In Search of Culturally Grounded Profiles of Parental Over-control:

Implications for Anxiety in Hispanic/Latino Children

by

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#### ABSTRACT

Parental over-control (excessively restrictive and regulatory parenting behaviors) has been consistently identified as a robust risk factor in the development and maintenance of child anxiety problems. However, current understanding of the parental over-control to child anxiety relation is limited by a lack of specificity. The broad 'parental over-control' construct represents a heterogeneous category of related but distinct parenting behaviors each of which may exert a unique effect on child anxious emotion. Still, research to date has generally failed to consider this possibility. Moreover, culturally cognizant theory and emerging empirical evidence suggest cross-ethnic (Caucasian vs. Hispanic/Latino) differences in the utilization of various parenting strategies as well as the effects of parenting behaviors on child outcomes. But, only a handful of studies have considered the potential differences in the functioning of parental over-control behaviors within a Hispanic/Latino cultural framework. Using a sample of 98 pre-adolescent children at-risk for anxiety problems, the present study sought to further explicate the association between parental over-control and child anxiety symptoms in the context of ethnic and cultural diversity. Results suggest that parents' use of overprotection and (lack of) autonomy granting might be particularly relevant to child anxiety, compared to parental intrusiveness and behavioral control. Findings also indicate that some youth may be more vulnerable to parental over-control and suggest that cultural values may play a role in the relation between over-controlling parenting and child anxiety symptoms. Knowledge about cross-cultural variations in the relation among parental over-control behaviors and the development of anxiety symptoms is important

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because it can improve the cultural robustness of child anxiety theory and has potential to inform culturally sensitive child anxiety prevention and intervention efforts.

"A wise woman once said to me that there are only two lasting bequests we can hope to give our children. One of these she said is roots, the other, wings."

- Hodding Carter Jr., Where Main Street Meets the River

### DEDICATION

### To Mom and Dad,

whose unconditional love, wisdom, and never-ending encouragement have provided me with strong roots and a wondrous set of wings.

And to Lauren, my biggest cheerleader,

and Leef, my angel,

who inspire me to be better every day.

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### Introduction

Anxiety disorders are among the most common psychiatric problems faced by youth with recent estimates showing prevalence rates reaching nearly 32% by late adolescence and individual disorder diagnoses ranging from 2% to 19% (Beesdo-Baum & Knappe, 2012; Costello, Egger, & Angold, 2005; Kessler, Ruscio, Shear, & Wittchen, 2010; Merikangas et al., 2010). Conceptually, pathological anxiety is thought to be a tripartite construct that includes negative or worried cognitions, physiological hyperarousal, and behavioral avoidance (Barlow, 2002; Barlow, Allen, & Choate, 2004; Lang, 1968). The early onset of anxiety as well as the often chronic and intractable course of these disorders typically results in significant impairment during childhood, adolescence, and beyond (Keller et al., 1992; Kessler et al., 2005). Specifically, when left untreated, anxiety can lead to functional deficits in school performance and peer relationships (e.g., Last & Strauss, 1990; Mychailyszyn, Mendez, & Kendall, 2010), early initiation of alcohol, tobacco, and illicit drug use for some youth (e.g., Hayatbakhsh et al., 2007; Kaplow, Curran, Angold, & Costello, 2001; Marmorstein, White, Loeber, & Stouthamer-Loeber, 2010), and poor adjustment in adulthood (e.g., the development of depression; Pine, Cohen, Gurley, Brook, & Ma, 1998). Given the frequency, early onset, chronicity, and impairment associated with anxiety, it is not surprising that anxiety disorders place a significant burden on society including increased use of psychiatric and nonpsychiatric health care services, school truancy, and reduced productivity (Greenberg et al., 1999; Lépine, 2002). As such, childhood anxiety is a significant public health concern and the need to understand the factors that place children at risk for the development of anxiety disorders cannot be understated.

Theoretically, several models for understanding the etiology and development of childhood anxiety emphasize the role of the family (see Drake & Ginsburg, 2012 for a review), with parenting behaviors identified as especially relevant to risk and protective processes (Thompson, 2001; Wood, McLeod, Sigman, Hwang, & Chu, 2003). In particular, high levels of parental over-control have been consistently identified as a robust risk factor for internalizing problems in youth (e.g., Barber, Olsen, & Shagle, 1994; Hudson & Rapee, 2001). Even more specifically, parental over-control behaviors (defined as excessively restrictive and regulatory parenting strategies) have been shown to be uniquely linked to anxiety (compared to depression; Chorpita & Barlow, 1998; Hudson & Rapee, 2002; Lieb et al., 2000). As articulated by Rapee and colleagues, parents' excessive regulation of children's emotions in the face of potentially anxiety-provoking situations inhibits the child's ability to develop a mastery of their environment as well as effective emotion-coping skills, subsequently leading to anxiety symptoms (Rapee, 2001, 2002).

Although this parental over-control to child anxiety model is widely accepted and supported by research with Caucasian youth, it is embedded in traditional Western tenets that prioritize independence and self-maximization (Grusec, 2002; Wood et al., 2003). That is, for children in cultures that value individual achievement and self-reliance (e.g., American culture), intrusive or overprotective parenting may inhibit the child's ability to realize these culturally salient developmental goals, thus resulting in distress. However, research has yet to determine whether these processes operate in the same manner in other cultural frameworks in which notions of parenting and family relations are different. Traditional Hispanic/Latino culture, for example, prioritizes familial well-being

over individual needs and desires and emphasizes a hierarchal family structure in which children show deference to elders (e.g., Marin & Marin, 1991; Varela & Hensley-Maloney, 2009; Zayas & Solari, 1994). In this context, parent's regulation of child emotion and behavior may be a culturally sanctioned form of adaptive parenting therefore leading to more positive child outcomes; but, research investigating this possibility is sparse.

The lack of research attention to cross-cultural differences in the parental overcontrol-child anxiety linkage is particularly troublesome given growing evidence suggesting that Hispanic youth are at greater risk of developing anxiety than youth from other ethnic backgrounds (e.g., Glover et al., 1999; Gross et al., 2006; U.S. DHHS, 2001). In particular, Latino children have been found to experience high levels of anxious worrying (Ginsburg & Silverman, 1996; McLaughlin et al., 2007; Varela, Sanchez-Sosa, Biggs, & Luis, 2008) and anxiety-related somatic symptoms (Pina & Silverman, 2004; Varela et al., 2004). Moreover, Hispanics are the largest ethnic minority group in the United States (U.S. Census Bureau, 2011a; U.S. Census Bureau, 2011b) and so identifying the factors that perpetuate and maintain anxiety in this group of young people is especially important. Thus, the present study will address a significant gap in the literature by exploring how parental over-control behaviors operate within the Hispanic/Latino cultural context. Particular attention will be given to *familismo* beliefs (i.e., an emphasis on close familial relationships) as this traditional Hispanic/Latino value is theoretically and empirically linked to both parenting behaviors and child outcomes (Harwood, Leyendecker, Carlson, Asencio, & Miller, 2002; Umaña-Taylor & Updegraff, 2012).

Building on theories of child anxiety and previous research (e.g., Creveling,

Varela, Weems, & Corey, 2010; Drake & Ginsburg, 2012; Hudson & Rapee, 2001; Wood et al., 2003), the overarching aim of the current dissertation study will be to identify a culturally grounded model of parental over-control relevant to child anxiety among Hispanic/Latino youth. The introduction will begin with a brief overview of the literature linking parenting to child anxiety in predominantly Caucasian samples. Following this review, theoretical and empirical work on parental over-control as it relates to childhood anxiety will be examined and critically evaluated. Next, the existing literature on the salience of parental over-control to models of child anxiety in Hispanic/Latino families will be reviewed with an emphasis on the context of traditional *familismo* values. Finally, study aims and hypotheses will be articulated.

# Parenting behaviors are influential in the development and maintenance of childhood anxiety

Theoretical models of child anxiety consistently identify parenting as particularly influential in the development, maintenance, and treatment of anxious symptoms (Chorpita & Barlow, 1998; Craske, 1999; Dadds & Barrett, 1996; Field, Cartwright-Hatton, Reynolds, & Creswell, 2008; Fox, Henderson, Marshall, Nichols, & Ghera, 2005; Krohne, 1990; Manassis & Bradley, 1994; Rapee, 2001; Thompson, 2001; Wood et al., 2003). More specifically, it is theorized that parental behaviors may set in motion several processes that account for child anxiety outcomes. For example, learning theory principles have been used to explain how parents may shape children's anxiety via socialization behaviors. That is, parents who provide children with extra attention, love, or assistance during stress-inducing situations may inadvertently reward or reinforce anxious responding or avoidance thereby increasing the likelihood of future anxiety. In addition, children who are exposed to parental modeling of anxiety (i.e., parents describe their own anxious thoughts, feelings, and behaviors or parents respond to feared objects of situations with high anxiety) may imitate anxious responses when facing similar objects and situations in a manner consistent with social learning theory (Bandura, 1977). Parents also may contribute to child anxious and avoidant responding by communicating to children "threat" messages (Beidel & Turner, 1998), which serve to direct children's attention to the possible dangers that may (or not) be present in the environment. This could lead to child schemas that denote situations as unsafe or unmanageable and thereby should be avoided (Bögels & Brechman-Toussaint, 2006; Lester, Field, Oliver, & Cartwright-Hatton, 2009; Muris & Merckelbach, 1998). These parent-driven processes help to account for anxiety outcomes in children and offer a theoretical framework for understanding how parents might contribute to the development, maintenance, and amelioration of anxiety in youth.

Empirical support for models linking parenting and child anxiety comes from research examining the influence of a variety of specific parenting behaviors beyond the socialization behaviors described above. Briefly, findings suggest that parental warmth and responsiveness are linked to lower levels of child anxiety (Hudson, Dodd, Lyneham, & Bovopoulous, 2011; Hudson & Rapee, 2001), while parental rejection, criticism, and over-control are linked to elevated anxiety in children (Edwards, Rapee, & Kennedy, 2010; Festa & Ginsburg, 2011; Ginsburg, Siqueland, Masia-Warner, & Hedtke, 2004; Hudson et al., 2011). Although each of these broad parenting dimensions has been linked to anxiety, the degree of these associations is variable both in strength and consistency.

For instance, parental over-control has been repeatedly linked to increased anxiety problems for children with and without anxiety disorder diagnoses (for a review see Ballash, Leyfer, Buckley, & Woodruff-Borden, 2006) but findings related to parental warmth are mixed (Gar, Hudson, & Rapee, 2005; Ginsburg, Grover, & Ialongo, 2004; Wood et al., 2003). That is, a majority of studies comparing clinical and nonclinical children show that parents of children with anxiety disorders display more positivity and warm affection than parents of children without anxiety diagnoses (e.g., Barrett, Fox, & Farrell, 2005; Hudson & Rapee, 2001; Suveg, Zeman, Flannery-Schroeder, & Cassano, 2005). However, this finding has not been consistently replicated across all samples of clinically anxious youth (e.g., Lieb et al., 2000) or in community samples (e.g., Greco & Morris, 2002; Rork & Morris, 2009). The impact of parental over-control, on the other hand, appears to be robust with evidence of specificity between over-controlling behaviors and childhood anxiety disorders, rather than depression, conduct disorder, or oppositional defiant disorder (Shanahan, Copeland, Jane Costello, & Angold, 2008). In addition, other parenting behaviors that have been linked to anxiety have been found to be more closely associated with other child outcomes. Parental rejection, for example, has been more strongly linked to depression than anxiety in children (Beesdo, Pine, Lieb, & Wittchen, 2010; Rapee, 1997). In fact, McLeod, Weisz, and Wood (2007) conducted a meta-analysis with data accumulated across 47 studies and found that parental overcontrol is the most robust predictor of child anxiety (i.e., compared to warmth and rejection). Given that parental over-control is consistently and specifically linked to increased anxiety across clinical and community samples of youth, the current study

focused exclusively on this parenting behavior in order to advance understanding of its role in childhood anxiety.

# Parental over-control is one of the most robust familial contributors to child anxiety problems

The parental over-control behaviors theoretically and empirically linked to anxiety related outcomes comprise those that are excessively restrictive and regulatory. More specifically, parenting behaviors such as overprotection, intrusiveness/overinvolvement, granting of minimal autonomy, and/or provision of direct instruction on how children should think, feel, and behave are theorized to be associated anxiety symptoms in children (e.g., Barber, 1996; Drake & Ginsburg, 2011; McLeod et al., 2007; Steinberg, Elmen, & Mounts, 1989; Wood et al., 2003). Typically, these behaviors fall under the category of psychological over-control, which is defined as parenting behaviors that limit or intrude on children's development of autonomy and self-sufficiency. Behavioral control, on the other hand, is conceptualized as parents' management of children's behaviors via discipline and monitoring strategies. There is evidence to suggest that behavioral control (or more specifically, a lack of behavioral control) is linked to elevated externalizing behavior problems (e.g., delinquency, substance use; Bean, Barber, & Crane, 2006; Galambos, Barker, & Almeida, 2003) while psychological control is linked to internalizing problems (e.g., depression, anxiety; Barber, 1996; Sher-Censor, Parke, & Coltrane, 2011). However, when applied in the presence of child anxiety symptoms, parent's implementation of some behavioral control strategies may increase anxious responses. For instance, the use of power assertive behavioral control strategies, such as force, coercion, or strong commands, has been linked to elevated anxiety in

children (Barber, 1996; Dumas, LaFreniere, & Serketich, 1995; Rubin & Mills, 1991). As such, it is proposed that both psychological and behavioral control might influence child anxiety.

Taken together, parental over-control behaviors are theorized to contribute to the development and maintenance of childhood anxiety in primarily two ways 1) by increasing the child's attention to threat/danger and 2) by decreasing the child's perception of control over their environment. Specifically, a parent who protects their child from stressful or potentially anxiety-provoking situations or who takes control in these instances may convey to their child that the world is a perilous place from which they need to be shielded. In this way, parents call attention to the possibility of aversive experiences (which may not reflect actual threats to the child) resulting in children's hypervigilance, biased threat interpretation, and fear (Chorpita & Barlow, 1998; Rapee, 1997). Parental over-control also is thought to limit opportunities for the child to independently engage with his or her environment as well as learn ways effectively cope with challenges. Consequently, the child may fail to develop realistic expectations of the world and their ability to master it and instead feel a lack of control and competence resulting in a dependence on their parent to help them navigate the environment safely (Wood et al., 2003; Rapee, 1991, 1997). A child's increased attention to threat and decreased self-efficacy to control the perceived threat could lead to avoidance of situations that might be risky, regardless of whether real danger exists. This could be problematic as encouraging or enabling the avoidance of anxiety is posited to interfere with the extinction process in which anxiety is ameliorated by repeated exposure to a benign but feared stimulus (Fox et al., 2005; Rachman, 1997; Rapee, 2001).

### Current understanding of the parental over-control to child anxiety association is limited by a lack of specificity

Although the parental over-control to child anxiety link is widely accepted in the field, there has been a recent call for increased efforts to improve its theoretical and empirical specificity. The current study aimed to further explicate our understanding of this link by addressing three primary gaps in the literature. First, the current study examined patterns of parental over-controlling behaviors (i.e., using latent profile analysis) thereby offering a more fine-grained operationalization of parental over-control. To date, the literature on parental over-control has been plagued with inconsistent and/or ill-defined conceptualizations. Early work on the link between parental over-control and child adjustment utilized broad definitions of over-controlling parenting that often included bipolar categories such as democratic versus autocratic parenting (Baldwin, 1948), firm over-control versus lax over-control (Baumrind, 1965), psychological overcontrol versus psychological autonomy (Schaefer, 1959), support versus restriction (Krohne, 1980), and restrictive versus permissive (Becker, 1964). In general, it was believed that these construct pairs fell on a continuum with one end depicting a 'positive' parenting behavior (e.g., minimal amounts of over-control; democratic parenting; psychological autonomy) and the other end of the spectrum depicting a 'negative' parenting behavior (e.g., elevated levels of over-control; autocratic parenting; psychological over-control). However, the term 'over-control' has been used to refer to several different parenting phenomena. For example, Baumrind's (1965) discussion of over-control focused on parental demands for child maturity and compliance whereas Schaefer's (1959) work focused on parent's over-involvement in children's emotional

worlds. Current models of the parental over-control to child anxiety link offer no resolution as each one pinpoints different over-controlling parenting behaviors as most important. Chorpita and Barlow (1998), for instance, argue that provision of opportunities to develop new skills and demonstrate independence (i.e., granting autonomy) fosters the child's sense of agency and efficacy thereby preventing problematic anxiety. On the other hand, Rapee (1991, 1997, 2001) emphasizes high levels of over-involvement as the primary parenting behavior linked to elevated perceptions of threat and danger, which leads to hyperviligance and fear. Still others have argued for an all-inclusive conceptualization based on the notion that parental over-control is a single, higher order construct that captures the essence of the parenting behavior most relevant to childhood anxiety (e.g., Schwarz, Barton-Henry, & Pruzinsky, 1985; Wood et al., 2003). The diversity of definitions and descriptions of parental over-control are problematic as the discrepancies result in uncertainty as to whether parents' exertion of over-control is beneficial or detrimental for children's well-being (Grolnick, 2003).

The inconsistency in the empirical measurement of parental over-control also has contributed to the impreciseness of the parental over-control to child anxiety link. In my review of the empirical literature<sup>1</sup>, I found five studies that focused on intrusiveness,

<sup>&</sup>lt;sup>1</sup> I conducted a literature search for studies presenting quantitative data on the association between parental over-overcontrol behaviors and anxiety in childhood and adolescence (6 to 17 years old). Using the PsychInfo computer database, I searched for peer-reviewed journal articles on this topic with four anxiety-related key terms: anxi-, fear, phobia, and worry. These key terms were crossed with six parent-related key terms (i.e., father, paternal, mother, maternal, parent, parental) as well as six over-control-related key terms (i.e., over-control, overprotection, intrusiveness, autonomy, behavioral over-control, monitoring). In addition, relevant literature reviews, meta-analyses, and empirical articles (e.g., McLeod et al., 2007; Wood et al., 2003) were hand searched to identify studies that may not have been incorporated into PsychInfo. These steps resulted in a total of 45 studies. For the purposes of this dissertation study and based on the operationalization of parental over-control used in each study, the research articles were categorized into five groups: intrusiveness, overprotection, autonomy granting, behavioral over-over-control, and broad over-control. Eight studies examined more than one parental over-control behavior (without making a composite) and so were counted in each appropriate group (e.g., Budinger et al., 2013 was placed in both the autonomy granting and broad over-control group).

sixteen on overprotection, seven on autonomy granting, four on behavioral over-control, and twenty one that utilized a broad over-control construct (e.g., combined two or more parent over-control behaviors in the measurement). Even within these categories, measurement strategy and definitions of the facet of over-control being studied were variable. Not surprisingly, this body of work provides divergent findings regarding the presence and strength of the association between parental over-control behaviors and child anxiety. The inconsistency of empirical findings coupled with the conceptual distinctiveness of each parental over-control behavior suggest that the various types of over-control may exert unique influences on childhood anxiety. Support for this possibility comes from a meta-analysis conducted by McLeod et al. (2007), which showed significant differences in association between parental over-control and child anxiety symptoms across subdimensions of over-controlling behaviors. Specifically, results indicated that the effect of autonomy granting (i.e., acknowledgement and encouragement of child independence) on child anxiety was significantly larger than that of parental over-involvement (i.e., interference with independence, boundary issues, restriction) (ESs = .42 and .23, respectively). Moreover, the overall parental over-control dimension (i.e., over-involvement and low autonomy granting) had medium effect on child anxiety (ES = .25) whereas autonomy granting had a large effect. Thus, the broad 'parental over-control' construct seems to represent a heterogeneous category of related but distinct parenting behaviors and a continued focus on broadly defined parental overcontrol could result in an underestimation of the robustness of the parental over-control to child anxiety relation (Ballash et al., 2006; McLeod et al., 2007; Silk, Morris, Kanaya, & Steinberg, 2003; Wood, 2006).

