determinant of the R-matrix, \(|R| = 0.000016\) and Item 9 also had multiple correlation coefficients greater than 0.85 (Field, 2014, pgs. 685-6). Therefore, item 9 was removed because the concept of respect was redundant with other items. The 10 items on the adapted PSSM were subjected to maximum likelihood analysis. The KMO value for the 10-item scale was 0.763, supporting the use of factor analysis in this sample (Field, 2014). All initial communalities were \(\geq 0.46\). Bartlett’s test of sphericity was statistically significant \(\chi^2 = 274.198, df = 45, p < .001\). K1 method of analysis suggested two factors with eigenvalues greater than 1 (Kaiser, 1960). The eigenvalue of the first factor was 5.962, accounting for 59.62% of the total variance. The eigenvalue of the second factor was 1.166, accounting for 11.66% of the total variance. Therefore, a two-factor solution was sought with an oblique rotation since the factors were assumed to correlate with one another. The two-factor model explained 71.28% of the total variance. Factor loadings less than 0.5 were suppressed since loadings of 0.55 are good (Tabachnick & Fidell, 2007). Table 6 shows the pattern matrix with the loading for each factor. The first factor was called belonging and included items 1, 2, 3, 4, 5, 7, 8, 10, and 11; the second factor only consisted of one item, item 6, and was called inclusion in activities.

**Adapted Psychological Sense of School Membership Scale**

The average score on the adapted PSSM was approximately 4, which shows high agreement with the statements, \(M=4.22, SD=0.73\).

**Interviews with Parents.**

**Effectiveness of Adapted PSSM.** To test the hypothesis that parents find the adapted PSSM scale to be a useful tool for measuring parent belonging and connection, parents were asked how good a job they think the scale does. Sixty seven percent of parents \((N=8)\) reported
that they thought the adapted PSSM scale did a good job at measuring their connection to their child’s school, while 33% \((N=4)\) were unsure.

**Important Concepts.** Twenty five percent of respondents \((N=3)\) highlighted the first statement of the scale “I feel like a real part of (name of school)” as especially relevant to them.

Another important 42% of participants \((N=5)\) highlighted the importance of respect. Two statements from the adapted PSSM related to respect: item 7 “In this school, they respect me how I am” and item 8, “I am treated with as much respect at other parents”. One parent described the importance of all parents and students being treated equally:

“Number 7 I paid attention to—treating all the parents with the same respect that they treat the other parents. Since it’s a bilingual school, I always have in the back of my head is my child doing the same thing as other kids?... She’s not excluded or treated any differently, so I feel respected in that way” (Parent 12).

Other parents affirmed the importance of respect in their definition of connection:

“For me, most relevant would be that I feel there is respect when I go” (Parent 10)

Another important concept to the parents interviewed was communication. Parents mentioned item 2, “People in this school take my opinions seriously” and item 4, “There’s at least one person in this school I can talk to if my child has a problem”. Related to item 2, several parents analyzed the school’s willingness to listen to a parent’s problems. One parent mentioned the importance of item 2, saying:

“If you have a question about your children and they listen and then tell you what’s happening” (Parent 3).

One other parent mentioned item 2, but said it wasn’t as relevant because she felt as if her voice wasn’t being heard:
“I’m not sure if it’s because [I don’t speak English], but sometimes I have felt as if they weren’t listening to me. I’m not sure how to describe it, I’m a person, maybe because I don’t have much education or vocabulary…” (Parent 10).

Additionally, on the topic of communication, several parents mentioned the importance of item 4 but recognized that this may not always feel like there is someone they can talk to. When asked to talk about statements from the scale that were most important, one parent responded:

“I guess what really got me thinking was if I have a problem, if I know who to contact or who to talk to. I thought, I really started thinking is there someone and I really don’t know who” (Parent 4).

Another parent spoke to this same theme:

“I like to always have a person available for if there’s a problem, whatever it is. We can resolve it well when I understand everything in my language... That’s been a little difficult for me” (Parent 10)

**Recommendations.** When asked if there was anything missing from the 11 questions, one parent responded that the scale lacks any questions about communication between parents and teachers. For her and another parent, staying in contact with her child’s teacher is very important:

“We’re in constant contact, at least through text and that makes me feel like I’m not missing anything important...So I feel like they have a good communication system at the moment” (Parent 12)

Additionally, parents were asked about statements that were not relevant to their definitions of belonging and connection. Not as important to parents was the idea in statement 3, “Most teachers and administrators at (name of school) are interested in me”. Twenty five percent of participants (N=3) mentioned that they didn’t feel this statement was as relevant to their idea of connection. One participant highlighted that this statement wasn’t as important:
“It’s not as important that they’re [the school] interested in me. The priority is that they are interested in my daughter and that she learns” (Parent 3).

Another parent mentioned the disconnect between item 3 and the rest of the items on the scale, saying:

_I know that number 3 stood out... because I think the school is generally more concerned with the students than the parents... Change it or add one [a statement] about [the school] caring about the students, rather than the parents_” (Parent 5).

**Educator Surveys**

**Effectiveness of Adapted PSSM.** To test the hypothesis that educators find the adapted PSSM scale to be a useful tool for measuring parent belonging and connection, educators were asked how good a job they think the scale does. Overall, the educators responded positively to the adapted PSSM scale: 6.67% said it did extremely well at measuring connect (n=1), 80% said it did very well (n=12) and 13.33% said it did moderately well (n=2). There were no patterns that emerged for which statements were especially important or which statements weren’t relevant.

**Recommendations.** One theme that emerged when educators were asked if there were any ideas missing from the statements was the need to include culture and respect for cultural differences as an item on the scale. Forty percent of educators (n=6) recommended including another item to address culture. One educator discussed how as a bilingual and bicultural school, culture is very important:

_“Culture needs to be included. Culture is part of our foundation”_ (Educator 9).

Another educator suggested a specific item:

_“Something like “my culture is valued, and I feel that diversity is appreciated”_ (Educator 4).
Another educator focused specifically on the diversity and culture of the Parent Teacher Association (PTA) and recommended adding a statement like:

“The PTA and decision-making group is diverse and represents someone who shares my values, background, ideas” (Educator 2).

Another theme that emerged in reference to both the PSSM and IOS, 40% of educators (n = 6) discussed the importance of including something about the child in these questions. About the IOS, one educator said:

“I think that the part that is missing is the child. As a parent and staff I believe that if my child does not feel welcome or comfortable, neither will I no matter what the school does to welcome me” (Educator 6).

When asked if there was anything missing from the PSSM, another educator reported:

“They reflect the parent’s opinion about feeling or not connected, but how about parents indicating how their children feel as students?” (Educator 4)

Another educator highlighted the importance of the child in a parent’s relationship with the school:

“These statements are all related to parents, but not to students. Students are 1st in parents’ mind” (Educator 7).

This same educator emphasized that it is not just communication in general with the school, but that what matters most is communication specifically about their child:

“Yes, statements don’t include anything about student achievement. Parents must be connected to all information pertaining to their kids’ academic growth” (Educator 7).

From these quotes, it is clear the important role that students play in a parent’s connection to the school.

**Inclusion of Other in the Self Scale**
The average score on the IOS was between 4 and 5, $M=4.57$, $SD=1.63$.

**Interviews with Parents**

**Interpretation.** Parents reported several different ways of interpreting the IOS. Interpretations included participation/involvement, communication, the idea of closeness, or other ideas.

**Participation/Involvement.** Sixty six percent of parents (N=8) discussed their participation or involvement at school in their interpretation of the scale. One parent thought about the frequency of how much she participates at school, saying:

“*I based my decision on the percentage of participation that I have with the school, like the meetings, with my daughter, dropping her off, talking to the teacher, these classes*”

(Parent 3)

Other parents described that someone who answered option 7 would be very involved in all of the school activities:

“A 7 would be somebody that does all of the field trip volunteering and after-school volunteering” (Parent 5). “*A 7 would mean that you’re available to volunteer, give more time to the school, help the teachers, have time for when they do field trips*” (Parent 6)

**Communication.** Other parents’ comments fit under the theme of communication. One parent answered:

“I put myself at number 7—I feel in communication, I feel like I can come at any time and tell the teacher that I’m worried about something and we’ll talk, and she’ll tell me how to help” (Parent 8).

