Latina/o adolescents experience an increased risk for the development of both internalizing and externalizing problems compared to non-Latina/o white youth (Anderson & Mayes, 2010; Coatsworth, Pantin, & Szapocznik, 2002). Research demonstrates that parent-adolescent communication is one important familial process that influences the development and attenuation of these symptoms (Davidson & Cardemil, 2009). However, little work has investigated how adolescent self-disclosure to mothers may play a role in Latina/o youth adjustment. The current dissertation explored correlates of behavioral and emotional self-disclosure in Latina/o adolescents using an emic approach. This study had two specific aims: (1) To investigate the relation between two types of adolescent self-disclosure—behavioral and emotional—and two types of adolescent adjustment—internalizing and externalizing problems. (2) To identify predictors of both behavioral and emotional self-disclosure, incorporating both universal and cultural factors. These aims were tested in a sample of 217 second generation Latina/o adolescents ages 13-17 (mean age = 15.22; 78.8% female) across the U.S. Adolescents completed an online survey including questionnaires about self-disclosure, adjustment, relationship quality with their mother, maternal reactions to disclosure, cultural values, and language gaps with mothers. Results indicated that behavioral and emotional self-disclosure differentially predict youth adjustment, and relationship quality is an important predictor of Latina/o youth frequency of disclosure. Post-hoc analyses suggested that cultural factors do indeed impact Latina/o youth disclosure and
adjustment, and that relationship quality is indirectly related to youth adjustment through self-disclosure.
LATINA/O ADOLESCENT ADJUSTMENT: UNDERSTANDING THE ROLE OF ADOLESCENT SELF-DISCLOSURE TO MOTHERS

by

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CHAPTER I

INTRODUCTION

The early onset and prevalence of mental health disorders in the United States is concerning, as it serves as a significant risk for progression or reoccurrence of the disorder(s) into early adulthood and later life (Merikangas et al., 2010). According to epidemiological rates, one out of every four to five youth meet diagnostic criteria for a mental health disorder before age 18 in the U.S. (Merikangas et al., 2010), but this risk is heightened for Latina/o youth who experience higher rates of both internalizing problems (e.g. depression and anxiety) and externalizing problems (e.g. alcohol and substance use) as compared to their non-Latina/o peers (Anderson & Mayes, 2010; Isasi, Rastogi, & Molina, 2016; Merikangas et al., 2010). The risk that Latina/o adolescents experience for development of these mental health concerns is noteworthy, as the Latina/o population constitutes a significant portion of youth in the U.S. A 2013 survey found that twenty-four percent of children in the United States identify as Latina/o or Hispanic, and the number of Latina/o children in the U.S. is expected to almost equal that of non-Latina/o white children by 2050 (Murphey, Guzman, & Torres, 2014). Given the risk for adjustment concerns faced by Latina/o youth into adolescence, it is important for research to direct its’ efforts to understanding aspects of the Latina/o adolescent context that may promote youth adjustment across these concerns.
One important aspect of the Latina/o adolescent context that has been related to positive adjustment across mental health concerns is parent-adolescent communication within the family (Davidson & Cardemil, 2009; McNaughton, Cowell, & Fogg, 2015; Perrino, Brincks, Howe, Brown, Prado, & Patin, 2016). Specifically, a small body of work finds that parent-adolescent communication is associated with fewer externalizing and delinquent behaviors among Latina/o adolescents (Asfour et al., 2017; Davalos, Chavez, & Guardiola, 2005; Davidson et al., 2009; Schwartz et al., 2013). More broadly, the link between family communication and adolescent adjustment is most consistently found in literature investigating adolescent self-disclosure. Specifically, researchers have recognized that an integral part of parent-adolescent communication involves the adolescent as an active agent in daily bidirectional interactions with parents (Cummings & Schermerhorn, 2003), choosing what personal information to self-disclose to their parents, and thus providing parents with the necessary knowledge to intervene in youth behavior and promote their adjustment (Buhrmester & Prager, 1995; Hartos & Power, 1997). Such work has focused on adolescent behavioral or routine self-disclosure (e.g. disclosure about daily activities) as a mechanistic piece of the communication process that serves to increase parental knowledge, helping parents monitor behavior and ultimately decrease adolescent delinquency (Crouter, Bumpus, Davis, & McHale, 2005; Kerr & Stattin, 2000; Kerr, Stattin, & Burk, 2010; Kerr, Stattin, & Trost, 1999; Soenens, Vansteenkiste, Luyckx, & Goossens, 2006). This broader work identifies adolescent behavioral self-disclosure as a key component of parent-adolescent communication to understand Latina/o youth externalizing behaviors.
In addition to exploring how behavioral self-disclosure relates to adolescent adjustment, research has examined the factors that predict the frequency of adolescent behavioral self-disclosure (Smetana, Metzger, Gettman, & Campione-Bar, 2006; Yau, Tasopoulos-Chan, & Smetana, 2009). Specifically, the literature identifies both relationship dynamic and cultural factors as correlates of increased adolescent behavioral self-disclosure (Smetana, et al., 2006; Tasopoulos-Chan, Smetana, & Yau, 2009; Villalobos & Smetana, 2012; Yau, Tasopoulos-Chan, & Smetana, 2009). This research effort provides a foundation for intervention efforts directed at improving communication between Latina/o adolescents and their parents through increased adolescent behavioral self-disclosure (Perrino et al., 2014; Perrino et al., 2016).

On the other hand, the relation between parent-adolescent communication and youth internalizing problems has been less frequently studied, especially within the Latina/o adolescent literature. Importantly, self-disclosure occurs across multiple domains including behavioral, or routine self-disclosure, and emotional self-disclosure (Kerr et al., 1999; Tilton-Weaver, Marshall, & Darling, 2014). Disclosure of and communication about emotions and emotional experiences (i.e. emotional self-disclosure) may be more closely linked to internalizing problems (Suveg, Zeman, Flannery-Schroeder, & Cassano, 2005) than would be behavioral self-disclosure. Two interventions studies point to the importance of parent-adolescent communication in reducing risk for internalizing symptoms. Perrino et al., (2016) reported a reduction in Latina/o adolescents’ internalizing symptoms as an unintended outcome of a parent-adolescent communication intervention designed to reduce adolescent externalizing
behaviors. Similarly, Gonzales et al. (2012) have demonstrated a preventative communication intervention’s effectiveness at reducing both externalizing and internalizing problems for Latina/o adolescents. However, few studies have explored the nuances in the relation between parent-adolescent communication and Latina/o youth internalizing problems, particularly regarding the role of adolescent self-disclosure.

Indeed, emotional self-disclosure as a construct has been sparsely studied in the adolescent literature (see Hare, Marston, & Allen, 2011; Main, Lougheed, Disla, & Kashi, 2018; Martin, Kim, & Freyd, 2017; Papini, Farmer, Clark, Micka, & Barnett, 1990 for exceptions), and the link between emotional self-disclosure and internalizing problems even less studied. Furthermore, the literature’s investigation of the factors that influence adolescent emotional self-disclosure to mothers has been confined to an understanding of universal relationship dynamic factors, such as relationship quality and maternal reactions to disclosure about emotions (Hare et al., 2011; Martin et al., 2017; Papini et al., 1990), but does not incorporate an understanding of how cultural factors impact Latina/o adolescent emotional self-disclosure, as no extant studies investigate this process with Latina/o adolescents.

Therefore, the proposed study seeks to contribute two important pieces to the current literature by using a within-group design to provide—(1) a more nuanced understanding of the relation between different types of adolescent self-disclosure to mothers (i.e. behavioral self-disclosure and emotional self-disclosure) and externalizing and internalizing problems for Latina/o youth, with the goal of establishing a unique link between adolescent emotional self-disclosure and internalizing symptoms and (2)
identifying culturally specific and universal familial factors that predict the frequency of Latina/o adolescent behavioral and emotional self-disclosure.

**Theoretical Underpinnings**

The current dissertation focuses on one communication process (i.e. adolescent self-disclosure) within Latina/o families. It is therefore important to first ground this work in a broader understanding of parent-adolescent relationships, which serve as the milieu within which adolescents and their parents communicate (Barnes & Olson, 1985). In fact, one model of family systems suggests that familial communication is the “mechanism families utilize to share their changing preferences, needs, and feelings” (p. 439) (Barnes et al., 1985). Thus, communication is central to the parent-adolescent relationship (Olson, 2000), and research should explore specific aspects of the communication process, such as adolescent self-disclosure.

Within this general framework, this section will provide a theoretical foundation to explain the functioning of parent-adolescent relationships and how self-disclosure fits within this context. It will also make a theoretical argument for this study’s premise of the necessity for including the role of cultural variables in predicting aspects of the parent-adolescent relationship, communication, and ultimately adolescent self-disclosure, to best understand how self-disclosure operates for Latina/o adolescents specifically. Of note, this study uses an emic approach to understand these processes for Latina/o adolescents, and thus uses a within-group design. The ultimate goal is to contribute to culturally-informed treatment aimed at improving Latina/o youth outcomes given their risk for maladjustment. This study does not argue that these processes are unique to the
Latina/o population, but rather, that it is important to test questions using a within-group design to elucidate the cultural factors that may influence these processes.

**A Transactional Process Model within an Emic Bioecological Framework**

Over the years, researchers have proposed varying theoretical models to explain the functioning of parent-adolescent relationships and their impact on child development (Kuczynski, 2003). Original models of parent-adolescent relationships focused on the role of the parent in enacting change on the child or adolescent through socialization, or teaching, to encourage the child’s acquisition of developmental competencies (Maccoby, 1992). Such models placed emphasis on the parent as the teacher and the child as the learner (Maccoby, 2007), largely ignoring the child’s role in the socialization process. Since then, the literature has progressed to consider a transactional process model of parent-adolescent relationships that asserts that the relationship between adolescents and their parents is bidirectional, closely involving interactions between both members that mutually influence one another, and ultimately the relationship and the developing child, across time (Kuczynski, 2003). This study takes a three-fold theoretical approach to inform its design—1) A transactional model; 2) A bioecological framework; 3) An emic approach.

First, the transactional process model is a particularly helpful framework that can inform the functioning of communication processes between adolescents and their parents, since communication is one type of daily interaction that parents and adolescents engage in. It also allows for consideration of how the dynamics between parents and adolescents impact their interactions (Sameroff, 2009). Even within an interaction, all
individuals have some agency—adolescents have agency about deciding to self-disclose to parents about a variety of topics (Cummings et al., 2003; Kuczynski, 2003)—yet this process is nonetheless influenced by the dyad’s history of previous interactions (Lollis, 2003). For example, maternal reactions to a child’s disclosure about emotions can influence whether the child will disclose in the future—if a parent is unsupportive towards a child’s display of emotion and does not reinforce the display of emotion, over time, the child may choose to not display that emotion to the parent again (Martin et al., 2017). Less display of emotion from the child may then discourage the parent from attempting to elicit emotion-talk from the child at a later time, further diminishing discussions of emotions. In this case, the child has agency to decide to self-disclose to the parent voluntarily, but this decision is influenced by a dynamic between the parent and child that may vary and change across time. Additionally, there may be non-verbal indicators, such as a child crying, that result in maternal solicitation of an emotional disclosure, thereby influencing this transactional process; however, this paper will focus on the role of self-disclosure as a specific and voluntary component of parent-adolescent communication initiated by the adolescent. There is a more substantial literature investigating parental solicitation of information from adolescents that will not be the topic of this paper. The general transactional model therefore provides this study with a basis for identifying self-disclosure predictor variables. Specifically, it points to the importance of relationally-based factors, such as relationship quality and maternal reactions to adolescent emotions and behaviors, as factors that may impact youth disclosure.
Secondly, one transactional model that clearly captures how daily bidirectional interactions influence a developing child is Bronfenbrenner’s Bioecological model of child development (Bronfenbrenner & Morris, 2006). In Bronfenbrenner’s model, the transactional interactions between parents and children are defined as proximal processes, and importantly, this model considers the influence of context on these proximal processes (Bronfenbrenner et al., 2006; Tudge, Mokrova, Hatfield, & Karnik, 2009). The model identifies five relevant levels of a child’s environment including the microsystem (in which proximal processes between a child and a parent occur), the mesosystem (e.g. school), the exosystem (e.g. parent’s work), the macrosystem (e.g. culture), and the chronosystem (e.g. time) (Bronfenbrenner et al., 2006). The theory proposes that the different levels of the contextual environment impact each other to influence the proximal processes in the microsystem and ultimately the development of the child (Bronfenbrenner et al., 2006). One important proximal process for an adolescent is communication, and in the case of this study, adolescent self-disclosure to mothers.