Second, the current study set out to examine the differential associations between patterns of parental over-control behaviors and various anxiety symptom clusters in children (i.e., separation, social, and generalized anxiety). Although there is some evidence for specificity in the links between certain parental over-control behaviors and certain types of anxiety symptoms, the research is limited to only seven studies. A majority of these studies have used retrospective reports from anxious adults to show that individuals with social anxiety are more likely to have had parents who were overprotective compared to individuals with panic or agoraphobia (Arrindell, Emmelkamp, Monsma, & Brilman, 1983; Bruch, Heimberg, Berger, & Collins, 1989; Parker, 1979; Rapee & Melville, 1997). However, a study of late adolescents and young adults found that parental overprotection is linked not only to social phobia but also to specific phobia, panic disorder, agoraphobia, and generalized anxiety (Knappe, Beesdo-Baum, Fehm, Lieb, & Wittchen, 2012). Turning to studies using child samples, Wood (2006) examined parental over-control in families with children diagnosed with various types of anxiety disorders. Results showed a significant association between parental intrusiveness and children's separation anxiety but not generalized anxiety, social anxiety, or physical symptoms. A similar link between parental intrusiveness and child separation anxiety has been found for typically developing children (Wood, Kiff, Jacobs, Ifekwunigwe, & Piacentini, 2007). In addition to research examining the effects of one parental over-control behavior on several anxiety subtypes, studies investigating several parental over-control behaviors within a sample experiencing a single anxiety disorder can also help to elucidate differential effects. For instance, Greco and Morris (2002) compared fathers' use of physical over-control and directive commands (typically

considered a marker of over-involvement) in a sample of socially anxious youth. Findings showed that fathers of highly socially anxious children were more likely to use physical over-control during a challenging task compared to children with low social anxiety; however, there was no significant difference in paternal over-involvement. This finding is consistent with the notion that some but not all parental over-control behaviors influence child anxiety. Moreover, there is evidence that parental over-control might not be the most influential parenting behavior in the development of certain anxiety disorders. When it comes to generalized anxiety disorder, for example, two studies showed that parental rejection was more predictive of symptoms than parental overcontrol (Brown & Whiteside, 2008; Hale, Engels, & Meeus, 2005), a finding that is counter to previous research and theory (e.g., Beesdo et al., 2010; McLeod et al., 2007; Rapee, 1997; Shanahan et al., 2008). Because preliminary evidence shows that specific subdimensions of parental over-control may be linked to specific subtypes of anxiety, additional research is needed to obtain a truly comprehensive and accurate understanding of the parental over-control to child anxiety link.

Third, the current study will advance understanding of the parental over-control to child anxiety link by examining its relevance in Hispanic/Latino families. Thus far, the parenting literature has been largely based on studies conducted with homogenous samples of primarily Caucasian families (Wood et al., 2003). It has only been in the last 25 years that minority families have received notable attention in empirical studies of parenting. Since then, comparisons of Hispanic/Latino and Caucasian parenting have revealed cross-ethnic differences in both the strategies utilized by parents as well as the effects of parenting behaviors on child outcomes; however, findings have been equivocal.

For example, some research suggests that Hispanic/Latino parents are more permissive than parents from other ethnocultural groups (e.g., Julian, McKenry, & McKelvey, 1994) while other findings show that Hispanic/Latino parents tend to exhibit high levels of authoritarian parenting behaviors (e.g., demanding and unresponsive; Darling & Steinberg, 1993; Hammer & Turner, 1990; Knight, Virdin, & Roosa, 1994; MacPhee, Fritz, & Miller, 1996). When it comes to consequences of parenting behaviors for child outcomes, findings also are mixed. One study of Mexican American and European American children showed parental acceptance to be associated with lower levels of negative symptoms (i.e., disruptive behaviors and depression) in both ethnic groups (Hill, Bush, & Roosa, 2003). While other research has shown that higher levels of acceptance are linked to increased anxiety in some, but not all, Hispanic/Latino children (e.g., depending on residence in Mexico or the United States; Varela et al., 2009). Similarly, there is a lack of agreement surrounding which type of parenting is "best" for Hispanic/Latino children. For instance, authoritative parenting has been found to be associated with positive outcomes for children in Hispanic/Latino families as it is for Caucasian children (Carlson, Uppal, & Prosser, 2000; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Radziszewka et al., 1996; Steinberg, Dornbush et al., 1992; Steinberg, Lamborn et al., 1992) but this finding is not replicated across all Hispanic/Latino families (Park & Bauer, 2002; Suarez-Orozco & Suarez-Orozco, 1995). At a more specific level, there is a growing body of research suggesting that the frequency, meaning, and consequences of parental over-control behaviors are variable across ethnic groups. For example, a study by Mason and colleagues (2004) showed that Hispanic (and African American) youth associated coercive parental over-control (e.g.,

My caregiver says "if I really care for her, I would not do things to cause her worry") with feelings of being loved and cared for whereas Caucasian youth reported feelings of being over-controlled or manipulated in response to this parenting behavior. Moreover, parental over-control is not consistently associated with increased maladjustment in ethnic minority youth, (e.g., Finkelstein, Donenberg, & Martinovich, 2001; Halgunseth, Ipsa, & Rudy, 2006), a fact that will be further elaborated on below.

### Parenting behaviors may function differently in a Hispanic/Latino cultural context

In order to clarify and advance understanding of parenting (including parental over-control) in families from diverse ethnic backgrounds, parenting behavior must be contextualized within cultural values and norms. White et al. (2013) describe parenting as a "mechanism through which culture is expressed in the family context" (pg. 366). That is, parents select parenting practices consistent with their cultural values, standards, and customs (Calzada, Fernandez, & Cortez, 2010; Chao, 2000; Chao & Tseng, 2002). As such, Hispanic/Latino parents tend to employ parenting strategies that emphasize traditional cultural values such as *respeto* (respect for and deference to elders), *familismo* (maintaining close family bonds), *personalismo* (emphasis on personal goodness and getting along with others), and *simpatia* (pleasant social interactions and harmony in interpersonal relationships). To this end, research has found that Hispanic/Latino parents exert more direct over-control over their children's emotion expression and behavior (Bulcroft, Carmody, & Bulcroft, 1996; Fuligni, 1998), demonstrate high levels of warmth and support (Calzada & Eyberg, 2002), and use fewer emotion words when speaking with their children (Cervantes, 2002) than parents of other ethnic backgrounds. In this way, Hispanic/Latino parents place a great emphasis on children's ability to exercise of

self-over-control, get along with others, and be obedient (Julian et al., 1994). In the context of these culturally grounded parental socialization practices, Hispanic/Latino children may also exhibit increased internalizing behaviors such as shyness, anxiety, and fear, because they are deemed appropriate forms of emotion expression (Mesquita & Walker, 2003; Varela & Hensley-Maloney, 2009).

When cultural context is considered, it is perhaps not surprising that Hispanic/Latino parents tend to use more over-control in their parenting practices than parents from ethnic backgrounds (e.g., Hill et al., 2003; Varela et al., 2004). Specifically, Halgusenth, Ipsa, and Rudy (2006) hypothesized that the use of over-control related behaviors is specifically designed to instill in children a sense of deference, family loyalty, and a commitment to family needs over one's own. Because these over-control behaviors are in keeping with Hispanic/Latino values and socialization goals, they are typically perceived as a culturally-sanctioned model of good parenting (Grusec, Rudy, & Martini, 1997). In this way, high levels of over-control may function differently in Hispanic/Latino families compared to Caucasian families. Elevations in the use of parental over-control by Caucasian parents, for example, are thought to be linked to increased parental and/or familial stress and associated with low levels of parental warmth and closeness; however, this is not the case for Hispanic/Latino parents (e.g., Carlson & Harwood, 2003). In fact, while Hispanic/Latino parenting has been described as having high levels of over-control and harshness, Hispanic/Latino parents also tend to be highly responsive, accepting, and warm (e.g., Calzada et al., 2010; Halgunseth et al., 2006; Hill et al., 2003; Varela et al., 2004; White et al., 2013). Given that parents' use of over-control is normative in Hispanic/Latino culture and is frequently implemented in

conjunction with positive parenting behaviors, the detrimental effects of over-control may be minimized or even non-existent in Hispanic/Latino children; however, research investigating this hypothesis is scarce and so far findings have been mixed (e.g., Creveling et al., 2010; Luis, Varela, & Moore, 2008; Varela, Sanchez-Sosa, Biggs, & Luis, 2009).

# Theoretical models linking parental over-control to child anxiety may need to be modified for Hispanic/Latino families

The process by which parental over-control is believed to contribute to children's anxiety (i.e., via excessive restriction of children's autonomous acts) may not be relevant across ethnic and cultural groups. That is, the parental over-control to child anxiety model is largely embedded within traditional Western values that emphasize individualism and self-maximization (Grusec, 2002; Wood et al., 2003). Indeed, empirical support for this model has relied almost exclusively on Caucasian families. Only three studies have examined the anxiety-related consequences of parental overcontrol in Hispanic/Latino youth to date. Varela, Sanchez-Sosa, Biggs, and Luis (2009) investigated the link between mothers' over-controlling parenting style and childhood anxiety in a sample of Mexican, Latino (predominantly Central American), and Caucasian families and found higher levels of over-control to be related to more child anxiety symptoms across all three cultural groups. Creveling, Varela, Weems, and Corey (2010) found a similar positive association between maternal over-control and anxiety in African American, Latino, and Caucasian youth. These findings are consistent with current child anxiety theory based on studies of Caucasian youth (e.g., Rapee, 2001). However, findings from a third study suggest that the parental over-control to child

anxiety link is more complex than originally posited. Luis, Varela, and Moore (2008) utilized a family discussion task in which children and parents are observed talking about ambiguous or anxiety-provoking situations to examine the association between overcontrol and anxiety. Results showed higher levels of over-controlling parenting during discussions of anxiety-provoking situations were related to higher levels of anxiety for Caucasian and Mexican youth living in Mexico but lower levels of anxious behaviors for Mexican American youth. It is possible that high levels of parental over-control serve a particularly adaptive function for Mexican American youth with minority status by facilitating deference to the head of household and commitment to collective family needs thereby making a more cohesive family unit to face external challenges (e.g., discrimination; Hill et al., 2003; Knight et al., 1994). In addition, Mexican origin families living in the United States may develop a dual cultural orientation in which they adhere to both traditional Hispanic/Latino values as well as mainstream American values. Since acculturation (i.e., the transition from one's home culture to the culture of the host country; Escobar, Nervi, & Gara, 2000) does not require the abandonment of traditional beliefs and practices (Gonzales, Knight, Morgan-Lopez, Saenz, & Sirolli, 2002), it is possible that Mexican American children expect a certain level of over-controlling parenting as this is indicative of care and concern in traditional Hispanic/Latino culture (Luis et al., 2009). Alternatively, variations in the anxiety-related consequences of parental over-control could be attributed to differences in measurement of over-control behaviors. That is, both Varela et al. (2009) and Creveling et al. (2010) assessed child perceptions of parents' use of 'hostile over-control' in everyday situations (i.e., "tells me exactly how to do my work," "decides what friends I can go around with"). On the other

hand, Luis and colleagues (2008) assessed over-control via behavioral coding of parents' use of direct commands, suggestions, planning, and attention devices during a conversation about a potentially anxiety provoking event. As discussed previously, different subtypes of parental over-control may exert differential effects on child outcomes and additional research is needed to explore this possibility.

The equivocal findings linking parental over-control to anxiety in Hispanic/Latino children indicate a need for additional research focusing on the influence of cultural context. As articulated by White and colleagues (2013), Hispanic/Latino parents may "uniquely package" their parenting techniques in order to facilitate the culturally determined socialization goals for their children (Hill et al., 2003; Carlson & Harwood, 2003). It is suggested that each individual parenting behavior is only meaningful when considered in conjunction with the other parenting behaviors being utilized. When it comes to parental over-control, research has yet to examine the meaning of the unique subdimensions of this parenting construct in their relation to each other (i.e., behavioral over-control, (lack of) autonomy granting, intrusiveness, and overprotection). Furthermore, parenting practices are designed to socialize children's experience, expression, and regulation of emotion in a manner that is consistent with cultural values and customs (Cole & Dennis, 1998; Cole & Tan, 2007). Thus, the current study advances our understanding of the "unique packaging" of parental over-control in Hispanic/Latino families by investigating parents' use of various subdimensions of over-control as well as the cultural values (i.e., *familismo* values) in which these parenting behaviors are embedded.

# *Familismo* values influence parenting behaviors and child socioemotional functioning in some Hispanic/Latino families

The theoretical literature on parenting in Hispanic/Latino families highlights familismo values as being particularly important in guiding parents' expectations, beliefs, and behaviors (Harwood et al., 2002; Umana-Taylor & Updegraff, 2012). Familismo refers to a belief system that emphasizes the importance of maintaining close family bonds, identifies the family as the primary source of support and assistance, and expects a commitment to family needs over individual desires (Negy & Woods, 1992; Staples & Mirande, 1980). Parents who adhere to *familismo* values have been shown to implement high levels of monitoring, demandingness, and responsivity (Calzada et al., 2010; Romero & Ruiz, 2007; White et al., 2013). In addition, *familismo* has been associated with parents' increased expectation for compliance from children and a belief that harsh parenting is necessary to instill familial solidarity, obedience, and respect (Calzada et al., 2010; Romero & Ruiz, 2007). Just as *familismo* influences Hispanic/Latino parents' use of over-control behaviors, it may also influence children's perception of these behaviors as well as subsequent effects on child anxiety and related problems. In general, Hispanic/Latino youth report more positive feelings about their parents and family, are more likely to seek advice from family member, and feel a greater responsibility to respect and support their parents than youth from other ethnic backgrounds (Fuligni, Tseng, and Lam, 1999; Suarez-Orozco & Suarez-Oroco, 1995; Zayas & Sodari, 1994). Also in keeping with *familismo* values, Hispanic/Latino youth may prioritize family connections and parental authority above their own individualism and thus experience less distress than Caucasians who tend not share these same values. As such, when

parental over-control behaviors are used in a family environment that also emphasizes closeness, support, and respect, parental over-control behaviors may not be as detrimental for Hispanic/Latino youth.

Overall, endorsement of *familismo* beliefs is widely regarded as having a positive influence on Hispanic/Latino children and families; however, emerging evidence suggests that this might not always be true. When defined broadly, *familismo* has been shown to operate as a protective factor for Hispanic/Latino youth (e.g., Ayon, Marsiglia, Bermudez-Parsai, 2010; Gamble & Modry-Mandell, 2008; German, Gonzales, & Dumka, 2009; Morcillo et al., 2011). For instance, adherence to traditional *familismo* values has been directly linked to lower levels of internalizing behaviors in adolescents (Ayon et al., 2010) and has been shown to protect against the negative effects of deviant peer affiliations on adolescent externalizing behavior problems (German et al., 2009). Moreover, *familismo* has been found to promote the positive effects of sibling warmth and parent-child closeness on adjustment in young Hispanic/Latino children (Gamble & Modry-Mandell, 2008). Interestingly, current conceptualizations of *familismo* identify three unique facets: 1) familismo-support: an emphasis on close and supportive family bonds; 2) familismo-referent: a belief that one's behaviors should be in keeping with familial expectations; and 3) *familismo*-obligations: a commitment to family needs over individual needs/desires (Knight et al., 2010). While *familismo*-support is consistently shown to operate as a buffer against risk, *familismo*-obligations might instead pose a vulnerability. For example, Martinez, Polo, and Carter (2012) found familism support was associated with less social anxiety and fewer physical symptoms of anxiety whereas children who endorsed high levels of familial obligations and deference to authority

exhibited more symptoms of separation anxiety and panic. In addition, Hispanic/Latino boys (but not girls) who were observed to have high levels of filial responsibility (a marker of *familismo*-obligations) were reported by teachers to have more externalizing behaviors (Kuperminc, Jurkovic, & Casey, 2009). As such, while the significance of family ties in Hispanic/Latino families may suppress the negative effects of parental over-control on pathological child anxiety development, this relation may be more complex than originally thought. The current study attempts to address the gap by exploring the influence of unique patterns of *familismo* facets and parental over-control subdimensions on child anxiety in Hispanic/Latino families.

### **Current Study**

Despite widespread acceptance of the influence of parental over-control on children's anxiety, extant research is limited by a lack of specificity in conceptualizations of over-control and the use of ethnically homogeneous (mostly Caucasian) samples. The current study proposed to address these gaps by exploring the differential risk associated with parental over-control in the context of ethnic and cultural diversity. This study represents an important advance in the literature by examining patterns of various parental over-control behaviors (i.e., behavioral over-control, lack of autonomy granting, intrusiveness and overprotection) and their association with specific anxiety symptom types (i.e., separation, social, and generalized anxiety). These relations were examined in families of fourth and fifth grade children at risk for the development of anxiety problems. The influence of parental over-control may be particularly salient for children in this age group as they are preparing to transition to adolescence in which increased independence and responsibility is often expected. As such, pre-adolescents may be especially sensitive to over-controlling parenting behaviors if it inhibits their ability to develop a mastery of their environment and function autonomously (McLeod et al., 2011). Moreover, data on the onset of anxiety disorders suggests that clinical anxiety tends to stabilize during this developmental period and become less likely to spontaneously remit (Last, Hansen, & Franco, 1997; for a comprehensive review, see Beesdo, Knappe, & Pine, 2009). And so, the middle childhood period represents a particularly opportune time to alter maladaptive anxiety trajectories in youth.

The current study was designed to examine two specific aims (see Figure 1). First, the study aimed to identify culturally grounded profiles of parental over-control as a way to better understand the patterns with which parents use various over-control behaviors. Specifically, the current study examined four subdimensions of parental over-control: 1) lack of autonomy granting; 2) intrusiveness; 3) overprotection; and 4) behavioral overcontrol (see Table 1 for definitions). In order to contextualize these parenting behaviors within Hispanic/Latino values, the three facets of *familismo* were also included in the profiles (i.e., support, referent, obligations). Though the total number of profiles that can be extracted may be limited by the sample size, it was expected that multiple latent profiles will emerge. For example, one latent profile may indicate high levels of parental over-control across all subdimensions as well as high familism-support. This profile would be aligned with traditional Hispanic/Latino cultural values in which parental socialization goals focus on instilling in children a sense of respect for and deference to elders as well as family closeness (e.g., Bulcroft, Carmody, & Bulcroft, 1996; Fuligni, 1998). Another profile may indicate high autonomy granting (i.e., low lack of autonomy granting), low overprotection, low behavioral over-control, low intrusiveness, and high

familism-obligations. This profile might suggest a family structure in which children are have a number of household responsibilities which they are expected to complete independently. Overall, the use of a person-centered approach allows naturally occurring patterns to emerge from the data rather than restricting patterns based on pre-determined conceptualizations of parental over-control. In this way, findings would provide information about how the constructs operate independently without assuming that if you are high on one aspect of parental over-control or *familismo* you are high across all facets.

The second aim of the study was to examine the concurrent relations between the observed culturally grounded profiles of parental over-control and child anxiety symptoms. In particular, it was proposed that relations between membership in culturally grounded over-control profiles and separation anxiety, social anxiety, and generalized anxiety would each be examined. It was expected that profiles indicative of high levels of parental over-control across several subdimensions and low levels of familism support will be associated with higher child anxiety symptoms across subtypes; however, profiles showing variability across subdimensions of over-control (e.g., high overprotection, low intrusiveness, low behavioral over-control) may show specificity in the relation to anxiety subtypes. When it comes to *familismo*, it was expected that profiles including a high level of support would be predictive of less anxiety regardless of level of over-control whereas profiles with high levels of obligations would be associated with more anxiety symptoms.