**Closeness.** Other parents discussed the scale in terms of distance, using words like “close” and “far.” For example, one parent said:
“How close or involved you are in the school of your kids. If you’re on the margin or if you’re involved a little, a medium amount, or a lot within the school” (Parent 2).

This quote also relates back to the idea of participation or involvement within the school.

**Other Interpretations.** Although the majority of parents discussed the scale in terms of participation, communication, or closeness, there were other interpretations. One parent compared her relationship to the school with her relationship to her daughter:

“I circled 3 because school is important, but not as important as my relationship with my child. So that’s where I got a little bit confused. Cause like this one, it’s like how can school be more important than me and my child?” (Parent 4).

This participant interpreted the distance between the circles as an evaluation of the importance of her relationship with the school relative to her relationship with her child.

**Effectiveness of IOS.** To test the hypothesis that parents find the IOS to be a useful tool for measuring parent belonging and connection, parents were asked how good a job they think the scale does. A large percentage of participants did not think the scale did a good job at measuring parent belonging and connection. Only 58% \((N=7)\) thought the scale did a good job, while 17% \((N=2)\) were unsure and 25% \((N=3)\) did not think the scale did a good job.

However, some parents also recognized that the relationship can change over time and that the scale can serve as a progression. One parent talked about since her daughter is only in Kindergarten, she didn’t feel entirely connected. But that by 1st or 2nd grade, she hoped she would be at a “7” on the scale (Parent 12). One parent discussed wanting to improve, saying:

“I am trying to improve my involvement. I hope to improve my relationship with the school” (Parent 11)

This quote suggests the possibility of becoming more connected with the school over time and how the IOS can capture this change.
Confusion and Ambiguity. Twenty five percent of parents (N=3) brought up the fact that the scale was confusing to understand and interpret. One parent described difficulty understanding the scale:

“Well I had to reread the question like 3 times. I was like what are they talking about? So, it was kind of confusing and then the circles kind of threw me off I guess” (Parent 4).

Another parent said:

“Yes, for me it was a little confusing. I don’t understand it very well” (Parent 10)

Recommendations. One participant suggested that instead of the circles of the IOS, it would be better to have another scale:

“I think that instead of circles it would be better to have a scale from 1 to 7 asking ‘How connected are you with the school?’” (Parent 3).

One participant spoke to the differences in interpretation that could occur across different people:

“I think having more descriptions of more or less what each one is would be more consistent between people. I think as a general idea, it probably gets the point across. But what I consider number 3 could very easily be somebody else’s 5 without a good definition to each one” (Parent 5).

Educator Surveys.

Interpretations. Almost every educator responded in a unique way; therefore, no consistent themes that emerged. Some thought of the scale in terms of involvement in school while another educator thought in terms of “how respected, welcomed, and valued I feel every time I work with the school” (Educator 2).

When asked what it would mean if a parent selected option 1 on the scale (where there is no overlap between the circles), 73.33% of respondents (n=11) stated that option 1 would mean a lack of connection (and specifically used the word “connection”). However, their answers were
short, simple, and lacked deeper interpretation: educators tended to just repeat back that option 1 would mean a lack of connection. When asked to define option 7, no themes emerged. The varied responses included ideas of having a strong connection with the school, concepts of community, respect, being valued, building positive rapport with the school, or being very involved. Others mentioned:

“That I can come in anytime and am welcome to visit the school or classroom” (Educator 3).

Another educator reported:

“We create/develop a great rapport with parents that they are a part of our school family” (Educator 8).

A third educator interpreted option 7 in terms of listening to parent opinions:

“Feels that their voice, concerns, and opinions are not only heard, but also acted upon” (Educator 2).

**Effectiveness of IOS.** When educators were asked how good a job they think the scale does at measuring belonging and connection, 6.67% said it did extremely well \((n=1)\), 40% said it did very well \((n=6)\), 20% said it did moderately well \((n=3)\), and 33.33% said it did slightly well \((n=5)\).

**Confusion and Ambiguity.** Confusion and ambiguity were clear themes that emerged from the educators’ responses about the IOS scale. Sixty six percent of educators discussed confusion with the scale or how it could be interpreted in various ways \((n=10)\). For example, one educator said:

“The pictures were confusing and really did not help me to understand the message. I’d think that it will be better to use words rather than pictures” (Educator 5).

Another reported:
“If parents are to interpret these questions, they would probably miss the point”

(Educator 7).

Similarly, an educator discussed how multiple possible interpretations of the scale could mean that one couldn’t be sure of what any response means:

“The images could be interpreted in many different ways, so if I were to respond, I would wonder what the person reading it would think of my response. I couldn’t be sure they interpreted it the same way” (Educator 12)

**Recommendations.** When asked to provide feedback on the scale, respondents suggested ways to resolve the ambiguity of the question. One educator recommended clarifying what each option means, saying:

*It would be helpful to have a rubric explaining the options”* (Educator 1).

Other educators recognized the inherent differences in how different parents could approach the question and recommended allowing parents to explain their answer to give more specific responses:

“Maybe add an open question asking why they select their answer. This will help provide more feedback in specific feelings” (Educator 4).

Educators did not think that the scale was a clear way to measure connection and recommended allowing parents to explain their answers.

**Lived Experiences of Latino/a Belonging and Connection**

Beyond the information provided about the IOS and adapted PSSM, other themes emerged from parent interviews and educator surveys about lived experiences of Latino/a parent belonging and connection. Two other themes emerged from the parent interviews that were both barriers to connection with the school: *having enough time* to be involved and *speaking English.* Across all of the questions of the educator survey, two additional themes emerged: *the*
differences between Latino/a and Anglo parents at School 2, and barriers that may prevent Latino/a parents from being more involved. These themes capture the lived experiences of Latino/a parents, and highlighted limitations of the IOS and adapted PSSM.

**Interviews with Parents**

**Enough Time.** Fifty percent of participants (N=6) brought up time at some point in their interviews, either saying that they were grateful to have enough time to be involved at school or mentioning that the amount of time they work is a barrier. One working parent said:

“I’m working and can’t participate. I have to keep working. We have many responsibilities and you see things that you have to do. It’s difficult to find time for everything” (Parent 9)

Another parent commented also on not having the time to participate:

“We don’t have the time to be involved in the school...You’re not as involved as you should be because of lack of time” (Parent 9)

One mother commented on how having three children meant that she did not always have the time to participate in everything:

“It takes a lot of time and since I have 3 kids, I sometimes feel a little busy to have extra time to have more of a relationship with the school. It would be important since the teachers always need support from the parents, but sometimes we don’t have the time” (Parent 6)

**Language Barrier.** Additionally, two parents discussed a language barrier that sometimes prevented them from being more involved in the school. Even though School 2 is a bilingual school, language was mentioned as a barrier, especially in schools that are not bilingual. One parent discussed how not speaking English can be uncomfortable:
“Because I don’t know how to speak English, sometimes I feel uncomfortable because I sometimes have to find a translator...Sometimes the language scares me a little bit. It’s happened before that there hasn’t been an interpreter and I’ve been left understanding a few words, but not everything and I don’t feel comfortable. It’s difficult with the challenges of the language” (Parent 10).

Another parent said:

“Sometimes it’s difficult with the language. I think sometimes that the language is a barrier. I understand a little bit, but not 100%” (Parent 11).

