The transition to kindergarten can be challenging for many children who do not have the necessary skills to meet the demands of classroom settings such as paying attention, remembering instructions, and demonstrating self-control. Children who lack the necessary behavioral regulation skills to meet the demands in the classroom environment are at risk of lower academic achievement (Blair and Razza, 2007; Galindo & Fuller, 2010; McClelland et al., 2006). Previous research has documented that disadvantaged children are at higher risk for having poor behavioral regulation and lower academic achievement (Galindo and Fuller, 2010; Wanless, McClelland, Tominey, & Acock, 2010). Moreover, parental beliefs and practices such as the discipline strategies, parent interaction, and parents beliefs about their children have been recognized as an important influence on children’s behavioral regulation, but very little is known about the parental beliefs and practices of Latino/a parents and their influence on children’s behavioral regulation. Therefore, it is important to explore the parenting styles and behaviors of Latino/a parents and their influence on children’s behavioral regulation, as well as examine how factors such as acculturation influence the parental beliefs and practices of Latino/a parents. Using principal component analysis, regressions, and qualitative interviews, this study examined the reliability of the Parenting Questionnaire (Morrison & Cooney, 2002) for Latino/a and Caucasian parents. It also explored if parenting dimensions differently influence Latino/a and Caucasian children’s behavioral regulation. In addition, the study explored how acculturation levels among Latino/a parents may influence parenting styles and behaviors. Using a modified Parenting Questionnaire, results indicated that for Latino/a parents, the quality of the family learning environment
had a significant positive relation to children’s behavioral regulation. For Caucasian parents, parental beliefs had a marginally significant and negative relation to behavioral regulation. The acculturation levels of Latino parents were not significantly correlated and did not significantly relate to the parenting dimensions. The qualitative interviews indicated that Latino/a parents face constant struggles to provide additional educational materials to enrich the home learning environment of their children. In addition, parent control and parent beliefs, which include respect and being well educated, emerged as key factors that guide parents’ expectations of children’s behaviors and discipline. Understanding the influence of parenting dimensions on Latino/a and Caucasian children’s behavioral regulation provides important empirical evidence to further understand how parenting dimensions may differently relate to the behavioral regulation and academic achievement of Latino/a and Caucasian children.
Parental Beliefs and Practices:
Influences of Parenting in Latino/a and Caucasian Children’s Behavioral Regulation

by
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I understand that my thesis will become part of the permanent collection of the Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

Guadalupe Diaz, Author
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Parental Beliefs and Practices:

Influences of Parenting in Latino/a and Caucasian Children’s Behavioral Regulation

Chapter 1: Introduction

The transition to kindergarten can be challenging for many children who do not have the necessary skills to meet the demands of classroom setting such as paying attention, remembering instructions, and demonstrating self-control. Children who lack the necessary behavioral regulation skills to meet the demands in the classroom environment are at risk of lower academic achievement (Blair and Razza, 2007; Galindo & Fuller, 2010; McClelland, et al., 2006). Previous research has documented that disadvantaged Latino/a children are at higher risk for having poor behavioral regulation and lower academic achievement (Galindo and Fuller, 2010; Wanless et al., 2010). Moreover, parental beliefs and practices such as the discipline strategies, parent interaction, and parents beliefs about their children have been recognized as an important influence on children’s behavioral regulation, but very little is known about the influence of the parental beliefs and practices of Latino/a parents on their children’s behavioral regulation. Therefore, it is important to explore how parenting influences children’s behavioral regulation and if parenting dimensions differently influence Latino/a and Caucasian children’s behavioral regulation, as well as how factors such as acculturation influence the parental beliefs and practices of Latino/a parents. This study examined 1) the reliability of the Parenting Questionnaire by Morrison and Cooney (2002) for a combined sample of Latino/a and Caucasian parents, 2) if parenting dimensions differently influence Latino/a and Caucasian children’s behavioral regulation, and 3) for how acculturation levels influenced parenting styles and behaviors for Latino parents.
Understanding how Latino/a parents’ beliefs and practices influence children’s behavioral regulation and how these may differ from Caucasian parent’s beliefs and practices can provide important empirical evidence to strengthen the behavioral regulation and improve the academic achievement and school experiences of Latino/a children.

Defining Behavioral Regulation

Self-regulation has been defined as a multidimensional construct that includes the regulation of emotions, behaviors, and cognitions (McClelland, Ponitz, Messersmith & Tominey, 2010). This study focused on behavioral regulation, which includes behavioral aspects of working memory, attention, and inhibitory control. Working memory is defined as storing information while processing new information (Siegel & Ryan, 1989). For example, a child uses his/her working memory when remembering multiple steps to complete an art activity in the classroom. Attention includes resisting distractions and shifting attention when necessary (Morrison, Ponitz & McClelland, 2010). In a classroom environment, the ability to maintain attention helps a child pay attention when the teacher is reading a book and shifting attention when it is time to transition to another activity. Inhibitory control refers to inhibiting an automatic response to a more adaptive reaction (Morrison et al., 2010). A child using his/her words to ask for a toy that has been taking away from him/her by another child instead of hitting and taking the toy back is an example of inhibitory control. As illustrated by the previous examples, components of behavioral regulation are essential for a child to successfully function in a classroom and adapt to school and social settings (Blair, 2002).

Behavioral Regulation and Academic Achievement
A number of studies have documented the relationship between individual components of behavioral regulation, and academic achievement. Previous studies found that inhibitory control uniquely predicted math achievement and early literacy in kindergarten (Blair & Razza, 2007; Lan et al., 2011). In one study, aspects of attention such as hyperactivity-inattention in kindergarten significantly predicted high school completion (Vitaro, Brendgen, Larose & Tremblay, 2005). In another study, working memory uniquely predicted math and reading in China and uniquely predicted math skills in the United States (Lan et al., 2011). Although previous research has found that individual components of behavioral regulation uniquely predict aspects of academic achievement, the integration of these skills may be the most important to doing well in academic settings (Arnold et al., 2006; Blair, 2002; Blair & Razza 2007; McClelland et al., 2007; Ponitz, McClelland, Matthews & Morrison, 2009; Raver et al., 2011). For example, research has documented that improving children’s behavioral regulation through intervention programs can improve children’s academic skills (Raver et al., 2001; Tominey & McClelland, 2011) and gains in behavioral regulation predict gains in literacy, vocabulary, and math skills during prekindergarten (McClelland et al., 2007). Another study found that children’s learning-related skills, which include aspects of behavioral regulation and social skills, predicted reading and math skills between kindergarten and sixth grade and growth in math and reading between kindergarten and second grade, emphasizing the importance of these skills in school environments (McClelland, Acock, & Morrison, 2006).

**Cumulative Risk Factors**

Although previous literature has established that behavioral regulation is critical
for children’s academic achievement, research also demonstrates that low-income English Language Learners are more likely to show low levels of behavioral regulation (Wanless, McClelland, Tominey, & Acock, 2010). Disadvantaged Latino/a children not only show low levels of behavioral regulation, but they are also more likely to experience difficulty in school (e.g. being English Language Learners) and have lower academic achievement compared to their English-speaking peers (Cosden et al., 1995; De Feyter & Winsler, 2009; Sektnan et al., 2010.)