Because the possibility that profiles would not emerge is conceivable, an alternate set of aims were conceptualized for this research (see Figure 2). More specifically, the first alternate aim was to examine whether the prediction of child anxiety symptoms from each parental over-control behaviors differed across varying levels of adherence to each familismo value (i.e., each over-control behavior and each familismo value will be examined separately). Broadly, and consistent with previous research (Ayón et al., 2010; Gamble & Modry-Mandell, 2008; German et al., 2009; Morcillo et al., 2011), it was expected that higher levels of familism values would protect against the negative relation between parental over-control behaviors and child anxiety symptoms, especially for Hispanic/Latino families. The second alternate aim was to explore, in a descriptive way, the cross-ethnic similarities and differences in the type and amount of over-control behaviors used by parents. To this end, over-control was investigated and described at the item-level. Overall, the current study offers an innovative method for exploring the interplay of parental over-control and cultural values as they influence child anxiety. Findings provide information about the differential influence of specific patterns of parental over-control behaviors as well as explicate how *familismo* values operate in conjunction with the parental socialization of anxiety.

#### Methods

### **Participants**

The study used data from a multi-site pilot preventive intervention trial evaluating the effects of a school-based anxiety prevention program in the southwestern region of the United States. To allow exploration of hypotheses using a cross-ethnic comparative approach, only data corresponding to Caucasian and Hispanic/Latino children was used for this study's secondary data analyses. The sample included 98 (M age = 9.73 years; 59.2% Hispanic/Latino (mostly Mexican origin)) children and their primary caregivers (mostly mothers). Full demographic information including participant age, gender,

ethnicity, family income, parent education level, and parent marital status are listed in Table 2. The ratio of participant ethnicity (i.e., Hispanic/Latino:Caucasian) in the current sample was similar to that found in the larger sample screened for participation in the school-based anxiety prevention program (54.5% Hispanic/Latino) and is representative of the general population from which the sample was recruited.

### **Procedures**

All study procedures were approved by the university's Institutional Review Board. Children were recruited from nine public elementary schools after the primary caregiver (or legal guardian) provided consent (and children provided assent) for the primary study. A full consort diagram is depicted in Figure 3. Briefly, a total of 1,539 letters describing the study were sent to the parents (or legal guardians) of 4<sup>th</sup> and 5<sup>th</sup> grade children in regular classes. In response, 875 parents provided consent, 326 students did not return the signed consent form, and 338 parents did not provide consent. With parent consent (assent from child), a battery of questionnaires was administered in the classroom to all participating children (N = 859). All measures were administered in English to youth. Non-participating children were provided with activity sheets (e.g., puzzles, mazes) during the administration of the questionnaire battery. During administration, a trained research assistant read aloud the questions and response choices while two other research assistants monitored administration and provided individual assistance to children, as necessary. Children who met the "at risk" cutoff score on the Spence Children's Anxiety Scale (SCAS; Spence, 1997; 1998) during this screening were invited to participate in the multi-site school-based anxiety prevention program (n = 111). Parents and children who chose to participate were randomized to treatment (6-week

intervention; n = 61) or control (education support; n = 50) (Note: As previously mentioned, only data corresponding to Caucasian and Hispanic/Latino children was used in this study (treatment n = 54; control n = 44). For these families a more extensive battery of questionnaires was administered via telephone interviews before the 6-week intervention. The interview lasted about one and a half hours. All children completed the interview in English; approximately 34% of caregivers completed the interview in Spanish. Measures used in the current study were pulled from this more extensive, preintervention battery.

### Measures

**Parental over-control.** Parental lack of autonomy granting, intrusiveness, and overprotection were measured using caregiver report on a modified version of the Child Development Questionnaire (CDQ-M; Zabin & Melamed, 1980). The CDQ-M includes 14 situations in which children often show anxiety and asks parents to report on the extent to which they would engage in a variety of parenting behaviors. All items are scored as 1 (*never*), 2 (*rarely*), 3 (*sometimes*), 4 (*often*), or 5 (*always*). Split-half reliability is reported to be acceptable (r = .67; Zabin & Melamed, 1980). In the current sample, the internal consistency (alpha) coefficients for the CDQ-M subscales ranged from .65 to .85.

Lack of autonomy granting was measured using the 14-item Force subscale of the CDQ-M, which is designed to assess the extent to which parents force their child to unwilling engage in a behavior. Sample items include "If [CHILD'S NAME] woke up in the middle of the night and said (she/he) was scared to be alone, I would put [CHILD'S NAME] back into (her/his) bed" and "If [CHILD'S NAME] was afraid to get back on

(her/his) bicycle after falling off and did not get hurt, I would place [CHILD'S NAME] physically on the bicycle myself." In the current sample, the internal consistency (alpha) coefficients for the CDQ-M Force subscale was .69.

Intrusiveness was measured using the 14-item Modeling and Reassurance subscale of the CDQ-M, which is designed to assess the extent to which parents attempt to alleviate or minimize child distress by engaging in the behavior him/herself or offering extra reassurance. Sample items include "If [CHILD'S NAME] was afraid to get a drink of water because it was dark, I would go with [CHILD'S NAME] to get the water to show (her/him) there is nothing to be afraid of" and "If [CHILD'S NAME] was afraid to talk to children (she/he) does not know, I would tell [CHILD'S NAME] what I would do when I have to talk to someone I don't know." In the current sample, the internal consistency (alpha) coefficients for the CDQ-M Modeling and Reassurance subscale was .85.

*Overprotection* was measured using the 14-item Reinforcement of Dependency subscale of the CDQ-M, which is designed to assess extent to which parents allow their child to avoid situations that may cause them distress. Sample items include "If [CHILD'S NAME] was complaining of a stomachache the morning of a spelling test, I would tell [CHILD'S NAME] that (she/he) could stay home from school" and "If [CHILD'S NAME] told me that (her/his) heart was beating very fast because s/he was feeling nervous, I would ask [CHILD'S NAME] how I could help (her/him) calm down and then do whatever (she/he) asked." In the current sample, the internal consistency (alpha) coefficients for the CDQ-M Reinforcement of Dependency subscale was .65.

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*Behavioral over-control* was measured using the parent version of the Children's Report on Parent Behavior: 30 item version- Firm over-control subscale (CRPBI-30; Schludermann & Schludermann, 1988). The Firm Over-control Subscale includes 4 items designed to assess caregivers' use of direct means of over-control to restrict, monitor, or discipline the child. Items are scored as 0 (*not at all true*), 1 (*somewhat true*), and 2 (*very true*). Sample items include "I insist that my child must do exactly as he/she is told" and "I let my child go anyplace he/she pleases without asking" (reverse coded). The firm over-control subscale of the CRPBI-30 has been shown to have acceptable internal consistency (0.63 to 0.65) and test-retest reliability (0.79 to 0.83; Schludermann & Schludermann, 1988). In the current sample, the internal consistency (alpha) coefficient for the Firm Over-control subscale was .63.

**Familism values.** Familism support, obligations, and referent were measured using caregiver report on the Mexican American Cultural Values Scale- Familismo subscales (MACVS; Knight et al., 2010). The Familismo subscales include 16 items designed to assess the extent to which respondents believe in or adhere to traditional Hispanic/Latino family values. All items are scored as 1 (*not at all*), 2 (*a little*), 3 (*somewhat*), 4 (*very much*), or 5 (*completely*). Internal consistencies on the total and subscale scores have been reported as ranging from 0.55 to 0.90 (Berkel et al., 2010; Delgado, Updegraff, Roosa, & Umana-Taylor, 2011; Knight et al., 2010). In the current sample, the internal consistency (alpha) coefficient for the MACVS-Familism subscales ranged from .60 to .71.

The *Familism Support* and emotional closeness subscale includes 6 items designed to assess an individual's belief in the importance of the practice and

maintenance of close family bonds. Sample items include "Family provides a sense of security because they will always be there for you" and "It is important for family members to show their love and affection to one another." In the current sample, the internal consistency (alpha) coefficient for the MACVS Familism Support subscale was .71.

The *Familism Obligations* subscale includes 5 items designed to assess an individual's belief that family members have a responsibility to supply their kin with instrumental and emotional support. Sample items include "Older kids should take care of and be role models for their younger brothers and sisters" and "Children should be taught that it is their duty to care for their parents when their parents get old." In the current sample, the internal consistency (alpha) coefficient for the MACVS Familism Obligations subscale was .60.

The *Familism Referent* subscale includes 5 items designed to assess an individual's belief that family members' behaviors should be in keeping with family expectations. Sample items include "Children should always do things to make their parents happy" and "Children should be taught to always be good because they represent the family." In the current sample, the internal consistency (alpha) coefficient for the MACVS Familism Referent subscale was .71.

**Parent report of child anxiety.** Child anxiety symptoms were measured using caregiver report on the Spence Children's Anxiety Scale (SCAS; Spence, 1997, 1998). The SCAS includes 38 items designed to assess child anxiety symptoms across six domains: social phobia, separation anxiety, panic attack/agoraphobia, obsessive compulsive disorder, generalized anxiety, and physical injury fears. For each item,

respondents report how often a given feeling, thought, or behavior is experienced. Items are scored as 0 (never), 1 (sometimes), 2 (often), or 3 (always). Social anxiety symptoms were measured using the 6-item Social Phobia subscale. Sample items include "My child feels afraid that s/he will make a fool of her/himself in front of people" and "My child worries what other people think of him/her." Separation anxiety symptoms were measured using the 6-item Separation Anxiety subscale. Sample items include "My child would feel scared if s/he had to stay away from home overnight" and "My child worries that something awful will happen to someone in our family." Generalized anxiety symptoms were measured using the 6-item Overanxious Disorder subscale. Sample items include "I worry about things" and "When I have a problem, I get a funny feeling in my stomach." Total anxiety symptoms were measured using the SCAS Total Score. Spence, Barrett, and Turner (2003) reported internal consistencies for the total and subscale scores ranging from 0.60 to 0.92 and 12 week test-retest reliability estimates ranging between 0.51 and 0.75. The SCAS correlates significantly with the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds and Richmond, 1978) (r = 0.40 to 0.75, p < 1000.001; Spence et al., 2003). In the current sample, the internal consistency (alpha) coefficients for the SCAS subscales ranged from .75 to .81. The alpha for the SCAS total score was .94.

**Child self-report of anxiety.** Child anxiety symptoms were also measured using child report on the Multidimensional Anxiety Scale for Children (MASC; March, Parker, Sullivan, Stallings, & Conners, 1997; March, Sullivan, & Parker, 1999). The MASC includes 39 items designed to assess child anxiety symptoms across four domains: physical symptoms, harm avoidance, social anxiety, and separation anxiety/panic. For

each item, respondents report the extent to which each statement is true for them (or their child). Items are scored as 0 (*never true*), 1 (*rarely true*), 2 (*sometimes true*), 3 (*often true*). *Social anxiety symptoms* were measured using the 9-item Social Anxiety subscale. Sample items include "I worry about getting called on in class" and "I'm afraid that other kids will make fun of me." *Separation anxiety symptoms* were measured using the 9-item Separation Anxiety/Panic subscale. Sample items include "I try to stay close to my parents" and "I sleep next to someone from my family." (Note: The MASC does not have a subscale to assess *generalized anxiety symptoms*.) *Total anxiety symptoms* were measured using the MASC Total Score. Internal consistencies of the MASC have been reported as ranging from 0.87 to 0.90 and estimates of concurrent validity have been found to range from (*rs*) 0.60 to 0.69 (March et al., 1997; Rynn et al., 2006). In the current sample, the internal consistency (alpha) coefficients for the MASC subscales ranged from .62 to .79. The alpha for the MASC total score was .85.

# Data Analytic Plan

**Preliminary analyses.** Data were reduced to scale scores and a series of preliminary analyses were run to ensure integrity of the data. Specifically, outlier analyses using DFFITs and DFBETAs were conducted to identify potentially influential cases. In addition, study variables were checked for normality and correlation analyses were conducted to assess the relations among study variables. Given the small sample size, statistics with significance values of p < .10 are reported and discussed as clinically meaningful.

**Primary analyses.** Latent profile analysis (LPA) was conducted using MPlus (Muthén & Muthén, 2012) to assess culturally grounded profiles of parental over-control.

The primary goal of LPA is to identify groups of individuals who share similar profiles without forcing them into predetermined classifications (Bergman, 2001). In contrast to the traditional variable-centered approach, LPA takes a person-centered approach to data analysis. That is, rather than examining parental over-control as a construct on which parents score high or low, LPA examines configurations of the various over-control behaviors within a parent and then classify parents based on similar configurations. This analytic strategy was particularly appropriate for the current study as it allows families to have elevated scores on some, but not all, indicators thus allowing for the identification of qualitatively distinct profiles. In this way, LPA provides a more holistic representation of specific patterns of parental over-control behaviors and familism values within each person and affords the opportunity to explore how these patterns relate to various child anxiety outcomes.

The optimal number of profile solutions was determined using a data-driven approach. First, a single solution model was analyzed, followed by models with increasing numbers of profile solutions. Model fit was determined by statistical fit indices as well as the relation of the solution to substantive theory. Based on current guidelines for LPA, Akaike's Information Criterion (AIC; Akaike, 1973, 1987) Bayesian information criterion index (BIC; Schwarz, 1978), sample-size adjusted BIC, Vuong-Lo-Mendel-Rubin test (LMR; Lo, Mendell, & Rubin, 2001), and entropy were used as the statistical measures of fit (Tein, Coxe, Cham, 2013). Model stability as measured by loglikelihood replication, posterior probabilities, and proportion of profiles membership were considered as additional indicators of fit as appropriate (Pastor, Barron, Miller, & Davis, 2007; Geiser, 2012). Had the LPA identified meaningful profiles, chi-squared analyses would have been conducted to evaluate differences in culturally grounded parental over-control profiles across ethnicity. Then, an Mplus framework would have been used to test for significant differences in mean levels of anxiety symptoms (separation, social, and generalized) across profile membership.

# Alternative Data Analytic Plan

The feasibility of the analytic plan described above was dependent on the outcome of the LPA and the presence of culturally grounded profiles of parental overcontrol in the current sample. Given the small sample size, the identification of interpretable profiles might not be attainable using an LPA approach. As such, an alternate data analytic approach was developed to investigate the alternate aims as described above. As part of this alternate plan, a series of regression analyses using a two-way interaction approach (parental over-control behavior X familism value) were conducted to examine how the relation between each parental over-control behavior (i.e., lack of autonomy granting, intrusiveness, overprotection, behavioral over-control) may be influenced by each familism value (i.e., support, obligations, referent) in predicting child anxiety symptoms. Given the small sample size and because ethnic differences in these predictions were of interest, all models were run separately by ethnicity.

In addition to these regression models and to further investigate the similarities and differences in anxiety-relevant parental over-control behaviors across Hispanic/Latino and Caucasian families, a series of exploratory descriptive analyses were conducted. Specifically, constructs were examined at the item level to investigate similarities and differences in the use of parental over-control behaviors across ethnic

groups. In order to focus on over-control behaviors particularly salient to anxiety, the following item-level analyses concentrated on the items from the Child Development Questionnaire-Modified (CDQ-M; Zabin & Melamed, 1980). Because the CDQ-M is specifically designed to assess parental reactions to children's expression of anxiety, exploring cross-ethnic similarities and differences on these items may be particularly meaningful for the advancement of child anxiety theory as well as prevention and intervention program design. Exploratory descriptive analyses focus on differences in item-level means and frequency counts to identify the parental over-control behaviors most commonly endorsed within each ethnic group (Hispanic/Latino and Caucasian). Next, t-tests were conducted to assess mean score differences on parental over-control behaviors (at the item level) across ethnicity. Then, correlations were conducted between each parental over-control behavior (at the item level) and ethnicity (Hispanic/Latino = 1). Results from the t-tests and correlations were used to highlight differences across ethnicities. Although this alternative approach cannot examine culturally grounded patterns of parental over-control behaviors per se, it provides meaningful contributions to the understanding of ethnocultural similarities and differences in the use of parental overcontrol behaviors and their influence on child anxiety symptoms.

# Results

# **Preliminary Analyses**

**Outlier Analyses.** Regression diagnostics were conducted to identify and evaluate outliers. To this end, two sets of three regression equations were examined using child- and parent-reported total anxiety symptoms as the dependent variables, respectively. The first regression equation contained the four parental over-control behaviors (i.e., lack of autonomy granting, intrusiveness, overprotection, and behavioral over-control) predicting total child anxiety symptoms. A second regression equation included the three familism values (i.e., support, obligations, and referent) as predictors of total child anxiety symptoms. The final regression equation included all of the parental over-control behaviors and the familism values in the prediction of total child anxiety symptoms. In each equation, DFFITs were examined to explore how each case influences the overall regression equation and DFBETAs were examined as a more specific indicator of how each case affects each regression coefficient. Because the sample size for this study is small to moderate, a cutoff of less than one was used (Cohen, Cohen, West, & Aiken, 2003). Diagnostic analyses indicated that all values for DFFITs and DFBETAs were below one. As such, none of the cases appear to substantially influence the regression of the predictors on the measure of child- or parent- reported total anxiety symptoms, no outliers were identified, and the sample remained intact.

**Descriptive Statistics and Correlations.** Table 3 shows the mean, standard deviation, range, and normality statistics corresponding to the variables examined in this study. The proposed variables were examined for normality by evaluating skewness and kurtosis. As suggested by West, Finch, and Curran (1995), the limits for normally distributed variables that would not sufficiently bias the analyses have skewness values less than 2 and kurtosis values less than 7. Using these criteria, all variables were found to be within the normal range of acceptability.

Correlations among study variables are presented in Table 4. Correlations among the facets of parental over-control behaviors (i.e., lack of autonomy granting, intrusiveness, overprotection, behavioral over-control) were from near zero to medium

(rs ranged from .001 to .32) suggesting a low degree of overlap among these constructs. Correlations among familism values (i.e., support, obligations, referent) were large (rs ranged from .62 to .66); however, given the conceptual distinctness of the three familism constructs and past research showing differential influence on child outcomes (e.g., Ayón et al., 2010; Gamble & Modry-Mandell, 2008; German et al., 2009; Kupermic et al., 2009; Martinez et al., 2012; Morcillo et al., 2011), the formation of a familism composite variable was deemed unnecessary and each subscale remained separate in the LPA. When it comes to child anxiety variables, correlations among parent-reported child anxiety (i.e., total symptoms, social anxiety symptoms, separation anxiety symptoms, generalized anxiety symptoms) were medium to large (rs ranged from .55 to .89). Similarly, correlations among child self-reported anxiety symptoms (i.e., total symptoms, social anxiety symptoms, and separation anxiety symptoms) were medium to large (rs ranged from .42 to .76). Consistent with literature, correlations between parent- and childreported anxiety symptoms were small to medium (rs ranged from .21 to .30; Achenbach, McConaughy, & Howell, 1987; De los Reyes & Kazdin 2004).

To further explore sample characteristics, a series of descriptive analyses were conducted. Independent samples t-tests were used to compare mean score differences of study variables across sex and ethnicity. In cases where the assumption of homogeneity of variance across groups is violated, the alternative t statistic (i.e., the Welch t-test statistic) is reported. Results are presented in Table 5. As shown, Hispanic/Latino parents reported significantly higher levels of overprotection and lack of autonomy granting compared to their Caucasian counterparts (For lack of autonomy granting: t (95.65) = -2.66, p = .009; For overprotection: t (96) = -3.43, p = .001). The Hispanic/Latino

subsample also endorsed significantly higher levels of familism support (t (96) = -2.33, p= .02), obligations (t (96) = -3.42, p = .001), and referent (t (96) = -3.78, p < .001) compared to the Caucasian subsample. In terms of anxiety symptom levels, Hispanic/Latino parents reported that their children experienced significantly more symptoms of separation anxiety (t (94.28) = -3.46, p = .001) and marginally more symptoms of generalized anxiety (t(96) = -1.95, p = .05) compared to Caucasian parents' report of their children's anxiety. When it comes to cross-sex comparisons, significant mean differences were only found for anxiety symptoms levels (not for parental overcontrol behaviors or familism values). Specifically, girls were reported to have higher levels of social anxiety based on child self-report of symptoms (t(95) = 2.51, p = .01) and parent ratings of child anxiety symptoms (t (96) = 1.79, p = .08). Girls were also shown to have higher levels of separation anxiety again based on both child-self report of symptoms (t (51.45) = 2.14, p = .04) and parent ratings of child anxiety symptoms (t (96)) = 2.06, p = .04). Parent-reported total anxiety symptoms were also marginally higher for girls (t (96) = 1.82, p = .07) compared to boys.