**Educator Surveys**

*Differences between Latino/a and Anglo parents.* First, 50% of educators from School 2 (n = 5) discussed differences in Latino/a and Anglo parents at School 2. One educator discussed how Latino/a parents tend to be more involved at home compared to Anglo parents:

“Anglo parents participate in PTA. Latino Parents are involved in their kids’ education in several levels—from home and a few of the Hispanic parents are involved directly in the school” (Educator 3)

This same educator also talked about how Anglo parents tend to be more active in the classroom:

“ Latino parents don’t participate as much as other culture (Anglo) parents in the classroom for different reasons. E.g. Parties in classrooms are integrated and they don’t feel comfortable. Latino parents are usually in a corner” (Educator 3)

One educator described the ways in which Latino/a parents tend to participate:

“*Our Latino parents are involved in their children’s education by attending parent/teacher conferences, [Latino/a parent] meetings, and school celebrations*”

(Educator 10).
Official Parent Groups. The educators specifically mentioned the differences between their PTA a traditional school board dominated by Anglo parents, and another program, designed specifically to engage with Latino/a parents. One educator discussed the formation of this group for Latino/a parents, saying:

“Sometimes our non-Latino families overtake the Latino families at our school causing them to feel uncomfortable which is why we created our [group] to specifically target the needs of our Latino families” (Educator 2)

Many educators recognized the hard work that School 2 is putting in to engage with Latino/a parents. Sample statements from educators include:

“Our school is working very hard to ensure that our community outreach and parental involvement is a strength” (Educator 1).

“Our [Latino/a parent] community is working very hard to open dialogue among teachers and our Latino community very successfully” (Educator 10).

“Our staff is very good at keeping great open communication with parents in different ways—written, phone call, conferences, school social events and Latino/a parent group specifically to increase parental involvement” (Educator 9).

Despite these efforts, however, educators acknowledge ongoing gaps in participation between the two groups of parents:

“There are communities where parents have been invited and asked to share their views about the school that has really helped with parent connection at the school and with staff. There is still a huge gap with the Anglo community” (Educator 6)

Another educator recognized this difference:
“We have a highly engaged Latino parent group, but it is a result of separating them by language. Parents that speak English have a different discourse style that prevents Latinos from participating” (Educator 7)

To bridge this gap, the educators suggested merging these two programs:

“Bridge our [Latino/a parent] program with our existing PTA program” (Educator 2)

Additionally, one educator recommended:

“Change the current guidelines, function, process and board of the current PTA”

(Educator 2).

Other educators discussed creating more events and gatherings for Latino/a parents that are culturally relevant and working to be more inclusive.

**Barriers.** Some educators discussed additional barriers to parental belonging and connection, including work, transportation, language problems, and lack of knowledge of the U.S. educational system. As noted above, parents also identified barriers of having enough time (sometimes due to work) and language that prevent connection. One educator said:

“Parents from other cultures feel intimidated by the system. Many of them do not understand English, are illiterate, of low economic status, of immigration status. They need to learn more about the system, so they can support their students” (Educator 5)

Additionally, similar to a theme that emerged with parents about not having enough time to be involved, one educator highlighted how differences in working schedules can affect connection:

“In communities that parents might not work a 9-5 job, or are stay at home parents, they might be able to be more physically present during the day at their child’s school, coming across as more connected when parents that are not as flexible because of different circumstances might be doing the most that they can with what they have” (Educator 15).
Another educator mentioned how the need for background checks can deter parents from volunteering at school.

“But the parents have to have background checks to volunteer in the classroom or go on field trips and many are put off by the time and expense of the checks or they may have legitimate fears about background checks” (Educator 11)

Some educators recommended including a space where parents could explain their connection or describe any barriers that exist for them. One educator recommended including:

“Maybe a statement indicating that parents feel there is something missing in order for them to get more connected” (Educator 4).

Educators recommend asking about the types of barriers that Latino/a parents may face and what can be done to overcome them. An educator recommended asking:

“What kind of support they need to feel connected to their student’s school?” (Educator 5).

Specifically, educators expressed interest in knowing parents’ background with US education system:

“I think that we also would like to know how much parents know about the USA education system, how does it work, assessments, special education, volunteering, etc.” (Educator 5).

One educator recommended ESL classes for parents, and another educator suggested education and information as a way to improve Latino/a parent engagement:

“It might be helpful if more explicit information was given to parents in regard to the exact areas where help volunteering is needed. (Educator 1).
The current project aimed to inform the measurement of Latino/a parent belonging and connection to schools in a reliable, valid, and culturally relevant way. Our preliminary literature review indicated that the PSSM (Goodenow, 1993) was the most extensively used scale to measure student belonging to school, with established reliability and validity in Latino/a populations. The IOS (Aron, Aron, & Smollan, 1992) was also identified as a visual tool that held promise in measuring parent connection to their child’s school.

Our qualitative analyses highlighted multiple unique and overlapping themes in both parents and educator definitions of belonging and connection. While belonging and connection are important and related constructs, parents tend to view belonging as a deeper way of helping their children receive the best education possible. In contrast, when defining connection, parents tended to mention communication methods and the goal of these communications: to stay up-to-date and involved in their children’s education. These results are consistent with Osterman’s (2000) definitions of belonging. Osterman connected belonging to relatedness, which is “one of three basic psychological needs essential to human growth and developments” (Osterman, 2000, pg. 325). Relatedness, or feeling securely connected to others, is the same idea as belonging or community (Osterman, 2000). Based on these definitions, belonging refers to a basic and important human need. Parent definitions of belongingness to school were deeper and more fundamental than their definitions of connection. In contrast, the results of educator surveys did not differentiate as much between belonging and connection. With both belonging and connection, the themes of having a voice, especially in decision-making, participation in school events and volunteering, and communication emerged.

Our results indicate that Latino/a parents and educators do not find the IOS Scale (Aron, Aron, & Smollan, 2002) to be a useful tool to measure parent belonging and connection. One-quarter of parent participants expressed that they found the scale to be confusing and it is
possible that others found it confusing but were reluctant to express this because they did not want to offend the researchers. Many educators found it confusing and ambiguous as well. Furthermore, participants interpreted the scale in a variety of ways, emphasizing its ambiguous nature. Many discussed participating in activities or being involved with the school as the basis for how they arrived at their answer. The large variety in possible interpretations of the scale shows that it may not be a precise measure of connection. If parents and educators are thinking about different concepts while responding, there is little consistency across responses. Participants recommended clarifying what each response means, allowing parents to explain their responses more or replacing the circles with a 1-7 scale asking participants: “How connected are you to the school?” Based on these results, we do not recommend using the IOS to measure parent belonging to school.

Our results indicate that Latino/a parents and educators perceived the adapted PSSM scale to be a useful tool to capture parent experiences of belonging and connection to school. The results show that the majority of parents and educators thought the scale did a good job at measuring their connection to the school and that it included relevant questions about their connection. Some parents proposed helpful changes to the PSSM scale, including removing item 3 (“Most teachers and administrators at (name of school) are interested in me”). Parents reported that they did not find this item as relevant to their experiences of belonging or connection, since they cared more about the relationship between educators and their children. Another parent suggested adding an item about communication between parents and teachers. Since communication emerged as an important theme in defining connection, it may be important to expand the PSSM to capture this experience. The majority of educators recommended including a statement about culture and specifically about whether the school values and appreciates a parent’s culture. Additionally, another important conclusion from educator surveys was the need
to include the child in measuring parent connection. The relationship between the school and the parent would not exist without the child and therefore, it is important to include the parent-child relationship in measurement. Additionally, having a strong relationship between child and parent can help improve engagement in school. Research shows that children who feel relatedness to their parents and teachers from an early age engage more at school over time than children with lower levels of relatedness to parents and teachers (Heatly & Votruba-Drzal, 2017). Neither of these measurement tools take the child into consideration at all, which may be an important part of the equation.