Thirdly, an important part of Bronfenbrenner’s model that often receives less attention is the role of the macrosystem context on proximal processes, specifically, the role of culture on the proximal processes. The current placement of culture in the macrosystem implies that it has a less direct role in influencing the proximal processes than do pieces of the other systems that are nearer to the developing child. The third component of this study’s theoretical framework is to work within an emic approach, or a type of cross-cultural research that proposes that “Human acts cannot be separate from their cultural context” (p. 133; Helfrich, 1999). Several researchers have moved toward
this emic, within-group approach including Raffaelli, Carlo, Carranza, and Gonzalez-Kruger (2005), as well as Velez-Agosto and colleagues (2017), the latter of whom recently integrated the emic approach with Bronfenbrenner’s model by purporting that culture be placed in the microsystem, as a direct influence on proximal processes such as parent-adolescent communication. This study will thus use a within-group design to focus its investigation on the role of cultural factors on adolescent self-disclosure by considering cultural factors as predictors of adolescent self-disclosure and youth adjustment.

**Cultural context.** To consider how culture impacts adolescent self-disclosure, it is important to identify and define several important cultural concepts and factors that play a role in Latina/o familial relationships that will be relevant throughout the rest of this document. First is to recognize that the experience of culture for immigrant populations is often best captured within the understanding of acculturation. Acculturation is “the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members” (Berry, 2006, p. 13). In other words, acculturation is a process that involves an individual’s changing experiences across many cultural domains, including cultural value endorsement, language use, ethnic identity, and traditions and cultural practices, when the person immigrates to a country with a new culture (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Acculturation is also best understood as bidimensional, meaning that it encompasses an individual’s ascription to the cultural values, language, traditions, and
identity of the new country (e.g. the U.S) while also maintaining aspects of the native culture across these domains (Cabassa, 2003).

Understanding how acculturation impacts immigrant families is particularly important for understanding the dynamics of Latina/o families in the U.S. as at least one member of Latina/o families in the U.S is typically an immigrant (i.e. 1st generation), with other members who have been born in the U.S. to immigrant parents (2nd generation), and in many cases, members of the family acculturate at different rates within the family due to these complexities (Telzer, 2010). Such experiences can result in changes in parent-adolescent relationship quality and influence parenting practices.

One important acculturation domain is language use. Language use is understood as both language proficiency and language preference, related yet distinct constructs. Language proficiency describes an individual’s capacity to communicate in a particular language; language preference concerns a bilingual individual’s preference to speak one language over the other (Gee, Walsemann, & Takeuchi, 2010). Although not a highly relevant factor for monolingual families, language proficiency and preference are very important for understanding communication in many immigrant families, such as Latina/os (Tseng & Fuligni, 2000). Indeed, language is one of the domains of acculturation on which Latina/o children and their parents may differ (Lutz, 2006). Many Latina/o children who have been born in the United States or who have immigrated at a young age prefer to speak English, while many of their 1st generation immigrant mothers prefer to speak Spanish, with both having limited proficiency of or preference to speak the other language (Lutz, 2006), impacting communication processes within the family.
For example, a mother who has a lower proficiency in English may struggle to help her child complete homework, with conceivable long-term effects of limiting academic scaffolding in the home, possibly leading to a child’s difficulty in school, which has the potential to impact mood and internalizing problems, or to lead the child to disengage from school and engage in risky behavior outside of school (e.g. externalizing behaviors). However, the child and parent are limited in their ability to communicate not only about the homework but also about the resulting distress, likely compounding the symptoms. Such trajectories have been demonstrated by researchers investigating the relationship between differential language abilities within Latina/o families (Schofield, Beaumont, Widaman, Jochem, Robins, & Conger, 2012). Taken together, the literature suggests that parent-child communication is impacted by differential language acculturation and it needs to be considered.

Another acculturation domain that has garnered a significant amount of research is Latina/o family cultural value endorsement. Specifically, familism, or the belief in one’s obligation to help the family, turning to the family for support, and noting that one’s actions reflect on the family, as well as the respect value, or the belief in honoring family above others (Knight et al., 2011) have demonstrated their relationship to positive youth development (Stein, Cupito, Mendez, Prandoni, Huq, & Westerberg, 2014). Regarding acculturation, researchers have widely posited that for immigrant families living in the U.S., adolescents often ascribe to more ‘American’ values, while parents maintain heritage values, resulting in increased conflict within the family, notably called the ‘acculturation gap’ (Szapocznik & Kurtines, 1993). These processes also influence
family conflict and communication as seen in work by Davidson and Cardemil (2009), Kuhlberg, Peña, and Zayas (2010), Frazer, Rubens, Johnson-Motoyama, DiPierro, and Fite (2017), among others. Further, attitudinal cultural values also shape the behaviors that family members choose to engage in and influence daily interactions (Hernández & Bámaca-Colbert, 2016). For example, strong endorsement of the familism cultural value may influence an adolescent to spend free time, such as weekends, at home with the family, rather than out with friends, diminishing the teen’s exposure to potential risk-taking behaviors (e.g. drinking alcohol) that may be introduced in peer contexts outside of the home. Taken together, this research on cultural values indicates the need for further investigations on how these values impact Latina/o communication processes.

In summary, this dissertation’s theoretical framework considers the transactional factors (e.g. relationship quality, maternal reactions to youth emotions) that influence youth interactions at the proximal level (i.e. youth self-disclosure to mothers) with a cultural overlay (e.g. within-group design, role of acculturative factors like language use and cultural value endorsement).

**Familial Communication and Latina/o Adolescent Adjustment**

**Externalizing Problems**

Externalizing behaviors are broadly defined as “a grouping of behavior problems that are manifested in children’s outward behavior and reflect the child negatively acting on the external environment” (pp. 93) (Liu, 2004). Example behaviors include delinquency (e.g. criminal acts), drug and alcohol use, risky sexual behavior, aggression, and truancy, all of which see a marked increase during adolescence as adolescents begin
to experiment with their surroundings and form peer groups (Cicchetti & Toth, 1991; Henry & Thornberry, 2010; Timmermans, Van Lier, & Koot, 2008). Coatsworth, Pantin, and Szapocznik (2002) argue that Latina/o adolescents are at increased risk for developing externalizing problems because many immigrant families live in high-risk urban areas and/or live in areas where they do not have the social capital or network necessary to build supports and help their children successfully navigate the U.S. social system.

This risk that Latina/o adolescents experience for externalizing problems has also been closely related to acculturation factors, as defined above. For example, Fridrich and Flannery (1995) found that more ‘acculturated’ Latina/o adolescents (acculturation assessed as language use and generation status) reported more delinquent behaviors than non-Latina/o whites, non-acculturated Latina/os, and recent immigrant Latina/os in a sample of 6th and 7th graders. Other researchers have taken this work one step further to suggest that acculturation is related to Latina/o adolescent externalizing problems because it can negatively impact family processes such as familial values and parent-adolescent conflict (Buchanan & Smokowski, 2009; Frazer et al., 2017; Samaniego & Gonzales, 1999). Such work directs research to examine the relationship between familial processes, such as parent-adolescent communication, and youth externalizing behaviors. This has been accomplished by work in the past several decades that has investigated how to decrease adolescents’ risk for engagement in externalizing behaviors generally (see Anderson et al., 2012 for a review), while others focus on minimizing this
risk for Latina/o youth specifically (Asfour et al., 2017; Coatsworth et al., 2002; Gonzales et al., 2012; Prado et al., 2013, to name a few).

The work aimed at decreasing Latina/o youths’ risk for externalizing problems has focused on familial processes, such as communication with parents, as a broad construct, rather than investigating specific mechanisms such as adolescent self-disclosure. In a sample of 40 Latina/o parent-adolescent dyads, parental communication and involvement were related to less adolescent delinquency (Davidson et al., 2009). Additionally, a family intervention designed to increase communication between parents and adolescents found decreases in adolescent externalizing behaviors in both a U.S. sample (Prado et al., 2013) and a sample in Ecuador (Molleda et al., 2017), highlighting the importance of communication, especially for those at highest risk (Prado et al., 2013). Another prevention intervention designed for Latina/o adolescents transitioning to high school and their parents has been shown to be effective in reducing both adolescent externalizing and internalizing problems by improving some familial factors such as family cohesion and effective parenting (Gonzales et al., 2012). Schwartz et al. (2013) more generally found that good family functioning, including good communication, was protective against Latina/o adolescent alcohol use. Another study investigating alcohol use in adolescents in Mexico found that family intimacy predicted less overall use and less binge drinking through parent-adolescent communication (Martyn et al., 2009). Finally, a between-group study confirmed that more parent-adolescent communication is related to fewer delinquent behaviors for both non-Latina/o whites and Latina/os (Davalos, et al., 2005). Overall, these studies, although not addressing self-disclosure
specifically, highlight that communication is indeed related to fewer externalizing problems for Latina/o youth. They also indicate a need to explore the role of adolescent self-disclosure as a mechanism of communication to better understand the process at large, especially when considering key cultural factors like value endorsement and language preference or ability.

**Internalizing Problems**

Internalizing problems are “problems that more centrally affect the child’s internal psychological environment rather than the external world” (pp. 2), including withdrawn, anxious, inhibited, or depressed behaviors (Liu, 2004). Internalizing and externalizing problems are often comorbid in adolescent populations (Cosgrove et al., 2011). As Latina/o adolescents are at increased risk for development of externalizing problems (Anderson et al., 2010; Coatsworth et al., 2002), they are also at increased risk for development of internalizing problems, especially depression, as compared to their non-Latina/o peers (Anderson et al., 2010; Isasi, et al., 2016). Also, recent changes in the socio-political climate in the United States have placed Latina/o children at additional risk for developing anxiety, as it relates to, for example, the uncertainty and fears of deportation faced by many mixed-status families (i.e. a family comprised of some members with documentation and others without) in the U.S. (Brabeck & Sibley, 2016; Gulbas, Zayas, Yoon, Szlyk, Aguilar-Gaxiola, & Natera, 2016).

There is a very small literature that examines the relationship between communication in Latina/o families and internalizing problems specifically. The strongest support is found in Gonzales et al.’s (2012) communication intervention for
Latina/o adolescents and their families that found that improvement on relationship
factors, such as cohesion and positive parenting, reduced both internalizing and
externalizing behaviors. Also, a family intervention study that was originally designed to
reduce Latina/o youth externalizing problems also inadvertently found a reduction in
youth internalizing problems as a result of the intervention (Brincks et al., 2016; Perrino
et al., 2014; Perrino et al., 2016), suggesting that some aspect of communication has a
positive impact on minimizing internalizing concerns for these children. Piña-Watson and
Castillo (2015) found that Latina adolescent perception of how close they feel to their
mother mediated the relationship between general maternal caring and adolescent
depressive symptoms, suggesting that mechanisms around how adolescents feel close to
their mothers (e.g. talking with them about feelings) is important in Latina female
adolescents’ experience of depressive symptoms. More generally, the literature finds that
Latina/o parenting practices, such as supportive parenting, have been linked to fewer
depressive symptoms (and fewer conduct problems) for Latina/o adolescents (Gonzales,
Deardorff, Formoso, Barr, & Barrera, 2006). Overall, the literature acknowledges that
familial processes are important in lessening or preventing internalizing problems for
Latina/o adolescents, and that parent-adolescent communication may play a specific role
(Perrino et al., 2014); however, the unique communication mechanisms that may help to
facilitate this process (i.e. self-disclosure) are not well articulated. Further, there is past
literature that considers cultural factors in the familial relationship in relation to
communication patterns and internalizing symptoms (Kuhlberg et al., 2010; Pina-Watson
& Castillo, 2015), but not as it relates to adolescent self-disclosure.
Adolescent Self-Disclosure

Self-disclosure involves the verbal sharing of personal information to another individual on a continuum, from the sharing of general behavioral acts and experiences, to the sharing of intimate feelings (Rotenberg, 1995). It is a construct that was originally introduced by Jourard and Lasakow in 1958 as the “process of making the self known to other persons” (pp. 91), and was understood to be a personality characteristic, such that one was more or less likely to disclose based on his or her personality (Derlaga & Berg, 1987). Since its’ original inception, the self-disclosure literature has expansively grown to investigate disclosure across a variety of personal relationships and has recognized it as an integral element of interpersonal communication (Rotenberg, 1995). Furthermore, researchers have examined self-disclosure processes in childhood and adolescence, acknowledging differences in this process across development (Buhrmester & Prager, 1995). This next section of the paper will first discuss self-disclosure during the adolescent developmental period specifically and will then provide a literature review of two types of self-disclosure—behavioral self-disclosure and emotional self-disclosure—as they relate to adolescent adjustment as well as the factors that predict the frequency of both types of disclosure. Again, this study focuses on Latina/o adolescent self-disclosure; however, due to the sparsity of work in this area, other relevant literature about adolescents and self-disclosure will also be included. The emphasis will remain on using a transactional model with an emic bioecological framework in the identification of predictors, given this paper’s focus on incorporating culture at the microlevel of transactional proximal processes such as adolescent self-disclosure.
Self-Disclosure during Adolescence

Adolescence is a developmental period classically marked by autonomy seeking and identity formation, processes that involve the adolescent’s individuation from parents (Erikson, 1959). Theoretically, this would suggest that adolescents would have less of a desire to self-disclose to mothers to ensure their growing independence, possibly resulting in emotional distancing from parents (Hartos & Power, 1997). Some researchers have investigated how disclosure changes across development, most thoroughly in terms of how the recipient of disclosure (i.e. whom one chooses to disclose to) may change (Buhrmester & Prager, 1995). In their meta-analysis of disclosure in children and adolescents, Buhrmester and Prager (1995) identified that there is an increase in disclosure to peers as children age, without a decrease in disclosure to mothers, suggesting that the net amount of disclosure increases with time.