Risk factors such as low socioeconomic status, being an English Language Learner (ELL), and low maternal education negatively affect the development of behavioral regulation and academic achievement in young children. According to the Pew Hispanic Center (2011), 37.6% of Latino/a children under the age of 5 lived in poverty in 2010. Previous research has documented the relationship between living in poverty, lower behavioral regulation and lower academic achievement (Dearing, Berry & Zaslow, 2006; Evans & Rosenbaum, 2008; Wanless et al, 2010). For example, young children living in poverty are more likely to perform lower on achievement tasks, intelligence, language, school readiness indicators, and demonstrate deficiencies in behavioral regulation (Dearing et al, 2006; Evans & Rosenbaum, 2008). Other studies have found that factors such as ethnic minority status and being an ELL influenced the development of behavioral regulation and academic achievement (Evans & Rosenbaum, 2008; Wanless et al, 2010; Sektnan et al., 2010). In one study, ELL children from low-income families began prekindergarten with significantly lower behavioral regulation, made improvements at significantly slower rates than English-speaking low income children, and thus, were not able to catch up in behavioral regulation with their peers by
the end of kindergarten (Wanless et al., 2010). In another study, lower maternal education was related to lower scores in math, reading and vocabulary for young Latino/a children (Sektnan et al., 2010). This research suggests that Latino/a children are more likely to experience multiple risk factors that increase their risk of developing poor behavioral regulation and lower academic achievement, which is especially concerning because multiple risk factors are associated with negative adjustment in young children (Lengua, 2002).

Some research has attempted to disentangle the issue of minority status from income. In one study, Galindo and Fuller (2010) found that social competency, which included aspects of behavioral regulation, predicted stronger cognitive growth in Latino children. Although low-income Latino/a children displayed weaker social competence, children from middle-class Latino/a families did not. The difference in social competence was apparent in subgroups of Latinos/as and differed by region of origin. For example, children from Cuban and South American descent demonstrated higher scores on social competence and children from Mexican descent showed lower social competence scores (Galindo & Fuller, 2010). It was speculated that in addition to income disparities, the advantages experienced by these children could potentially be explained by factors such as acculturation history and parenting practices of Latino/a parents. The parenting practices of Cuban and South American families were more likely to resemble the parent-child interaction of European middle class parents, and may be more likely to prepare children for Western schooling (DeFeyter & Winsler, 2009; Gallindo & Fuller, 2010). Together, these studies suggest a relationship between low levels of behavioral regulation and academic achievement in Latino/a children, which may be potentially
influenced by factors such as income, parenting beliefs and practices, and parents’ acculturation levels. The present study explored the parental believes and practices of Latino/a and Caucasian parents and the influence of acculturation on parenting styles of Latino/a parents.

**Parenting Beliefs and Practices**

Parental beliefs and practices have long been recognized as an important influence on the children’s development, including their behavioral regulation. For example, a number of studies have established the essential role that parent-child interactions play in the development and growth of children’s behavioral regulation (Bernier, Carlson, & Whipple, 2010; Grolnick & Ryan, 1989; Morrison et al., 2010). The strategies parents utilize to discipline or control their children when misbehaving have an impact on the development of children’s behavioral-regulation (Morrison et al., 2010). For example, in one study, mothers who were responsive and used lower rates of physical punitive punishment during early childhood were more likely to have children who were socially competent with high levels of behavioral and emotional regulation in middle childhood (Colman, Hardy, Albert, Raffaelli, Crockett, 2006).

Differences in parenting styles in Spanish-speaking parents maybe one of the potential reason for Spanish-speaking children’s lower levels of behavioral regulation (Wanless et al., 2010). Previous research has documented that the parenting behaviors of Latino/a parents are rooted in their cultural values (Billings, 2009; Caspe, 2009; Domenech Rodriguez, Donivick & Crowley, 2009; Farver, Xu, Eppe & Lonigan, 2006; Grau, Azmitia & Quattlebaum, 2009; Perry, Kay & Brown, 2008; Valdez, 1996). For example, there are three culturally rooted components: respect, which emphasizes proper
demeanor and respect for authorities; *familism*, which emphasizes the importance of solidarity, obligation, and parental authority within the family; and *education*, which emphasizes a moral upbringing and being a good person. Together, these components influence and guide the parenting styles and behaviors of Latino/a parents, which can influence the opportunities children have to practice behavioral regulation skills. (Calzada, Fernandez, Cortes, 2010; Grau et al., 2009; Galindo & Fuller, 2010; Halgunseth, Ispa & Rudy, 2006; Perry, Kay & Brown, 2008). For example, in a qualitative study, Calzada et al., (2010) found that Latina mothers often cited respect as the guidance for the behavioral expectations in their children in all situations.

Latino/a parents are also frequently described as having parenting styles that value obedience and compliance. However, the current research is mixed on the findings regarding the parenting beliefs and practices of Latino/a parents (Domenech Rodriguez et al., 2009; Julian, McKendy, Mckelvey, 1994; Martinez, 1988). One study found that only Latino/a parents from low socioeconomic status use authoritarian parenting styles (Brooks-Gunn & Markman, 2005; Martinez, 1988). Another study found that Latino/a parents do not fit any of the traditional descriptions of parenting styles (Domenech Rodriguez et al., 2009) while Harwood, Miller, & Irizarry (1995) found no difference between Puerto Rican parents and Caucasian parents on emphasizing child compliance. Thus, it is unclear how aspects of parenting may influence Latino/a children’s behavioral regulation and if the effect of parenting dimension differ for Caucasian and Latino/a children. The diversity in parenting beliefs and practices found in the literature emphasizes the importance of expanding the research on the potential difference between the parenting beliefs and practices of Latino/a and Caucasian parents and their effect on
behavioral regulation. Based on the previous mixed findings on the parenting styles of Latino/a parents and their potential influence on children’s behavioral regulation, the present study examined if the Morrison & Cooney (2002) parenting questionnaire was a reliable measure for both Caucasian and Latino/a parents. It also explored how parenting dimensions differently influenced Latino/a and Caucasian children’s behavioral regulation.

**The Parenting Questionnaire**

In the current study, the Morrison and Cooney (2002) Parenting Questionnaire was used to measure parenting dimensions in Latino/a parents. The Parenting Questionnaire was developed to measure four dimensions of parenting that relate to children’s literacy and academic development: the quality of the family learning environment (including literacy and numeracy), parental warmth and responsiveness, parental beliefs and parental control and discipline (Morrison and Cooney, 2002). Other research has found the Morrison and Cooney (2002) Parenting Questionnaire to be a reliable measure and predictive of child outcomes (Hindman & Morrison 2012; Morrison & Cooney, 2002).

The quality of the family learning environment is designed to measure parenting behaviors that focus on the degree to which parents promote literacy and number knowledge. This includes activities, materials, and parent-child interactions that foster the learning environment. Several studies have documented the importance of the quality of the family learning environment on behavioral regulation (Downer & Pianta, 2011, McClelland, Kessinch, & Morrison, 2003, Morrison & Cooney, 2002). For example, one study found that the family learning environment predicted children’s ability to regulate
their attention and that attention partially accounted for the relationship between family environment and school readiness outcomes (NICHD, 2003). The quality of family learning environment has been documented to have an influence on the developmental outcomes of Latino children, but it is unclear if the same relationships exist between quality of the family learning environment and Latino children’s behavioral regulation. The way parents structure the learning environment may differ depending on their cultural practices and beliefs (Billings, 2009; Caspe, 2009; Farver et al., 2006; Perry, Kay Brown, 2008). For example, Perry, Kay, and Brown (2008) found that Latino parents modified school related literacy activities to reflect their own cultural practices by incorporating storytelling, bilingualism, teaching morals and correct behavior during literacy activities. In another study, Caspe (2009) found that there is a tendency for low-income Latino mothers to prefer a storytelling style for booksharing, which positively predicted print-related literacy skills for their children.