It was hypothesized that the adapted PSSM scale would have one factor: belonging. The results of an exploratory factor analysis showed a two-factor solution with the majority of items on the scale loading onto the one factor called belonging. The second factor, inclusion in activities, only contained one item. These results are consistent with the results from parent interviews that suggested that parents value the quality of education their child receives more than school activities that they are included in as a parent. With the exception of this one item, which may not be as relevant for parent belonging as it is for student belonging, these results support some research that suggests there is only one factor within the PSSM scale (Goodenow, 1993; Abubakar et. al., 2015; Gaete et. al., 2016). Goodenow (1993) originally proposed her 18-item scale as one factor: belonging. When adapted for parents, 9 out of the 11 items fit well.

Our qualitative results provide additional information on the lived experiences of Latino/a parent belonging and connection that goes beyond the information from the IOS and adapted PSSM. For example, educators discussed the differences in involvement between Latino/a and Anglo parents. Specifically, they highlighted that fewer Latino/a parents are involved in the school and in the classroom compared to Anglo parents. These results support the research that Latino/a families tend toward informal ways of support (Zarate, 2007; LeFevre &
MEASURING LATINO/A PARENT CONNECTION TO SCHOOLS

Shaw, 2011), such as helping with homework or providing emotional support. These experiences may not be well assessed by the existing measurement tools.

Additionally, our results reveal that there are many barriers that prevent Latino/a parents from connecting to school that are not well addressed by existing measurement tools. It is important to keep in mind that many parents may like to be more connected to the school but cannot because of these barriers. When measuring connection, this must be taken into consideration. Parents and educators discussed time, language difficulties, knowledge of the US school system, and other issues that Latino/a parents are more likely to face. More than half of parents mentioned the importance of having enough time to form a connection with the school. This is not a barrier unique to Latino/a parents, since many working families of all ethnicities struggle with the same issue. Research shows that many teachers hold negative assumptions and low-income and working-class families, immigrant families, and families of color (Posey-Maddox & Haley-Lock, 2016) and can overlook the “complexity of parents’ lives, demands, schedules, goals, values, and their relationships with their children” (Cooper, 2009, pg. 381). However, since parent connection to school is a strong predictor of a child’s academic success (Barnard, 2004; Jeynes, 2003), it is important for schools to work with parents in any way that is possible. Even if parents are not able to volunteer in the classroom or participate in other formal ways, schools can work to engage and communicate with these parents at other times or in other ways. Quezada (2003) recommends asking parents what times work best for them and offering flexible schedules for meetings and after-school programs. Additionally, they discuss conducting home visits to get to know the culture of families and encourage participation and offering transportation to school and child care (Quezada, 2003). All of these strategies can help busy, working parents. However, schools must first be aware that their parents are facing these competing demands. Measurement tools of parent belonging or connection and parent
involvement tend to overlook the fact that many working parents simply may not have the time to participate as much as they would like.

Another key barrier to connection was language among Latino/a parents who didn’t speak English. Parents discussed how not understanding the communications from the school or not being able to fully express their voice made it difficult to feel a connection to the school. These results were consistent with reports of the educators as well. These findings support previous research that lack of bilingual resources creates a linguistic barrier between parents and the school (De Gaetano, 2007; Dreby, 2015; Perreira, Chapman & Stein, 2006). Other research indicates that the inability to understand English can diminish parents’ feelings of self-worth and increase their feelings of helplessness, making them believe they can’t help their children with homework, much less help the teacher or the classroom (Quezada, 2003). Therefore, to measure parent connection and to help parents be more engaged, measurement tools must be easily accessible in both English and Spanish and Spanish versions must be available with no additional work or cost. Additionally, measurement tools should ask about the extent to which language barriers prohibit parent connection. Once aware that language barriers are an issue, there are many successful programs to overcome it. For example, the Family Literary Workshop implemented in Colorado Springs, CO brought Latino/a families to the library to improve students’ reading abilities and improve parent support of literary and English language development (Quezada, 2003). Over 2 years, academic performance of students enrolled in the Family Literary Workshop improved up to 20% (Quezada, 2003). De Gaetano and colleagues (2007) implemented a 3-year culturally responsive and bilingual program to engage Latino/a parents. Through monthly learning workshops with parents, teachers, and staff that specifically discussed culture, parents became partners with the teachers, both at school, and at home (De Gaetano, 2007). Henderson and colleagues (2007) discuss the importance of making a
commitment to Hispanic culture by hiring bilingual staff, making an effort to learn Spanish, and “inviting families to share their cultural values, stories and traditions” (pg. 116). Such programs show the possibility of overcoming the language barrier with special focus on engaging Latino/a parents through language and culture. Measurement tools to capture Latino/a parent experiences of belonging and connection should include not only current levels of connection, but also the extent to which these barriers prevent belonging and connection.

**Limitations**

There was a small sample size for parent interviews \((n = 12)\) and educator surveys \((n=15)\) and neither the schools nor parents within schools were randomly selected. These limitations raise concerns of generalizability to the larger population of Latino/a parents. Also, variability in interview settings may have influenced results. The scheduling of some interviews allowed more time for rapport building than for others. Also, some of the parents brought their children with them and therefore faced additional time pressure and conflicting demands for their attention. It is also possible that because some couples completed the surveys next to each other and were interviewed in the same room, their responses may have been influenced by the presence of one another. Additionally, some participants did not seem to understand that the questions about the PSSM and IOS were focused on their analysis of if they thought the questions did a good job or not. Many participants answered the questions based on their personal experience, saying things like: “Yes, it seems to me like the school worries a lot about the parents because it has these classes” (P1). Despite further probing, some of these participants did not respond to the validity of the questions and focused on their personal experience about how true each of the statements was at this school. Finally, it is important to consider the power dynamic between the participants and the interviewers that may have prevented participants from being totally honest. All participants were told that the researchers were not the ones who designed the questionnaires...
and were only interested in how they interpreted the measures. Participants were also told that there were no right answers. Despite these assurances, participants might have been unwilling to give negative feedback for fear of offending the researcher or appearing rude. Research has shown that in the school setting, Latino/as have high respect for educators and view them as professionals capable of doing their job themselves (Quezada, 2003). Challenging a teacher or other educator can be seen as disrespectful and counterproductive (Levre & Shaw, 2011). Latino/a parents may have been reluctant to express criticisms for fear of coming across as disrespectful.

**Implications**

Parent experiences of belonging and connection to school have profound implications on the academic and engagement outcomes for their children. Parental involvement is associated with higher academic achievement among their children (Fan & Chen, 2001) and parental perceptions of school are associated with child and family participation and engagement in school (Schuler et al., 2014). Therefore, it is important to have reliable, valid, and culturally relevant measurement tools to assess Latino/a parent belonging and connection to school. We tested both the IOS (Aron, Aron, & Smollan, 1992) and adapted PSSM (Goodenow, 1993) and our results provide one such assessment tool that can be used: the adapted PSSM (Goodenow, 1993). Future research could measure Latino/a parents perceived discrimination at school and compare this with their experiences of belonging and connection. This would be an ideal way to measure divergent validity. Future research is needed to refine the adapted PSSM scale and potentially add items about culture, the child, and communication between parents and teachers. A confirmatory factor analysis would contribute to the large body of research on the subscale structure of the PSSM.
### Tables and Figures