Chi-square tests were used to explore any differences of sociodemographic characteristics across ethnicity. As shown in Table 6, chi-square tests revealed that there were more Caucasian families in the highest income level and more Hispanic/Latino families in the lowest income level ( $x^2$  (3, n = 98) = 21.09, p < .001). Results from these analyses also revealed that there were more Hispanic/Latino parents in the lowest level of educational attainment (i.e., no high school diploma/degree) and more Caucasians parents in the highest levels level of educational attainment (i.e., college degree or more; For mothers:  $x^2$  (3, n = 97) = 36.89, p < .001; For fathers:  $x^2$  (3, n = 94) = 33.07, p < .001).

Lastly, a higher percentage of Caucasian parents reported being married compared to their Hispanic/Latino counterparts ( $x^2(3, n = 98) = 9.26, p = .03$ ).

Correlations among study variables were also conducted separately for Hispanic/Latino and Caucasian subsamples (see Table 7). Following recommendations of Cohen et al. (2003), Fisher z' transformation was used to test for significant differences between independent samples correlations. Results show that only two (out of 91) correlations were significantly different across ethnic groups. Specifically, the correlation between parent-reported child social anxiety and familismo support and the correlation between parent-reported child social anxiety and familismo obligations were significantly larger and more negative for the Hispanic/Latino subsample than the Caucasian subsample (p < .05). Moreover, relations among the subcomponents/types of broad study variables (i.e., parental over-control, familism values, and child anxiety) were found to be consistent across ethnic groups. That is, parental intrusiveness was found to be correlated with both parental lack of autonomy granting and parental overprotection for both Hispanic/Latino and Caucasian families (rs ranged from .24 to .35). The three facets of familism also were found to be interrelated across ethnic groups (rs ranged from .54 to .71) as were parent reports of child anxiety symptoms (3 subtypes and total; rs ranged from .43 to .92) and child self-reported anxiety symptoms (2 subtypes and total; rs ranged from .41 to .79).

When it comes to correlations across the three broad study constructs, crossethnic variations in the patterns of relations were observed. An examination of the relations between parental over-control behaviors and familism values revealed more significant relations for the Caucasian subsample (eight out of ten correlations were significant; significant *rs* ranged from .27 to .59) compared to the Hispanic/Latino subsample (three out of ten correlations were significant; significant *rs* ranged from .27 to .32). In terms of correlations between parental over-control behaviors and child anxiety, lack of autonomy granting and parental overprotection were both linked to significantly higher levels of child's separation anxiety symptoms and child's total anxiety symptoms, both as reported by parents (*rs* ranged from .23 to .37) for Hispanic/Latino, but not Caucasian, families. Additional significant relations were found between parental overprotection and parent-reported child social anxiety (r = .24) and behavioral overcontrol and parent-reported total child anxiety symptoms (r = .22) in the Hispanic/Latino subsample. For Caucasian families, no significant correlations emerged between any of the parental over-control behaviors and any of the measures of child anxiety. A similar lack of significant relations was found between the facets of familism values and child anxiety measures for the Caucasian subsample.

# **Primary Analyses**

A series of latent profile analysis (LPA) models was tested to identify groups of families whose patterns of parental over-control behaviors and cultural values are alike. A total of seven variables (standardized to have all constructs on a comparable scale) were used as indicators in each profile model: Parental lack of autonomy granting, parental intrusiveness, parental overprotection, parental behavioral over-control, familism support, familism obligations, and familism referent. Beginning with a one-profile solution (i.e., an independent means model), LPA models were evaluated in a stepwise fashion with each profile solution being compared to a solution with one profile more. Indicators of model fit included Akaike's Information Criterion (AIC; Akaike, 1973, 1987), Bayesian information criterion index (BIC; Schwarz, 1978), sample-size adjusted BIC (ABIC), Vuong-Lo-Mendel-Rubin test (LMR; Lo, Mendell, & Rubin, 2001), Entropy (Tein, Coxe, & Cham, 2013) and proportion of profile membership (Pastor et al., 2007; Geiser, 2012). For the AIC, BIC, and ABIC, smaller values are indicative of better model fit. When it comes to the LMR test stastic, a significant value (p < .05) represents that the current LPA model fits the data better than an LPA model with one less profile. Finally, entropy values >.80 suggest a high degree of separation between profiles in the LPA model. One-, two-, and three- profile solutions were estimated. Results of LPA analyses are presented in Table 8.

Based on the aforementioned fit indices and interpretability of the model solutions, none of the solutions demonstrated satisfactory model fit (see Table 8). The two-profile solution demonstrated good fit based on LMR (p = .02) and entropy (.84) values; however, the AIC, BIC and ABIC are larger values compared to those in the one-profile solution suggesting a decrease in model fit from the simpler one-profile solution. The three-profile solution demonstrated similarly poor fit with a non-significant LMR value (p = .18) and a larger BIC value compared to the two-profile solution. The lack of identifiable profiles in the current sample precludes the analyses originally proposed for Aim 2. As such, the alternate approach was employed to investigate questions related to the influence of cultural values on the link between parental over-control and child anxiety symptoms.

# Alternate Analyses

**Regressions.** An Mplus framework was used to conduct a series of regression analyses to evaluate the interplay of each parental over-control behavior (i.e., lack of

autonomy granting, intrusiveness, overprotection, and behavioral over-control) with each familism value (i.e., familism support, familism obligations, and familism referent) in the prediction of child anxiety symptoms as reported by parent and child, respectively. That is, a total of twelve regression models were examined for each parental over-control behavior. Each model included a score one of the four parental over-control behaviors, a score on one of the three familism values (both centered, as recommended by Cohen et al., 2003), and a parental over-control X familism value interaction term. Analyses were conducted separately by ethnicity. Results of all regression models are presented in Table 9 for Hispanic/Latino families and in Table 10 for Caucasian families. A brief summary of findings is provided below for each parental over-control behavior.

*Lack of Autonomy Granting.* For Hispanic/Latino children, the lack of autonomy granting/familism support and lack of autonomy granting/familism referent models explained a significant portion of the variance in parent-reported child anxiety symptoms ( $\mathbb{R}^2 = .22$ , p = .02 and  $\mathbb{R}^2 = .14$ , p = .09, respectively). In addition, parental lack of autonomy granting was found to have a significant and positive main effect on parent-reported child anxiety symptoms, across all three models ((standardized)  $\beta$ s ranged from .29 to .35, ps < .05). In the lack of autonomy granting/familism support model, familism support showed a significant and negative main effect on parent-report child anxiety symptoms ( $\beta = -.37$ , p = .001). No significant regression effects were found when child self-reported anxiety symptoms were used as the outcome in the Hispanic/Latino subsample.

For Caucasian children, results revealed a significant parental lack of autonomy granting X familism obligations interaction in the prediction of parent-reported child

anxiety symptoms. Following Cohen et al. (2003), the significant interaction ( $\beta = -.37$ , p = .01) was probed by examining simple slopes (see Figure 4). The simple slope of parental lack of autonomy granting at high levels of familism obligations was significant in predicting parent-reported anxiety in the positive direction. That is, when the level of familism obligations was 1 SD above the mean, the simple slope of lack of autonomy granting on child anxiety was significant (b = 15.15 (SE = 6.75), p = .03). At mean and low levels of familism obligations, the simple slope of lack of autonomy granting on child anxiety was not significant. No significant regression effects were found when child self-reported anxiety symptoms were used as the outcome in the Caucasian subsample.

*Intrusiveness.* For Hispanic/Latino children, results from the parental intrusiveness. For Hispanic/Latino children, results from the parental intrusiveness/familism support model showed a significant and negative main effect on parent-report child anxiety symptoms ( $\beta = -.35$ , p = .004). When effects on child self-reported anxiety symptoms were examined, the parental intrusiveness/familism referent model was found to explain a significant portion of the variance ( $R^2 = .23$ , p = .02). In addition, a significant parental intrusiveness X familism referent interaction emerged ( $\beta = -.42$ , p < .001). Simple slopes were examined and are depicted in Figure 5. The simple slopes of parental intrusiveness at mean and high levels of familism referent were significant in predicting child self-reported anxiety in the negative direction. That is, when the level of familism referent was 1 SD above the mean, the simple slope of intrusiveness on anxiety was significant (b = -17.41 (SE = 4.50), p < .001) and at mean levels of familism referent, the simple slope of intrusiveness on anxiety was also significant (b = -7.03 (SE = 2.91), p = .02). At low levels of familism referent, the simple slope of lack of autonomy granting on child anxiety was not significant. For Caucasian

children, the parental intrusiveness regression models showed no significant effects.

Overprotection. For Hispanic/Latino children, the overprotection/familism support and lack of autonomy granting/familism obligations models explained a significant portion of the variance in parent-reported child anxiety symptoms ( $R^2 = .18$ , p = .05 and  $R^2$  = .16, p = .07, respectively). In addition, parental overprotection was found to have a significant and positive main effect on parent-reported child anxiety symptoms, across all three models ( $\beta$ s ranged from .23 to .28, *p*s < .10). In the overprotection/familism support model, familism support showed a significant and negative main effect on parent-report child anxiety symptoms ( $\beta = -.31$ , p = .01). Results also revealed a significant parental overprotection X familism obligations interaction in the prediction of parent-reported child anxiety symptoms ( $\beta = -.24$ , p = .06). Simple slopes were examined and are depicted in Figure 6. The simple slopes of parental overprotection at low and mean levels of familism obligations were significant in predicting parent-reported child anxiety in the positive direction. That is, when the level of familism obligations was 1 SD below the mean, the simple slope of overprotection on anxiety was significant (b = 19.09(SE = 6.34), p = .003) and at mean levels of familism obligations, the simple slope of obligations on anxiety was also significant (b = 9.56 (SE = 5.21), p = .07). At high levels of familism obligations, the simple slope of lack of autonomy granting on child anxiety was not significant. No significant regression effects were found when child self-reported anxiety symptoms were used as the outcome in the Hispanic/Latino subsample.

For Caucasian children, a significant overprotection X familism support interaction was found in the prediction of parent-reported child anxiety symptoms ( $\beta$  = - .27, p = .09). Simple slopes were examined and are depicted in Figure 7. The simple slopes of parental overprotection at low levels of familism obligations were significant in predicting parent-reported child anxiety in the positive direction. That is, when the level of familism obligations was 1 SD below the mean, the simple slope of overprotection on anxiety was significant (b = 17.22 (SE = 9.14), p = .06). At mean and high levels of familism obligations, the simple slope of overprotection on child anxiety was not significant. In addition, parental overprotection was found to interact with familism referent in the prediction of parent-reported child anxiety in the Caucasian subsample ( $\beta = -.32$ , p = .07). An examination of simple slopes (see Figure 8) showed that simple slope of parental overprotection on anxiety was significant at low levels of familism referent (b = 18.08 (SE = 8.43), p = .03). The simple slope of parental overprotection on anxiety was not significant at mean and high levels of familism referent. No significant regression effects were found when child self-reported anxiety symptoms were used as the outcome in the Caucasian subsample.

Behavioral control. For Hispanic/Latino children, the behavioral control/familism support model explained a significant portion of the variance in parent-reported child anxiety symptoms ( $\mathbb{R}^2 = .16$ , p = .08). In addition, behavioral control was found to have a significant and positive main effect on parent-reported child anxiety symptoms, across all three models ( $\beta$ s ranged from .21 to .28, ps < .10). In the behavioral control X familism support model, familism support showed a significant and negative main effect on parentreported child anxiety symptoms ( $\beta = ..31$ , p = .007). Similarly, in the behavioral control X familism obligations model, familism obligations was found to have a significant and negative main effect on parent-reported child anxiety symptoms ( $\beta = ..22$ , p = .08). No significant regression effects were found when child self-reported anxiety symptoms were used as the outcome in the Hispanic/Latino subsample. For Caucasian children, the parental behavioral control regression models showed no significant effects.

**Descriptive Analyses.** To further explore the use of parental over-control behaviors, item-level descriptive analyses were conducted. Item-level frequencies were used to identify the most highly endorsed items within Hispanic/Latino and Caucasian groups, respectively. Results showed that the two most frequently used parental overcontrol behaviors were the same across ethnic groups: 1) "If [CHILD'S NAME] was scared to give a report in front of the class and refused to do it. I would make sure my child gave her/his report" (from the Lack of Autonomy Granting subscale and 2) "If [CHILD'S NAME] often tells me that s/he worries that I might get sick even though I am healthy, I would tell my child, each time s/he asks, that s/he has nothing to worry about because I am healthy" (from the Overprotection subscale). For both of these items, 67.2% of Hispanic/Latino parents and 55% of Caucasian parents reported that they "always" respond in this way. In the Hispanic/Latino subsample, the third most frequently endorsed item was "If while at school, [CHILD'S NAME] missed me a lot and asked to be taken home, I would leave her/him at school until the school day is over" (from the Lack of Autonomy Granting subscale; 63.8% "always" do this). For Caucasian parents, the third most frequently endorsed item was "If [CHILD'S NAME] told me that her/his heart was beating very fast because s/he was feeling nervous, I would tell him/her it is ok to be nervous sometimes and show her/him to calm down" (from the Intrusiveness subscale; 50% "always" do this). Item-level mean scores were also calculated for each group. Items with the highest mean scores are presented in Table 11. As shown, the top

three most frequently endorsed items for each group were among the items with the highest means for each ethnic group.

To explore possible differences across ethnic groups, t-tests were used to assess mean score differences on parental over-control (at the item level) across ethnicity. Using this method, six parental over-control behaviors were identified as possibly being the most meaningful for Hispanic/Latino families compared to Caucasian families: (a) "If [CHILD'S NAME] hands were shaking when she/he was waiting to have her/his first filling at the dentist, I would hold his/her hands down so that they would stop shaking." (from Lack of Autonomy Granting subscale); (b) "If [CHILD'S NAME] was afraid to get a drink of water because it was dark, I would go with her/him to get the water to show her/him there is nothing to be afraid of." (from Intrusiveness subscale); (c) "If [CHILD'S NAME] was afraid to get back on her/his bicycle after falling off (and did not get hurt), I would place him/her physically on the bicycle myself." (from Lack of Autonomy Granting subscale); (d) "If [CHILD'S NAME] constantly asked me to over-check her/his homework and it prevented me from getting things done at home, I would check his/her homework with her/him whenever s/he asked." (from Overprotection subscale); (e) "If [CHILD'S NAME] hands were shaking when she/he was waiting to have her/his first filling at the dentist, I would tell her/him that if she/he does not stop shaking we are going to have to leave and reschedule for another time." (from Lack of Autonomy Granting subscale); (f) "If [CHILD'S NAME] was complaining of a stomachache the morning of a spelling test, I would tell him/her to stop it and that the other kids don't feel this way when they have a test." (from Lack of Autonomy Granting subscale). As expected, these

parental over-control behaviors were also found to be the most highly correlated with ethnicity (Hispanic/Latino = 1). Results are presented in Table 12.

# Discussion

The current study sought to address the lack of specificity in conceptualizations of parental over-control and its relation to childhood anxiety. Although parental overcontrol has long been considered a risk factor for the development and maintenance of child anxiety, this study advances understanding about the nature of this association by examining four specific and distinct types of parental over-control behaviors and their association with children's anxious emotions. In addition, the study offers novel information about the importance of the parenting context by exploring the interplay of parental over-control and cultural values (i.e., familism) in both Hispanic/Latino and Caucasian families. Findings from the current sample of Hispanic/Latino families are generally consistent with child anxiety theory and past research showing that parent's over-control behaviors are related to more child anxiety symptoms. Furthermore, some findings suggest that certain types of over-control (i.e., lack of autonomy granting, overprotection) may be more salient to anxiety in Hispanic/Latino children than others (i.e., behavioral control, and intrusiveness). Interestingly, fewer significant relations were found between parental over-control and child anxiety in the current sample of Caucasian families.

# In search of culturally grounded profiles of parental over-control

The current study utilized latent profile analysis (LPA) to explore a model of parental over-control in the context of culturally salient familism values. This approach was selected in an attempt to contextualize parental over-control behaviors within traditional Hispanic/Latino values that emphasize familial connections (i.e., practice and maintenance of close family bonds, responsibility to supply kin with instrumental and emotional support, behaviors should be in keeping with family expectations). By including various types of parental over-control behaviors as well as familism values, it was predicted that LPA would identify profiles in which individuals were grouped by shared culturally grounded parenting attributes. The results from the current LPA failed to reveal any meaningful profiles in the current sample. That is, the current participants were not able to be clustered based on similarities in scores on measures of parental overcontrol and familism values. There are many reasons why LPA might be unsuccessful in identifying profiles. For instance, the current study had low power to detect nuanced profiles and/or profiles that might be difficult to identify. A replication of this method with a larger sample (for sample size recommendations, see Tein, Coxe, & Cham, 2013) might produce interesting profiles that offer novel information about culturally grounded patterns of parental over-control. Furthermore, additional cultural and contextual indicators may be needed for significant profiles to emerge. That is, it might be that the current study's focus on over-control was too narrow and the inclusion of more diverse parenting variables may provide a necessary context for understanding parental overcontrol. More specifically, the meaning of parental over-control behaviors are best understood when considered in concert with other parenting behaviors that may influence the effects of over-control, such as parental warmth (which may act as a buffer against the effects of over-control) and/or rejection (which may exacerbate effects). Building upon the notion that Latino parents may uniquely package their parenting behaviors to accomplish culturally specific parenting goals, White and colleagues (2013) were the first to utilize LPA to examine Mexican American parenting profiles. The authors included in the profiles parenting behaviors traditionally considered "risky" (e.g., harsh parenting) as well as protective parenting constructs (e.g., parental acceptance, consistent discipline). Six parenting profiles emerged across mothers and fathers using this approach. Given the promising nature of these findings, the possibility of culturally grounded parental control profiles should not be discounted; rather, additional research is needed utilizing larger samples and a greater number of cultural and contextual factors.

# Towards an improved understanding of the relation between parental over-control and child anxiety

The possibility that profiles might not emerge with the current sample was anticipated and an alternate plan was constructed to advance knowledge of parental overcontrol and its link to child anxiety. More specifically, a variable centered approach was taken to examine the relations among parental over-control behaviors, familism values, and child anxiety symptoms for both Hispanic/Latino and Caucasian families. To this end, regression analyses were conducted using a two-way interaction approach to examine the influence of each distinct over-control behavior and each familism value on child anxiety symptoms as well as the interplay between over-control and familism values. Exploratory descriptive statistics were also conducted at the scale and item level to gain a more in-depth understanding of parental over-control as it relates to child anxiety. In order to examine the unique relations among these variables in each ethnic group, all analyses were run separately for Hispanic/Latino and Caucasian families. This approach is in keeping with recommendations of Miller and Chapman (2001) who suggest that group membership reflects meaningful and substantive differences on observed variables of interest. For example, Hispanic/Latino parents have been shown to be more over-controlling in their approach to parenting (e.g., Hill et al., 2003; Varela et al., 2004) and Hispanic/Latino children have been shown to report higher levels of anxiety when compared to their Caucasian counterparts (e.g., Pina & Silverman, 2004; Varela, Weems, Berman, Hensley, & Rodreguez de Bernal, 2007). In fact, in the current sample, Hispanic/Latino parents reported higher levels of total child anxiety symptoms and Hispanic/Latino families demonstrated significantly less annual family income, lower levels of parent educational attainment, and greater incidence of unmarried parents, compared to the Caucasian families. It may be then, that parental over-control is particularly risky for the development of anxiety in contexts where children and families are already experiencing high levels of stress due to financial struggles, neighborhood risk factors, familial instability. As such, ignoring ethnicity and the related contextual factors (e.g., low income) may possibly result in a biased estimation (under-estimation) of the relations of interest in this study. All together, results from the approach provide important contributions to the understanding of cross-ethnic similarities and differences in the use of parental over-control behaviors and their influence on child anxiety symptoms.