*Parental warmth and responsiveness* measures parental support and affective climate or warmth in the home. Research on parental warmth and responsiveness has shown positive effects on children’s developmental outcomes including behavioral regulation (Eisenberg, et al, 2005; Morrison & Cooney, 2002; McClelland et al., 2003; Suchodoletz, Trommsdorff and Heikamp, 2011). For example, in a sample of German mothers and their kindergarten children, parental warmth was a significant predictor of children’s higher behavioral regulation (Suchodoletz, Trommsdorff and Heikamp, 2011). Latino/a parents are often characterized as being high in warmth and responsiveness (Domenech Rodriguez et al., 2009), but literature on the way parental warmth and responsiveness affects Latino children’s developmental outcomes specifically behavioral
regulation is limited. One example is school involvement, which is related to parental warmth and responsiveness (Morrison and Cooney, 2002). In two previous studies, Valdez (1996) and Moreno (2004) found that traditional understanding of school involvement does not accurately reflect the school involvement of Latino/a parents because of the unique struggles of this population such as language barriers, limited family resources, and differing cultural values. For example, Moreno (2004) found that Latina mothers are highly engaged in home based activities but less engaged in school activities, which may lead to an inaccurate notion that Latino/a parents do not care about their children’s education.

*Parental control* measures socialization efforts by parents such as rules, standards, and limits in the home. Previous research has found that parent control is related to the development of behavioral regulation because high parental control might not provide opportunities for children to practice behavioral regulation skills (Grolnick & Ryan, 1998; Kochanska & Knaack, 2003; Morrison and Cooney, 2002; Wachs, Gurkas & Kontos, 2004). Latino/a parents are often characterized as being more controlling and valuing compliance, (Wanless et al., 2010; Domenech Rodriguez et al., 2009), but some research suggests this is only evident in low-income Latino/a parents (Arcia & Johnson, 1998; Martinez, 1988). The relationship between control and children’s outcomes may differ for Latino/a children and the use of greater control by Latino parents may not relate to negative outcomes for Latino children as it does for European American children (Grau et al., 2009). For example, in a sample of middle class mothers, high use of physical control by Puerto Rican mothers was associated with secure attachment and in European American mothers it was associated with insecure attachment in young
Parental beliefs assess beliefs about childrearing and knowledge about developmentally appropriate practices including expectations and aspirations for children. Research on the effect of parent beliefs on children’s outcomes is limited and has shown inconsistent relationships, but previous research has shown that parent beliefs have an effect on other parenting dimensions and children’s outcomes (Okagaki & Sternberg, 1993; Morrison & Cooney, 2002). It has also been documented that the relationship between parental beliefs and child outcomes varies across different ethnic groups (Arcia & Johnson, 1998; Okagaki & Frensch, 1998; Okagaki & Sternberg, 1993). For example, Okagaki & Sternberg (1993) found that Anglo American parents valued autonomy and creativity in their children, while immigrant parents (including Mexican immigrant parents) valued conforming to external standards. Previous literature on parental beliefs of specifically Latino/a parents is limited, but it has been documented that immigrant mothers’ (including Latina mothers) knowledge and childrearing practices differ by cultural experiences and backgrounds (Bornstein & Cote, 2007; Bornstein & Cote, 2004; Reese, 2002).

As demonstrated by previous research, parenting dimensions may differ across ethnic groups (Raver, Gershoff & Aber, 2009) and it is possible that measures of parenting might function differently for Latino/a and Caucasian parents. Given that previous literature on the way parenting dimensions and their effect on Latino/a children’s outcome is limited or inconsistent, it is important to examine if parenting measures are appropriate for both Latino/a and Caucasian parents. The present study explored these parenting dimensions and relations to children’s behavioral regulation in a
sample of Latino/a and Caucasian parents.

Acculturation and Parenting

The acculturation process has been identified as being an important factor influencing parenting practices and beliefs among Latino/a parents (Domenech Rodriguez et al., 2009; Grau et al., 2009; Glass & Owen, 2010; Teichman & Contreras-Grau, 2006). Acculturation is defined as a phenomena that results when groups of individuals having different cultures come into continuous contact with another culture causing changes in the original cultural (Cuellar, Arnold, & Maldonado, 1995). Parenting values and practices are highly influenced by cultural backgrounds and experiences in the United States (Brooks-Gunn & Markman, 2005; Glick, Bates, & Yabiku, 2009; Kotchnick, & Forehand, 2002). Diversity in parenting practices and beliefs in Latino/a parents may be partially explained by the acculturation level of parents because of the interaction between the United States culture and the cultural background of Latino/a parents. Previous research has found that differences and connections among parent-child interactions, family dynamics, and the parent involvement of Latina/o parents and their children vary by parents’ acculturation levels (Buriel, 1993; Glass & Owen, 2010; Gonzales-Ramos et., 1998; Grau et al., 2009; Smokowski, Rose, & Bacallao, 2008; Teichman & Contreras-Grau, 2006). For example, less acculturated parents of Puerto Rican and Mexican heritage are more controlling and have a stricter style of parenting than parents with higher acculturation levels (Buriel, 1993; Gonzales-Ramos et., 1998). The effect of control also varies by parents’ acculturation levels, with research suggesting that control has less negative child outcomes in low-acculturated parents than in high-acculturated parents (Grau et al., 2009). For example, Gonzales, Pitts, Hill, and Roosa
found that Spanish-speaking preadolescents whose parents were less acculturated reported higher levels of hostile control from their parents, but lower levels of externalizing behaviors. Acculturation becomes important in understanding the factors that influence the parental beliefs and practices of Latino/a parents and is a focus of the present study.

Chapter 2: Goals of the Present Study

Parenting beliefs and practices have an important influence on the behavioral regulation of young children. Less is known about the effects of Latino/a parents’ parenting beliefs and practices on the development of behavioral regulation and how these differ from Caucasian parents, as well as how acculturation affects the parenting style of Latino/a parents. The present study 1) assessed the reliability of a parenting measure for a combined sample of Latino/a and Caucasian parents; 2) explored links between parenting and child behavioral regulation through quantitative and qualitative methods; and 3) examined the effect of acculturation on the parenting beliefs and practices of Latino/a parents. The following three research questions were proposed:

Research Question #1: Is the Parenting Questionnaire a reliable measure for Latino/a and Caucasian parents?

Previous literature has documented mixed findings on the potential differences in parenting styles and practices across ethnic groups (Billings, 2009; Domenech Rodriguez et al., 2009; Raver et al., 2009). The present study examined if four dimensions of parenting were reliable for a combined sample of Latino/a and Caucasian parents. It was expected that questions in the Parenting Questionnaire (Morrison & Cooney, 2002) would need to be modified to be a reliable measure for the combined sample of Latino/a
and Caucasian parents. If this hypothesis is supported, modifying the Morrison and Cooney (2002) Parenting Questionnaire will increase the reliability of the Parenting Questionnaire for a group of Latino/a and Caucasian parents.

Research Question #2: Do aspects of parental beliefs and practices of Latino/a and Caucasian parents relate differently to children’s behavioral regulation?

It was hypothesized that the effect of parenting dimensions such as the quality of the family learning environment; parental control and discipline, parental warmth, and parental beliefs of Latina/o parents would significantly and differently relate to behavioral regulation for Latino/a and Caucasian children. For example, it was expected that the quality of the learning environment would have a significant and positive effect on children’s behavioral regulation for both Caucasian and Latino/a children. Previous research has documented the importance of these dimensions of parenting on children’s developmental outcomes (Bernier et al., 2010; McClelland et al., 2003; Morrison and Cooney, 2002), but fewer studies have focused specifically on how these parenting dimensions differently influenced the development of behavioral regulation of Latino/a and Caucasian children.

In addition to the results from the quantitative analyses, semi-structured interviews were conducted with Latino/a parents to capture parents stories and gain a better understanding on the factors and components that influence the parenting styles and discipline strategies of Latino/a parents and the connection to children’s behavioral regulation. Previous research has documented that the parenting behaviors of Latino/a parents are rooted in three core cultural components (Billings, 2009; Caspe, 2009; Domenech Rodriguez et al., 2009; Farver et al., 2006; Grau et al., 2009; Perry et al.,
2008), which influence parent expectations and discipline strategies for their children. It was expected that during the interviews, parents would express how parenting beliefs such as respect, education, and familism influence and guide parenting styles, as well as how parent control, which includes discipline methods and strategies, influence behavior expectations for their children.