**Table 1**

*Measures of Belonging and Connection to School based on the results from the literature review. Rows highlighted in blue were measures selected to be used.*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Authors</th>
<th>Construct</th>
<th>Description</th>
<th># Items</th>
<th>Study on Validity?</th>
<th>Used with Latinos?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Sense of School Membership (PSSM)</td>
<td>Goodenow</td>
<td>Student Belonging</td>
<td>&quot;the extent to which students feel personally accepted, respected, included, and supported&quot; at school</td>
<td>18</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Belonging and Connectedness</td>
<td>Midgley et al.</td>
<td>Student Belonging</td>
<td>Simple measure of belonging and connectedness</td>
<td>5</td>
<td>Unclear</td>
<td>Unclear</td>
</tr>
<tr>
<td>School Belonging</td>
<td>Anderman</td>
<td>Student Belonging</td>
<td>Simple scale of perceived school belonging</td>
<td>5</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Parent/Guardian Empowerment at School Scale</td>
<td>Ball</td>
<td>Parent Empowerment</td>
<td>Includes parent knowledge of school system and parent roles within it and parent perceived competence</td>
<td>15</td>
<td>No (too recent)</td>
<td>No</td>
</tr>
<tr>
<td>Family Empowerment Scale</td>
<td>Koren, DeChillo, &amp; Friesen</td>
<td>Parent Empowerment</td>
<td>Originally developed for families whose children have emotional disabilities. Measures family, service system, and community/political empowerment</td>
<td>34</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Parent Empowerment</td>
<td>Kim &amp; Bryan</td>
<td>Parent Empowerment</td>
<td>Personal parent empowerment and community empowerment (including community belonging, community participation, and parent contact with school counselor)</td>
<td>18</td>
<td>No (too recent)</td>
<td>Yes</td>
</tr>
<tr>
<td>Parent-Teacher Involvement Questionnaire</td>
<td>Fast Track</td>
<td>Parent Involvement</td>
<td>Measures parent-teacher relationships, parent involvement, endorsement of child's school and frequency of contact with teacher</td>
<td>26</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Parent Involvement Survey</td>
<td>Griffith</td>
<td>Parent Involvement</td>
<td>8 areas: informed parents, empowered parents, involved parents, school climate, school safety, academic instruction, student recognition and overall satisfaction</td>
<td>41</td>
<td>Yes</td>
<td>Unclear</td>
</tr>
<tr>
<td>Perceived Control at School</td>
<td>Adelman et al.</td>
<td>Student Control</td>
<td>Includes personal power, self-determination, interference with autonomy, powerlessness</td>
<td>16</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Inclusion of Other in Self</td>
<td>Aron, Aron &amp; Smollan</td>
<td>Connection</td>
<td>Visual measure originally designed to show closeness between 2 people</td>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table 2. Results from a literature review on Factor Analyses of the PSSM.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Date</th>
<th>Language</th>
<th>Country</th>
<th># Factors</th>
<th>What Factors</th>
<th># Items</th>
<th>Type of Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodenow</td>
<td>1993</td>
<td>English</td>
<td>US</td>
<td>1</td>
<td>Belonging</td>
<td>18</td>
<td>None</td>
</tr>
<tr>
<td>Hagberg</td>
<td>1994</td>
<td>English</td>
<td>US</td>
<td>3</td>
<td>Belonging, Rejection, Acceptance</td>
<td>11</td>
<td>EFA</td>
</tr>
<tr>
<td>Cheung and Hui</td>
<td>2003</td>
<td>Chinese</td>
<td>Hong Kong</td>
<td>2</td>
<td>School belonging, Feelings of rejection</td>
<td>18</td>
<td>Principal components analysis</td>
</tr>
<tr>
<td>O’Farrell &amp; Morrison</td>
<td>2003</td>
<td>English</td>
<td>US</td>
<td>1</td>
<td>Student feelings of belonging and acceptance</td>
<td>5</td>
<td>EFA</td>
</tr>
<tr>
<td>Cheung</td>
<td>2004</td>
<td>Chinese</td>
<td>Shanghai, Hong Kong</td>
<td>2</td>
<td>School belonging, Feelings of rejection</td>
<td>18</td>
<td>Principal components analysis followed by varimax</td>
</tr>
<tr>
<td>Ye &amp; Wallace</td>
<td>2004</td>
<td>English</td>
<td>US</td>
<td>3</td>
<td>Identification and participation in school, perception of fitting in among peers, and generalized connection to teachers</td>
<td>15</td>
<td>Both EFA and CFA</td>
</tr>
<tr>
<td>You et. al.</td>
<td>2011</td>
<td>English</td>
<td>Australia</td>
<td>3</td>
<td>Caring relationship, acceptance, rejection</td>
<td>12</td>
<td>Both EFA and CFA</td>
</tr>
<tr>
<td>Togari et. al.</td>
<td>2011</td>
<td>Japanese</td>
<td>Japan</td>
<td>3</td>
<td>Acceptance by teachers, acceptance by students, belonging</td>
<td>13</td>
<td>Multigroup confirmatory factor analyses</td>
</tr>
<tr>
<td>Abubakar et. al.</td>
<td>2015</td>
<td>Various languages</td>
<td>Netherlands, Kenya, Indonesia, Spain</td>
<td>1</td>
<td>Belonging with different subscales based on the target</td>
<td>18</td>
<td>Reliability analysis; Multigroup confirmatory factor analyses</td>
</tr>
<tr>
<td>Gaete et. al.</td>
<td>2016</td>
<td>Spanish</td>
<td>Chile</td>
<td>1</td>
<td>Belonging</td>
<td>13</td>
<td>Both EFA and CFA</td>
</tr>
</tbody>
</table>
## The 11 items on the Adapted PSSM

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel like a real part of (name of school).</td>
</tr>
<tr>
<td>2</td>
<td>People in this school take my opinions seriously.</td>
</tr>
<tr>
<td>3</td>
<td>Most teachers and administrators at (name of school) are interested in me.</td>
</tr>
<tr>
<td>4</td>
<td>There’s at least one person in this school I can talk to if my child has a problem.</td>
</tr>
<tr>
<td>5</td>
<td>People at this school are friendly to me.</td>
</tr>
<tr>
<td>6</td>
<td>I am included in lots of activities at (name of school).</td>
</tr>
<tr>
<td>7</td>
<td>I am treated with as much respect as other parents.</td>
</tr>
<tr>
<td>8</td>
<td>I can really be myself at this school.</td>
</tr>
<tr>
<td>9</td>
<td>The teachers and administrators here respect me.</td>
</tr>
<tr>
<td>10</td>
<td>I feel proud of belonging to (name of school).</td>
</tr>
<tr>
<td>11</td>
<td>People at this school like me the way I am.</td>
</tr>
</tbody>
</table>
### Table 4
Demographics of participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall Sample (n=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender, no. (%)</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8 (26.67)</td>
</tr>
<tr>
<td>Female</td>
<td>22 (73.33)</td>
</tr>
<tr>
<td><strong>Age, mean (SD)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>35.68 (4.26)</td>
</tr>
<tr>
<td><strong>Number of Children, mean (SD)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.67 (1.12)</td>
</tr>
<tr>
<td><strong>Marital status, no. (%)</strong></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>21 (70.00)</td>
</tr>
<tr>
<td>Relationship, but not married</td>
<td>8 (26.67)</td>
</tr>
<tr>
<td>Divorced/Separated</td>
<td>1 (3.33)</td>
</tr>
<tr>
<td><strong>Education Level, no. (%)</strong></td>
<td></td>
</tr>
<tr>
<td>Between 1\textsuperscript{st}-5\textsuperscript{th} grade</td>
<td>2 (6.67)</td>
</tr>
<tr>
<td>Between 6\textsuperscript{th} and 8\textsuperscript{th} grade</td>
<td>7 (23.33)</td>
</tr>
<tr>
<td>Between 9\textsuperscript{th} and 12\textsuperscript{th} grade</td>
<td>5 (16.67)</td>
</tr>
<tr>
<td>GED/High School Diploma</td>
<td>3 (10.00)</td>
</tr>
<tr>
<td>Some College</td>
<td>9 (30.00)</td>
</tr>
<tr>
<td>College</td>
<td>3 (10.00)</td>
</tr>
<tr>
<td>Graduate School</td>
<td>1 (3.33)</td>
</tr>
</tbody>
</table>
Table 4 Continued