#### Parental over-control behaviors and child anxiety

An examination of the main effects in the regression models showed unique relations between specific parental over-control behaviors and child anxiety symptoms. Findings showed that some, but not all, parental-over control behaviors predicted concurrent levels of anxiety symptoms in certain youth.

Parental over-control in Hispanic/Latino families. Parental overprotection and lack of autonomy granting were associated with significantly higher levels of anxiety in Hispanic/Latino children. This is consistent with child anxiety theory and previous research with Caucasian samples showing that parental over-control (broadly defined) is linked to increased child anxiety symptoms (e.g., Ballash et al., 2006; Rapee, 2001, 2002). More specifically, there is emerging evidence that autonomy granting (or lack thereof) is among the most influential parenting-related predictors of child anxiety symptoms. That is, in a meta-analysis examining the relation between parenting and child anxiety, results showed that parental autonomy granting had a significantly larger effect on child anxiety symptoms than parental warmth, aversiveness, withdrawal, and overinvolvement/overprotection (McLeod et al., 2007). Notably, parental overprotection emerged as the second most significant parenting behavior in terms of influencing child anxiety outcomes. The current study's findings are in keeping with the findings of this meta-analysis, and provide additional support for the unique and influential role that autonomy granting and overprotective parenting behaviors play in child anxiety development and/or maintenance. Furthermore, (lack of) autonomy granting and overprotection may be most closely aligned with the mechanisms of risk theorized to account for the over-control to child anxiety link (compared to intrusiveness and behavioral control). That is, over-controlling parenting is thought to increase the child's attention to threat/danger and decrease the child's perception of control over their environment. In turn, this elevated focus on or sensitivity to anxiety-provoking circumstances and a limited self-efficacy to competently manage such situations is thought to lead to hypervigilance, fear, avoidance, and anxiety (Chorpita & Barlow,

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1998; Rapee, 1991, 1997). It is possible that overprotective parenting (e.g., inhibiting child participation in certain activities, encouraging avoidance, making cautionary statements) and/or parenting that offers limited opportunities for independent pursuits may result in children viewing the world as a scary place that they are not equipped to handle on their own. On the other hand, parents' use of intrusive parenting behaviors (e.g., offering frequent and unsolicited help, giving many directions/commands, interrupting child) and behavioral control (e.g., structuring and monitoring child activity, implementing rules and firm expectations) may not influence children's attention towards danger or undermine their feelings of competency. However, this has yet to be empirically examined and future research should address the relations between specific parental over-control behaviors and these supposed mechanisms of risk.

If the current pattern of findings is replicated, it might suggest that parental intrusiveness and behavioral control are less relevant to anxiety development and maintenance, especially compared to overprotection and lack of autonomy granting. This is contrary to previous research specifically examining the association between intrusive parenting and child anxiety. However, this body of work is small (i.e., only five studies were found in the current review of the empirical literature) and disparate from the current study in terms of study design and methods. That is, prior studies have focused almost exclusively on comparing samples of clinically anxious children to nonclinical children (see de Wilde & Rapee, 2008 for the exception) and each study measured intrusiveness using coded observations of parent-child interactions (Gar & Hudson, 2008; Greco & Morris, 2002; Hudson & Rapee, 2001, 2002; de Wilde & Rapee, 2008). For example, Gar & Hudson (2008) used a 5-minute speech task to observe intrusive

behaviors (e.g., degree of (over)involvement, amount of unsolicited help, degree to which mother directed the child's speech) in parents of anxious and non-anxious children, Hudson and Rapee (2001; 2002) observed mother's intrusiveness in the context of a puzzle task, and Greco and Morris (2002) observed father's intrusiveness in the context of a challenging origami task. In each of these studies, higher levels of intrusiveness were found in parents of clinically anxious children compared to nonanxious peers. This prior research seems to suggest that parental intrusiveness serves to exacerbate symptoms only in children who are already experiencing pathological anxiety levels. The current study, on the other hand, suggests that for children showing early signs of an anxiety problem, parental intrusiveness is not linked to anxiety symptom level. The discrepancy in the intrusiveness to child anxiety link between past work and the current study could indicate that the effect of parental intrusiveness varies across levels of child anxiety symptoms. In addition, it is possible that methodological differences in the assessment of parental intrusiveness are also contributing to variations in the relation to child anxiety. As such, further research is needed using mixed method assessments and clinically diverse samples in order to fully understand the effect of parental intrusiveness.

When it comes to behavioral control, previous literature has suggested that this type of parenting behavior is conceptually distinct from the other types of over-control examined in this study and therefore may not be as closely tied to child anxiety. That is, overprotection, lack of autonomy granting, and intrusiveness are traditionally considered forms of psychological control, defined as parenting behaviors that limit or intrude on children's development of autonomy and self-sufficiency. Behavioral control, on the other hand, is conceptualized as parents' use of discipline and monitoring strategies to

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manage child behavior. Past research has demonstrated that psychological control behaviors, but not behavioral control behaviors, are linked to elevated child anxiety symptoms (e.g., Barber, 1996; Pettit, Laird, Dodge, Bates, & Criss, 2001). Findings from the current study are consistent with this literature and support the notion that behavioral control may not be particularly relevant to child anxiety.

Parental over-control in Caucasian families. In the current subsample of Caucasian families, parental over-control was not associated with child anxiety symptoms. This finding is contradictory to previous research and theory as well as findings with the current sample of Hispanic/Latino families. The lack of relation between parental over-control and child anxiety may suggest a need to re-consider the circumstances under which parental over-control is linked to anxious symptomology in Caucasian children. The current study, for example, focused exclusively on fourth and fifth grade children at-risk for the development of anxiety problems. Although it was proposed that parental over-control may be particularly detrimental for preadolescent children, it may be that this type of parenting is developmentally appropriate for Caucasian youth preparing to enter adolescence. That is, in a cultural context that aims to promote self-maximization, individual achievement, and self-reliance, pre-adolescence may serve as a training period in which parents offer heightened levels of direct instruction, behavioral support, and guidance in order to groom children to meet increasing expectations of independence during adolescence. If this is true, parenting behaviors typically conceptualized as over-controlling may be normative for children in the current sample of Caucasians thereby reducing the strength of its association with child behavior problems of anxiety. In fact, past research examining parent's use of

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behavioral control and youth delinquency found that although overall use of behavioral control strategies decreased as children got older, the effectiveness of control as a deterrent for delinquent behaviors was strongest in mid-adolescence (for boys) and late adolescence (for girls; Seydlitz, 1991). Barber (1996) found a similar age effect when investigating the relation between psychological control and youth depression: The strength of the association between control and depression was stronger when children were in eighth grade compared to fifth grade. As such, it seems that for Caucasian children, the effects of parental over-control on children's adjustment in general and anxiety specifically, may vary across child age and developmental period. In terms of preadolescence specifically, parental over-control may not be as detrimental as originally proposed.

It may also be that there is a specific threshold at which parental over-control begins to effect child anxiety levels and Caucasian parents in the current sample are not reaching that threshold. In other words, Caucasian children may not have been exposed to the level of over-control required to see an effect on child anxiety. In support of this possibility is the fact that Caucasian parents endorsed significantly lower levels of overprotection and lack of autonomy granting compared to Hispanic/Latino parents. Future research should explore these possibilities by carefully examining parental overcontrol behaviors in a sample with greater variability in terms of child age and amount of over-control.

#### Familism values and child anxiety

Consistent with prior research and theory, findings from the current study showed that familism support, but not obligations or referent, predicted lower concurrent levels of anxiety symptoms in Hispanic/Latino youth. This lack of effects may be a function of child age as prior research examining the influence of cultural values on youth outcomes has focused predominantly on adolescents (e.g., German, Gonzales, & Dumka, 2009; Gonzales et al., 2008). The previously demonstrated importance of familism values during adolescence may be due, at least in part, to typical developmental processes such as autonomy seeking, risk taking, increased peer affiliation, and identity development, as well as minority specific challenges such as increased acculturative stressors and perceived discrimination (Gonzales, Jensen, Montano, & Wynne, 2014). As Hispanic/Latino adolescents face these unique challenges, strong connections to family may be a particularly powerful predictor of youth adjustment outcomes, especially compared to during earlier stages of development. In light of this hypothesis, the current study's limited support for the relation between familism values and child anxiety outcomes may be at least partially attributed to the focus on preadolescent children who are not yet in this "risky" period of development.

**Familism values in Caucasian families.** Although typically associated with Hispanic/Latino culture, familism values are also relevant for Caucasian families. A strong sense of familism reflects a prioritization of close and supportive family relationships and loyalty to the family unit, which are not absent among Caucasian individuals and families. Moreover, a strong family orientation may be particularly important in guiding parents' beliefs, behaviors, and expectations for their children (e.g., Harwood et al., 2002) and so is likely to be relevant to understanding parental overcontrol behaviors and their link to child anxiety symptoms, regardless of ethnic background.

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In the current subsample of Caucasian families, familism values were not directly associated with child anxiety symptoms. This may be because familial closeness and responsibility are less culturally meaningful for Caucasian compared to Hispanic/Latino families. Traditional Hispanic/Latino values, for instance, tend to emphasize personal alignment with and connection to a social group (often the family). Caucasian cultures, on the other hand, traditionally focus on the development of autonomy and selfsufficiency (Grusec, 2002; Markus & Kitayama, 1991). In this way, a close and supportive family unit may not be as relevant to or necessary for positive outcomes for Caucasian children. Alternatively, and consistent with the threshold hypothesis described above, it might be the case that the present sample of Caucasian parents may not be endorsing high enough levels of family support for it to influence child anxiety. In fact, mean level comparisons show that Hispanic/Latino parents endorsed significantly higher levels of familism support compared to their Caucasian counterparts. This discrepancy, paired with the significant negative relation between support and child anxiety in the Hispanic/Latino but not the Caucasian samples, offers support for this threshold hypothesis. However, there is an overall paucity of research examining the influence of family values on child well-being in Caucasian families and additional research is needed to delineate the potential power of familism values to impact Caucasian children's wellbeing in general, and anxiety in particular.

# The interplay of parental over-control and familism values

Building upon theory and emerging research, it was hypothesized that familism values would protect against the maladaptive effects of parental over-control behaviors

on child anxiety symptoms, particularly in Hispanic/Latino families. Only partial support for the buffering effect of familism emerged.

In the current sample of Hispanic/Latino families, two significant interactions were found. First, the link between parental overprotection and child anxiety symptoms (as reported by parents) was found to vary across levels of adherence to the cultural value of familism obligations (i.e., a belief system that emphasizes family members responsibility to supply their kin with instrumental and emotional support). In Hispanic/Latino families with low and mean (but not high) levels of familism obligations, parental overprotection exerted a significant and positive concurrent effect on child anxiety levels. Unlike children from families with greater belief in familism obligations, children in families with low familism obligations may not have the expectation that that family members will provide a high level of assistance during challenging situations, including those that are anxiety provoking. As such, these children may be particularly vulnerable to the negative effects of overprotective parenting. On the other hand, it is possible that overprotective parenting is consistent with the traditional Hispanic/Latino value of familism obligations and so children from families with high endorsement of this value may expect their parents to provide comfort and aid. The use of overprotection in this context likely will not lead to increased anxiety in children as it is in keeping with their ideals for parents who are caring and positively involved.

The second significant interaction found with the Hispanic/Latino sample emerged in the relation between parental intrusiveness and self-reported child anxiety symptoms. This association was found to vary across levels of familism referent (i.e., belief that family members' behaviors should be in keeping with family expectations). More specifically, in families with mean and high (but not low) levels of familism referent, parental intrusiveness exerted a significant and negative concurrent effect on child anxiety levels. It might be that intrusiveness is a culturally sanctioned form of parenting specifically designed to facilitate the achievement of Hispanic/Latino socialization goals (Calzada et al., 2010; Chao, 2000; Chao & Tseng, 2002). That is, in Hispanic/Latino families who emphasize acting in ways that honor and respect family level needs and wishes, the implementation of intrusive parenting behaviors may help to provide children with clear guidelines for what is expected of them. In this way, intrusive parenting may decrease Hispanic/Latino children's experience of anxiety by helping them to behave in a way that will allow them to meet family expectations.

Turning to the current subsample of Caucasian families, results showed that different types of parental over-control behaviors were found to interact with different facets of familism values in the prediction of child anxiety symptoms. Specifically, parental overprotection was found to interact with both familism support and familism referent, but not obligations as it did in the Hispanic/Latino subsample. In both significant overprotection-by-familism interactions, the familism value buffered against the potential negative effects of parental overprotection. That is, in Caucasian families with low familism referent and low familism support, respectively, parental overprotection exerted a positive concurrent effect on child anxiety levels (as reported by parents). This is consistent with past theory and research with Hispanic/Latino samples showing that familism buffers against environmental risks for maladaptive child outcomes (e.g., Ayón et al., 2010; Gamble & Modry-Mandell, 2008; German et al., 2009; Morcillo et al., 2011). The third significant interaction found in the Caucasian sample was in the relation between lack of autonomy granting and child self-reports of anxiety: This link was found to vary across level of familism obligations. More specifically, for Caucasian children in families with a high level of adherence to familism obligations, lack of autonomy granting was significantly and positively related to anxiety symptoms. It may be that high levels of familism obligations are inconsistent with normative Caucasian values of independence and so when parents offer few opportunities for children to develop autonomy in these contexts a cumulative risk effect may occur resulting in increased child anxiety.

Overall, the current study provided limited evidence that familism values influence the relation between parental over-control behaviors and child anxiety symptoms. As previously suggested, the lack of findings may be due to the developmental stage of the current sample. That is, strong familism values may be an especially important cultural resource when adolescents are seeking greater independence, affiliating more with peer groups than family, and are (potentially) facing greater exposure to discrimination and acculturative stressors (e.g., Gonzales et al., 2014). There also is some research to suggest that cultural values are more salient as protective or risk potentiating for externalizing as opposed to internalizing outcomes. For example, a study examining discrimination experiences and youth adjustment found that cultural orientation and values played a moderating role for the relation between perceived discrimination and externalizing behaviors (i.e., risky behaviors, deviant peer affiliations) but not for depressive symptoms (Delgado et al., 2013). Future studies examining the interplay between cultural values and parental over-control should explore whether the function of values might vary across child age and adjustment outcome.

# A closer look at parental over-control

To further explore the use of parental over-control behaviors in Hispanic/Latino and Caucasian families, descriptive analyses were conducted and carefully considered. Findings suggest that cross-ethnic differences among the relations between over-control behaviors, familism values, and child anxiety may be explained, at least in part, by differences in the amount and type of child anxiety symptoms across these groups. For example, Hispanic/Latino parents reported that their children experienced significantly higher total anxiety symptoms and separation anxiety symptoms, compared to their Caucasian counterparts. This finding is in keeping with recent reports that Hispanic youth are at greater risk of developing anxiety than youth from other ethnic backgrounds (e.g., Glover, Pumariega, Holzer, Wise, & Rodriguez, 1999; Gross et al., 2006, U.S. DHHS, 2001) and have been shown to have a higher prevalence of separation anxiety than Caucasian children (e.g., Ginsburg & Silverman, 1996; McLaughlin, Hilt, Nolen-Hoeksema, 2007). Given that the influence of parental over-control emerged exclusively in the Hispanic/Latino subsample, it may be that over-control is most salient to the development and/or maintenance of separation anxiety, compared to other types of anxiety. However, additional research is needed to explore this possibility.

Additional cross-ethnic comparisons revealed that the most frequently used parental over-control behaviors were the same in both Caucasian and Hispanic/Latino families. In fact, there were more similarities than differences in the top six most endorsed over-control behaviors across ethnic groups. Careful consideration of these items fails to result a meaningful pattern or theme in item content. For example, the items span several types of parental over-control behaviors including intrusiveness (e.g., "If [CHILD'S NAME] told me that her/his heart was beating very fast because s/he was feeling nervous, I would tell him/her it is ok to be nervous sometimes and show her/him to calm down"), overprotection (e.g., "If [CHILD'S NAME] often tells me that s/he worries that I might get sick even though I am healthy, I would tell my child, each time s/he asks, that s/he has nothing to worry about because I am healthy"), and lack of autonomy granting (e.g., "If [CHILD'S NAME] was scared to give a report in front of the class and refused to do it, I would make sure my child gave her/his report"). Thus, the item-level analyses do not offer much qualitatively rich information. It could be that this measure is not capturing parental over-control in a way that allows for fine-grained examination of the construct and its influence on children's anxiety. A richer measure may need to be developed from a combination of qualitative and parent child interactions tasks relevant to the parenting of the anxious child. Ideas for more comprehensive assessment of parental over-control are outlined below.

# **Limitations and Future Directions**

A number of limitations are noteworthy when interpreting results. First, this study's sample size was relatively small. Having a small sample size often places restrictions on the ability to detect small effects and it is possible that some of the null relations found in this research are related to sample size. As previously mentioned, the small sample size also likely hindered the ability to extract meaningful profiles of culturally grounded parental over-control. Latent profiles would have likely provided a more comprehensive understanding of the parenting environment in these families. However, the approach of examining the interaction between each type of over-control and each facet of familism provides important insight into the interplay between parenting and culture. Second, data used in the current study was cross-sectional and therefore conclusions about possible causal associations between parental over-control and child anxiety cannot be made. Nonetheless, several of the significant relations discussed in the current study are robust and consistent with previous theory and research. Third, the exploratory and descriptive nature of the data analytic approach may have resulted in an increased the probability of discovering significant relations when none exist (i.e., type 1 errors). Although replication is needed to confirm tentative findings, results provide preliminary information about the influence of parental overcontrol behaviors on child anxiety in a culturally diverse sample and generate additional questions that can be used to stimulate and enhance future investigations.

A fourth limitation of the current study is the reliance on parent report, particularly to assess parental over-control. Past research has suggested that typically there are low levels of agreement between parent and child reports of parenting behavior and children may be more influenced by their interpretations of parents' actions rather than behaviors themselves (e.g., Demo, Small & Savin-Williams, 1987; Tein, Roosa, & Michaels, 1994). Past research examining children's perceptions of parenting found links between parental over-control and child anxiety where the current study showed none. For example, Gruner, Muris, & Merckelbach (1999) found a significant positive association between children's ratings of parental over-control (broadly defined) and selfreported child anxiety symptoms while parent reported over-control was largely unrelated to self-reported anxiety in the current sample of children. In addition, a meta-analysis conducted by McLeod et al. (2007) showed that studies using observational assessments of parenting behaviors showed significantly stronger associations with child anxiety symptoms than studies using child- or parent-report. Therefore, the relations (or lack thereof) found in the current study may differ when child report or observational data is used to assess parental over-control. Even so, the present findings offer insight into how parents' views of their over-controlling behaviors might uniquely influence their children's anxious symptoms.

It should also be noted that the significant findings in the current study largely emerged in models consisting entirely of parent-reported measures and so findings may have been influenced by mono-reporter bias. Traditionally, youth are thought to be the best reporters of their own internalizing states (e.g., Achenbach et al., 1987; De los Reyes & Kazdin, 2004) compared to parents, siblings, peers, and teachers. However, it has also been suggested that parents may perceive child emotions and emotion-related behaviors in a unique manner. The Attribution Bias Context Model (De los Reyes & Kazdin, 2005), for example, would suggest that children are more likely attribute their experience of anxiety to environmental factors and discount the possibility that they themselves are anxious. On the other hand, parents are more likely to consider children's exhibition of anxious feelings or behaviors to the child's disposition. In the current sample of children identified as being at risk for anxiety problems, parents may be more aware of the various signs and symptoms of their children's anxiety because they are sensitive to their histories of anxious experience. The children, by contrast, may be under-reporting their experience of anxious emotion because they believe anxiety is a natural reaction to stressful situations. Thus, neither reporter is "better" or "worse" rather each offers useful information for understanding problematic functioning. In the end, research investigating

the influence of parental over-control on child anxiety would benefit from the incorporation of both parent- and child- report as well as observational data.