*Research Question #3: Do parents’ acculturation levels relate to the parenting dimensions for Latino/a parents?*

It was hypothesized that acculturation levels would relate to the quality of the family learning environment, parental control and discipline, parental warmth, and parental beliefs. In particular, it was expected that parents with higher acculturation scores would reflect parenting dimensions more similar to the mainstream U.S. culture. For example, parents with higher acculturation scores were expected to be less controlling than parents with lower acculturation scores. As noted above, different levels of acculturation influence parent-child interactions, child outcomes and parents’ beliefs, and practices (Grau et al., 2009; Teichman & Contreras-Grau, 2006). Acculturation relates to parenting beliefs and practices such as parental control, education expectations, and parent involvement by potentially changing parents’ beliefs, knowledge, and behaviors to more closely reflect those of the new culture (Contreras, 2004; Glass & Owen, 2010; Moreno, 1999). For example, less acculturated mothers have less knowledge of school activities than more acculturated mothers (Moreno, 1999). If this hypothesis is supported, it will expand the current understanding of the role acculturation plays in parenting dimensions of Latino parents.

**Chapter 3: Methods**
Participants

The present study consisted of 80 parents recruited from preschools in Oregon. The sample consisted of 36 families that identified as Caucasian and 44 families that identified as Latino/a (42 were primarily Spanish-speaking). Caucasian parents had a mean parent education level of 15.5 years ($S.D. = 2.6$) and the Latino/a parents had a mean parent education level of 9.3 years ($S.D. = 3.5$). A total of 57 children (47% boys) participated in the study. The mean age for Caucasian children was 54.8 months ($S.D. = 3.3$) and 56.8 months for Latino children ($S.D. = 2.7$). In addition, a subsample of 13 Mexican-American and Spanish-speaking mothers participated in a qualitative interview. Most of the mothers were the first generation in their family to live in the United States.

Procedure

During the fall and spring of the preschool year, 80 families were recruited through their children’s preschool. All parents completed the Morrison and Cooney (2002) Parenting Questionnaire ($N=80$). A subsample of Latino parents ($N=23$) completed the Acculturation Rating Scale For Mexican Americans-II (ARSMA-II). The scales took approximately 30 minutes to complete. During the fall of the preschool year children ($N=57$) completed the Head-to-Toes Task of behavioral regulation.

In addition, a subsample of 13 first and second generation, Mexican-American and Spanish-speaking mothers completed a semi-structured qualitative interview about parenting beliefs and practices, which took approximately 30 minutes to an hour of their time. The parents ($n = 2$) who decided not to participate in the interview indicated that it was because of lack of time. The interviews took place at the children’s school in a private room. All interviews were conducted a bilingual and bicultural researcher and the
parents choose the language of the interview (12 Spanish, 1 English).

**Measures**

*Parenting Questionnaire.* Parents ($N = 80$) completed the Morrison and Cooney’s (2002) Parenting Questionnaire (PQ). The Parenting Questionnaire is used to measure dimensions of parenting including the quality of the family learning environment (including literacy and numeracy), parental warmth and responsiveness, parental knowledge and beliefs and parental control and discipline. The PQ consists of 48 items and was originally developed to examine the relative impacts of specific parenting domains on early literacy development (Morrison & Cooney, 2002). Parenting dimension scores were computed by taking the average of the items in the subscale. In previous research, the internal reliabilities for the Parenting Questionnaire were: quality of the family learning environment, .75; parental warmth, .81; parental beliefs, .87; and parental control, .91 (Morrison & Cooney, 2002).

*Acculturation Rating Scale For Mexican Americans-II (ARSMA-II).* A subsample of parents ($N = 23$) completed the ARSMA-II, which is a 30-item scale measuring orientation toward the Mexican culture and the Anglo culture. There are two subscales, a Mexican Orientation Subscale (MOS) and an Anglo Orientation Subscale (AOS) (Cuellar, Arnold & Maldonado, 1995). The ARSMA-II measures acculturation on four factors: language use and preference, ethnic identity, cultural heritage and ethnic interaction. The internal reliabilities for the ARSMA-II are as follows: the MOS has 17 items and a coefficient alpha of .88 and the AOS has 13 items and a coefficient alpha of .83 (Cuellar, Arnold & Maldonado, 1995). In previous research this scale has been used successfully to predict acculturation levels among parents (Teichman & Contreras-Grau,
Acculturation is calculated by adding the 17 items representing the Anglo Orientation Subscale and dividing it by the 13 items that represent the Mexican Oriented Scale. Based on the Acculturation Rating Scale for Mexican Americans-II (Cuellar, Arnorld & Maldonado, 1995) the acculturation process is represented by five levels. Level 1: very Mexican oriented, level II: Mexican oriented to approximately balanced bicultural, level III: slightly Anglo oriented bicultural, level IV: strong Anglo oriented, and level V: very assimilated; Anglicized.

**Parent Interview.** A subsample of first and second generation, Mexican-American parents (N = 13) completed semi-structured interviews that lasted 30 minutes to one hour. All parents were primarily Spanish speaking and determined the language of the interview (12 Spanish-speaking and 1 English-speaking). The interviews were conducted at the children’s preschool by a bilingual and bicultural researcher. The transcriptions were analyzed in their original language using a combination of inductive and deductive approach to develop a coding system. In this procedure, excerpts of the data are organized into categories, then patterns among the categories are connected, and finally, themes are created represented by quotes and passages from the data (Berg, 1998; Packer, 2011 & LaRossa, 1995). All quotes are reported in Spanish with an English translation.

The interviews further explored the factors that have influenced the parenting styles and behaviors of Latino parents. The interview included eight questions related to influences on parenting beliefs and practices, as well as parental expectations and discipline methods for their children. The following are the questions for the qualitative interview.

1. What were your expectations of how you would parent? How does that compare to what you do?
a. Can you provide examples?

2. Have your parents influenced your parenting style? How is your parenting different or the same from your parents?

3. Who are your role models for parenting?
   a. How often do you contact them?
   b. What advice do they give you?

4. What are the expectations you have for your child’s behavior?

5. What discipline methods do you use to teach your child to meet your expectations?

6. Can you think of a time when they did not meet your expectations? How did you handle the misbehavior?

7. How are the expectations you have for your child at home different and/or the same from the expectations at school?

8. Is there anything else you would like to add or that I did not ask that you were expecting me to ask that can help me understand you more as a parent?

*Head-Toes-Task of Behavioral Regulation.* Children’s ($N=57$) behavioral regulation was measured using the Head-to-Toes Task. The Head-to-Toes Task is a direct assessment of behavioral regulation. The children are asked to play a game where they were told to do the opposite of what was instructed. For example, if a child was told to touch their toes, they were supposed to touch their head. There was a total of 10 items used (“touch your head” or “touch your toes”) and scores were 0 for an incorrect response, 1 for a self-corrected response, and 2 for a correct response. Scores were summed with a total possible score of 20. Previous research has supported the reliability
and validity of the task. In multiple studies, evidence has been found for construct validity, reliability, and variability among diverse populations including Spanish-speaking children (Connor et al., 2010; Ponitz et al., 2008; Ponitz, McClelland, Matthews, & Morrison, 2009; Wanless et al., 2011).

Chapter 4

Results

The present study examined the reliability of the Parenting Questionnaire (Morrison & Cooney, 2002) and explored the differences and influence of parenting dimensions on Latino/a children’s behavioral regulation as measured by the Head-Toes-Task. The present study also examined how acculturation levels among Latino/a parents influenced parenting dimensions.