*Demographics of Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall Sample (n=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Yearly household income level, no. (%)</strong></td>
<td></td>
</tr>
<tr>
<td>&lt;$30,000</td>
<td>18 (60.00)</td>
</tr>
<tr>
<td>$30,000-$50,000</td>
<td>5 (16.67)</td>
</tr>
<tr>
<td>$50,000-$70,000</td>
<td>5 (16.67)</td>
</tr>
<tr>
<td>$70,000-$90,000</td>
<td>1 (3.33)</td>
</tr>
<tr>
<td>&gt;$100,000</td>
<td>1 (3.33)</td>
</tr>
<tr>
<td><strong>Working Status, no. (%)</strong></td>
<td></td>
</tr>
<tr>
<td>Work Full Time</td>
<td>14 (46.67)</td>
</tr>
<tr>
<td>Work Part Time</td>
<td>5 (16.67)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>1 (3.33)</td>
</tr>
<tr>
<td>Self-employed</td>
<td>3 (10.00)</td>
</tr>
<tr>
<td>Stay-at-home parent</td>
<td>7 (23.33)</td>
</tr>
<tr>
<td><strong>Measures of Connection, mean (SD)</strong></td>
<td></td>
</tr>
<tr>
<td>Inclusion of Other in the Self Scale</td>
<td>4.57 (1.63)</td>
</tr>
<tr>
<td>Adapted Psychological Sense of School Membership Scale</td>
<td>4.22 (0.73)</td>
</tr>
</tbody>
</table>
Table 5
*Correlation Matrix and Statistical Significance of Items on the Adapted PSSM*

<table>
<thead>
<tr>
<th>Item 1</th>
<th>Item 2</th>
<th>Item 3</th>
<th>Item 4</th>
<th>Item 5</th>
<th>Item 6</th>
<th>Item 7</th>
<th>Item 8</th>
<th>Item 9</th>
<th>Item 10</th>
<th>Item 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>.504*</td>
<td>.444*</td>
<td>.395</td>
<td>.230</td>
<td>.266</td>
<td>.207</td>
<td>.327</td>
<td>.295</td>
<td>.596**</td>
<td>.138</td>
</tr>
<tr>
<td>.504*</td>
<td>1.0</td>
<td>.504*</td>
<td>.484*</td>
<td>.519*</td>
<td>.256</td>
<td>.521*</td>
<td>.575**</td>
<td>.582**</td>
<td>.486*</td>
<td>.319</td>
</tr>
<tr>
<td>.444*</td>
<td>.504*</td>
<td>1.0</td>
<td>.378</td>
<td>.248</td>
<td>.028</td>
<td>.289</td>
<td>.433*</td>
<td>.426*</td>
<td>.383</td>
<td>.644**</td>
</tr>
<tr>
<td>.395</td>
<td>.484*</td>
<td>.378</td>
<td>1.0</td>
<td>.488*</td>
<td>.178</td>
<td>.593**</td>
<td>.572**</td>
<td>.606**</td>
<td>.789**</td>
<td>.395</td>
</tr>
<tr>
<td>.230</td>
<td>.519*</td>
<td>.248</td>
<td>.488*</td>
<td>1.0</td>
<td>.300</td>
<td>.918**</td>
<td>.823**</td>
<td>.872**</td>
<td>.629**</td>
<td>.290</td>
</tr>
<tr>
<td>.266</td>
<td>.256</td>
<td>.028</td>
<td>.178</td>
<td>.300</td>
<td>1.0</td>
<td>.258</td>
<td>-.010</td>
<td>.085</td>
<td>.243</td>
<td>.012</td>
</tr>
<tr>
<td>.207</td>
<td>.521*</td>
<td>.289</td>
<td>.593**</td>
<td>.918**</td>
<td>.258</td>
<td>1.0</td>
<td>.910**</td>
<td>.957**</td>
<td>.714**</td>
<td>.416*</td>
</tr>
<tr>
<td>.327</td>
<td>.575**</td>
<td>.433*</td>
<td>.572**</td>
<td>.823**</td>
<td>-.010</td>
<td>.910**</td>
<td>1.0</td>
<td>.978**</td>
<td>.699**</td>
<td>.461*</td>
</tr>
<tr>
<td>.295</td>
<td>.582**</td>
<td>.426*</td>
<td>.606**</td>
<td>.872**</td>
<td>.085</td>
<td>.957**</td>
<td>.978**</td>
<td>1.0</td>
<td>.747**</td>
<td>.473*</td>
</tr>
<tr>
<td>.596**</td>
<td>.486*</td>
<td>.383</td>
<td>.789**</td>
<td>.629**</td>
<td>.243</td>
<td>.714**</td>
<td>.699**</td>
<td>.747**</td>
<td>1.0</td>
<td>.423*</td>
</tr>
<tr>
<td>.138</td>
<td>.319</td>
<td>.644**</td>
<td>.395</td>
<td>.290</td>
<td>.012</td>
<td>.416*</td>
<td>.461</td>
<td>.473*</td>
<td>.423*</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*p < .01
**p < .001
Table 6
*Factor Loadings on the Adapted PSSM*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1 (Belonging)</th>
<th>Factor 2 (Inclusion in Activities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 8 (I can be myself)</td>
<td>.941</td>
<td></td>
</tr>
<tr>
<td>Item 7 (As much respect as other parents)</td>
<td>.908</td>
<td></td>
</tr>
<tr>
<td>Item 10 (Proud of belonging)</td>
<td>.888</td>
<td></td>
</tr>
<tr>
<td>Item 4 (Person to talk to)</td>
<td>.855</td>
<td></td>
</tr>
<tr>
<td>Item 2 (Take my opinions seriously)</td>
<td>.809</td>
<td></td>
</tr>
<tr>
<td>Item 5 (People are friendly)</td>
<td>.791</td>
<td></td>
</tr>
<tr>
<td>Item 3 (Teachers and admin are interested in me)</td>
<td>.754</td>
<td></td>
</tr>
<tr>
<td>Item 11 (People like me the way I am)</td>
<td>.718</td>
<td></td>
</tr>
<tr>
<td>Item 1 (I feel like a real part)</td>
<td>.556</td>
<td></td>
</tr>
<tr>
<td>Item 6 (Included in lots of activities)</td>
<td>.864</td>
<td></td>
</tr>
</tbody>
</table>
### Table 7

**Themes from Parent Interviews with Example Quotes**

<table>
<thead>
<tr>
<th>Question</th>
<th>Themes</th>
<th>Example Quotes</th>
</tr>
</thead>
</table>
| **Definition of Belonging** | It’s important | - “It’s very important” (P6)  
- “It’s very important for me to belong to the school. And I feel like we’re an important part of the education of the kids” (P11) |
| | Engaging and being involved in school events/activities | - “Feeling a sense of belonging to the school means participating in the events that the school puts on” (P3)  
- “To be involved in how everything is going with the kids at school… I’m not very involved here at school” (P9) |
| | Success in School | - “If I feel a sense of belonging to the school, I will be able to help my son” (P1)  
- It will greatly help my kids if I feel a sense of belonging to the school, my kids will feel more comfortable with the school and the teachers and I feel like it will help with their future” (P10) |
| **Definition of Connection** | Same Idea as Belonging | - “Here you’re repeating the same thing to me. It’s the same” (P3)  
- “I think it [connection] falls back into the same category as belonging” (P12) |
| | It’s very important | - “It seems to me that it’s good because one plays an important role in the education of their kids” (P1) |
| | Communication methods with staff or teachers (talking, listening, texts, emails) | - “If you have a question or anything you can talk with one of them” (P7)  
- “They know how to listen to the needs of the parents” (P6)  
- “Getting communications, so when we get emails from the principal or text messages I feel that they care more about us and I feel more connected when I get the voicemails or the text messages of the emails.” (P4) |
| | Staying informed and up-to-date with the school process | - “To stay up to date with all of the activities that the school has for our children and for the education of the children” (P11)  
- “Ask how everything related to my daughter is going and if she’s doing well in school” (P3) |
| **PSSM Scale** | Statement 3: “The majority of the teachers and staff at the school are interested in me” | - “It’s not as important that they’re interested in me. The priority is that they are interested in my daughter and that she learns. That statement is important, but not that important.” (P3)  
- “I know that number 3 stood out when I did it cause I think the school is generally more concerned with the students that the parents…Change it or add one about caring about the students, rather than the parents” (P5) |
| | Respect (Statements 7 and 8) | - For me, most relevant would be that I feel there is respect when I go” (P10)  
- “Number 7 I paid attention to—treating all the parents with the same respect that they treat the other parents. Since it’s a bilingual school, I always have in the back of my head is my kid doing the same thing as other kids?… She’s not excluded or treated any differently, so I feel respected in that way” (P12) |
### Themes from Parent Interviews with Example Quotes