Moreover, these results counter the idea that adolescents disclose less to parents and suggest that communication with mothers during adolescence remains integral (Buhrmester & Prager, 1995). It furthermore indicates that it is important to consider contextual factors (e.g. recipient of disclosure) to understand self-disclosure. This study focuses on mothers as the recipient of disclosure due to the large body of research highlighting the ongoing impact of mothers on adolescent development (Hair, Moore, Garnett, Ling, & Cleveland, 2008; Steinberg, 2001). Specifically, Rodríguez, Perez-Brena, Updegraff, & Umaña-Taylor (2014) found that mother-adolescent relationships for Latina/o youth influence the development of other social relationships, thus impacting youth well into adolescence. Additionally, Jiménez (2007) found that adolescents
communicate more with mothers than fathers, making the mother-adolescent relationship an important starting point for research on adolescent self-disclosure processes in families.

**Behavioral Self-Disclosure vs. Emotional Self-Disclosure**

Another contextual nuance that has received some attention in the literature is the acknowledgement that adolescents can disclose information across a variety of domains (Kerr et al., 2000; Tilton-Weaver et al., 2014). The two most basic divisions of disclosure domains are disclosure about whereabouts and daily activities (i.e. behavioral self-disclosure, also known as routine disclosure), and disclosure about feelings and thoughts (i.e. emotional self-disclosure, also known as self-disclosure) (Rotenberg, 1995; Tilton-Weaver, et al., 2014). Although the literature recognizes the differences between these domains of self-disclosure, researchers have not investigated the nuances across each in terms of both what they predict and what predicts them (Tilton-Weaver et al., 2014). Moreover, extant adolescent self-disclosure literature has focused on understanding behavioral self-disclosure during adolescence, with very little work investigating emotional self-disclosure (see Hare et al., 2011; Main et al., 2018; Martin, et al., 2017; Papini et al., 1990 for exceptions).

The differentiation between behavioral and emotional self-disclosure was most clearly addressed by Tilton-Weaver and colleagues (2014) who first identified an inconsistency in the literature’s exploration of self-disclosure during adolescence. Specifically, they noted that researchers have confounded *routine disclosure* (what this paper terms behavioral self-disclosure) and *self-disclosure* (what this paper terms
emotional self-disclosure) both conceptually and in construct measurement (Tilton-Weaver et al., 2014). They propose that these two constructs are conceptually different, since sharing about whereabouts or what one is engaging in (i.e. behavioral self-disclosure or routine disclosure) is conceptually different than sharing about private information or feelings (i.e. emotional self-disclosure). Nonetheless, they acknowledge challenges with differentiating these constructs due also to their similarities. They note that these two types of disclosure are correlated because it is possible to affectively share information about whereabouts or to share about whereabouts in a detailed enough way to also share about emotional experiences related to the whereabouts (Tilton-Weaver et al., 2014). Therefore, understanding the difference between the two is complex (Tilton-Weaver et al., 2014), and warrants exploration to disentangle their potentially unique contributions to functioning and what factors influence both types of disclosure.

Behavioral Self-Disclosure

The adolescent literature thoroughly addresses behavioral self-disclosure because it encompasses an important aspect of adolescence—the desire for autonomy (Erikson, 1959). As adolescents begin to immerse themselves in peer groups, it often requires them to spend time away from the home and outside of school with peers, resulting in a large portion of time when adolescents are physically separate from their parents and often unsupervised (Anderson & Branstetter, 2012). It is during their time away from parents and with their peers that adolescents are regularly faced with choices about engagement in a variety of behaviors, including experimentation with drugs and alcohol or risky sexual behavior (Anderson et al., 2012). Research closely links adolescent behavioral
self-disclosure and externalizing problems, and the literature has widely studied predictors of behavioral self-disclosure to ultimately increase its frequency to decrease externalizing problems.

The broader parental monitoring literature highlights the mechanisms for communication’s protective role, describing a specific pathway through which parental behavior can decrease adolescent externalizing problems. Researchers previously argued that, because adolescents are often engaging in externalizing behaviors unbeknownst to or away from their parents, parental monitoring, or parents’ perceived awareness of adolescents’ whereabouts, is a key process for allowing parents to intervene and prevent adolescents from being in environments that facilitate externalizing behaviors (Stattin & Kerr, 2000). Crucial to a parent’s knowledge, therefore, is how they acquire this knowledge. To this end, Stattin et al. (2000) extended the literature’s focus on parents just ‘knowing’ about an adolescent’s whereabouts to identify a mechanism through which they may best know—adolescent behavioral self-disclosure or sharing with parents about daily activities and whereabouts. Specifically, Soenens and colleagues (2006) propose a model that suggests that adolescent self-disclosure predicts parental knowledge, which predicts adolescent problem behavior. In this model, adolescent behavioral self-disclosure is an integral piece of the process, recognizing an adolescent’s agency and autonomy in choosing to disclose to parents or not.

There is a small, yet solid, body of literature that supports this model and highlights the association of adolescent self-disclosure with fewer externalizing problems. For example, in a sample of 1,186 fourteen-year old Swedish adolescents, Kerr
& Stattin (2000) found that parental knowledge predicted positive youth adjustment. They looked at three methods of parental acquisition of knowledge about their adolescent’s whereabouts including adolescent self-disclosure, parental solicitation (i.e. parent asks questions/initiates about adolescent whereabouts), and parental control (i.e. the parent preemptively requires the adolescent to share whereabouts with parents or sets limits on behaviors the adolescent can engage in outside of the home). Specifically, they found that adolescent self-disclosure was the strongest predictor of youth adjustment as compared to the other methods of parental acquisition of knowledge. This finding was then supported in a 2-year longitudinal design using 938 seventh and eighth graders in Sweden to confirm that adolescent disclosure was a predictor of parental knowledge while parental monitoring efforts, such as solicitation and control, were not (Kerr, et al., 2010). Moreover, they found that adolescent self-disclosure predicted changes in delinquency over time, not the parental monitoring measures (Kerr et al., 2010), further solidifying the importance of adolescent behavioral self-disclosure in decreasing adolescent externalizing behaviors. More recent work also supports the importance of adolescent disclosure for increasing parental knowledge, as compared to other methods (Kapetanovic, Skoog, Bohlin, & Gerdner, 2018). There has also been support for this model in work with ethnic minority youth including a recent longitudinal study by Garthe and colleagues (2018) that found that adolescent disclosure predicted fewer externalizing behaviors two years later for African American youth; their model also found that maternal solicitation predicted more adolescent externalizing behaviors, suggesting that some parental monitoring methods may actually be unhelpful for certain groups of teens.
These results bolster the importance of adolescent disclosure above and beyond other methods for parental obtainment of knowledge.

Additionally, one study that showcased the relation between adolescent behavioral self-disclosure and externalizing problems also found that behavioral self-disclosure was related to a less depressed mood (Kerr et al., 2000). However, the authors had originally included a measure of adolescent depressed mood to hypothesize that an adolescent’s depression would be related to parental control, such that less feelings of autonomy from parents would make an adolescent feel depressed, which was not supported. It is therefore unclear exactly how behavioral self-disclosure may be related to adolescent depressive symptoms, making it important to further disentangle the link between behavioral self-disclosure and youth adjustment, including both internalizing and externalizing problems. Alternatively, another type of disclosure, such as emotional self-disclosure, may have a stronger link to internalizing problems, a hypothesis of this current study. Taken together, these findings point to the importance of adolescent behavioral self-disclosure to promote fewer externalizing problems and have set the stage for research to explore contextual factors that influence adolescent engagement in behavioral self-disclosure.

**Predictors of behavioral self-disclosure.** In the vein of predicting adolescent behavioral self-disclosure, researchers identify several contributing factors. These identified factors highlight that although the adolescent is an active agent in deciding to disclose, this decision and process is not outside of the transactional process model; parent-adolescent relationship dynamics mutually influence each other and guide
behaviors. This section will describe these transactional-type predictors of adolescent self-disclosure, dividing them into ‘universal’ predictors that have found support across ethnic groups, and more specific ‘cultural’ predictors that are particularly relevant for specific cultural groups.

**Universal. Relationship quality.** The most widely supported predictor of adolescent behavioral self-disclosure is the relationship quality between adolescents and their parents, such that better relationship quality is related to a greater frequency of adolescent self-disclosure. One study with Latina/o youth found that more parental trust predicted greater behavioral disclosure to parents for Puerto Rican adolescents (Villalobos & Smetana, 2012). In a sample of 3,125 Korean adolescents, Yun, Cui, and Blair (2016) identified that parental warmth predicted adolescent behavioral disclosure which predicted parental knowledge, ultimately predicting fewer delinquent behaviors. More generally, Smetana and colleagues (2006) found that greater trust and acceptance with parents predicted more adolescent behavioral self-disclosure in a sample of 276 ethnically diverse ninth through twelfth graders.

The broader literature with work on white or European adolescents also finds that relationship quality is an important predictor of behavioral self-disclosure. For example, in a 3-year longitudinal study of 131 mothers and their adolescents, maternal warmth in sixth grade predicted higher levels of adolescent self-disclosure in 7th grade, and higher levels of maternal knowledge in 8th grade (Blodgett Salafia, Gondoli, & Grundy, 2009). Another longitudinal study of 5-years investigated within-family changes in adolescent disclosure and maternal knowledge across adolescence, finding that there was more
adolescent disclosure when there was better relationship quality between the adolescent and the parent (Keijser et al., 2016). Vieno, Nation, Pastore, and Santinello (2009) found that parent-adolescent closeness is directly related to adolescent behavioral self-disclosure which is related to more parental knowledge and ultimately fewer antisocial behaviors. Also, Kearney and Bussey (2015) highlight the importance of open communication (assessed as being able to talk with mothers in an open and supportive way) for increases in adolescent behavioral self-disclosure in a sample of 463 adolescents. Tilton-Weaver (2014) determined that parental supportive behaviors, such as parents who helped adolescents to feel that they could talk to their parents about problems, predicted greater adolescent behavioral self-disclosure in a sample of 874 teens.