Research Question #1: Is the Parenting Questionnaire (Morrison & Cooney, 2002) a reliable measure for Latino/a and Caucasian parents?

Principal component factor analysis and Cronbach's alpha using Stata 12.0 (StataCorp., 2011) were used to assess the reliability of the Morrison and Cooney (2002) Parenting Questionnaire. Based on previous findings (Morrison & Cooney, 2002) a four-factor solution was initially tested including the quality of the family learning environment, parent beliefs, parent control and discipline, and parent warmth and responsiveness. Due to the small sample size \( n=80 \), there was not sufficient statistical power to model all four factors into one model. Instead, based on previous literature, a principal components factor analysis was run on each parenting dimension and the best factor structure was chosen for each (Hindman & Morrison 2012; Morrison & Cooney, 2002). Initially, without any modifications, the internal reliabilities for some dimensions
was poor (less than $\alpha = .2$ in some cases), which suggested that items should be removed to best represent the parenting dimensions in a sample that included both Latino/a and Caucasian parents. Specifically, for the quality of the family learning environment, the best solution included removing 9 items, for the parent control 11 items were removed, and for parent beliefs 2 items were removed. No items were removed from the parent warmth and responsiveness dimension.

Factor loadings for the final solution for each parenting dimensions are presented in Table 1. The first factor for the quality of the family learning environment included 10 items. Seven items were related to academic instruction in the household (e.g. how often do you read to your child?) and three items were related to parent and child behavior expectations in the household (e.g. encourage child to explore and question things). Loadings for these items ranged from .53 to .75. The second factor representing parent beliefs included five items related to child behavior expectations (e.g. important for child to have good manners). Loadings for these items ranged from .42 to .76. The third factor representing the parent control and discipline included four factors related to parent behaviors when disciplining the child (e.g. once I decide how to deal with misbehavior, I follow through). Loading for these items ranged from .52 to .87. Finally, the fourth factor represented the parent warmth and responsiveness included six items related to the parent engagement with the child (e.g. I typically ask my child how his/her day went). Loadings for these items ranged from .41 to .81. After modifying the questionnaire based on the principal component analysis, the internal reliabilities for the combined sample of Latino and Caucasian parents were: quality of the family learning environment, .83; parental warmth and responsiveness, .70; parental beliefs, .61; and parental control and
discipline, .73.

**Descriptive Statistics**

After the Parenting Questionnaire was modified, descriptive statistics were examined. Descriptive statistics and correlations are provided in Table 2 for Latino/a parents and in Table 3 for Caucasian parents for children’s behavioral regulation, the parenting dimensions, and background characteristics. For Latino/a parents there was a significant correlation between the quality of the family learning environment and children’s behavioral regulation ($r = .53, p = .02$). The quality of the family learning environment was also significantly positively correlated with parent control and parent warmth respectively ($r = .37, p = .03$; $r = .40, p = .01$). In addition, parent control was significantly positively correlated with parent beliefs ($r = .37, p = .03$); and parent warmth ($r = .57, p = .001$); and parent warmth was positively correlated with parent beliefs ($r = .36, p = .02$). None of the parenting dimensions were significantly correlated with parent education.

For Caucasian parents (see Table 3), there was a significant and negative correlation between parent beliefs and children’s behavioral regulation ($r = -.42, p = .01$). Parent beliefs was also positively correlated with parent control and the quality of the family learning environment respectively, at a trend level ($r = .24, p = .07$; $r = .25, p = .06$). In addition, parent control was significantly positively correlated with the quality of the family learning environment ($r = .45, p = .001$); and parent warmth ($r = .57, p = .001$); parent warmth was significantly correlated with the quality of the family learning environment ($r = .40, p = .002$). None of the parenting dimensions were significantly correlated with parent education. Finally, child age and gender was not significantly correlated with
behavioral regulation for Latino/a or Caucasian children.

**Research Question #2: Do aspects of parental beliefs and practices of Latino/a and Caucasian parents relate differently to children’s behavioral regulation?**

Individual regression models indicated that for Latino/a children the quality of the family learning environment had a significant and positive relation to children’s behavioral regulation ($\beta = .53$, $p = .02$) (see Table 4). For Caucasian children, the strength of parent beliefs had a negative and marginally significant relation to children’s behavioral regulation ($\beta = -.31$, $p = .06$) after controlling for parent education (see Table 5). All initial models controlled for child age, child gender, and parent education, and all nonsignificant variables were subsequently dropped from the model to preserve parsimony. Results indicated that parental control, and parental warmth did not significantly relate to the behavioral regulation of Latino/a or Caucasian children.

Although parental beliefs and parent control did not emerge as significant predictors for Latino/a children behavioral regulation in the quantitative analyzes, these parenting dimensions emerged as key factors influencing parenting behaviors of Latino/a parents. Specifically, in the qualitative interviews, parenting beliefs and parent control, which are related to *respect* and which emphasizes proper demeanor and respect for authorities, *and being well educated*, which emphasizes a moral upbringing and being a good person emerged as important parenting dimensions. These components guide parenting beliefs, discipline strategies, and behavior expectations, such as the obedience and compliance of their children. In addition, mothers expressed the high aspiration they had for their children’s future, but also expressed their struggles to provide additional materials for their children’s education and learning environment.
During the interviews, mothers expressed that respect and being well educated were key factors that influenced their parenting beliefs and the way they disciplined their children. For example mothers expressed the importance of respect,

“El respeto es muy importante que lo aprendan desde que estan chiquitos, si no aprenden a respetar es muy malo” (12/13)

“Respect is one of the most important things to learn since the kids are little, if they have no respect then it is really bad.”

In addition, respect was a key factor from which mothers build upon to emphasize education, and obedience. The mothers believed that although their children were too young to understand appropriate behaviors and parents knew what was better for them, it was good practice to start learning respect and obedience from a young age in order for children to become successful adults. For example, when talking about obedience a mother said,

“obedecer es parte del respeto y van a hacer lo que yo digo por que yo se lo que es mejor para ellos” (12/13)

“obedience is part of respect and they are going to do whatever I tell them to do because I know what is better for them.”

Mothers believed that if they told their children what to do, the children would learn and have a good future. Growing up to become educated and respectful adults was key for all the mothers and they often associated being well educated, and obedience with respect. For example, a mother said
“necesitan aprender a obedecer desde que estan chiquitos, si no aprenden ahorita cuando crescan no loban a hacer y es bueno para ellos para que crezcan a ser adultos respetuosos” (11/13)

“They need to learn to be obedient since they are little, if they don’t do it now once they grow up they are definitely not going to do it and it’s good for them to learn so they grow up to be a respectful adults.”

Although the mothers had high expectations for the future children and wanted them to do well, mothers expressed the limitations they experienced when needing to provide additional resources for their children’s education. For example, when speaking about her older child one mother said:

“pues me dijo que esta interesado en fotografía, pero no le podemos comprar una camara, le dije que si le podian rentar o prestarle una en la escuela, pero me dijo que no, entonces yo le dije que le trataríamos de comprar una pero que no le garantizaba que le pudiéramos comprar una” (7/13)

“He told me he is really interested in photography, but I can’t buy him a camera, I asked him if he could rent or borrow one from school, but he said no, so I told him we would try to get it but couldn’t guarantee we would be able to buy him one.”

Thus, the expectations that parents had for their children to become successful and respectful adults were often limited by their inability to provide children with all the additional resources they needed for their education.