<table>
<thead>
<tr>
<th>PSSM Scale</th>
<th>Communication (Statements 2 and 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• “A more important statement would be: ‘People in this school take my opinion seriously’. If you have a question in relation to your child and they listen and then they tell you what’s happening’” (P3)</td>
</tr>
<tr>
<td></td>
<td>• “I think that yes, the scale lacks the communication between parents and teachers, which is very important” (P8)</td>
</tr>
<tr>
<td></td>
<td>• “I like to always have a person available for if there’s a problem, whatever it is. We can resolve it well if I understand everything” (P10)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IOS Scale (The Circles)</th>
<th>Participation and Involvement (How they interpreted the question)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• “I based my decision on the percentage of participation that I have with the school, like the meetings, with my daughter, dropping her off, talking to the teacher, these classes” (P3)</td>
</tr>
<tr>
<td></td>
<td>• “I guess like just how involved I am with the school mostly… A 7 would be somebody that does all of the field trip volunteering and after-school volunteering” (P5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication (How they interpreted the question)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• “I put myself at number 7—I feel in communication, I feel like I can come at any time and tell the teacher that I’m worried about something and we’ll talk, and she’ll tell me how to help” (P8)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Idea of Closeness/Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• “I looked at how close or far I am” (P8)</td>
</tr>
<tr>
<td>• How close or involved you are in the school of your kids. If you’re on the margin or if you’re involved a little, a medium amount, or a lot within the school” (P2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Progression</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I am trying to improve my involvement. I hope to improve my relationship with the school” (P11)</td>
</tr>
<tr>
<td>• “Since she’s in Kinder, I went for the 5. Hopefully by even 1st or 2nd grade I’ll be at the 7” (P12)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Confusing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The circles are a little confusing, but once you understand, if someone explains to you what they mean…” (P3)</td>
</tr>
<tr>
<td>• “It was kind of confusing and then the circles kind of threw me off I guess.” (P4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I think that instead of circles it would be better to have a scale from 1 to 7 asking; “how connected are you with the school?” (P3)</td>
</tr>
<tr>
<td>• “I think having more descriptions of more or less what each one is would be more consistent between people… But what I consider number 3 could very easily be somebody else’s 5 without a good definition” (P5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Barriers to Connection</th>
<th>Importance of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• I’m working and can’t participate. I have to keep working… It’s difficult to find time for everything” (P9)</td>
</tr>
<tr>
<td></td>
<td>• It takes a lot of time and since I have 3 kids, I sometimes feel a little busy to have extra time to have more a relationship with the school” (P6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>• “Because I don’t know how to speak English, sometimes I feel uncomfortable because I sometimes have to find a translator… Sometimes the language scares me a little bit… It’s difficult with the challenges of the language” (P10)</td>
</tr>
</tbody>
</table>
Table 8  
*Key Themes from Educator Surveys with Example Quotes*

<table>
<thead>
<tr>
<th>Question</th>
<th>Themes</th>
<th>Example Quotes</th>
</tr>
</thead>
</table>
| **Definition of Belonging** | Having a voice, especially in decision making | • “Included in large and small decision making and ideas included in areas for growth” (P14)  
• “It means that parents have a voice and help make decisions at the school” (P19) |
| | Participation in school events | • “Latino parents care a great deal about our school and are very invested in their child’s education. They are coming in increasingly more for school events” (P13)  
• “A parent that participates, attends and gets involved in school activities” (P16)  
• “Parents are consistently encouraged to participate in classrooms, school committees, and other activities pertaining to their students as well as the school community” (P20) |
| **Communication** | | • “Parent belonging here is based on constant, effective, and timely communication” (P19)  
• “Communication with staff and teachers especially when it pertains to student” (P18) |
| **Definition of Connection** | Have a voice | • “For the most part, parents feel very welcome here. Parents from diverse culture have a variety of opportunities to have a voice” (P20)  
• “Included in decision making; voice is heard on important issues” (P14) |
| | Participation in school events and volunteering | • “Our Latino parents are involved in their children’s education by attending parent/teacher conferences, [Latino/a parent] meetings, and school celebrations” (P22)  
• “Latino parents connect in conferences—a few come and volunteer at the classroom” (P15)  
• “Parents are also invited to participate in class and out depending on teacher” (P18) |
| **Communication** | | • “The fact that many of the staff is bilingual helps communication with them” (P22)  
• “Parents are communicated to regularly and have multiple avenues like text, email, call, etc.” (P19) |
| **Bilingual program** | | • “The fact that many of the staff are bilingual helps communication with them [parents]” (P22).  
• “Most of the Latino families are connected to this school because we have a bi-literacy program and they want their children to become bilingual and bicultural” (P17). |
Table 8 Continued.

*Key Themes from Educator Surveys with Example Quotes*

<table>
<thead>
<tr>
<th>PSSM Scale</th>
<th>Include culture</th>
<th><strong>Include culture</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>“One statement that may be worth including is whether parents feel that their culture—as well as any cultural differences—are respected” (P13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“The PTA and decision-making group is diverse and represents someone who shares my values, background, ideas” (P14)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Culture needs to be included. Culture is part of our foundation” (P21)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IOS Scale</th>
<th>Confusing/ambiguous</th>
<th><strong>Confusing/ambiguous</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>“It would be helpful to have a rubric explaining the options” (P13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“The pictures were confusing and really did not help me to understand the message. I’d think that it will be better to use words rather than pictures” (P17)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“If parents are to interpret these questions, they would probably miss the point” (P19)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Themes</th>
<th>Need to Include Child</th>
<th><strong>Need to Include Child</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>“I think that the part that is missing is the child. As a parent and staff I believe that if my child does not feel welcome or comfortable, neither will I no matter what the school does to welcome me” (P18)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“They reflect the parent’s opinion about feeling or not connected, but how about parents indicating how their children feel as students?” (P16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“These statements are all related to parents, but not to students. Students are 1st in parents’ mind” (P19)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Differences between Latino and Anglo Parents</th>
<th><strong>Differences between Latino and Anglo Parents</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“Latino parents don’t participate as much as other culture (Anglo) parents in the classroom for different reasons. E.g. Parties in classrooms are integrated and they don’t feel comfortable. Latino parents are usually in a corner” (P15)</td>
</tr>
<tr>
<td></td>
<td>“Sometimes our non-Latino families overtake the Latino families at our school causing them to feel uncomfortable which is why we created our [group] to specifically target the needs of our Latino families” (P14)</td>
</tr>
<tr>
<td></td>
<td>“We have a highly engaged Latino parent group, but it is a result of separating them by language. Parents that speak English have a different discourse style that prevents Latinos from participating” (P19)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Barriers</th>
<th><strong>Barriers</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“Most Latino parents don’t volunteer in the classroom. Some of them have two jobs and don’t feel comfortable because they don’t speak English” (P15)</td>
</tr>
<tr>
<td></td>
<td>“Parents from other cultures feel intimidated by the system. Many of them do not understand English, are illiterate, of low economic status, of immigration status. They need to learn more about the system, so they can support their students” (P17)</td>
</tr>
</tbody>
</table>
**Inclusion of Other in the Self Scale**

**Directions:** Please circle the image that best describes your relationship with your child’s school.

<table>
<thead>
<tr>
<th>You= yourself</th>
<th>X = child’s school</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Diagram" /></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 1.* Inclusion of Other in the Self scale.
References


Quezada, R. L., Diaz, D. M., & Sanchez, M. (2003). Involving Latino parents: Getting Latino parents involved in educational activities with their children hasn't always been a priority for schools. The following strategies for attracting Latino parents to our classrooms can help parents overcome the barriers they may face. Leadership, 33(1), 32.