It is important to note that across these studies that identify the association between relationship quality and adolescent behavioral self-disclosure, relationship quality has been assessed in varied ways. For example, it is sometimes assessed as parental warmth (Blodgett Salafia et al., 2009), other times assessed as supportive parenting (Tilton-Weaver, 2014), and still other times discussed as open communication (Kearney & Bussey, 2015). This dissertation assesses general relationship quality between the adolescent and mother defined as satisfaction with the relationship, as other more specific relationship variables will also be assessed. Taken together, these studies provide strong support that relationship quality is important for influencing greater frequency of adolescent behavioral self-disclosure across ethnic-racial groups; however, the work on this process for Latina/o adolescents specifically is sparse.
Maternal reactions to wrongdoings. Another transactional factor that influences adolescent behavioral self-disclosure is parental reaction to adolescent self-disclosure. In a 3-wave longitudinal sample of 982 youth, Tilton-Weaver et al. (2010) found that parental negative reaction to the adolescent’s behavioral self-disclosure, such as angry outbursts or coldness and rejection, predicted adolescent’s negative feelings about their parents, which then predicted less youth disclosure. Another study by the same author identified that parental supportive behaviors, such as parents who helped adolescents to feel that they could talk to their parents about problems, predicted greater adolescent behavioral self-disclosure (Tilton-Weaver, 2014). A qualitative study conducted with 16 boys and 16 girls ages 13 and 14 from Croatia confirmed that adolescents believe that parental reactions to their disclosure can either inhibit or promote self-disclosure, citing more positive reactions as a promotive factor (Tokić & Pećnik, 2011). A follow-up to this qualitative study developed a measure to assess parental reaction to adolescent self-disclosure (Milaković, & Pećnik, 2014), and these parental reactions, such as support or unavailability, were found to be indirectly related to adolescent self-disclosure through the adolescent’s perception of whether the parenting behavior met his or her needs (Tokić Milaković, Glatz, & Pećnik, 2017). Importantly, from a transactional process model, parental reactions are the daily behavioral interactions that over time influence an adolescent’s perception or feeling of relationship quality, making these constructs likely correlated—one is a behavior and one is an affective feeling. Nonetheless, these results hint that parental reaction may be uniquely important for promoting adolescent
behavioral self-disclosure, in addition to the more general relationship quality that adolescents have with their parents.

**Cultural. Cultural values.** Villalobos and Smetana (2012) examined the role of Latina/o family values (i.e. familism—importance of family, and respect—need to respect the family and others) on behavioral self-disclosure in a sample of 109 Puerto Rican middle adolescents in the U.S. They found that greater endorsement of Latina/o familial values was associated with more adolescent behavioral self-disclosure. This within-group design allowed the researchers to consider how cultural nuances in values may encourage youth to share information with parents in a way that other between-group studies (Smetana et al., 2006) are unable to parse apart or measure specifically. Moreover, Hernández and Bámaca-Colbert (2016) propose a general model based on a review of the cultural value literature documenting how familism values directly impact youth adjustment by acting as a protective factor that can facilitate parental monitoring of behavior, and ultimately Latina/o youth adjustment. Thus, research should investigate how familism may impact more specific mechanisms of youth communication, such as self-disclosure.

**Generation status as a proxy variable.** Another group of researchers considered how the role of generation status, or whether adolescents were born in the U.S. or elsewhere, impacted disclosure. They found that 2nd generation Chinese youth, or those born in the U.S., disclosed less about prudential issues (e.g. engagement in risky behaviors like substance use) to their parents than did immigrant Chinese youth in the U.S. (Tasopoulos-Chan et al., 2009). This finding suggests that some factors that differ
across immigrant generations may be impacting the adolescent disclosure process. It is likely that ‘generation status’ is serving as a proxy variable, more indicative of behavioral manifestations, such as cultural value endorsement or language use (Bostean & Gillespie, 2018). Nonetheless, it is apparent that cultural factors do indeed matter, and this study considers perceived gaps in language proficiency and cultural value endorsement as important cultural factors that affect adolescent behavioral self-disclosure.

**Emotional Self-Disclosure**

Although the literature focuses on adolescent behavioral self-disclosure due to its’ relationship with a reduction in adolescent externalizing problems, the other major domain of self-disclosure, emotional self-disclosure, has received significantly less attention. The proposed study argues, however, that it is an equally important aspect of parent-adolescent communication that can inform youth outcomes. Moreover, as recognized by Tilton-Weaver and colleagues (2014) research needs to disentangle these two constructs beginning with offering a theory for their unique contribution to psychological outcomes. Building off Tilton-Weaver et al.’s (2014) proposition, and in line with Soenens et al.’s (2006) theory about behavioral self-disclosure providing parents with knowledge, this study proposes that emotional self-disclosure, or sharing about emotions and emotional experiences, also informs parental knowledge, albeit knowledge about the adolescent’s emotional wellbeing. This knowledge can then inform parental provision of emotional support to serve as one way to decrease adolescent internalizing problems. Additional research needs to investigate the longitudinal trajectory of adolescent disclosure, parental knowledge, parental provision of support,
and internalizing problems. This dissertation hypothesizes that disclosure predicts fewer internalizing problems, which is housed in Soenen et al.’s (2006) model, and which assumes that adolescents are disclosing to seek support from parents to address their internalizing concerns.

Support-seeking is a specific coping mechanism in which an individual “attempts to establish a supportive relationship with [an individual], involving verbal and/or physical contact” (Curry et al., 1985, pp. 63) with the ultimate goal of managing distress or dealing with stressful situations (i.e. internalizing problems). The emotional support that an individual acquires from this process has strongly been linked to positive overall adjustment and improved psychological health within the adolescent population (Burleson & Kunkel, 1996; Gardner & Cutrona, 2004), indicating that emotional support is indeed an important link to promoting positive adjustment for adolescents. The adolescent literature has not, however, identified nor examined the mechanisms through which adolescents seek this support through self-disclosure. Nonetheless, the adult literature has made significant headway in this area and argues that emotional self-disclosure is one mechanism of support-seeking.

For example, Trees (2005) investigated mechanisms of support-seeking and categorized them as either direct/indirect and verbal/nonverbal methods. Emotional self-disclosure would thus be a direct and verbal method of seeking emotional support as a means to cope with distress. In other words, an individual must verbally disclose about his or her own distress in order for the recipient of this disclosure to respond by either providing support or not. Considering this process in the context of what is known about
adolescent behavioral self-disclosure, parental monitoring, and externalizing problems, it is likely that an adolescent’s emotional self-disclosure can occur separately or in tandem with behavioral self-disclosure such that it results in parental knowledge about the adolescent’s emotional wellbeing and can lead to parental provision of emotional support which helps the adolescent to cope with internalizing problems. Therefore, more emotional self-disclosure may be uniquely linked to fewer adolescent internalizing problems because it is one mechanism through which adolescents seek emotional support, which has clearly been associated with better psychological health and adjustment for adolescents (Burleson & Kunkel, 1996; Gardner & Cutrona, 2004). This study investigates the relation between emotional self-disclosure and internalizing problems in the same model as behavioral self-disclosure and externalizing problems to determine if there is a unique link between the type of adolescent self-disclosure and the youth adjustment problems, recognizing that these processes do not always occur separately (Tilton-Weaver et al., 2014).

**Predictors of emotional self-disclosure.** Although emotional self-disclosure has not been uniquely identified as important in ameliorating internalizing problems for adolescents, research establishes it as an important support-seeking mechanism (Trees, 2005). There is also a small body of literature that investigates factors that predict adolescent emotional self-disclosure, albeit without including cultural factors. However, there is a separate body of literature that highlights the importance of culture for understanding emotions broadly, and another that examines adult support-seeking and cultural differences, both of which provide a foundation for this study’s extension of this
work. This dissertation reviews the literature of relevant factors that likely influence Latina/o adolescent emotional self-disclosure, dividing them into ‘universal’ and ‘cultural’ factors as noted above. It is important to note, however, that even though universal factors may be applicable across several different ethnic groups that have more cultural commonalities, this paper will describe how they are pertinent for Latina/o youth specifically in this section, as that is the focus of this study.

**Universal. Relationship quality.** Relationship quality is one of the only factors that has been recognized as influential for emotional self-disclosure. Papini et al., (1990) found that the frequency of emotional self-disclosure to parents in a sample of 12 to 15-year-olds largely depended on the adolescent’s perception of openness with parents, family cohesion, and satisfaction with family relationships. Another study found that maternal acceptance is correlated with more adolescent emotional self-disclosure in a sample of diverse 7th and 8th graders (Hare et al., 2011).

For Latina/o adolescents specifically, researchers have noted that open communication with trust and support with mothers is very important, and that even when they report relationship difficulty with parents, Latina/o adolescents still view parents positively (Crockett, Brown, Russell, & Shen, 2007). More generally, open communication and more parental involvement has been linked to positive outcomes for Latina/o adolescents (Davidson et al., 2009). These results are not surprising, given the expansive literature that investigates the Latina/o cultural value of familism, which pointedly identifies the family as an important source of support for Latina/o youth, and which has been related to multiple positive outcomes for Latina/o children across
developmental stages (see Stein, Cupito, Mendez, Prandoni, Huq, & Westerberg, 2014, for a review). Overall, there is support that relationship quality is important for adolescent emotional self-disclosure, and there is work to suggest that it is also important for Latina/o adolescents specifically.

Maternal reactions to emotions. In addition to relationship quality, maternal reactions to discussions about emotions specifically, or previous emotion socialization experiences, are an important transactional factor that influence adolescent emotional self-disclosure. Emotion socialization is a complex process that involves parental encouragement of a child’s initial understanding and regulation of emotions primarily through parental labeling, discussion, and reaction to emotions (Eisenberg, Cumberland, Spinrad & 1998), and is the process that best explains parental reactions to emotional self-disclosure. As a socialization practice, it must be recognized as bidirectional, a concept that the emotion socialization literature has more recently advocated (Klimes-Dougan & Zeman, 2007). The role of emotion socialization in adolescents’ decisions to disclose to parents has found a small amount of support in the literature. In a sample of 66 dyads, one study examined adolescent emotional self-disclosure and found that maternal reaction to disclosure about a distressing event (i.e. emotional self-disclosure) predicted more disclosure, such that mothers who validated negative emotions and who showed less distress themselves had adolescents who disclosed more (Martin et al., 2017). There is no work to support how emotion socialization experiences may impact disclosure in ethnic minority groups; however, as will be discussed below, cultural values have a major influence on the family’s view and discussions about emotions (Eisenberg...

**Cultural.** Cultural values. Some collectivistic cultures (i.e. a culture that assumes a person is inherently interconnected with other members of the group) discourage the display of anger or other negative emotions because it disrupts the harmony and wellbeing of the family, a value espoused by many of these cultures (Fitness & Duffield, 2004; Kim et al., 2008). Friedlmeier, Corapci, and Cole (2011) describe emotion socialization across cultures, highlighting the role of Latina/o cultural values, such as familism and respect, which encourage children to have commitment to family harmony and encourage them to have proper conduct in social interactions, both possibly related to less discussion about negative emotions aimed at maintaining family harmony and acting in an appropriate manner (i.e. *bien educado*) (Knight, Cota, & Bernal, 1993).

The adult support-seeking literature has recognized these cultural nuances and investigated how such beliefs about emotions influence Asian and Latina/o individuals’ support-seeking behaviors. For example, in a support-seeking review, Kim et al. (2008) summarized that Asians and Asian Americans are less likely to seek direct verbal support from others due to desires to maintain harmony within their collectivistic culture. Similarly, a more recent study conducted focus groups with 31 Latina/o and 27 Asian American undergraduate students to understand their use of support-seeking as a method of coping (Chang, 2015). Through qualitative data collection, this study identified that these two ethnic groups did not use a significant amount of social support. The Asian American students mostly reported that they did not seek support to avoid looking weak
or “losing face”, while the Latina/o students reported that they did not want to burden their parents (Chang, 2015). Interestingly, the Asian American students reported that their parents discouraged support-seeking, while the Latina/o students reported that their parents encouraged support-seeking even though the student did not want to seek the support (Chang, 2015).

The role of parents in teaching about whether children should share about emotional experiences is part of emotion socialization (Eisenberg et al. 1998), which likely plays a role in an adolescent’s frequency of emotional self-disclosure to mothers in ethnic minority groups such as Latina/os. There are culturally-driven rules about how, when, and why an adolescent should engage in emotional self-disclosure with a parent. However, the link between cultural values and self-disclosure is unclear, as the support-seeking literature suggests that Latina/o adolescents may disclose less about emotions when they have stronger familism and respect value endorsement to maintain family harmony and not burden their parents. At the same time, Villalobos et al.’s (2012) study with Puerto Rican youth found that more familism and respect values were related to more behavioral self-disclosure. It therefore appears that cultural values may operate differently depending on what is being disclosed and for what purpose, indicting once again the contextual nuances across self-disclosure domains. For example, respect and familism values may encourage Latina/o youth to tell their parents where they are going or who they are spending time with (i.e. behavioral self-disclosure) (as supported by Villalobos et al. (2012)), but the same values may discourage them from sharing about
emotions (i.e. emotional self-disclosure) because they want to put their family first and not burden them with their own difficulties (as supported by Chang (2015)).