**Research Question #3: Do parents’ acculturation levels relate to the parenting dimensions for Latino/a parents?**
The results using data from a subgroup of the overall sample \((n = 23)\) who completed the acculturation scale indicated that there were no significant correlations between acculturation levels and any of the parenting dimensions: quality of the family learning environment, parental warmth and responsiveness, parental knowledge and beliefs and parental control and discipline (Morrison & Cooney, 2002). In addition, acculturation levels did not significantly relate to the four parenting dimensions: quality of the family learning environment \((\beta = -.04, ns)\), parental warmth and responsiveness \((\beta = .02, ns)\), parental beliefs \((\beta = .15, ns)\), and parental control and discipline \((\beta = -.35, ns)\). The lack of significant relationships between parents’ acculturation levels and the four parenting dimensions could be because of the lack of variability in parents’ acculturation level. Most parents \((n=11)\) were categorized as being very Mexican oriented, followed by Mexican oriented to approximately balanced bicultural \((n=6)\), and slightly Anglo oriented bicultural \((n=2)\). These categories indicated that the majority of parents \((90\%)\) had a low acculturation level (Cuellar, Arnold & Maldonado, 1995).

**Chapter 5: Discussion**

The overall aim of the study was to further understand the influence of parental beliefs and practices of Latino/a parents on children’s behavioral regulation. This study assessed the reliability of the Morrison & Cooney (2002) Parenting Questionnaire for a combined sample of Latino/a and Caucasian parents, the influence of the four parenting dimensions on Latino/a and Caucasian children’s behavioral regulation, and explored the influence of acculturation level on parenting dimensions for Latino/a parents.

**Reliability of the Parenting Questionnaire for Latino/a and Caucasian Parents**

After assessing the reliability of the Parenting Questionnaire, the Parenting
Questionnaire was modified to be a reliable measure for the combined sample of Latino/a and Caucasian parents. Based on previous literature, items were chosen to represent each parenting dimension and the current modifications were similar to the modifications in a recent study (Hindman & Morrison, 2012). For example, items representing the quality of the family-learning environment are related to academic instruction and child behavior expectations in the home (e.g. how often do you read to your child?). The differences in the items used to represent each parenting dimensions in the present study could be do to the larger number of Latino/a families included in this sample as compared to samples in previous studies (Hindman & Morrison, 2012; Morrison & Cooney, 2002). The current modifications made the measure more appropriate for the combined sample of Latino/a and Caucasian families and better represented the parenting dimensions for combined sample that includes a larger number of Latino/a families.

This finding contributes to previous literature documenting the importance of assessing parenting measures in different ethnic groups to create more reliable parenting measures (Domenech Rodriguez et al, 2009; Grau et al., 2009; Raver et al., 2009). Reliable measures across ethnic groups allow adequate reflection of parenting aspects that affect children’s developmental outcomes. Future research should evaluate parenting measures with larger sample sizes to allow parenting measures to be assessed separately for Latino/a and Caucasian parents. Parenting measures that are more appropriate across ethnic groups may also help to further understand which parenting dimensions and behaviors might be specific and/or general to parents of different ethnicities and how each relate to the development of children’s behavioral regulation.

**Parenting dimensions and behavioral regulation of Latino and Caucasian children**
For the quantitative results, for Latino/a parents, only the quality of the family learning environment significantly and positively related to the behavioral regulation of Latino/a children. For Caucasian parents, only parent beliefs had a significant negative effect on children’s behavioral regulation at a trend level. The hypothesis predicting significant relations between the four parenting dimensions and behavioral regulation was based on previous literature that emphasizes the importance of parenting on the development of behavioral regulation (Bernier et al., 2010; Morrison, et al., 2010). The relationship between the quality of the family learning environment and the behavioral regulation for Latino/a children emphasizes the importance of providing resources to enhance the quality of the family learning environment of Latino/a families. This finding also emerged in the qualitative interviews when parents highlighted the high expectations they had for their children’s education, which is related to the quality of the family learning environment and the struggles they faced providing additional resources to enhance their children’s education. It is also important to note that most of the Latino/a families in the current study were low-income with a significantly lower level of parent education compared to the Caucasian parents ($M = 9.3$ years compared to 15.5 years), which might contribute to parents’ struggles to provide additional educational resources for their children. Results suggest that although Latino/a families in this sample experience poverty and may lack resources such as reading materials; those parents who were able to promote a high quality-learning environment in the home had children with significantly higher behavioral regulation (Brooks-Gunn & Markman, 2005).

Although previous research has found a relationship between the quality of the family learning environment and Caucasian children’s behavioral regulation (Morrison
et al., 2010; Morrison & Cooney, 2002) the current study did not find this relationship, which could be due to the small sample size. Conducting future studies with a larger sample size of Latino/a and Caucasian parents could provide a more complete understanding of how behaviors such as reading, writing, and allowing childrens to explore in the home, which are representative of the quality of the family learning environment are related to the development Caucasian children’s behavioral regulation.

It is possible that the negative relationships between parenting beliefs and behavioral regulation for Caucasian children may be because parents may already be demanding these behaviors from their children (e.g. getting along with others, being responsible, considerate). For example, parents in this sample had a high mean of 4.63 in the 1-5 scale in the parent beliefs dimension meaning that they believed these behaviors were very important. The high importance attributed to these items could mean that parents were demanding compliance on these behaviors from their children. Previous research had documented that compliance is related to lower levels of behavioral regulation (Kochanska & Knaack, 2003), which could potentially explain the negative relationship between parent beliefs and behavioral regulation in this sample. It is important to note that the relationship between parent beliefs and behavioral regulation was only marginally significant. Previous research has documented inconsistent relationships between parenting beliefs and children’s outcomes (Okagaki & Stenberg, 1993), and the effect of parenting beliefs on behavioral regulation was a small effect. Given the limited and inconsistent findings between parent beliefs and behavioral regulation, future research should further explore these relations to elucidate the effect of parent beliefs on behavioral regulation. The nonsignificant relationship between
parenting beliefs and behavioral regulation of Latino/a children may be because of differences in parenting styles and their effect on child outcomes that have been previously documented (Brooks-Gunn & Markman, 2005; Grau et al., 2009). These findings support the need for understanding ethnic differences in parenting styles and their effect on children’s development (Brooks-Gunn & Markman, 2005; Grau et al., 2009). Further understanding how specific parent beliefs influence children’s behavioral regulation and other parenting dimensions can provide a more complete understanding of the influence parenting has on children’s behavioral regulation.

In addition, in the qualitative results, parent control and parent beliefs emerged as key factors influencing the parenting behaviors of Latino/a parents. In the qualitative interviews, parents indicated the importance of *respect and being well educated*, which is related to parental control and showed the importance of parenting beliefs for Latino/a parents’ parenting practices and behaviors. The emphasis parents placed on respect, obedience, and compliance could potentially limit the opportunities children obtain to practice behavioral regulation because their mothers were externally regulating their behavior as oppose to children regulating their own behavior. The constant external regulation of behavior and the limited opportunities children get to practice regulating their own behaviors can result in lower levels of behavioral regulation (Brooks-Gunn & Markman, 2005; Kochanska & Knaack, 2003). The lack of a significant relationship between parent control and parent beliefs and behavioral regulation in the quantitative results and the emergence of parent control and parent beliefs as key factors influencing parenting behaviors in the qualitative results supports previous literature finding mixed results on the influence of parental control and child outcomes in Latino/a children.
Previous literature has found positive, negative, and non-significant relationships between parent control and Latino/a children’s outcomes (Arcia & Johnson, 1998; Grau et al., 2009; Martinez, 1988). The mixed findings could be because of the measurements being used to measure parent control in Latino/a parents. It is important to continue to explore aspects of parent control and how these aspects could differently relate to outcomes for Latino/a children.

The findings from the qualitative results also complemented the quantitative results, which highlight the importance of conducting mixed methods studies that can capture a more complete understanding of parenting beliefs and behaviors of Latino/a parents. The combination of the qualitative and quantitative results provides an important understanding of the parenting dimension and cultural beliefs that influence the development of children’s behavioral regulation. The quantitative results show the potential different influences that parenting dimensions can have on the development of behavioral regulation for Latino/a and Caucasian children. The potential differences in parenting across Latino/a and Caucasian parents emphasize the importance of being aware of these differences to adapt programs and maximize the positive outcomes of Latino/a children. For Latino/a parents, the qualitative results provided a better understanding of how parent beliefs and parent control guide the parenting behaviors and expectations of Latino/a parents and how these can potentially influence behavioral regulation.