Future studies can build upon the current study's findings by improving methodology and design as well as incorporating additional cultural and contextual factors that may influence parental over-control to child anxiety link. For instance, large scale longitudinal studies with multiple and diverse measurements of parental overcontrol behaviors, cultural values, and child anxiety would allow for more thorough examination of the effect of over-control on children's anxious symptomology. For example, in order to get a more well-rounded measurement of over-control, the children's version of the EMBU (a Swedish acronym for "my memories of upbringing"; Castro, Toro, Van der Ende, & Arrindell, 1993) could be used to assess children's perceptions of parenting and the Child Anxiety Prevention Study's Manual for Coding Parent-Child Interactions (Ginsburg & Grover, 2003) might be useful as a guide for making sense of observational data. When it comes to child anxiety symptoms, clinician ratings on a diagnostic battery such as the Anxiety Disorders Interview Schedule (Silverman & Albano, 1996) might be used to complement child- and parent-reports. And finally, in terms of culture, a broader assessment of values and culturally relevant constructs, such as *respeto* (respect for authority/elders), *religioso* (religion), and ethnic identify, should be included perhaps using the full version of the Mexican American Cultural Values scale (Knight et al., 2010) and/or the Ethnic Identify Scale (Umana-Taylor, Yazedjian, & Bamaca-Gomez, 2004).

When it comes to culture, it is also worth considering that the Hispanic/Latino families in the current sample were primarily Mexican-origin but not necessarily a

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homogeneous group. For example, the current Hispanic/Latino sample had a large proportion of low-income families (about  $43\% \leq \$15,000$  per year), a large proportion of girls (about \$1%) and a majority of parents preferred to speak Spanish (about \$8%). So, current findings might only generalize to a specific segment of Hispanic/Latino children (e.g., those living near poverty, those with low acculturated parents). As such, it would be important for future studies to examine whether additional cultural and contextual factors such as socioeconomic status, language, and child sex may influence effects. In fact, when it comes to child sex, supplementary analyses conducted with the current sample revealed that Hispanic/Latino parents of boys reported significantly less autonomy granting than parents of girls. In addition, lack of autonomy granting and behavioral control was correlated with *more* anxiety in Hispanic/Latino girls but *less* anxiety in Hispanic/Latino boys. (See Appendix B for a complete summary of these post hoc findings). Additional research is needed to further explore the variation in the link between parental over-control and child anxiety across child sex.

### Implications

Findings from this research have important implications for the development or adaptation of culturally-valid prevention and intervention programs for both Hispanic/Latino and Caucasian children experiencing anxiety. Existing research has demonstrated that parental over-control behaviors (e.g., overprotection, behavioral control) are related to less beneficial treatment responses in anxious youth (e.g., Creswell, Willets, Murray, Singhal, & Cooper, 2008; Settipani, O'Neil, Podell, Beidas, & Kendall, 2013). To this end, it has been suggested that reducing parental control behaviors may help to alleviate anxiety symptoms in children making parental control a possible change mechanism to be targeted in anxiety prevention and intervention protocols (Festen et al., 2013; Rapee, 2002; Wood et al., 2006). In fact, when parental control has been specifically targeted in child anxiety treatment, findings show that reductions in controlling parenting behaviors lead to decreases in child anxiety symptoms at posttreatment as well as at follow-up (Settipani et al., 2013; Wood et al., 2006, 2009). However, current findings can be used to refine the ways in which parental over-control is targeted within prevention and intervention programs in order to further improve treatment efficiency and success. First, intervention developers should be aware of the varying effects of specific parental over-control behaviors on child anxiety. Specifically, the current study supported previous research identifying autonomy granting as a particularly crucial parenting behavior when it comes to child anxiety. As such, it will likely be beneficial for preventive interventions to emphasize training parents to be supportive of their children's independent pursuits, rather than focusing on decreasing interrupting and commanding behaviors (i.e., intrusiveness) or loosening rules and consequences (i.e., behavioral control).

In addition, culturally competent and sensitive interventionists should be cognizant of the contextual factors that may influence child anxiety symptoms and/or the influence of parental over-control on child outcomes. Current findings, for example, found that an emphasis familial closeness and support was associated with lower levels of anxiety for Hispanic/Latino children. As such, anxiety interventionists should consider facilitating the development of meaningful parent-child bonds and encouraging parents and children to spend quality family time together as part of anxiety prevention and intervention programs. In addition, there is some (albeit limited) evidence that the link

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between certain parental over-control behaviors may vary across adherence to certain familism values. When developing a treatment plan, interventionist should take time to learn about family level values in order to understand how specific parenting behaviors may function in a given family context. Overall, current findings offer valuable information for moving the field toward a culturally prescriptive framework for the treatment of anxious Hispanic/Latino youth, which aims to bolster cultural strengths and thereby increase the likelihood of client engagement and treatment success (Pina, Holly, Zerr & Rivera, 2014; Pina, Villalta, Zerr, 2009).

## Conclusion

Despite widespread acceptance of the influence of parental over-control on children's anxiety, extant research is limited by a lack of specificity in conceptualizations of over-control and the use of ethnically homogeneous (mostly Caucasian) samples. The present study is among the first to explore similarities and differences in the use of parental over-control behaviors across Hispanic/Latino and Caucasian families as well as cross ethnic variations in the link to child anxiety symptoms. The current study also uniquely extended knowledge about parental over-control in two important ways. First, the study considered four distinct over-control behaviors as they relate to child anxiety symptoms. Secondly, the study considered how the link between parental over-control and child anxiety symptom levels might vary across ethnicity and cultural values. Findings broadly showed that some (overprotection, lack of autonomy granting), but not all (intrusiveness, behavioral control), parental over-control behaviors were related to more anxiety symptoms and that this relation varied across ethnicity (Hispanic/Latino versus Caucasian). In all, the current study provides a more detailed assessment of the role of parental over-control as it relates to child anxiety symptoms. It is important to continue this line of research in order to further the advancement of culturally competent child anxiety theory and to inform further refinement of prevention and intervention efforts designed to address anxiety in ethnically and culturally diverse children.

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# APPENDIX A

# TABLES AND FIGURES

Subdimension	Parental Behaviors
Autonomy granting	Encourages child's individuality, solicits child opinion, acknowledges and respects child's views, engages in reciprocal conversations with the child, tolerates differences of opinion
Intrusiveness	Offers frequent and unsolicited help to child, gives many directions and commands, interrupts child, takes over child's activities
Overprotection	Inhibits child participation in certain activities, encourages avoidance, make cautionary statements, remains close to child as much as possible
Behavioral over-control	Structures interactions, monitors child activity, has strict rules and firm expectations, implements consequences when rules are broken

Table 1Operationalization of Parental Over-control Subdimensions

Table 2	
Sample Demographics	

		otal = 98)		c/Latino = 58)		asian = 40)
	N (%)	M(SD)	N (%)	M(SD)	N (%)	M(SD)
Age in years		9.73(.73)		9.78(.73)		9.68(.73
Gender						
Boys	23 (23.5)		11(19.0)		12 (30.0)	
Girls	75 (76.5)		47(81.0)		28 (70.0)	
Annual Family Income						
≤ 15,000	28 (28.6)		25 (43.1)		3 (7.5)	
15,001 - 45,000	30 (30.6)		19 (32.8)		11 (27.5)	
45,001 - 75,000	15 (15.3)		4 (6.9)		11 (27.5)	
≥ 75,001	25 (25.5)		10 (17.2)		15 (37.5	
Mother Education Level a						
No diploma/degree						
High school diploma/GED	28 (28.9)		28 (48.3)		0 (0.0)	
Some college/Trade school	17 (17.5)		12 (20.7)		5 (12.8)	
diploma	28 (28.9)		13 (22.4)		15 (38.5)	
College degree or more	24 (24.7)		5 (8.6)		19 (48.7)	
Father Education Level b						
No diploma/degree	21 (22 0)		20 (52 5)		2 (5 2)	
High school diploma/GED	31 (33.0)		29 (52.7)		2 (5.2)	
Some college/Trade school	27 (28.7)		17 (30.9)		10 (25.6)	
diploma	12 (12.8)		4 (7.3)		8 (20.5)	
College degree or more	24 (25.5)		5 (9.1)		19 (48.7)	
Parent Marital Status						
Married	46 (46.9)		22 (37.9)		24 (60.0)	
Divorced/separated	24 (24.5)		13 (22.4)		11 (27.5)	
Other	28 (28.6)		23 (39.7)		5 (12.5)	

*Note.* a N = 97 for Total sample and N = 39 for Caucasian subsample b N = 94 for Total sample, N = 39 for Caucasian subsample, and N = 55 for Hispanic/Latino subsample "Other" Marital Statuses include: Not married but living with partner, Never married and no partner, Partner but not living together, and Widowed.

		R	lange		
	Mean (SD)	Potential	Actual	Skewness	Kurtosis
Lack of autonomy granting	2.82 (.54)	1 - 5	1.86 - 4.14	0.16	-0.63
Intrusiveness	3.89 (.64)	1 - 5	2.36 - 4.86	-0.41	-0.85
Overprotection	2.70 (.46)	1 - 5	1.79 – 3.86	0.37	-0.26
Behavioral control	0.92 (.36)	0 - 2	0.25 - 2.00	0.44	0.02
Familismo support	4.45 (.45)	1 - 5	3.17 - 5.00	-0.51	-0.50
Familismo obligations	3.81 (.62)	1 - 5	2.20 - 5.00	-0.23	-0.65
Familismo referent	3.73 (.66)	1 - 5	2.20 - 5.00	-0.11	-0.74
Total Anxiety – Caregiver report	26.69 (17.91)	0 - 114	2.00 - 84.00	1.08	.81
Social Anxiety – Caregiver report	5.62 (3.40)	0 - 18	0 - 15	.79	.33
Separation Anxiety – Caregiver report	5.55 (4.31)	0 - 18	0 - 17	.77	08
Generalized Anxiety – Caregiver report	5.52 (3.63)	0 - 18	0 - 15	.73	08
Total Anxiety – Child report <sub>a</sub>	62.85 (15.14)	0 - 117	14.00 - 95.00	41	.18
Social Anxiety – Child report <sub>a</sub>	16.56 (5.65)	0 - 27	2.00 - 27.00	30	36
Separation Anxiety – Child reporta	13.19 (4.75)	0 - 27	0 - 23	17	26

Table 3Descriptive Statistics of Study Variables in the Total Sample

*Note*. N = 98; a N = 97

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Lack of autonomy granting, Intrusiveness, Overprotection = subscales of Child Development Questionnaire (CDQ; Zabin & Melamed, 1980); Behavioral control = subscale of parent version of Children's Report on Parent Behavior-30 item version (CRPBI-30; Schludermann & Schludermann, 1988); Familism support, Familism obligations, Familism referent = Mexican American Cultural Values Scale (MACVS; Knight et al., 2010); Caregiver report of child anxiety = Spence Children's Anxiety Scale (SCAS; Spence, 1997, 1998); Child report of child anxiety = Multidimensional Anxiety Scale for Children (MASC; March et al., 1997, 1999).

		1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Lack of autonomy granting													
2.	Intrusiveness	.32**												
3.	Overprotection	.11	.30**											
4.	Behavioral control	.16	01	.001										
5.	Familismo support	.33**	.41**	.15	.07									
6.	Familismo obligations	.22*	.18†	.20†	.21*	.62**								
7.	Familismo referent	.36**	.28**	.27**	.33**	.63**	.66**							
8.	Total Anxiety- Crgvr report	.30**	.01	.30**	.20†	14	02	01						
9.	Social Anxiety- Crgvr report	.12	.04	.25*	.10	21*	17†	12	.75**					
10	Separation Anxiety– Crgvr report	.24*	.02	.35**	.18†	10	.03	.05	.88**	.55**				
11	Generalized Anxiety–Crgvr report	.14	04	.22*	.18†	13	.01	01	.88**	.61**	.75**			
12	. Total Anxiety– Child report <sub>a</sub>	01	17†	01	.12	02	.04	.001	.26**	.22*	.19†	.37**		
13	Social Anxiety– Child reporta	.04	12	04	.08	08	10	08	.16	.21*	.07	.19†	.74**	
14	. Separation Anxiety– Child report <sub>a</sub>	.03	.01	.04	.08	.11	.10	.09	.28**	.16	.30**	.38**	.76**	.42 **

Table 4Correlations among Study Variables for the Total Sample

*Note.* Lack of autonomy granting, Intrusiveness, Overprotection = subscales of Child Development Questionnaire (CDQ; Zabin & Melamed, 1980); Behavioral control = subscale of parent version of Children's Report on Parent Behavior-30 item version (CRPBI-30; Schludermann & Schludermann, 1988); Familism support, Familism obligations, Familism referent = Mexican American Cultural Values Scale (MACVS; Knight et al., 2010); Caregiver report of child anxiety = Spence Children's Anxiety Scale (SCAS; Spence, 1997, 1998); Child report of child anxiety = Multidimensional Anxiety Scale for Children (MASC; March et al., 1997, 1999). N = 98; a N = 97

†p < .10 \*p < 05; \*\*p < .01

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	S	ex			Ethni	city		
	Boys (N = 23)	Girls ( <i>N</i> = 75)	_		Hispanic/Latino $(N = 58)$	Caucasian $(N = 40)$	-	
	Mean (SD)	Mean (SD)	t	df	Mean (SD)	Mean (SD)	t	df
Lack of autonomy granting	2.86 (.58)	2.81 (.52)	-0.40	96	2.93 (.58)	2.66 (.42)	-2.66**	95.65 a
Intrusiveness	3.83 (.63)	3.90 (.65)	0.46	96	3.79 (.65)	3.79 (.62)	-1.25	96
Overprotection	2.68 (.51)	2.71 (.44)	0.27	96	2.52 (.45)	2.52 (.41)	-3.43**	96
Behavioral over-control	0.91 (.35)	0.92 (.37)	0.04	96	0.96 (.40)	0.85 (.30)	-1.58	95.22 <sub>a</sub>
Familismo support	4.41 (.40)	4.47 (.47)	0.59	96	4.54 (.44)	4.33 (.44)	-2.33*	96
Familismo obligations	3.84 (.52)	3.79 (.66)	-0.33	96	3.98 (.60)	3.56 (.58)	-3.42**	96
Familismo referent	3.78 (.62)	3.72 (.68)	-0.40	96	3.93 (.63)	3.45 (.61)	-3.78**	96
Total Anx- Crgvr report	20.82 (12.74)	28.48 (18.93)	1.82ŧ	96	30.37 (19.00)	21.34 (14.85)	-2.52*	96
Social Anx- Crgvr report	4.52 (2.64)	5.95 (3.55)	1.79ŧ	96	5.77 (3.55)	5.40 (3.21)	-0.53	96
Separation Anx- Crgvr report	3.97 (3.06)	6.04 (4.53)	2.06*	96	6.69 (4.46)	3.90 (3.51)	-3.46**	94.28 a
Generalized Anx-Crgvr report	4.53 (3.47)	5.83 (3.64)	1.51	96	6.11 (3.86)	4.68 (3.12)	-1.95ŧ	96
Total Anx- Child report b	60.27 (13.41)	63.65 (15.63)	0.93	95	63.59 (16.00)	61.79 (13.94)	-0.57	95
Social Anx- Child report b	14.04 (4.61)	17.34 (5.74)	2.51*	95	16.51 (6.39)	16.63 (4.46)	0.11	95 a
Separation Anx- Child report b	11.65 (3.55)	13.66 (4.99)	2.14*	51.45 a	13.84 (4.85)	12.25 (4.50)	-1.64	95

Table 5Mean Differences of Study Variables across Sex and Ethnicity

*Note*. Lack of autonomy granting, Intrusiveness, Overprotection = subscales of Child Development Questionnaire (CDQ; Zabin & Melamed, 1980); Behavioral control = subscale of parent version of Children's Report on Parent Behavior-30 item version (CRPBI-30; Schludermann & Schludermann, 1988); Familism support, Familism obligations, Familism referent = Mexican American Cultural Values Scale (MACVS; Knight et al., 2010); Caregiver report of child anxiety = Spence Children's Anxiety Scale (SCAS; Spence, 1997, 1998); Child report of child anxiety = Multidimensional Anxiety Scale for Children (MASC; March et al., 1997, 1999).

a Alternative t-statistic reported to account for unequal variances across group

b Total Sample Size N = 97; Boys N = 23; Girls N = 74; Hispanic/Latino N = 57; Caucasian N = 40

*p* < .10 *p* < 05; *\*\*p* < .01

	E	thnicity			
	Caucasian	Hispanic/Latino	$x^2$	df	р
Age in years a			1.17	2	.56
9	22	29			
10	28	15			
11-12	8	6			
Gender <sub>b</sub>			1.61	1	.31
Boys	12	11			
Girls	28	47			
Annual Family Income			21.09	3	<.001
≤ 15,000	3	25			
15,001 - 45,000	11	19			
45,001 - 75,000	11	4			
≥ 75,001	15	10			
Mother Education Level ( $N = 97$ )			36.89	3	<.001
No diploma/degree	0	28			
High school diploma/GED	5	12			
Some college/Trade school diploma	15	13			
College degree	19	5			
Father Education Level ( $N = 94$ )			33.07	3	<.001
No diploma/degree	2	29			
High school diploma/GED	10	17			
Some college/Trade school diploma	8	4			
College degree or more	19	5			
Parent Marital Status c			9.26	3	.03
Married	24	22			
Divorced/separated	11	13			
Other	3	18			

Table 6Chi- Square Analysis: Distribution of Demographic Characteristics

*Note.* Total N = 98; Hispanic/Latino N = 58; Caucasian N = 40 (unless otherwise noted)

 $_{a}$  11 and 12 year olds were combined in this analyses since there is only one 12 year old in the sample (Hispanic/Latino girl).

<sup>b</sup> The Yates Continuity Correction was used to compensate for the overestimate of the chisquare value for the 2x2 analysis.

<sup>c</sup> "Other" Marital Statuses include: Not married but living with partner, Never married and no partner, Partner but not living together, and Widowed.

00	retations among study variables	Sepura	ciy by L	mucny											
_		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Lack of autonomy granting		.28†	09	.24	.50**	.36*	.29†	.16	.07	.02	.07	.03	.05	.08
2.	Intrusiveness	.32*		.35*	15	.59**	.26†	.39*	14	01	21	26	13	.02	.15
3.	Overprotection	.08	.24†		04	.29†	.27†	.39*	.13	.26	.06	.15	.02	02	.13
4.	Behavioral over-control	.09	.03	06		.17	.11	.27†	.03	.04	02	.11	.09	.10	18
5.	Familismo support	.19	.27*	06	03		.59**	.71**	02	.07	12	07	.03	.15	.15
6.	Familismo obligations	.05	.07	003	.20	.59**		.65**	004	.09	02	07	03	11	.004
7.	Familismo referent	.32*	.17	.04	.32*	.54**	.59**		12	07	10	14	18	23	.01
8.	Total Anxiety- Crgvr report	.29*	.04	.29*	.22†	30*	17	11		.73**	.84**	.92**	.27†	.15	.25
9.	Social Anxiety- Crgvr report	.12	.05	.24†	.12	41**	38**	19	.78**		.43**	.65**	.42**	.41**	.37*
10.	Separation Anxiety– Crgvr report	.23†	.08	.37**	.21	22†	12	07	.88**	.63**		.76**	.07	.002	.14
11.	Generalized Anxiety– Crgvr report	.11	.03	.18	.17	24†	06	14	.85**	.59**	.73**		.36*	.19	.24
12.	Total Anxiety– Child report <sub>a</sub>	05	21	06	.12	07	.05	.07	.25†	.10	.24†	.37**		.75**	.72**
13.	Social Anxiety– Child report <sub>a</sub>	.04	18	05	.08	20	09	01	.18	.12	.11	.19	.74**		.41**
14.	Separation Anxiety– Child report <sub>a</sub>	04	11	10	.17	.03	.08	.05	.25†	.02	.32*	.42**	.79**	.44**	

 Table 7

 Correlations among Study Variables Separately by Ethnicity

*Note.* Correlations for Caucasian youth are above the diagonal (N = 40). Correlations for Hispanic/Latino youth are below the diagonal (N = 58). Lack of autonomy granting, Intrusiveness, Overprotection = subscales of Child Development Questionnaire (CDQ; Zabin & Melamed, 1980); Behavioral control = subscale of parent version of Children's Report on Parent Behavior-30 item version (CRPBI-30; Schludermann & Schludermann, 1988); Familism support, Familism obligations, Familism referent = Mexican American Cultural Values Scale (MACVS; Knight et al., 2010); Caregiver report of child anxiety = Spence Children's Anxiety Scale (SCAS; Spence, 1997, 1998); Child report of child anxiety = Multidimensional Anxiety Scale for Children (MASC; March et al., 1997, 1999).