**Language.** A second less studied cultural factor that likely impacts emotional self-disclosure, and disclosure more generally, is the role of language use in disclosure. The use of language is a critical component of the verbal communication process (Miller, 1951), specifically for the labeling and expression of emotions (Chen, Kennedy, & Zhou, 2012), which indicates its’ centrality in emotional self-disclosure. Discrepancies in language proficiency and/or language preference between children and their parents in immigrant families have several implications. Tseng and Fuligni (2000) found that adolescents of multiple ethnic backgrounds who reported difficulty expressing themselves in their native language also reported poorer relationship cohesion with their parents. Similarly, Oh and Fuligni (2010) found that adolescents with greater proficiency in their native or heritage language had greater relationship quality with their parents. Together, these results suggest that it is a discrepancy in language proficiency between children and their parents that may impact the mother-adolescent relationship and adolescent outcomes rather than the particular language that they use to communicate with.

Unfortunately, no studies specifically identify how language proficiency may impact the self-disclosure process for adolescents. However, research does indicate that in multi-lingual families, the language that parents use to discuss emotions and emotional topics does influence a child’s experience, regulation, and understanding of emotions (Chen, et al., 2012). Additionally, bilingualism exists on a continuum (Zentella, 2005),
and it is important to recognize that adolescents may be proficient in a language generally but have limited proficiency or preference in the language surrounding emotional topics. For example, in a case study of a young woman bilingual in French and Portuguese, Koven (2006) found that the woman used more affective expressions during an interview when speaking her preferred language, hinting at the relevance of language preference in emotion communication. In another study investigating parent-child interactions in Asian American families, bilingual mothers code-switched, or switched the language they used to communicate with their child, more often when expressing negative emotions than positive emotions, suggesting that bilingual individuals may prefer to speak in his or her dominant language when distressed (Williams, Srinivasan, Liu, Lee, & Zhou, 2019).

Overall, although no research directly investigates the role of language in adolescent emotional self-disclosure, it is apparent that language preference and proficiency discrepancies can impact relationship dynamics between parents and adolescents. Furthermore, it is likely that the adolescent’s perception of the ‘language gap’, or perceived degree of discrepancy in language proficiency or preference, is what influences their voluntary disclosure to their mother, as hinted at in the broader literature that finds that having a language discrepancy in proficiency creates a language barrier between adolescents and their mothers (Oh & Fuligni, 2010). Although particularly important for conversations about emotions (Chen et al., 2012; Koven, 2006), it is credible that the functional difficulty of not knowing the necessary words or feeling misunderstood in a language (e.g. gaps in language proficiency) may discourage self-disclosure in general. It is therefore probable that language proficiency gaps between
mothers and adolescents are an important component in emotional self-disclosure for Latina/o youth, and in self-disclosure broadly.

**Goals and Hypotheses**

Given the literature review of adolescent behavioral and emotional self-disclosure, both in terms of youth adjustment and predictors of disclosure, it is clear that there are several directions for future research. This study tackled two of the many possible directions, including examining any potential nuances between behavioral and emotional self-disclosure as they relate to adolescent adjustment, and understanding the predictors of behavioral and emotional self-disclosure using both a transactional process model (i.e. thinking about how maternal and adolescent interactions impact adolescent self-disclosure) and an emic-informed bioecological framework (i.e. focusing on the role of cultural factors using a within-group design). This study sought to replicate findings of predictors of behavioral self-disclosure and include a new focus on emotional self-disclosure, as it is a significantly less studied construct in the literature. Importantly, due to the greater level of risk that Latina/o adolescents face across adjustment concerns, this study used an emic approach with a within-group design to allow for investigation of the cultural factors as they influence these disclosure processes for Latina/o adolescents. This study is not arguing that these processes are different for Latina/o youth as compared to other ethnic-racial groups, rather, this study focuses on contextual factors as they apply specifically to Latina/o youth to then inform specific treatment/interventions for these adolescents. Other research should continue to explore these processes more broadly.
This study therefore had two specific aims. Aim 1 was to understand the relation between the frequency of Latina/o adolescent behavioral self-disclosure and emotional self-disclosure and externalizing and internalizing problems and to examine potential differential prediction. Specifically, the goal was to replicate the relation between behavioral self-disclosure and externalizing problems, and to establish a relation between emotional self-disclosure and internalizing problems. It was expected (a) that a significant negative relation would exist between Latina/o adolescent emotional self-disclosure and adolescent internalizing problems, and between Latina/o adolescent behavioral self-disclosure and adolescent externalizing problems. Moreover, it was expected (b) that there would be a smaller effect between adolescent emotional self-disclosure and externalizing behaviors, and between adolescent behavioral self-disclosure and internalizing problems. The model also allowed for a correlation between internalizing and externalizing behaviors and between emotional self-disclosure and behavioral self-disclosure. Finally, given the general importance of relationship quality in predicting youth adjustment, this model included it as a covariate, with hypothesized positive relationships (c). See Figure 1 for a graphical depiction of the hypothesized model.

Aim 2 was to identify predictors of behavioral and emotional self-disclosure, replicating those identified in the literature and including additional predictors that the broader literature supports. Specifically, this aim sought to replicate both universal (e.g. relationship quality and supportive and non-supportive maternal reactions) and cultural (e.g. familism and respect cultural values and language proficiency gap) predictors of the
frequency of Latina/o adolescent behavioral and emotional self-disclosure. Maternal reaction measures were specific to the context of what was being disclosed. It was expected (a) that better relationship quality, more supportive maternal reactions to wrong doing, and more endorsement of cultural values would have a significant positive relationship to the frequency of Latina/o adolescent behavioral self-disclosure and (b) that more non-supportive maternal reactions to wrongdoings and a greater perceived language gap would have a significant negative relationship with adolescent behavioral self-disclosure (Tokić Milaković, et al., 2017; Villalobos & Smetana, 2012; Yun et al., 2016). Regarding emotional self-disclosure predictors, it was expected (c) that better relationship quality and more supportive maternal reactions to display of negative emotions would have a significant positive relationship to the frequency of emotional self-disclosure (Papini et al., 1990; Martin et al., 2017), and (d) that more non-supportive maternal reactions, more cultural value endorsement, and a greater perceived language gap would have significant negative relationships with Latina/o adolescent emotional self-disclosure. See Figure 2 for a graphical depiction of the hypothesized model.
CHAPTER II

METHODS

Participants

This study included a sample of 217 second-generation Latina/o adolescents (i.e. an adolescent born in the U.S and both parents born in a Latin American country) with a mean age of 15.2 years. The sample was a majority female sample (78.8%), and adolescents’ mothers were immigrants from Spanish-speaking Central and South American countries, with the largest percentages from Mexico (37.3%) and Cuba (12.4%). The largest percentage of adolescents identified as being from working class families (40.6%), and as living in the South (42.9%). See Table 1 for specifics. To be included in the study, in addition to being a 2nd generation adolescent, the adolescent was required to prefer to read in English, and the adolescent needed to be between the ages of 13 and 17.

Procedure

Recruitment

This study used a two-part recruitment effort. One part included online recruitment of participants through Qualtrics Research Panels, and the other included flyer and social media recruitment in the community. For both parts, participants completed an online survey consisting of a battery of questionnaires. For Qualtrics
Research Panels, the online sample was recruited from market research panels in which members of the panels had been pre-screened and had already expressed willingness to participate in surveys. Within the pre-screened research panels, members were proportioned to the general population and randomized before the survey was sent. Thus, biological Latina immigrant mothers of adolescents ages 13-17 (i.e. potentially eligible mothers) who are part of a research panel were randomly sent a general email and asked if they would be interested in having their adolescent participate in an online survey, including only general information about the survey, and including information about how long the survey was expected to take, as well as possible incentives. Incentives for this portion of data collection included cash, airline miles, gift cards, redeemable points, or vouchers, depending on which research panel the mother was a member of. Members of the panel were free to unsubscribe at any time from receiving these emails. Eligible mothers who had adolescents who met inclusion criteria and who had expressed interest after receiving the general email were then provided with the survey link via email. Data was collected from November 2018 through March 2019 (n= 79).

For the community recruitment, flyers with a QR code and survey link, and general information about the survey were placed in various community settings in Central North Carolina and the flyer was also verbally advertised at community events and settings that Latina/o families frequent. Permission to advertise at each setting was obtained in writing. Settings included a community mental health clinic, public libraries, local markets, and ESL classes. The flyer was also posted on social media accounts of Latina/o students and groups. Interested mothers were able to scan the QR code or enter
the survey link from the flyer and the survey was completed in the same manner as the Qualtrics Research Panel method. At the end of the survey, families were asked to enter their email address to receive a $10 electronic gift card through Tango Gift Cards at Rewards Genius, a collaborator of Qualtrics. Data was collected in the month of April 2019 (n= 138).

**Data Collection**

The online survey consisted of a series of eligibility questions in Spanish to be completed by the adolescent’s mother. After completing the eligibility questions, the adolescent’s mother was instructed that the adolescent must complete the rest of the survey, which included a battery of questionnaires with a randomized order for each respondent. Questionnaires assessed across adolescent self-disclosure, internalizing and externalizing problems, relationship quality, maternal reactions to adolescent disclosures, language use and preference, and cultural values. Questionnaires for the adolescents were administered in English, as an eligibility criterion is that the adolescent was born in the United States and their preferred language is English. To ensure that no two siblings from the same family completed the survey, or that no adolescent completed the survey twice, Qualtrics tracked IP addresses and used a sophisticated digital fingerprint system. Furthermore, to ensure that responses were not fraudulent, respondents who completed the survey in less than 1/3 the average survey completion length were not used (n = 12). Average survey completion time was 18.86 minutes. All study procedures were approved by the University of North Carolina Institutional Review Board.
Measures

Demographics

This study included a series of inclusion criteria demographic questions that were answered by the adolescent’s mother, and the adolescent also answered a series of demographic questions before completing the battery of questionnaires. Demographic questions include identification of gender, age, school grade, birthplace, mother’s birthplace, father’s birthplace, perception of socioeconomic status, percentage of Spanish/English spoken with the mother, and mother’s preferred language. Demographic questions were largely derived from Hughes, Camden, and Yangchen’s (2016) proposed demographic questions.

Behavioral Self-Disclosure

This study used a 13-item version of Smetana and colleagues’ (2006) behavioral self-disclosure scale to assess the frequency of adolescent behavioral self-disclosure about engagement in externalizing behaviors (Prudential subscale) and about seven whereabouts or personal decisions (Multifaceted subscale). Adolescents rated the frequency with which they tell their mother, without her asking, about each of 13 items on a scale of (1) Never tell to (5) Always tell, or (6) if they do not engage in the behavior. Example items include ‘Whether I use marijuana or other illegal drugs’—Prudential, and ‘Whether I go out with friends my mom does not approve of’—Multifaceted. Two items were modified to reflect cultural and technological updates including the addition of “or vape e-cigarettes” to an item asking about whether the adolescent smokes cigarettes, as well as changing “instant messaging” to “social media” for an item assessing whether the
adolescent tells the mother about what he or she writes online. A total mean score was calculated across the frequency of disclosure of these behaviors to indicate an overall frequency of behavioral self-disclosure to mothers, regardless of whether adolescents engaged in 1 of the 13 behaviors, 2 of the 13 behaviors, etc., up through all 13 behaviors. Only adolescents who did not endorse engaging in any of the 13 behaviors were excluded in analyses using this scale (n = 5). Because adolescents could choose to respond ‘I don’t engage in this behavior’, reliability statistics were unable to be calculated, as per previous research using the same scale; however, this scale has been successfully used in diverse samples including Latina/o adolescents (Yau et al., 2009; Villalobos et al., 2012). See Tables 2 and 3 for specifics of adolescent endorsement of this scale’s items.