In addition, these qualitative results showing the struggles Latino/a parents face to provide a high quality learning environment for their children, which relates to their children’s education and future aspirations complement the quantitative results showing
the importance of the quality of the learning environment for children’s behavioral regulation. These results represent the importance of the high quality of the learning environment for Latino/a children’s behavioral regulation and the struggles of Latino/a families to provide a high quality learning environment for their children, which may be a potential reason for Latino/a children’s lower levels of behavioral regulation. It is essential to provide programs that are culturally sensitive, but it is just as important to recognize the institutional and structural barriers Latino/a families encounter such as discrimination, not knowing how to navigate school systems works, language and poverty. Communities and schools can provide resources to ameliorate negative effects and improve the developmental outcomes for Latino children. For example, school awareness and understanding of the struggles Latino parents face can help schools be better prepare to make resources more accessible and find ways to encourage parents’ participation and engagement in the schools. In addition, understanding the parenting behaviors and practices of Latino parents and how these differ from Caucasian parents may help schools to tap into the parents’ existing resources to work together to better serve Latino children in the school systems.

**Parenting dimensions and acculturation**

The hypothesis predicting a significant relation between parenting dimensions and acculturation level of Latino parents was not supported. Our hypothesis was based on previous literature documenting that the differences in parenting behaviors, knowledge, and beliefs vary based on parents’ acculturation levels (Grau, et al., 2009; Glass & Owen, 2010; Moreno, 1999; Teichman et al., 2004). It is possible that the nonsignificant relation between parenting dimensions and the acculturation level could because of the
lack of variability in the acculturation level among parents; the majority of the parents had a low acculturation level and/or the small sample size. Although non-significant, the relationship between parent control and acculturation level was substantive and negative, which suggests that parents with higher acculturation may have lower levels of parent control. Previous research has documented mixed findings on the effects of low and high parent acculturation for child outcomes (Grau et al., 2009). Parents’ acculturation level can influence parenting behaviors differently and have a different effect on child outcomes. For example, higher parent control has been found in parents with lower acculturation level, but this does not necessarily have a negative effect on children’s outcomes (Grau et al., 2009). In the present study, this relationship was non-significant and future research should use a larger sample to explore the effects of different acculturation levels on parenting dimensions to obtain a more clear understanding of how these parenting dimensions are influenced by acculturation and level and how these parenting dimensions influence child outcomes. In addition, further exploring the relationship between acculturation levels, parent education, and income may help elucidate what factors influence the acculturation process because the participants in the present study were mostly from a low income background and had a mean education level of about 9 years.

Potential reasons for the low acculturation level among the majority of parents could be due to their remembrance of their values and traditions, continuous attachment to Mexico their home country and to other Latinos in the community. During the interviews, the majority of the mothers indicated they still remembered the way they were raised and the values that were taught to them while living in Mexico. For example,
when asked about the behavior expectation for her children one mother replied,

“Yo creo que es importante que se por ten bien, para mi ha sido importante que obedezcan desde que vivíamos en México. Me imagino que así crecí” (12/13)

“I think is important that they behave well, I have been valuing my children being obedient since we lived in Mexico. I guess that is just the way I was raised.”

Also, the majority of the mothers still maintained constant contact with their mothers in Mexico, as well as with other Latinos in their community, who all provided input on how to raise children. For example, one mother said,

“Ahy una senora que es del mismo pueblo en México, Yo miro como disciplina a sus hijos y también hablo con ella” (11/13)

“there is another lady that is from my same town in Mexico, I observe how she disciplines her kids and I also talk to her about it.” (11/13)

In addition, the mothers expressed the role their mothers who lives in Mexico play in raising their children,

“Yo hablo con mi mama que vive en México cada tercer día, y ella me dice como crear a mis hijos y que hace cuado estan enfermos o cuando no se portan bien” (11/13)

“I talk to my mom in Mexico every other day, and she tells me how to raise my children and what to do when they are sick or when they don’t behave.”

The combination of remembering and practicing cultural values, the constant contact with
the mother’s home country, as well as, the constant contact with other Latinos in the community could be influencing the acculturation level of these mothers. It has been previously documented that remembrance of cultural values, constant contact and attachment to the home country, and the consistent contact with individuals with the similar cultural values could potentially influence individuals’ acculturation level (Bacallao & Smokowski, 2009; Hardwood & Feng, 2006; Parrado & Flippen, 2005).

The remembrance of their cultural values and the traditions, the continuous contact to the parents’ home country and to other Latino/a parents in the community could potentially strengthens the cultural parenting beliefs and behaviors of Latino/a parents. The reinforcement of their beliefs about parenting behaviors may have allowed parents to continue parenting in a way that parallels the parenting behaviors of their home country. If parents continuously implement these parenting behaviors and it is accepted and reinforced by their current community, parents may have little reason to acculturate to the traditional parenting behaviors of mainstream culture. A deeper understanding of the factors that influence the acculturation process of these parents can provide an insight into the context in which Latino children develop, and how the acculturation process influence the behavior expectations parents have for their children, which may shape development of behavioral regulation in Latino children (Cabrera, 2011 & Li-Grining, 2012).

Chapter 6: Limitations

Although this study explored important factors that affect parenting and the behavioral regulation of Latino/a and Caucasian children, it did not explore all the potential factors that may affect behavioral regulation and parenting dimensions. The
study sample size was small, which may have made it difficult to find significant results. Despite the small sample size, significant relations were detected supporting the relation between the quality of the family learning environment and behavioral for Latino/a parents and the relation between parenting belief and behavioral regulation for Caucasian parents. Future work should investigate other aspects of parenting that may differ for Latino/a and Caucasian families such as autonomy support, and the value of obedience and compliance. Future research should also explore the effect of acculturation on parenting dimensions and children’s behavioral regulation. Replicating the current study with a larger sample size would also reinforce these findings.

In addition, all the information on parenting behaviors was based on parent self-report and collected during the fall and spring of the children’s preschool year. Although the information offers an important parent perspective, it can also be subject to bias. Future work should include multiple sources to measure parenting dimensions such as observational and direct measures to obtain a more comprehensive understanding of the parenting behaviors of Latino/a and Caucasian parents.

The qualitative interviews were all conducted at the children’s preschool, which could bias parents’ answers regarding their parenting behaviors and practices because of social desirability. Also all the participants in the interviews were mothers of Mexican American descent, which could limit the inferences that could be made about other ethnicities who are often included under the label of Latino. In spite of this limitation, the interviews provided a better understanding of how parenting dimensions such as parent control and parent beliefs influence children’s behavioral regulation, which were not detected in the quantitative analyzes. In addition, the interviews expanded the
understanding of how cultural values influence the parenting behaviors and expectations of Latino parents, and their potential effect on children’s behavioral regulation. Future research should include interviews with fathers to further understand the role that fathers play in the development of Latino children’s behavioral regulation. Also including participants from other ethnicities could strengthen the findings by providing a more complete understanding of the experiences of Latinos, which includes individuals from an array of different countries and cultures.