N = 98; a N = 97

 $p < .10 \ p < .05; \ p < .01$ 

					LMR Adjusted LRT	
# of Classes	AIC	BIC	ABIC	Entropy	test p-value	Proportion in each class
1	1075.67	1111.854	1067.644			
2	1846.37	1903.24	1833.77	.84	.02	.41 / .59
3	1826.74	1904.289	1809.554	.83	.18	.29 / .23 / .48

Table 8Results of Latent Profile Analyses for Culturally Grounded Profiles of Over-control

Summary of Regression Analyses Predicting	Parent Report			Child Report	ed Anxie	tv
	Symptoms		cty	Symptoms		ty
	(N=5					
	B (SE)	β β	$R^2$	(N = B (SE)	<u>β</u>	R
Lack of Autonomy Granting	11.48 (3.96)**	.35	n	-1.30 (3.79)	05	
Familism Support	-15.96 (5.07)**	37		-2.20 (4.84)	06	
Lack of Autonomy GrantingXSupport	4.50 (10.35)	.05		1.14 (9.96)	.02	
Lack of Autonomy GrantingASupport	4.50 (10.55)	.05	.22*	1.14 ().)0)	.02	.0
Lack of Autonomy Granting	9.46 (4.11)*	.29	•22	-1.86 (3.72)	07	.0
Familism Obligations	-5.30 (4.00)	17		1.85 (3.60)	.07	
Lack of Autonomy GrantingXObligations	3.77 (7.15)	.07		3.20 (6.44)	.07	
	0117 (1110)	,	.12	0.20 (0.1.1)		.0
Lack of Autonomy Granting	11.58(4.22)**	.35		-1.30 (3.79)	05	
Familism Referent	-6.03 (4.00)	20		-2.20 (4.84)	06	
Lack of Autonomy GrantingXReferent	5.66 (6.58)	.11		1.14 (9.96)	.02	
			.14†	111 (5550)		.0
Intrusiveness	3.86 (3.74)	.13	•••	-5.12 (3.28)	21	.0
Familism Support	-14.85 (5.50)**	35		58 (4.86)	02	
Intrusiveness XSupport	-8.84 (9.82)	11		-2.56 (8.61)	04	
in astronoss risupport	0.01 (9.02)		.12	2.00 (0.01)	.54	.0
Intrusiveness	.97 (3.79)	.03	.12	-5.76 (3.15)†	24	.0
Familism Obligations	-4.88 (4.11)	15		2.17 (3.42)	08	
IntrusivenessXObligations	-6.89 (6.99)	13		-6.63 (5.81)	15	
IndustvenessX00itgations	-0.87 (0.77)	15	.05	-0.03 (3.01)	15	.0
Intrusiveness	.92 (3.82)	.03	.05	-7.03 (2.91)*	29	.0
Familism Referent	-3.60 (3.93)	12		2.92 (3.00)	.12	
IntrusivenessXReferent	-9.61 (6.19)	20		-16.72 (4.71)**	42	
muusivenessArceleien	-9.01 (0.19)	20	.06	-10.72 (4.71)**	42	.2
Overprotection	10.16 (5.25)†	.24	.00	-3.66 (4.87)	10	•
Familism Support	-13.34 (5.26)*	31		-3.69 (4.90)	10	
Overprotection XSupport	-10.94 (13.00)	11		-10.47 (12.12)	12	
overprotection Asupport	-10.74 (15.00)	-,11	.18†	-10.47 (12.12)	12	.0
Overprotection	9.56 (5.24)†	.23	.10	-3.26 (4.80)	09	.0
Familism Obligations	-4.13 (3.86)	13		1.81 (3.53)	.07	
OverprotectionXObligations	-16.07 (8.51)†	24		-6.73 (7.77)	12	
overprotection/coongations	-10.07 (0.51)	.27	.16†	0.75 (1.17)	.12	.0
Overprotection	11.63 (5.27)*	.28	.10	-2.92 (4.67)	08	.0
Familism Referent	-3.60 (3.76)	12		1.97 (3.33)	.08	
OverprotectionXReferent	-7.66 (8.36)	12		-7.32 (7.39)	13	
overprotection/Atterent	-7.00 (0.50)	12	.11	-1.52 (1.57)	15	.0
Behavioral Control	10.12 (5.79)†	.21		4.75 (5.26)	.12	.0
Familism Support	-13.37 (5.21)**	31		-2.40 (4.77)	07	
Behavioral ControlXSupport	-14.53 (13.39)	13		39 (12.17)	004	
Benavioral Control Support	17.55 (15.57)	15	.16†		004	.0
Behavioral Control	12.97 (6.25)*	.27	.10	2.91 (5.41)	.07	.0
Familism Obligations	-6.98 (4.06)†	22		1.08 (3.52)	.07	
Behavioral ControlXObligations	78 (11.96)	22 01		15.00 (10.35)	.04 .19	
Benavioral ControlAODilgations	/0(11.90)	01	.10	15.00 (10.55)	.17	.0
Behavioral Control	13.56 (6.59)*	.28	.10	282 (574)	.07	.0
Familism Referent	-6.08 (4.08)	.28 20		2.83 (5.74)	.07	
Behavioral ControlXReferent				1.49 (3.56)		
Denavioral ControlArelefellt	1.74 (10.86)	.02	.09	9.20 (9.45)	.13	

# Table 9 Summary of Regression Analyses Predicting Anxiety Symptoms in Hispanic/Latino Children

*Note.* SCAS = Spence Children's Anxiety Scale; MASC = Multidimensional Anxiety Scale for Children  $\dagger p < .10, \ast p < 05; \ast \ast p < .01$ 

	Parent Reported Anxiety Symptoms- SCAS (N =40)			Child Repo Sympton (N		
	B (SE)	β	$R^2$	B (SE)	В	$R^2$
Lack of Autonomy Granting	6.49 (6.17)	.19		.49 (6.07)	.02	
Familism Support	-5.98 (6.00)	19		.38 (5.91)	.01	
Lack of Autonomy GrantingXSupport	20.66 (13.08)	.25		2.83 (12.88)	.04	
			.09	. ,		.00
Lack of Autonomy Granting	2.37 (5.74)	.07		02 (5.78)	001	
Familism Obligations	-1.58 (3.99)	06		90 (4.01)	04	
Lack of Autonomy GrantingXObligations	22.23 (9.29)*	.37		8.15 (9.35)	.14	
			.16			.02
Lack of Autonomy Granting	6.39 (5.63)	.18		3.03 (5.39)	.09	
Familism Referent	-4.54 (3.87)	19		-4.62 (3.71)	20	
Lack of Autonomy GrantingXReferent	10.73 (10.19)	.16		-1.81 (9.76)	03	
Each of Hatohomy Granting Herororon	10.75 (10.17)	.10	.08	1.01 ().70)	.05	.04
Intrusiveness	-5.35 (4.73)	22	.00	-5.32 (4.43)	24	
Familism Support	3.40 (6.57)	.10		5.18 (6.16)	.16	
Intrusiveness XSupport	5.39 (9.84)	.09		2.63 (9.22)	.05	
Intrusiveness Abupport	5.57 (5.64)	.07	.03	2.03 (7.22)	.05	.04
Intrusiveness	-3.56 (3.87)	15	.05	-3.01 (3.65)	13	.0-
Familism Obligations	.95 (4.11)	15 .04		.24 (3.89)	.01	
IntrusivenessXObligations		.04		-2.11 (5.69)	06	
Intrusiveness Congations	4.32 (6.02)	.11	.03	-2.11 (3.09)	00	.02
Intrusiveness	260(405)	11	.05	1 (1 (2 70))	07	.04
	-2.69 (4.05)	11		-1.61 (3.79)	07	
Familism Referent	-2.28 (4.31)	09		.3.31 (4.03)	14	
IntrusivenessXReferent	-2.43 (5.92)	07	02	.73 (5.54)	.02	0.
Overmentation	8 04 (5 04)	22	.03	70 (5.92)	02	.04
Overprotection	8.04 (5.94)	.22		.79 (5.82)	.02	
Familism Support	-2.84 (5.40)	08		.70 (5.29)	.02	
Overprotection XSupport	-21.33 (12.61) †	27	00	-4.18 (12.35)	06	00
	6.04 (5.01)	10	.09	1 (0 (5 5 ()	05	.00
Overprotection	6.34 (5.81)	.18		1.69 (5.56)	.05	
Familism Obligations	.73(4.24)	.03		.45 (4.06)	.02	
OverprotectionXObligations	-12.65 (8.94)	23	07	-8.50 (8.56)	17	0.0
			.07		10	.03
Overprotection	9.84 (5.99)†	.27		3.42 (5.86)	.10	
Familism Referent	-1.57 (4.32)	06		-4.93 (4.23)	22	
OverprotectionXReferent	-13.70 (7.70) †	32		-20 (7.53)	01	
			.12			.04
Behavioral Control	1.11 (7.91)	.02		02 (5.78)	001	
Familism Support	27 (4.05)	01		90 (4.01)	04	
Behavioral ControlXSupport	7.79 (15.12)	.08		8.15 (9.35)	.14	
			.01			.02
Behavioral Control	5.83 (5.07)	.18		4.40 (7.41)	.09	
Familism Obligations	-3.39 (2.60)	20		83 (3.80)	04	
Behavioral ControlXObligations	10.61 (9.70	.17		-1.06 (14.18)	01	
			.09			.01
Behavioral Control	3.61 (8.97)	.07		6.00 (8.26)	.13	
Familism Referent	-3.33 (4.02)	14		-4.84 (3.70)	21	
Behavioral ControlXReferent	-1.86 (14.32)	02		3.37 (13.19)	.04	
	. ,		.02	``'		.04

#### Table 10 Summary of Regression Analyses Predicting Anxiety Symptoms in Caucasian Children

*Note.* SCAS = Spence Children's Anxiety Scale; MASC = Multidimensional Anxiety Scale for Children  $\dagger p < .10, *p < 05; **p < .01$ 

Table 11Items with Highest Mean Scores by Ethnicity

	Subscale	Mean (SD)
Hispanic/Latino		
If [CHILD'S NAME] was scared to give a report in front of the class and refused to do it, I would make sure my child gave her/his report	Lack of Autonomy Granting	4.47 (.88)
If while at school, [CHILD'S NAME] missed me a lot and asked to be taken home, I would leave her/him at school until the school day is over	Lack of Autonomy Granting	4.41 (.92)
If [CHILD'S NAME] told me that her/his heart was beating very fast because s/he was feeling nervous, I would tell him/her it is ok to be nervous sometimes and show her/him to calm down	Intrusiveness	4.41 (.84)
If [CHILD'S NAME] often tells me that s/he worries that I might get sick even though I am healthy, I would tell my child, each time s/he asks, that s/he has nothing to worry about because I am healthy	Overprotection	4.38 (1.02)
If while at school, [CHILD'S NAME] missed me a lot and asked to be taken home, I would tell him/her about other children at school who miss their moms and how they are able to stay in school	Intrusiveness	4.31 (1.05)
If [CHILD'S NAME] was worried about many things and was constantly asking me if things were going to be "okay", I would tell him/her what I do to calm down when I am worried about things	Intrusiveness	4.31 (1.01)
Caucasian		
If [CHILD'S NAME] told me that her/his heart was beating very fast because s/he was feeling nervous, I would tell him/her it is ok to be nervous sometimes and show her/him to calm down	Intrusiveness	4.45 (.60)
If [CHILD'S NAME] often tells me that s/he worries that I might get sick even though I am healthy, I would tell my child, each time s/he asks, that s/he has nothing to worry about because I am healthy	Overprotection	4.40 (.74)
If [CHILD'S NAME] was scared to give a report in front of the class and refused to do it, I would make sure my child gave her/his report	Lack of Autonomy Granting	4.38 (.87)
If [CHILD'S NAME] was scared to give a report in front of the class and refused to do it, I would tell him/her about a time I had to give a report in front of people and how I managed my fear	Intrusiveness	4.25 (.87)
If [CHILD'S NAME] was worried about many things and was constantly asking me if things were going to be "okay", I would always tell him/her not to worry because things were going to be okay	Overprotection	4.25 (.90)

Item	Subscale	r	t	df
If [CHILD'S NAME] hands were shaking when she/he was waiting to have her/his first filling at the dentist, I would hold his/her hands down so that they would stop shaking.	Lack of Autonomy Granting	.38	-4.72	93.31 a
If [CHILD'S NAME] was afraid to get a drink of water because it was dark, I would go with her/him to get the water to show her/him there is nothing to be afraid of.	Intrusiveness	.32	-3.50	96
If [CHILD'S NAME] was afraid to get back on her/his bicycle after falling off (and did not get hurt), I would place him/her physically on the bicycle myself.	Lack of Autonomy Granting	.27	-3.74	94.46 a
If [CHILD'S NAME] constantly asked me to over- check her/his homework and it prevented me from getting things done at home, I would check his/her homework with her/him whenever s/he asked.	Overprotection	.26	-2.81	96
If [CHILD'S NAME] hands were shaking when she/he was waiting to have her/his first filling at the dentist, I would tell her/him that if she/he does not stop shaking we are going to have to leave and reschedule for another time.	Lack of Autonomy Granting	.25	-3.21	94.91 <sub>a</sub>
If [CHILD'S NAME] was complaining of a stomachache the morning of a spelling test, I would tell him/her to stop it and that the other kids don't feel this way when they have a test.	Lack of Autonomy Granting	.24	-2.89	94.46 <sub>a</sub>

Results from Item-level Correlations with Ethnicity and t-tests of Cross-Ethnic Mean Differences

Table 12

Note.  $_a$  Alternative t-statistic reported to account for unequal variances across group; All correlations and t-values are significant at p<.01

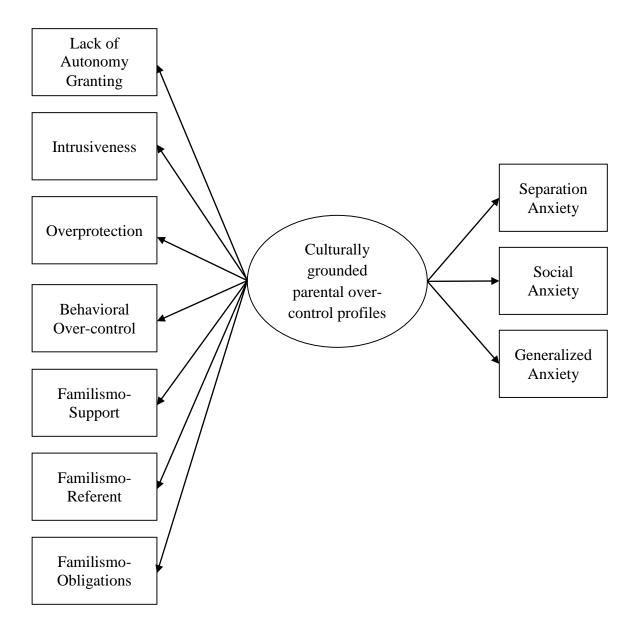
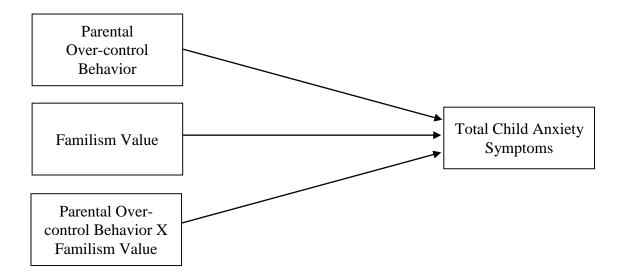
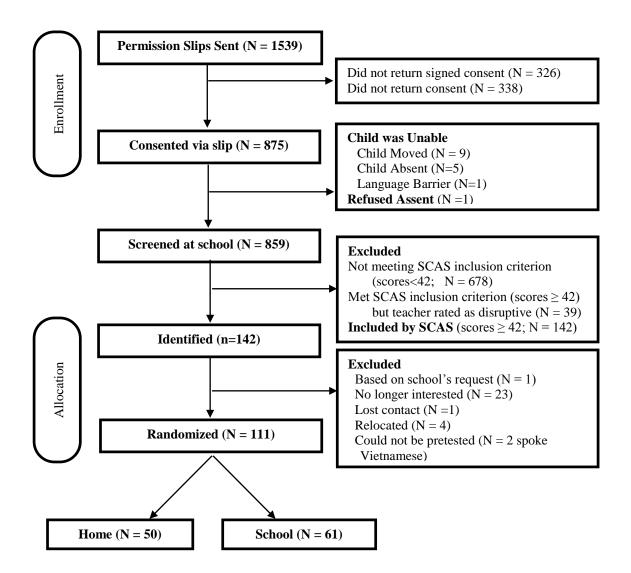


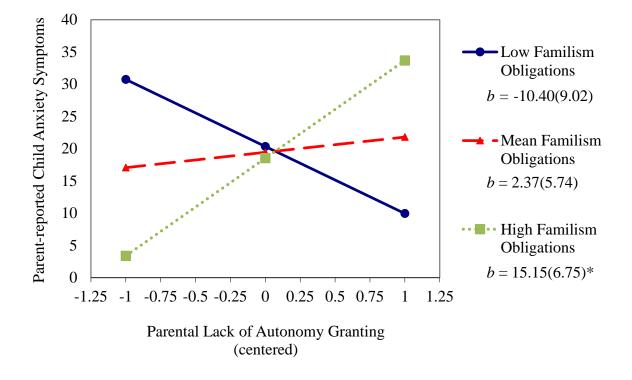
Figure 1. Proposed conceptual model for aims 1 and 2.



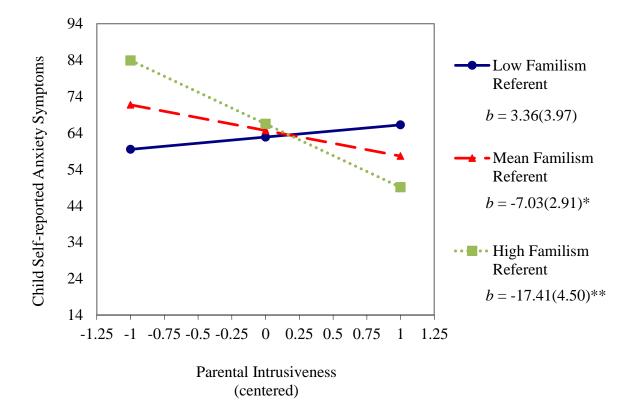
*Figure 2.* Proposed conceptual model for alternate aim 1. Parental over-control behaviors examined were lack of autonomy granting, intrusiveness, overprotection, and behavioral over-control. Familism values were familism support, familism obligations, and familism referent. Analyses were conducted separately by ethnicity (Hispanic/Latino, Caucasian) and by reporter of child anxiety symptoms (parent, child).