**Emotional Self-Disclosure**

This study used a 5-item scale created for this study modified from Snell and colleague’s (1988) Emotional Self-Disclosure Scale (ESDS) and Smetana and colleagues’ (2006) behavioral self-disclosure scale to assess for adolescents’ frequency of disclosure to their mothers about internalizing concerns. Adolescents responded with the frequency with which they tell their mother, *without her asking*, about times they have felt each of 5 feelings (i.e. sad, worried, down, scared, and upset) on a scale of (1) *Never tell* to (5) *Always tell*. Example items include “Times when I feel sad”, “Times when I feel worried”. A total mean score was calculated to indicate frequency of adolescent disclosure across internalizing concerns to mothers. This measure was piloted with a sample of 13 second generation Latina/o adolescents, demonstrating good reliability statistics (α = .91). Further analyses of the items in the pilot sample indicated an
improvement in reliability if removing the item referring to the emotion word ‘scared’ (α = .95). Therefore, the item referring to ‘scared’ was removed and replaced with ‘nervous’, a term more synonymous with anxiety. Reliability for the current study was adequate (α = .83).

**Externalizing Problems**

This study used the 17-item Misconduct Scale (Feldman, Rosenthal, Mont-Reynaud, Leung, & Lau, 1991) to assess adolescent engagement in externalizing behaviors in the past six months including school misconduct (e.g. “Come to class late”), Antisocial behavior (e.g. “Stolen things from a store”), and Status violations (e.g. “Drank alcoholic drinks”). Adolescents rate how often they have done each of the listed behaviors in the past six months on a scale of (1) Never to (5) Often. A total mean score across items was calculated to indicate a total of externalizing problems. This measure has demonstrated adequate psychometric properties in a Latina/o adolescent sample (Polo, 2002), and had excellent reliability in the present sample (α = .93).

**Internalizing Problems**

This study used a modified version of the 13-item Anxious/Depressed subscale of the Youth Self Report (Achenbach, 1991) to assess adolescent internalizing problems across anxiety and depression. The modified version contained 12 items, removing the item that refers to the adolescent’s thoughts about suicide, as any concerns raised during item completion would not have been able to be properly addressed due to data collection methods. Adolescents respond with how true, on a Likert scale from (1) Not true to (3) Very true or often true, each item is for them (e.g. “I cry a lot”; “I worry a lot”) in the
past six months. A total score across items was used to indicate adolescent anxiety/depression problems. This scale has demonstrated adequate psychometric properties for Latina/o adolescents (Polo, 2002). Reliability for the current study was excellent (α = .92).

**Relationship Quality**

This study used the 3-item Satisfaction subscale of the Network of Relationships Inventory—Social Provisions Version (NRI-SPV) (Furman & Buhrmester, 1985) to assess the adolescent’s general perception of the quality of the relationship they have with their mother. Adolescents respond to each of the items on a Likert scale of (1) *Little to None* to (5) *The Most* regarding their satisfaction with the relationship (e.g. “How happy are you with your relationship with your mother?”). This scale has demonstrated satisfactory psychometric properties in a diverse sample of adolescents including Latina/o youth (Cupito, Stein, Gonzalez, & Supple, 2016; Way & Chen, 2000). Cronbach’s alpha for the current study was adequate (α = .84).

**Maternal Reaction to Wrongdoing**

This study used the 13-item parental reaction to wrongdoing subscale of the Parental Behavior in the Context of Adolescent Disclosure—Parental Reactions (PBAD-R) scale (Milaković & Pećnik, 2014) to assess adolescents’ perception of their mothers’ reaction to their disclosure about wrongdoings or misconduct. Adolescents identified the frequency with which their mother reacts to the adolescent having done something the mother disapproves of on a Likert scale of (1) *Never* to (5) *Always*. Reactions include a series of six support and respectful guidance reactions from mothers (e.g. “encourages me
to make things right somehow”) and seven punishment reactions from mothers (e.g. “keeps reminding me of my mistake”). The total for support and respectful guidance reactions was averaged to indicate a mean total of supportive reactions from the mother and the punishment reactions were separately averaged to indicate a total of non-supportive reactions. Each total was used separately as a predictor in this study. This scale has demonstrated adequate psychometric properties with an adolescent sample (Milaković et al., 2014; Tokić Milaković, et al., 2017). Reliability for the current study for supportive reactions ($\alpha = .82$) and for unsupportive reactions ($\alpha = .77$) was adequate.

**Maternal Reaction to Emotions**

This study used the modified 12-item Emotions as a Child Scale (Guo, Mrug, & Knight, 2017) to assess adolescents’ perceptions of their mothers’ reactions to their own display of negative emotions. Adolescents responded to a set of 12-items for maternal reaction to the adolescent’s feelings of being upset (sad or worried). The original scale includes separate assessment of reactions to ‘sad’ and ‘anxious/fearful’ emotions; however, as this study was interested in a general reaction to both, the prompts for these emotions words were modified to ‘upset’. Adolescents rated how often their mother responded to the adolescent feeling upset on a scale of (1) Never to (5) Very often. Responses for each emotion included seven supportive reactions (e.g. “When I was upset, my mother took time to focus on me”) and five unsupportive reactions (e.g. “When I was upset, my mother got very upset”). This study averaged across the supportive reactions to calculate a total mean of supportive reactions to the adolescent’s negative feelings of sadness/worry and averaged across the unsupportive reactions to calculate the mean total
of unsupportive reactions to the adolescents’ sadness/worry. Each total was used separately as a predictor in this study. This scale has demonstrated adequate psychometric properties in an adolescent sample (Guo et al., 2017; Silk et al., 2011), and demonstrated adequate reliability for both supportive ($\alpha = .80$) and unsupportive ($\alpha = .81$) reactions in the current sample.

**Cultural Values**

This study used two subscales (familism-support and respect) of the Mexican American Cultural Values Scale (MACVS) (Knight et al., 2011) to assess adolescent endorsement of familism and respect cultural values. Adolescents responded with how much they believed each of 14-items on a scale of (1) *Not at all* to (5) *Completely* across each of the two subscales (e.g. “No matter what, children should always treat their parents with respect”—*respect* subscale; “It is important to have close relationships with aunts/uncles, grandparents, and cousins”—*familism-support* subscale). An overall mean total of the two subscales was used as a predictor in the model. This scale has demonstrated adequate psychometric properties with Mexican adolescents (Knight et al., 2011) as well as with other Latina/o adolescent groups (Villalobos et al., 2012), and the overall scale had excellent reliability in the current sample ($\alpha = .92$).

**Perceived Language Gap**

This study used a modified version of four language items from the Acculturation Gap Conflict Inventory (Basáñez, Dennis, Crano, Stacy, & Unger, 2014) to assess the adolescents’ perceived difficulties related to parent-adolescent language proficiency differences. The four modified items of the scale are “*Sometimes it is hard to talk to my
mom because I can't always pronounce all of the words correctly in Spanish.”; “Sometimes it is hard to talk to my mom because I prefer to speak English and she prefers to speak Spanish.”; “Sometimes it is hard to talk to my mom because if I say something in English, she doesn’t always understand, and I don’t always know the word in Spanish.”; “Sometimes it is hard to talk to my mom because I don’t know all of the right words in Spanish.” Adolescents indicated the degree to which they agreed with these statements on a scale of (1) Strongly disagree to (7) Strongly agree. The language gap variable was calculated as a mean score of the four modified items, with a higher score indicating a greater perceived language gap. Reliability for this scale was good (α = .87).

See Appendix B for complete instructions and item content of the study questionnaire.

**Power Analysis**

There are many suggestions for determining appropriate sample sizes in structural equation models. This study used Kline’s (2011) suggestion of following the general N: q rule to determine an appropriate sample size. According to Jackson’s (2003) study that argues that despite other methods of conducting power analyses, the N: q rule is a good starting point, a good ratio is 20:1 (i.e. sample size: estimated parameters), and an adequate is 10:1. In the case of the current study and the two models that were estimated, a sample of size of 217 is close to an adequate estimate for the number of parameters being estimated (Aim 1 = 14:1; Aim 2 = 5:1).
CHAPTER III

RESULTS

Preliminary Computations

The raw questionnaire data was exported from the Qualtrics platform to IBM SPSS Statistics 25 where the study questions were labeled, and the data was screened for outliers and missing data. No outliers were identified, and the only missing data, found on the Behavioral Self-Disclosure scale, was denoted. Descriptive statistics and correlations of the key study variables were then computed (See Table 4 for Aim 1; See Table 5 for Aim 2; See Table 6, Table 7, and Table 8 for breakdown by gender; See Table 9 for breakdown by age; See Table 10 for breakdown by income). Results indicate that overall, adolescents in this sample have average adjustment and somewhat positive interactions with mothers. Specifically, they reported slightly above average positive experiences including being very much satisfied with their relationship with their mothers ($M = 3.35, SD = .76$) sometimes receiving supportive maternal reactions to their behavioral self-disclosure ($M = 3.28, SD = .67$) and to their emotional self-disclosure ($M = 3.42, SD = .62$), and somewhat to very much agreeing with familism and respect cultural value tenants ($M = 3.64, SD = .61$). They also reported having some negative interpersonal experiences, but slightly less often than positive experiences, including rarely to sometimes receiving unsupportive maternal reactions to their behavioral self-disclosure ($M = 2.80, SD = .63$) and to their emotional self-disclosure ($M = 2.89, SD = .61$).
.76), and neither agreeing or disagreeing that there is a language gap with their mother ($M = 3.14, SD = .97$). Regarding well-being, adolescents in this sample reported few externalizing problems ($M = 2.34, SD = .80$) indicating engagement in negative behaviors about once in the past few months, and having some internalizing symptoms ($M = 1.86, SD = .46$).

Given the uneven sample sizes across gender, which breaks the assumption of homogeneity of variance and equal sample size across samples and the ability to adequately employ t-test and ANOVA analyses, mean comparisons were computed by randomly selecting an equivalent sample of female participants to match the male sample ($n = 46$). Although there was random identification of the 46 female participants, mean difference results by gender should be interpreted with caution. These results indicate a significant difference across several of the variables including that females in this random subset of the female sample reported significantly more ($t(90) = -3.38, p < .01$) internalizing problems ($M = 1.89, SD = .47$) as compared to males ($M = 1.55, SD = .49$), significantly more ($t(89.85) = -2.70, p < .01$) unsupportive maternal reactions to behavioral self-disclosure ($M = 2.87, SD = .65$) as compared to males ($M = 2.49, SD = .68$), and significantly more ($t(85.21) = -2.37, p = .02$) unsupportive maternal reactions to emotional self-disclosure ($M = 2.86, SD = .73$) as compared to males ($M = 2.45, SD = .93$). Males, on the other hand, reported significantly better ($t(89.92) = 2.39, p = .02$) relationship quality ($M = 3.70, SD = .82$) as compared to females ($M = 3.30, SD = .84$), significantly more ($t(87.35) = 3.19, p < .01$) supportive maternal reactions to behavioral self-disclosure ($M = 3.69, SD = .77$) as compared to females ($M = 3.22, SD = .64$),
significantly more ($t(84.16) = 2.58, p = .01$) supportive maternal reactions to emotional self-disclosure ($M = 3.65, SD = .82$) as compared to females ($M = 3.25, SD = .62$), and significantly more ($t(81.95) = 2.48, p = .02$) cultural value endorsement ($M = 4.02, SD = .74$) as compared to females ($M = 3.68, SD = .54$).