Appendix A

Parent Interview Questions—English

Opening Script

Thanks so much for taking the time to talk with me. This interview will help us learn more about your experience with your child’s school. We are trying to improve the process of answering the questions you did at the last session and your knowledge will help us learn more. There are no right answers and when we look at all of the responses to these questions, what you say will be de-identified (anonymous). No one will know that you said what you did.

Do you have any questions before we begin?

1. What does it mean to you to belong to the school?

What does it mean to you to feel connected to the school?

2. As you may remember, the last time you were here, you responded to a bunch of statements with how strongly you agree to them. We’re trying to tell if the questions we asked you before are effective. We’re not the ones who designed them, but we’re trying to see how you interpreted them. These were some of the questions you answered. (Show them the Adapted PSSM scale.) These questions are designed to understand how connected parents feel to their child’s school, but we’re trying to see if they do a good job. So your answers will help us understand if we’re asking the right questions.

How well do you think these questions do at measuring your belonging to your child’s school?

(Probes if time allows: how well do these questions align with what you think of belonging?
What concepts do you see in these questions that relate to belonging?
Do any of the questions in particular best address your connection to your child's school?
Are any of the questions not at all related to your connection to the school?)
Do these questions include everything you think relates to your connection to the school? Are there any concepts missing from these questions that you think are important? If you were trying to understand a family’s connection to the school, what would you ask?)

3. This was another question that you responded to. *Show them the Inclusion of Other in Self scale.*

**What did you think when you responded to this question?**

**How well do these circles represent your relationship with your child’s school? Why?**

(Probes if time allows:

What does a number 1 mean to you?

What does a number 7 mean to you?)

4. **Is there anything else that we haven’t talked about is important to understanding your connection to the school?**

**Closing script:** Thank you so much for your time. It was great to talk to you! Is it alright to follow up with you if we have additional questions?
Appendix B
Parent Interview Questions—Spanish

Opening script:
Gracias por tomar el tiempo de hablar con nosotros. Esta entrevista nos va a ayudar a aprender más sobre sus experiencias con la escuela de su hijo/a. También estamos tratando de entender cómo podemos mejorar el proceso de contestar todos los cuestionarios que Ud. hizo en la sesión anterior y su conocimiento nos va a ayudar a mejorar este proceso. Tengo unas preguntas para Ud. y le quiero recordar que no hay respuestas correctas. Solo queremos saber más de su opinión.
Todo lo que dice Ud. hoy será anónimo y nadie va a saber lo que Ud. dijo. ¿Tiene alguna duda o pregunta antes de que sigamos?

1. ¿Qué significa para Ud. sentirse parte de la escuela?
¿Qué significan para Ud. tener una conexión con la escuela?

2. La última vez que Ud. estaba aquí, respondió a muchos cuestionarios. Estamos tratando de ver si las preguntas de la otra sesión tienen sentido. Nosotros no creamos estas preguntas, pero queremos saber cómo Ud. las ha interpretado. Estas son algunas de las preguntas que usted respondió. Muestra el “Adapted PSSM scale”. Estas preguntas están diseñadas para entender la conexión que padres sienten a la escuela de su hijo/a. Estamos tratando de ver si hacen un buen trabajo. Entonces, sus respuestas nos va a ayudar comprender si estamos preguntando las preguntas más adecuadas.

¿Usted piensa que estas preguntas hacen un buen trabajo de medir su conexión a la escuela de su hijo?
¿Estas preguntas se alinean con su definición de sentirse parte de la escuela?

¿Qué conceptos hay en estas preguntas que se relacionan con su definición de sentirse parte de la escuela?

¿Hay algunas preguntas en particular que son importantes para su conexión a la escuela?

¿Hay preguntas que no se relacionan con su definición de conexión?

¿Estas preguntas incluyen todo sobre cuándo piensa en su conexión a la escuela de su hijo?

¿Hay algo que falta en estas preguntas que es importante para entender sus sentimientos de conexión a la escuela?

¿Si Ud. estuviera tratando de entender la conexión de una familia a la escuela, que le preguntaría?

3. Este es otro cuestionario que usted respondió. Muestra el “Inclusion of Other in Self Scale”

¿Usted piensa que estos círculos hacen un buen trabajo de medir su conexión con la escuela de su hijo?

¿En qué pensó Ud. cuando respondió a esta pregunta?

¿Qué significa responder 1?

¿Qué significa responder 7?

4. ¿Hay algo más que no hemos mencionado que es importante para entender su conexión a la escuela?

Closing Script: Muchas gracias por su tiempo. Aprendimos mucho al hablar con usted.

¿Podemos contactarle si tenemos más preguntas en el futuro?
Appendix C
Educator Survey

What school do you work at?
________________________________________________________________

How would you define parent belonging to this school?
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

How would you define parent connection to the school?
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
The following statements were asked to parents to measure their connection to their child's school. Parents responded to each statement on a scale of 1=not at all true to 5= completely true.

Please take a minute to read these statements over.

We are not the ones that designed these statements, but we are interested in your opinion about them.

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel like a real part of (name of school).</td>
</tr>
<tr>
<td>2</td>
<td>People in this school take my opinions seriously.</td>
</tr>
<tr>
<td>3</td>
<td>Most teachers and administrators at (name of school) are interested in me.</td>
</tr>
<tr>
<td>4</td>
<td>There’s at least one person in this school I can talk to if my child has a problem.</td>
</tr>
<tr>
<td>5</td>
<td>People at this school are friendly to me.</td>
</tr>
<tr>
<td>6</td>
<td>I am included in lots of activities at (name of school).</td>
</tr>
<tr>
<td>7</td>
<td>I am treated with as much respect as other parents.</td>
</tr>
<tr>
<td>8</td>
<td>I can really be myself at this school.</td>
</tr>
<tr>
<td>9</td>
<td>The teachers and administrators here respect me.</td>
</tr>
<tr>
<td>10</td>
<td>I feel proud of belonging to (name of school).</td>
</tr>
<tr>
<td>11</td>
<td>People at this school like me the way I am.</td>
</tr>
</tbody>
</table>
MEASURING LATINO/A PARENT CONNECTION TO SCHOOLS

How well do these statements do at measuring how connected parents feel to their child’s school?

- Extremely well
- Very well
- Moderately well
- Slightly well
- Not well at all

Do these statements include everything you think relates to parent connection to their child's school?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Is there anything else you would add to these statements to measure parent connection to their child's school?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
<table>
<thead>
<tr>
<th>Statement</th>
<th>Important to Definition</th>
<th>Not Related to Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement 1</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Statement 2</td>
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<td>Statement 3</td>
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<td>Statement 10</td>
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<td>☐</td>
</tr>
<tr>
<td>Statement 11</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Do you have any other comments about these statements?

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

The following question was asked to parents to measure their connection to their child’s school. Please take a minute to look it over. We are not the ones that created this question, but we are interested how you interpret it.

---

### Inclusion of Other in the Self Scale

**Directions:** Please circle the image that best describes your relationship with your child’s school.

<table>
<thead>
<tr>
<th>You= yourself</th>
<th>X = child’s school</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Image of relationships" /></td>
<td><img src="image" alt="Image of relationships" /></td>
</tr>
</tbody>
</table>

1. ![Image of relationships](image)
2. ![Image of relationships](image)
3. ![Image of relationships](image)
4. ![Image of relationships](image)
5. ![Image of relationships](image)
6. ![Image of relationships](image)
7. ![Image of relationships](image)
How well does this question do at measuring how connected parents are to their children’s schools?

- Extremely well
- Very well
- Moderately well
- Slightly well
- Not well at all

What would you think about in responding to this question?

What does it mean if someone selects option 1?
What does it mean if someone selects option 7?

________________________________________________________________
________________________________________________________________
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Do you have any other comments on this scale?

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Is there anything else you would like to add about parent connection to your school?

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