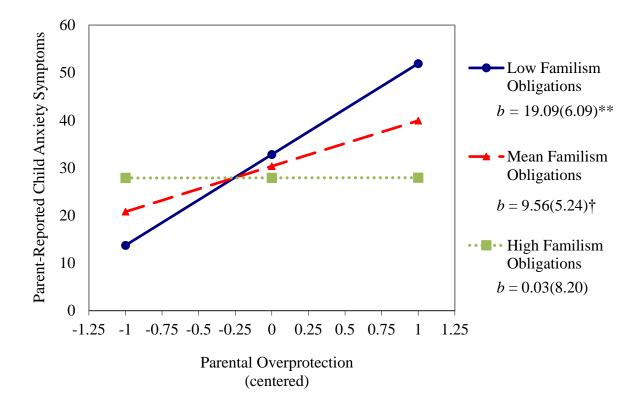
*Figure 3.* CONSORT flowchart: Recruitment, randomization, and pre-test assessment for the multi-site pilot preventive intervention trial evaluating the effects of a school-based anxiety prevention program.



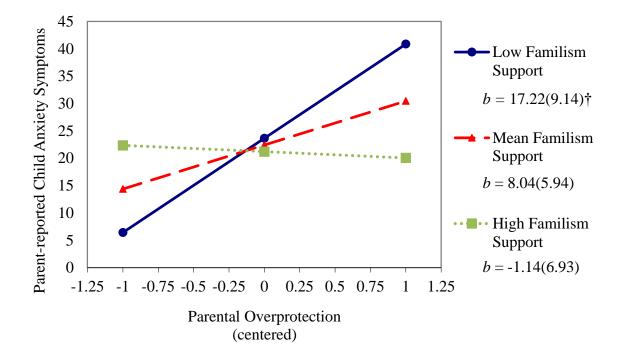
*Figure 4*. Simple regressions of parental lack of autonomy granting on child self-reported anxiety symptoms at different levels of familism obligations for the Caucasian subsample (N = 40). At high levels of familism referent, the simple slope of parental intrusiveness on child self-reported anxiety was significant.  $\dagger p < .10$ ,  $\ast p < 05$ ;  $\ast \ast p < .01$ 



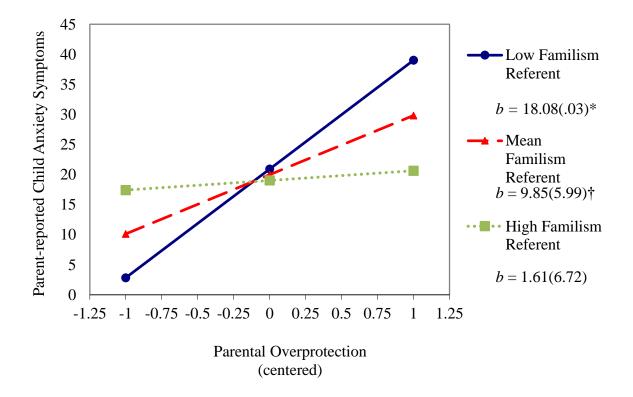
*Figure 5.* Simple regressions of parental intrusiveness on child self-reported anxiety symptoms at different levels of familism referent for the Hispanic/Latino subsample (N = 58). At mean and high levels of familism referent, the simple slope of parental intrusiveness on child self-reported anxiety was significant. p < .10, p < .05; p < .01



*Figure 6.* Simple regressions of parental overprotection on parent-reported child anxiety symptoms at different levels of familism obligations for the Hispanic/Latino subsample (N = 58). At low and mean levels of familism obligations, the simple slope of parental intrusiveness on parent-reported child anxiety was significant. p < .10, p < .05; p < .01



*Figure 7.* Simple regressions of parental overprotection on parent-reported child anxiety symptoms at different levels of familism support for the Caucasian subsample (N = 40). At low levels of familism support, the simple slope of parental intrusiveness on parent-reported child anxiety was significant.  $\dagger p < .10$ ,  $\ast p < 05$ ;  $\ast \ast p < .01$ 



*Figure 8.* Simple regressions of parental overprotection on parent-reported child anxiety symptoms at different levels of familism referent for the Caucasian subsample (N = 40). At low levels of familism referent, the simple slope of parental intrusiveness on parent-reported child anxiety was significant. p < .10, p < .05; p < .01

## APPENDIX B

## SEX DIFFERENCES WITHIN ETHNICITY

## Sex Differences Within Ethnicity

To further examine cross-sex variations in study variables, post-hoc descriptive analyses were conducted. Specifically, analyses evaluated whether sex-based differences that appeared in the total sample were also present within both Hispanic/Latino and Caucasian subsamples. In addition, theory suggests that gender roles values in traditional Hispanic/Latino culture might lead to sex-based variations in use of certain parenting behaviors as well as child interpretation of parenting behaviors (e.g., Buriel, 1993; Diaz-Guerrero & Rodriguez de Diaz, 1993). As such, correlations were conducted among variables of interest (i.e., parental over-control behaviors, familism values, child anxiety symptoms) to explore this possibility. Given the considerable reduction in sample size when the total sample is broken into sex by ethnicity subsamples, all analyses described below are considered exploratory and should be interpreted with caution.

Independent samples t-tests were used to compare mean score differences of study variables across sex within each ethnic group (i.e., Hispanic/Latino and Caucasian). Results are presented in Table A.1. As shown, Hispanic/Latino parents of boys reported significantly higher levels of lack of autonomy granting compared to Hispanic/Latino parents of girls (t (56) = -2.00, p < .10). In addition, Hispanic/Latino girls self-reported significantly higher levels of social anxiety symptoms compared to Hispanic/Latino boys (t (55) = 2.09, p < .05). Turning to the Caucasian subsample, parents of girls endorsed significantly higher levels of social anxiety, (t (38) = 1.86, p < .10), separation anxiety (t (38) = 2.02, p < .05), and total anxiety (t (38) = 1.95, p < .10). No significant cross-sex differences emerged in the use of parental over-control behaviors in the Caucasian subsample.

Correlations among study variables were also conducted separately for boys and girls in Hispanic/Latino and Caucasian subsamples. Of particular interest were the correlations between child anxiety symptoms and parental over-control behaviors and familism values, respectively. For Hispanic/Latino girls (see Table A.2), parental lack of autonomy granting was found to be significantly and positively related to parent-reported separation anxiety symptoms (r = .34, p < .05), social anxiety symptoms (r = .30, p < .05) .05), and total anxiety symptoms (r = .40, p < .01). Parental overprotection was similarly linked to significantly more symptoms of separation anxiety (r = .32, p < .05) and total anxiety symptoms (r = .25, p < .10) based on parent-report. For Hispanic/Latino girls, parental use of behavioral control was also significantly and positively linked to parentreported child social anxiety symptoms (r = .25, p < .10), separation anxiety symptoms (r= .29, p < .10, generalized anxiety symptoms (r = .25, p < .10), and total anxiety symptoms (r = .25, p < .10) as well as child self-reported separation anxiety symptoms (r= .23, p < .10) and total anxiety symptoms (r = .25, p < .10). When it comes to familism values, familism support was significantly and negatively related to parent-reported social anxiety symptoms (r = -.43, p < .01) and total anxiety symptoms (r = -.29, p < .05); familism obligations was found to be significantly and negatively associated with parentreported social anxiety symptoms (r = -.36, p < .05).

Turning to Hispanic/Latino boys (see Table A.3), parental lack of autonomy granting was found to be significantly and negatively related to parent-reported generalized anxiety symptoms (r = -.84, p < .01). In addition, parental intrusiveness was significantly and negatively associated with child self-reported total anxiety symptoms (r = -.54, p < .10) and parental use of behavioral control was significantly and negatively

related to parent-reported social anxiety (r = -.62, p < .05) and child self-reported total anxiety symptoms (r = -.54, p < .10). Parental overprotection was significantly and positively related to parent-reported child separation anxiety symptoms (r = .74, p < .01) and total anxiety symptoms (r = .58, p < .10). When it comes to familism values, support was found to be significantly and negatively linked to parent-reported generalized anxiety (r = -.60, p < .05) and child self-reported separation anxiety (r = -.60, p < .05) and referent was significantly and negatively associated with parent-reported generalized anxiety (r = -.68, p < .05).

Correlations among study variables within the subsamples of Caucasian girls and Caucasian boys we predominantly non-significant (see Table A.4 and Table A.5). In fact, only one significant correlation emerged: Parental overprotection was significantly and negatively related to parent-reported generalized anxiety symptoms (r = -.33, p < .10) for Caucasian girls.

	S	ex		
-	Boys	Girls		
	Mean (SD)	Mean (SD)	t	df
Hispanic/Latino	n = 11	n = 47		
Lack of autonomy granting	3.23 (.51)	2.86 (.58)	-2.00ŧ	56
Intrusiveness	3.97 (.71)	3.95 (.64)	-0.12	56
Overprotection	2.83 (.53)	2.83 (.44)	-0.02	56
Behavioral over-control	0.98 (.43)	0.96 (.39)	-0.15	56
Familismo support	4.65 (.28)	4.51 (.47)	-0.92	56
Familismo obligations	4.05 (.43)	3.96 (.63)	-0.48	56
Familismo referent	4.09 (.28)	3.89 (.62)	-0.94	56
Total Anx- Crgvr report	27.63 (11.99)	31.02 (20.35)	0.53	56
Social Anx- Crgvr report	5.09 (2.74)	5.93 (3.73)	0.70	56
Separation Anx- Crgvr report	5.84 (2.87)	6.89 (4.76)	0.70	56
Generalized Anx- Crgvr report	6.28 (3.57)	6.28 (3.94)	0.69	56
Total Anx- Child report	60.67 (13.03)	64.29 (16.68) <sub>b</sub>	0.67	55
Social Anx- Child report	13.00 (5.66)	17.35 (6.32) <sub>b</sub>	2.09*	55
Separation Anx- Child report	12.27 (3.58)	14.22 (5.10) <sub>b</sub>	1.20	55
Caucasian	n = 12	n = 28		
Lack of autonomy granting	2.51 (.42)	2.72 (.42)	1.46	38
Intrusiveness	3.70 (.54)	3.83 (.66)	0.58	38
Overprotection	2.54 (.47)	2.51 (.39)	-0.20	38
Behavioral over-control	0.85 (.27)	0.85 (.31)	-0.06	38
Familismo support	4.18 (.35)	4.39 (.46)	1.59 <sub>a</sub>	27.0 4
Familismo obligations	3.65 (.50)	3.52 (.62)	64	38
Familismo referent	3.50 (.45)	3.43 (.67)	-0.34	38
Total Anx- Crgvr report	14.58 (10.26)	24.23 (15.71)	1.95ŧ	38
Social Anx- Crgvr report	4.00 (2.56)	6.00 (3.31)	1.86ŧ	38
Separation Anx- Crgvr report	2.25 (2.14)	4.61 (3.76)	2.02*	38
Generalized Anx- Crgvr report	3.75 (3.33)	5.07 (2.99)	1.24	38
Total Anx- Child report	59.92 (14.32)	62.60 (13.95)	0.55	38
Social Anx- Child report	15.00 (3.36)	17.32 (4.75)	1.53	38
Separation Anx- Child report	11.08 (3.58)	12.75 (4.81)	1.08	38

Table A.1 Mean Differences of Study Variables across Sex within Ethnic Groups

*Note*. Lack of autonomy granting, Intrusiveness, Overprotection = subscales of Child Development Questionnaire (CDQ; Zabin & Melamed, 1980); Behavioral control = subscale of parent version of Children's Report on Parent Behavior-30 item version (CRPBI-30; Schludermann & Schludermann, 1988); Familism support, Familism obligations, Familism referent = Mexican American Cultural Values Scale (MACVS; Knight et al., 2010); Caregiver report of child anxiety = Spence Children's Anxiety Scale (SCAS; Spence, 1997, 1998); Child report of child anxiety = Multidimensional Anxiety Scale for Children (MASC; March et al., 1997, 1999).

 $_a$  Alternative t-statistic reported to account for unequal variances across group  ${}^{\ddagger}p < .10$  \*p < 05; \*\*p < .01

	1	2	3	4	5	6	7	8	9	10	11	12	13
15. Lack of autonomy granting													
16. Intrusiveness	.36*												
17. Overprotection	.19	.22											
18. Behavioral over-control	.04	10	01										
19. Familismo support	.14	.29†	08	06									
20. Familismo obligations	02	.10	05	.17	.61**								
21. Familismo referent	.20	.16	.13	.24	.53**	.61**							
22. Total Anxiety– Crgvr report	.40**	.02	.25†	.31*	29*	15	06						
23. Social Anxiety– Crgvr report	.22	.06	.21	.25†	43**	36*	13	.78**					
24. Separation Anxiety– Crgvr report	.34*	.05	.32*	.29*	22	11	01	.89**	.62**				
25. Generalized Anxiety– Crgvr report	.30*	.02	.11	.25†	19	02	02	.87**	.62**	.75**			
26. Total Anxiety– Child report <sub>a</sub>	03	15	.02	.25†	01	.10	.16	.26†	.08	.26†	.43**		
27. Social Anxiety– Child report <sub>a</sub>	.09	19	.06	.17	15	08	.08	.21	.10	.13	.26†	.75**	
28. Separation Anxiety– Child report <sub>a</sub>	.04	09	05	.25†	.11	.12	.17	.27	.02	.35*	.44**	.79**	.40**

Table A.2Correlations among Study Variables for Hispanic/Latino Girls

*Note.* Lack of autonomy granting, Intrusiveness, Overprotection = subscales of Child Development Questionnaire (CDQ; Zabin & Melamed, 1980); Behavioral control = subscale of parent version of Children's Report on Parent Behavior-30 item version (CRPBI-30; Schludermann & Schludermann, 1988); Familism support, Familism obligations, Familism referent = Mexican American Cultural Values Scale (MACVS; Knight et al., 2010); Caregiver report of child anxiety = Spence Children's Anxiety Scale (SCAS; Spence, 1997, 1998); Child report of child anxiety = Multidimensional Anxiety Scale for Children (MASC; March et al., 1997, 1999).

N = 47; a N = 46

 $\dagger p < .10 \ \ast p < 05; \ \ast \ast p < .01$ 

		1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Lack of autonomy granting													
2.	Intrusiveness	.15												
3.	Overprotection	35	.31											
4.	Behavioral over-control	.32	.57†	24										
5.	Familismo support	.39	.19	.11	.17									
6.	Familismo obligations	.42	.37	.21	.40	.35								
7.	Familismo referent	.75**	.18	32	.64*	.59†	.52							
8.	Total Anxiety- Crgvr report	40	.15	.58†	33	43	28	43						
9.	Social Anxiety- Crgvr report	31	.02	.40	62*	15	45	47	.75**					
10.	Separation Anxiety- Crgvr report	36	.32	.74**	34	13	19	40	.87**	.75**				
11.	Generalized Anxiety- Crgvr report	84**	.12	.48	16	60*	31	68*	.73*	.38	.59†			
12.	Total Anxiety- Child report	03	54†	45	54†	52	24	34	.06	.25	09	03		
13.	Social Anxiety- Child report	.34	14	50	31	35	07	21	22	.08	29	34	.76**	
14.	Separation Anxiety– Child report	28	24	41	24	60*	19	50	08	12	13	.22	.74**	.59

Table A.3Correlations among Study Variables for Hispanic/Latino Boys

*Note.* Lack of autonomy granting, Intrusiveness, Overprotection = subscales of Child Development Questionnaire (CDQ; Zabin & Melamed, 1980); Behavioral control = subscale of parent version of Children's Report on Parent Behavior-30 item version (CRPBI-30; Schludermann & Schludermann, 1988); Familism support, Familism obligations, Familism referent = Mexican American Cultural Values Scale (MACVS; Knight et al., 2010); Caregiver report of child anxiety = Spence Children's Anxiety Scale (SCAS; Spence, 1997, 1998); Child report of child anxiety = Multidimensional Anxiety Scale for Children (MASC; March et al., 1997, 1999).

$$N = 11$$

 $\dagger p < .10 \ \ast p < 05; \ \ast \ast p < .01$ 

		1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Lack of autonomy granting													
2.	Intrusiveness	.12												
3.	Overprotection	33†	.30											
4.	Behavioral over-control	.27	32†	31										
5.	Familismo support	.50**	.59**	.26	.08									
6.	Familismo obligations	.50**	.27	.30	.05	.58**								
7.	Familismo referent	.37†	.39*	.36†	.15	.76**	.63**							
8.	Total Anxiety- Crgvr report	.16	18	.09	.07	08	.07	09						
9.	Social Anxiety- Crgvr report	.06	01	.31	.09	.08	.24	02	.68**					
10	. Separation Anxiety– Crgvr report	04	24	.06	02	24	.01	12	.85**	.36†				
11	. Generalized Anxiety– Crgvr report	.13	33	.05	.21	11	001	10	.94**	.59**	.84**			
12	. Total Anxiety– Child report	.05	23	.01	.06	.07	07	17	.21	.44*	.06	.31		
13	. Social Anxiety– Child report	.01	02	06	.10	.17	01	22	01	.32†	13	.03	.75**	
14	Separation Anxiety– Child report	.01	.08	.10	31	.17	.07	.02	.20	.37†	.14	.18	.68**	.35

Table A.4Correlations among Study Variables for Caucasian Girls

*Note*. Lack of autonomy granting, Intrusiveness, Overprotection = subscales of Child Development Questionnaire (CDQ; Zabin & Melamed, 1980); Behavioral control = subscale of parent version of Children's Report on Parent Behavior-30 item version (CRPBI-30; Schludermann & Schludermann, 1988); Familism support, Familism obligations, Familism referent = Mexican American Cultural Values Scale (MACVS; Knight et al., 2010); Caregiver report of child anxiety = Spence Children's Anxiety Scale (SCAS; Spence, 1997, 1998); Child report of child anxiety = Multidimensional Anxiety Scale for Children (MASC; March et al., 1997, 1999). N = 28

†p < .10 \*p < 05; \*\*p < .01

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		1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Lack of autonomy granting													
2.	Intrusiveness	.72**												
3.	Overprotection	.39	.51											
4.	Behavioral over-control	.20	.43	.60*										
5.	Familismo support	.39	.60*	.45	.54†									
6.	Familismo obligations	.08	.31	.19	.33	.83**								
7.	Familismo referent	.10	.41	.52†	.77**	.67*	.71**							
8.	Total Anxiety- Crgvr report	16	16	.34	13	15	16	20						
9.	Social Anxiety- Crgvr report	17	16	.20	10	34	33	24	.86**					
10.	Separation Anxiety- Crgvr report	16	34	.16	.03	03	.06	.16	.60*	.47				
11.	Generalized Anxiety- Crgvr report	18	06	.36	15	15	19	24	.98**	.78**	.55†			
12.	Total Anxiety- Child report	09	.11	.03	.18	19	29	19	.43	.37	05	.46		
13.	Social Anxiety- Child report	07	.07	.10	.10	23	44	23	.58*	.55†	.24	.54	.81**	
14.	Separation Anxiety– Child report	.13	.36	.26	.32	09	16	.05	.29	.26	15	.33	.86**	.55†

Table A.5Correlations among Study Variables for Caucasian Boys

*Note*. Lack of autonomy granting, Intrusiveness, Overprotection = subscales of Child Development Questionnaire (CDQ; Zabin & Melamed, 1980); Behavioral control = subscale of parent version of Children's Report on Parent Behavior-30 item version (CRPBI-30; Schludermann & Schludermann, 1988); Familism support, Familism obligations, Familism referent = Mexican American Cultural Values Scale (MACVS; Knight et al., 2010); Caregiver report of child anxiety = Spence Children's Anxiety Scale (SCAS; Spence, 1997, 1998); Child report of child anxiety = Multidimensional Anxiety Scale for Children (MASC; March et al., 1997, 1999).

 $p < .10 \ p < .05; \ p < .01$ 

N = 12