Due to the complexity of additional groups and unequal sample size across age groups by year and by income, statistical mean comparisons were not computed across variables based on these descriptive groups. However, tables displaying descriptive statistics across key study variables by age and by income are present in Table 9 and Table 10, respectively. These suggest there could be some age-related differences in disclosure. The 17-year-olds appeared to endorse lower frequency of behavioral self-disclosure ($M = 2.93, SD = 94$) and emotional self-disclosure ($M = 2.85, SD = .83$) as compared to their peers. Regarding key study variables across income levels, affluent youth seemed to endorse greater frequency of externalizing problems ($M = 2.84, SD = .53$) and internalizing problems ($M = 2.17; SD = .39$) as compared to their peers. Finally, it also appeared that there could be a curvilinear class effect on behavioral self-disclosure with poor ($M = 3.04, SD = .67$) and affluent youth ($M = 3.05, SD = .47$) reporting less compared to working class ($M = 3.37, SD = .91$) and middle class ($M = 3.21, SD = .81$) youth. Yet, affluent youth seemed to report the least amount of emotional self-disclosure ($M = 2.68, SD = .46$) as compared to their poor ($M = 3.03, SD = .47$), working class ($M = 3.17, SD = .78$), and middle class ($M = 3.04, SD = .78$) peers. Again, these descriptions involved conducting a visual inspection of means, as there were not sufficient sample sizes to conduct statistical group comparison analyses.
Finally, in the overall sample, adolescents reported sometimes engaging in behavioral ($M = 3.23, SD = .82$) and emotional ($M = 3.07, SD = .72$) self-disclosure. Of note, the behavioral self-disclosure scale allowed adolescents to clarify if they have engaged in each of the 13 behaviors at least once or if they have never engaged in each individual behavior, and only adolescents who reported engaging in the behavior at least once reported on their frequency of disclosure of that behavior, with a mean disclosure score calculated across the behaviors they reported engaging in at least once (e.g. 1 of 13 behaviors, 2 of 13 behaviors, etc. up through engagement in all 13 behaviors); only teens who denied having ever engaged in any of the 13 behaviors ($n = 5$) were not included in analyses, as a frequency of behavioral self-disclosure could not be calculated for those participants. To further examine this scale, the percentage of participants who reported engaging in 0 of the 13 behaviors, 1 of the 13 behaviors, 2 of the 13 behaviors at least once, etc. were calculated. Results indicated that about half the sample (49.8%) reported engaging in all 13 of the possible behaviors at least once, and there was a distribution of .5% to 7.8% of participants who reported engaged in 0 of 13, 1 of 13, 2 of 13, etc. of the behaviors. Refer to Tables 2 and 3 for specifics. Additionally, correlations amongst adolescent reported engagement in the 13 possible behaviors on the behavioral self-disclosure scale, adolescent report of frequency of behavioral self-disclosure across those same behaviors, and adolescent report of externalizing behaviors, were calculated. Results indicated that there was a significant positive relationship between adolescent engagement in the 13 behaviors on the behavioral self-disclosure scale and the externalizing behavior scale ($r = .56$), as expected, such that adolescents who endorsed
engaging in more of the 13 behaviors on the behavioral self-disclosure scale also endorsed more frequent engagement in the behaviors on the externalizing behavior scale. However, there was no significant relationship between adolescents’ report of how many of the 13 behaviors they engage in on the behavioral self-disclosure scale and their report of frequency of disclosure on the same scale ($r = .05; p = .45$).

There were several significant correlations amongst study variables. Of note, there were strong correlations between emotional and behavioral self-disclosure ($r = .49$) and between internalizing and externalizing behaviors ($r = .52$). All positive relationship factors were strongly positively correlated including relationship quality with maternal supportive reactions to behavioral self-disclosure ($r = .58$), maternal supportive reactions to emotional self-disclosure ($r = .55$), and to cultural values ($r = .56$). Cultural value endorsement was also strongly correlated with maternal supportive reactions to behavioral self-disclosure ($r = .57$) and maternal supportive reactions to emotional self-disclosure ($r = .51$). Finally, there was a strong correlation between supportive maternal reactions to both types of self-disclosure ($r = .61$). The negative relationship quality factors were also strongly positively correlated including unsupportive maternal reactions to both types of self-disclosure ($r = .57$) as was the language gap with unsupportive reactions to emotional self-disclosure ($r = .53$) and unsupportive reactions to behavioral self-disclosure ($r = .40$). One unexpected correlation was the positive relationship between behavioral self-disclosure and externalizing problems ($r = .18$). However, overall, the majority of the correlations indicated expected relationships amongst study
variables, and did not vary significantly by gender, although the small sample size of male participants \((n = 46)\) resulted in fewer significant correlations.

Normal Q-Q Plots of the key variable means were then examined in SPSS, indicating expected normal values for all study variables. The key variable means were then entered into the LISREL 9.3 Student Structural Equation Modeling software where the variables were labeled, defined as continuous, and the missing values on the Behavioral Self-Disclosure scale were identified and noted to use pairwise deletion. These variables were then tested for multicollinearity, relative variances, skew, and kurtosis in the PRELIS program within LISREL (Schafer, 1999). All data was indicated as normal. A covariance matrix of the key variable means was computed in SPSS and then saved to be used in analyses in the LISREL software.

For the two separate path model analyses, model fit across each of the aims was determined based on a nonsignificant \(\chi^2\) statistic, the root-mean-squared error of approximation (RMSEA < .05), the Bentler comparative fit index (CFI > .95), and the standardized root-mean-squared residual (SRMR < .08) (Browne & Cudeck, 1992; Hu & Bentler, 1999). For models that did not fit the data well, modification indices were considered to improve model fit.

### Path Models

**Path Model Aim 1**

Because the hypothesized model of Aim 1 tested all parameters and was a saturated model, the fit for this model was ‘perfect’. There were four significant direct effects for the tested model. Hypotheses 1a was partially supported. Adolescent
behavioral self-disclosure directly influenced adolescent externalizing problems ($b = .21$, $t = 2.95$), with a unit increase in behavioral self-disclosure related to a .21 increase in externalizing problems. Adolescent emotional self-disclosure was directly related to adolescent internalizing problems ($b = .11$, $t = 2.36$), with a unit increase in emotional self-disclosure related to a .11 increase in internalizing problems. However, the directionality was not as hypothesized in either case, as the respective disclosures were related to more adjustment concerns. Results supported hypothesis 1b, as the relations between emotional self-disclosure and externalizing problems, and between behavioral self-disclosure and internalizing problems were not significant. Finally, results supported hypothesis 1c, as relationship quality significantly predicted fewer adolescent externalizing problems ($b = -.37$, $t = -5.19$) and fewer adolescent internalizing problems ($b = -.30$, $t = -7.90$). Given the unexpected directionality of the self-disclosure variables’ prediction of youth adjustment, the possibility of one or more of the predictor variables serving as a suppressor variable was considered (Maassen & Bakker, 2001); however, as the correlation was also in the unexpected direction, and as a post-hoc test was conducted to examine relationship quality predicting adjustment through self-disclosure with the same results, it was determined that it was not acting as a suppressor variable in this model. See Figure 3 for a graphical depiction of the model.

**Path Model Aim 2**

Indices for the Aim 2 model indicated good fit ($\chi^2(4) = 1.98$, $p = 0.74$; RMSEA = 0.0; CFI = 1.00; SRMR = 0.01). Hypotheses for this aim were partially supported. Of the predictors, only relationship quality significantly positively predicted both behavioral ($b$
and emotional ($b = .27, t = 3.55$) self-disclosure, a part of both hypothesis 2a and 2c. None of the other predictors was significant. See Figure 4 for a graphical depiction of the model.

**Post Hoc Analyses**

**Overall Model**

A post-hoc question for this study was to understand how all the study variables function in conjunction, considering self-disclosure as an indirect link between relationship quality and adolescent adjustment, and considering direct effects of the predictor variables on the outcome variables. This model was not originally proposed due to concerns about sample size, power, and the cross-sectional sample, and this post-hoc model may therefore not capture all significant effects but was tested to inform directions for future research. To test this post-hoc question, a third model was conducted to explore this larger picture by combining the models from Aim 1 and Aim 2 (See Figure 5 for a graphical depiction). Model fit for this post-hoc model was initially poor, ($\chi^2(10) = 32.93, p = 0.00$; RMSEA = 0.10; CFI = .98; SRMR = 0.03). Standardized residuals indicated an improved model fit with the addition of 3 paths: (1) emotional self-disclosure predicting externalizing problems, (2) unsupportive reactions to emotional self-disclosure predicting externalizing problems, (3) supportive reactions to behavioral self-disclosure predicting internalizing problems. These additions resulted in a good model fit ($\chi^2(7) = 7.92, p = 0.34; \text{RMSEA} = 0.03; \text{CFI} = 1.00; \text{SRMR} = 0.01$).

Regarding direct effects, relationship quality remained a significant predictor of both more behavioral self-disclosure ($b = .40, t = 4.42$) and emotional self-disclosure ($b = .40, t = 4.42$) and emotional self-disclosure ($b = .27, t = 3.55$) self-disclosure, a part of both hypothesis 2a and 2c. None of the other predictors was significant. See Figure 4 for a graphical depiction of the model.
There were three significant direct effects of the predictor variables on adolescent externalizing problems including that (1) unsupportive reactions to behavioral self-disclosure ($b = .36, t = 4.53$) and (2) unsupportive reactions to emotional self-disclosure ($b = .26, t = 3.73$) were related to more externalizing problems, and (3) more cultural value endorsement was related to fewer externalizing problems ($b = -.45, t = -5.15$). There were four significant direct effects of the predictor variables on adolescent internalizing problems. (1) More cultural value endorsement was related to fewer internalizing problems ($b = -.14, t = -2.85$), (2) supportive reactions to behavioral self-disclosure were related to fewer internalizing problems ($b = -.13, t = -2.72$), and (3) more unsupportive reactions to emotional self-disclosure ($b = .20, t = 5.81$) were related to more internalizing problems. Finally, (4) having a greater language gap between adolescents and mothers was related to more internalizing problems ($b = .08, t = 2.88$). In this model, only emotional self-disclosure was related to outcomes, including that it predicted more internalizing problems ($b = .09, t = 2.79$) and more externalizing problems ($b = .13, t = 1.96$).

Regarding indirect effects, relationship quality was indirectly associated with more internalizing problems through emotional self-disclosure ($b = .02, t = 2.19$) and it also was indirectly associated with more externalizing problems ($b = .07, t = 2.55$) through emotional self-disclosure.

**Aim 2**

Given the significant correlations of the predictor variables (e.g. maternal reactions, cultural values, and language gap) with relationship quality, a post-hoc analysis
of the Aim 2 model not including relationship quality was also conducted to identify the possible role of cultural factors in predicting adolescent self-disclosure. Indices for the Aim 2 model without relationship quality indicated adequate fit ($\chi^2(4) = 6.08, p = 0.19;$ RMSEA = 0.05; CFI = 1.00; SRMR = 0.01). However, standardized residuals suggested an improvement in model fit with the addition of two paths: (1) maternal supportive reactions to emotional self-disclosure to behavioral self-disclosure, (2) maternal unsupportive reactions to emotional self-disclosure to behavioral self-disclosure. These additions resulted in an excellent model fit ($\chi^2(2) = 1.82, p = 0.40;$ RMSEA = 0.0; CFI = 1.00; SRMR = 0.01). Results from this model indicated several significant pathways predicting behavioral and emotional self-disclosure including that supportive reactions to behavioral self-disclosure predicted more behavioral self-disclosure ($b = .22, t= 2.15$), that supportive reactions to emotional self-disclosure predicted more emotional self-disclosure ($b = .28, t = 3.27$), and that unsupportive maternal reactions to emotional self-disclosure also predicted more emotional self-disclosure ($b = .16, t = 2.21$). Finally, cultural value endorsement significantly predicted adolescent emotional self-disclosure ($b = .19, t = 2.03$). See Figure 6 for a graphical depiction.
CHAPTER IV
DISCUSSION

Latina/o youth are at increased risk for experiencing both internalizing and externalizing problems as compared to their non-Latina/o white peers (Anderson & Mayes, 2010; Coatsworth, Pantin, & Szapocznik, 2002). It is therefore important for research to further explore the contextual factors that can ameliorate these concerns. One important contextual factor that has demonstrated benefits for both Latina/o youth and youth more broadly is the importance of mother-adolescent communication (Davalos et al., 2005; Davidson & Cardemil, 2005; Hartos & Power, 1997). This study focused on one aspect of communication—adolescent self-disclosure—to gain a better understanding of the transactional process of communication within families and its impact on youth adjustment. Thus far, researchers have theorized and demonstrated that adolescent self-disclosure about whereabouts and daily activities is the best method for mothers to gain knowledge for parental monitoring purposes, ultimately reducing externalizing problems (Crouter et al., 2005; Kapetanovic et al., 2018; Kerr, Stattin, & Burke, 2010; Stattin & Kerr, 2000). Less research has investigated emotional self-disclosure, or disclosure about feelings and emotions, and how maternal knowledge about adolescents’ emotional well-being may impact parental provision of emotional support and youth presentation of internalizing problems (see Fernandez et al., 2018, for an exception).
In line with previous literature, this study had two aims. First was to determine the utility of specificity in measuring adolescent self-disclosure constructs (i.e. behavioral and emotional self-disclosure) and their potential differential impact on adolescent outcomes (i.e. internalizing and externalizing problems), considering relationship quality as a covariate. Second was to examine the factors that facilitate or inhibit an adolescent’s decision to self-disclose to mothers using an emic approach by looking within-group to capture culture at the microsystem level, including factors that a similar study with non-Latina/o white participants may not capture or consider (e.g. cultural value endorsement and language gaps). The ultimate goal of this study was to inform intervention research for the Latina/o community specifically. In addition to these aims, this study conducted post-hoc analyses to explore direct and indirect effects amongst relationship factors, self-disclosure, and youth adjustment and to better understand the relationship amongst predictor variables youth self-disclosure outside of relationship quality.