Chapter 7: Conclusion

This study assessed the reliability of the Parenting Questionnaire in a combined sample of Latino/a and Caucasian parents, the relations between parenting dimensions and behavioral regulation in Latino/a and Caucasian parents, and the relations between acculturation and parenting dimensions for Latino/a parents. Results indicate the importance of developing reliable measures for combined samples of parents of different ethnicities. The results also expand the understanding of how these parenting dimensions can differently influence Latino/a and Caucasian children’s behavioral regulation. Results highlight the importance of including mix methods studies to provide a deeper understanding of Latino/a parents parenting behaviors and how these relate to cultural values guiding the parenting behaviors and beliefs of Latino/a parents. Furthering our understanding of how parenting dimension and cultural values differently influence Latino/a and Caucasian children’s development can help schools, communities, and policy makers develop effective interventions and improve and better prepare classrooms environments to meet the needs of children and parents.
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### Appendix

Table 1  
*Factor Loadings of Parenting Questionnaire Items (N=80)*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality of Family Learning Environment</strong></td>
<td></td>
</tr>
<tr>
<td>How often do you read to your child?</td>
<td>.67</td>
</tr>
<tr>
<td>How often do you read to your self?</td>
<td>.61</td>
</tr>
<tr>
<td>How often does your partner read to him/herself?</td>
<td>.57</td>
</tr>
<tr>
<td>Frequency of teaching child letter names</td>
<td>.71</td>
</tr>
<tr>
<td>Display child’s work and art in home</td>
<td>.53</td>
</tr>
<tr>
<td>Encourage child to explore and question things</td>
<td>.59</td>
</tr>
<tr>
<td>Frequency of teaching child letter sounds</td>
<td>.75</td>
</tr>
<tr>
<td>Frequency of teaching child to read words</td>
<td>.70</td>
</tr>
<tr>
<td>I encourage child to write</td>
<td>.61</td>
</tr>
<tr>
<td>Importance of child being responsible</td>
<td>.59</td>
</tr>
<tr>
<td><strong>Parent Beliefs</strong></td>
<td></td>
</tr>
<tr>
<td>Importance of child being honest</td>
<td>.42</td>
</tr>
<tr>
<td>Importance of child having good manners</td>
<td>.76</td>
</tr>
<tr>
<td>Essential for child to get along with others</td>
<td>.66</td>
</tr>
<tr>
<td>Importance of child being considerate</td>
<td>.67</td>
</tr>
<tr>
<td>Importance of child being responsible</td>
<td>.67</td>
</tr>
<tr>
<td><strong>Parent Control and Discipline</strong></td>
<td></td>
</tr>
<tr>
<td>How critical is for your child to obey?</td>
<td>.52</td>
</tr>
<tr>
<td>I never threaten to discipline unless I will carry it out</td>
<td>.87</td>
</tr>
<tr>
<td>Once I decide how to deal with misbehavior, I follow through</td>
<td>.79</td>
</tr>
<tr>
<td>I have little or no difficulty sticking with rules for my child</td>
<td>.81</td>
</tr>
<tr>
<td><strong>Parent Warmth and Responsiveness</strong></td>
<td></td>
</tr>
<tr>
<td>I encourage child to express opinions</td>
<td>.41</td>
</tr>
<tr>
<td>My child and I have warm moments together</td>
<td>.49</td>
</tr>
<tr>
<td>I find it interesting and educational to spend time with my child</td>
<td>.79</td>
</tr>
<tr>
<td>I typically ask my child how his/her day went</td>
<td>.81</td>
</tr>
<tr>
<td>I encourage child to talk to me about his/her feelings</td>
<td>.71</td>
</tr>
<tr>
<td>I respect my child’s opinion</td>
<td>.66</td>
</tr>
</tbody>
</table>
Table 2
Correlations and Descriptive Statistics for Latino/a Parents (N=44)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Behavioral Regulation</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality of Family Learning Environment</td>
<td>.53*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Parent Beliefs</td>
<td>.04</td>
<td>.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Parent Control</td>
<td>.38</td>
<td>.34*</td>
<td>.36*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Parent Warmth</td>
<td>.24</td>
<td>.40**</td>
<td>.36*</td>
<td>.59***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Parent Education</td>
<td>.36</td>
<td>.29</td>
<td>-.18</td>
<td>.23</td>
<td>.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Child Age (in months)</td>
<td>.18</td>
<td>-.07</td>
<td>.01</td>
<td>.28</td>
<td>-.16</td>
<td>.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Child Gender (1=male)</td>
<td>.07</td>
<td>-.36</td>
<td>.03</td>
<td>-.03</td>
<td>-.04</td>
<td>-.34</td>
<td>-.03</td>
<td></td>
</tr>
</tbody>
</table>

M       7.67  3.39  4.51  3.39  4.05  9.53  56.76  .62
SD      7.74  .71  .42  .85  .61  3.34  2.68  .50
Range   0-19  2-4.8 3.4-5 2-5  2.14-5 4-15.5 52-62  0-1

Note: Behavioral Regulation= Sum of Head-to-Toes Task
*p<.05. **p<.01. ***p<.001.
### Table 3
**Correlations and Descriptive Statistics for Caucasian Parents (N=36)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Behavioral Regulation</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality of Family Learning Environment</td>
<td>.23</td>
<td>_</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Parent Beliefs</td>
<td>-.42**</td>
<td>.25†</td>
<td>_</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Parent Control</td>
<td>-.18</td>
<td>.45***</td>
<td>.24†</td>
<td>_</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Parent Warmth</td>
<td>-.13</td>
<td>.40***</td>
<td>.14</td>
<td>.57***</td>
<td>_</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Parent Education</td>
<td>.46**</td>
<td>.08</td>
<td>-.34*</td>
<td>-.06</td>
<td>-.27</td>
<td>_</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Child Age (in months)</td>
<td>-.05</td>
<td>.07</td>
<td>.22</td>
<td>.35*</td>
<td>.20</td>
<td>.14</td>
<td>_</td>
<td></td>
</tr>
<tr>
<td>8. Child Gender (1=male)</td>
<td>.08</td>
<td>-.11</td>
<td>.02</td>
<td>-.10</td>
<td>.03</td>
<td>-.05</td>
<td>.17</td>
<td>_</td>
</tr>
</tbody>
</table>

| M      | 10.14 | 3.86  | 4.63  | 3.93  | 4.27  | 15.9  | 54.86 | .39   |
| SD     | 7.70  | .65   | .38   | .78   | .55   | 2.53  | 3.29  | .40   |
| Range  | 0-20  | 2.6-5 | 3.2-5 | 2-5   | 2.14-5| 11-21 | 50-60 | 0-1   |

Note: Behavioral Regulation = Sum of Head-to-Toes Task

†p<.10. *p<.05. **p<.01. ***p<.001.
Table 4

Final Regression Models for Parenting Dimensions Predicting Behavioral Regulation for Latino/a Children (N=44)

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>$\beta$</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Family Learning Environment</td>
<td>4.91</td>
<td>.53*</td>
<td>1.89</td>
</tr>
<tr>
<td>Parent Beliefs</td>
<td>.75</td>
<td>.05</td>
<td>3.78</td>
</tr>
<tr>
<td>Parent Control</td>
<td>3.62</td>
<td>.38</td>
<td>2.12</td>
</tr>
<tr>
<td>Parent Warmth</td>
<td>3.30</td>
<td>.24</td>
<td>3.19</td>
</tr>
</tbody>
</table>

*p < .05.
Table 5
*Final Regression Models for Parenting Dimensions Predicting Behavioral Regulation for Caucasian Children (N=36)*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>β</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Environment</td>
<td>2.91</td>
<td>.20</td>
<td>2.31</td>
</tr>
<tr>
<td>Parent Beliefs</td>
<td>-5.59</td>
<td>-.31†</td>
<td>2.89</td>
</tr>
<tr>
<td>Parent Control</td>
<td>-2.14</td>
<td>-.16</td>
<td>2.17</td>
</tr>
<tr>
<td>Parent Warmth</td>
<td>.03</td>
<td>.00</td>
<td>3.21</td>
</tr>
</tbody>
</table>

†p < .10.

Note. All models controlled for parent education