Results of Aim 1 highlight that specificity in assessing self-disclosure is indeed important in this population, as emotional self-disclosure was predictive of internalizing problems, but not of externalizing problems, while behavioral self-disclosure was predictive of externalizing problems and not internalizing problems. Relationship quality was an important covariate predicting youth adjustment as well. However, contrary to hypotheses, self-disclosure predicted more youth maladjustment as opposed to less – likely due to the fact that youth who were engaged in negative behaviors disclosed more to their mothers. Moreover, results of Aim 2 suggest that of the examined predictors of adolescent self-disclosure, only relationship quality was a significant predictor of
adolescent frequency of self-disclosure. This relation between relationship quality to disclosure to outcome was further evident in the post-hoc analyses where relationship quality was indirectly related to internalizing and externalizing problems through emotional self-disclosure, such that relationship quality is related to more emotional self-disclosure, and emotional self-disclosure is related to more internalizing and externalizing problems. The post-hoc analyses also indicated that many of the predictor variables directly influenced youth adjustment, pointing to the continued importance for understanding contextual factors’ influence on Latina/o youth adjustment more broadly. Finally, post-hoc analyses confirm that not including the overarching factor of relationship quality in the model demonstrates the impact of maternal reactions on self-disclosure as well as the unique impact of cultural factors (e.g. cultural values) on Latina/o adolescent self-disclosure. This suggests that cultural values foster a close relationship between mothers and their youth that then provides an environment for emotional self-disclosure

**Aim 1: Self-Disclosure and Youth Adjustment**

Previous research supports that adolescent behavioral self-disclosure is related to fewer externalizing problems (Crouter et al., 2005; Kerr et al., 2010). The literature most widely supports Soenens et al.’s (2006) model, which identifies parental knowledge of adolescent behavior (i.e. parental monitoring) as predictive of fewer externalizing problems. Research building on this model suggests that it is not just parental knowledge that predicts fewer youth externalizing problems, but *how* the parents obtained that knowledge (e.g. parental solicitation, adolescent self-disclosure) that is most indicative of
improved youth adjustment, with adolescent self-disclosure being the best and sometimes only significant predictor (Kapetanovic et al., 2018; Kerr et al., 2000; Padilla-Walker, Son, & Nelson, 2017; Soenens et al., 2006). The results from the current study, however, do not support this model, and in fact, indicate the opposite—that more behavioral self-disclosure is associated with *more* youth externalizing problems.

One possible explanation for this finding is simply that teens who are reporting more behavioral self-disclosure are more likely to be the teens engaging in externalizing behaviors, as this study’s data was only gathered at one time point. It is possible that, over time, parents engage in more monitoring and protective behaviors for youth, a process that was unable to be captured in the current study design. On the other hand, it is also possible that, due to cultural values in Latina/o families that encourage youth to honor and obey parents, it may be that youth are engaging in the risky behaviors and telling their parents afterwards. In this case, the cross-sectional data limits a time order of causation. Additionally, it may be a question of measurement. Adolescents reported on behavioral self-disclosure and externalizing problems separately, and the behaviors that they were reporting on were not necessarily the same. For example, an item of behavioral self-disclosure is disclosing about what one writes on social media, while the externalizing measures capture some similar items, but also some more serious behaviors such as damaging school property. It may be that the youth who are disclosing more about the items in the behavioral self-disclosure measure are also engaging in more of the behaviors outlined in the externalizing behavior measure but may not necessarily tell their parents about those specific behaviors. Therefore, this analysis may capture youth
who are generally engaging in more behaviors, risky or not, and are sharing some information with parents, but not all. This hypothesis is somewhat supported by the additional analyses that had been conducted to show that youth who reported engaging in a greater variety of the 13 behaviors at least once as noted on the Behavioral Self-Disclosure scale also reported engaging in more externalizing behaviors on the Misconduct Scale. However, limits of the study questionnaires do not allow for an investigation of how reports of frequency of engagement in behaviors on the Behavioral Self-Disclosure scale is related to adolescent frequency of behavioral self-disclosure of the same behaviors. Future research should direct its efforts on creation and validation of more extensive behavioral self-disclosure measures to capture these nuances and to better understand whether behavioral self-disclosure is indeed related to fewer externalizing behaviors, as previous research would suggest, and to rule out any measurement errors or issues.

A second possible explanation is related to assumptions made in previous research. Parental knowledge does not in and of itself lead to positive parental intervention to influence youth engagement in externalizing behaviors. Parents must obtain the knowledge and then use it effectively to impact their teen. It is also therefore likely the case that even though disclosing to one’s mother has been found to be the best way for parents to obtain knowledge, adolescent disclosure also does not guarantee positive parental intervention (e.g. the adolescent shares that they are going to a friend’s house, and the parent invites their adolescent to have the friend over their home instead to better monitor activities). Moreover, parental intervention, even informed by adolescent
self-disclosure, does not guarantee that parents have success in their intervention—youth must be receptive and engaged in the parental intervention for it to be effective.

The need for active, involved, and effective parental monitoring strategies has been recently noted by Bendezú, Pinderhughes, Hurley, McMahon, and Racz (2018) who found that for racially diverse youth, some types of parental monitoring actually lead to increases in delinquency or do not predict externalizing outcomes at all. Specifically, these authors found that active and involved monitoring, consisting of discussion of daily activities, did not predict youth delinquency; however, it did predict parental knowledge, which was the strongest predictor of less youth delinquency. This suggests that the type of parental monitoring or intervention matters. The importance of the quality and type of the parental intervention is highlighted by Perrino et al. (2016), who conducted a longitudinal randomized controlled trial of a family-focused intervention for Latina/o youth and found that improvements in communication between adolescents and mothers predicted fewer youth externalizing behaviors at 18 months out, and ultimately fewer internalizing behaviors at 30 months. This intervention targeted acculturation issues and provided skills to improve communication between Latina/o youth and their mothers. Although that study did not assess adolescent self-disclosure as a mechanism that facilitated improved communication, it does suggest that clinical treatment should not only facilitate adolescents disclosing to parents, but also need to target parental strategies for intervening to prevent youth engagement in externalizing behaviors, and to also consider what may be most effective for each youth. Additionally, Gonzalez et al. (2012) introduced an intervention to improve Latina/o youth outcomes comprised of three
components. One important piece of this effective intervention is a parenting component that teaches strategies such as effective parenting, parental monitoring, and improved communication. Together, these intervention studies support that it is likely that the link between adolescent self-disclosure and adjustment does depend at least somewhat on the parental intervention piece, and additional research should parse this apart by gathering data about parental intervention and the transactional cascade of adolescent disclosure → parental knowledge → parental intervention → adolescent reception of the intervention → changes in adolescent behavior.

Similarly, emotional self-disclosure predicted more internalizing problems in the current study, rather than fewer, contrary to hypotheses. First, it is again possible that broadly, teens who are more upset and disclosing about emotions more may have more internalizing problems (Compas et al., 2017). Specifically, it may also be that the number of youths who have internalizing problems and who are not disclosing are a small number of teens who are likely receiving treatment, and that for generally healthy adolescents, those who disclose more have more (i.e. average) internalizing problems, especially because this is a cross-sectional study. For example, Suveg et al. (2004) found that in a clinical sample of children with anxiety, there was less emotion talk between children and their mothers, but in the non-clinical sample, there was more emotional expressiveness in the family. As this study used a non-clinical sample, and there were average reports of youth adjustment, it is possible that this study was not able to capture the experience of youth with more significant adjustment concerns and how disclosure impacts their wellbeing. Specifically, in this sample, teens were reporting few and somewhat normative
levels of internalizing symptoms, with most endorsing symptoms “sometimes” in the past 6 months. Given their normative levels, it is likely that disclosing to mothers has been helpful for maintaining their management of symptoms. On the other hand, for youth who report above average internalizing problems, this is likely occurring because they have generally poor coping skills and disclosing to mothers may be more helpful for those youth, as it would serve as a coping skill (e.g. emotional support-seeking).

Also, self-disclosure assumes that parents will obtain more information about adolescent emotional well-being, prompting them to provide emotional support. However, this study was not able to capture if this is indeed happening. The key missing piece is parental intervention to lead to reductions in youth maladjustment, which has been noted by intervention researchers (Perrino et al., 2016), and which was discussed regarding the behavioral self-disclosure results. Particularly, the changes in the socio-political climate in the U.S. throughout the past year may have negatively impacted mothers’ feelings of being able to provide emotional support to their youths. Given the increase in discrimination and deportations occurring for the immigrant Latina/o population in the U.S., mothers may feel less in control and able to intervene, thus youth may be disclosing more, but the intervention piece may be missing. The high level of stress experienced by this population in the current socio-political climate was not captured in this study, although the data were collected during this tumultuous time. Research has begun to document how these socio-political changes have been affecting the Latina/o community (Roche, Vaquera, White, & Rivera, 2018), and future work should specifically investigate how Latina mothers identify their abilities to provide
intervention/support to their youth during this time and how this may affect youth adjustment. To capture this type of question, research could also consider the combination of self-disclosure with supportive maternal reactions influencing fewer internalizing problems, rather than considering maternal reactions as a predictor of adolescent self-disclosure independently.

**Specificity in Measurement**

Regardless of the directionality of the results, this study supported the importance for using specific self-disclosure assessment tools. All pathways between the two types of disclosure (behavioral and emotional) and both outcomes (internalizing and externalizing problems) were tested, and only the hypothesized pathways were significant in the first model. This supports Tilton-Weaver et al.’s (2014) work that suggests that behavioral and emotional self-disclosure are distinct yet related constructs and indicates the need for use of nuanced methods for assessing adolescent self-disclosure in future research. The current study introduced a modified version of an emotional self-disclosure measure to ensure that emotional self-disclosure was being assessed as a separate construct from behavioral self-disclosure. This measure was piloted in a small Latina/o sample and demonstrated good reliability both in that sample and in the current study sample; however, future research should further test and modify this measure to ensure that there is a universal measure assessing emotional self-disclosure and behavioral self-disclosure.

Having such a specific assessment tool is important for several reasons. First, the use of this measure extended an understanding of both behavioral and emotional self-disclosure within the Latina/o population. Prior to this study, only one recent study
(Fernandez et al., 2018) has considered the link between adolescent self-disclosure and youth adjustment for Latina/o youth; however, that study was a between subject design, and thus was unable to capture the nuances of cultural factors. It is recommended that future work with the Latina/o population continue to use nuanced measures to assess self-disclosure to unpack their contributions in a cultural context.

Second, the post-hoc results of this study indicated that the language gap predicted more internalizing problems, but not externalizing problems. As previous work has indicated the nuances of emotion-talk in second languages, the Latina/o population has the unique challenge of possibly having different language proficiency or preferences even within the same family (Oh et al., 2010). The differentiation of behavioral versus emotional self-disclosure presented in this study encourages future research investigating the language gap and adolescent self-disclosure to be more cognizant of the nuances of self-disclosure and will allow them to more intentionally focus on the link between emotional self-disclosure and internalizing problems and the role of language gaps.

Finally, this paper was housed in a transactional process model of child development. Thus, it is natural that, even though previous longitudinal research has established a directional link of adolescent self-disclosure predicting youth adjustment (Jaggi et al., 2016; Keijsers et al., 2016; Soenens et al., 2006), a bidirectional relationship between disclosure and adjustment exists across time. To best be able to capture this bidirectional relationship as it relates to domains of self-disclosure, it is important to have specific assessment tools for self-disclosure. For example, it is likely that as adolescents engage in more and more risky behaviors, they may begin to disclose less over time, as it
is unlikely that many parents encourage their youth to engage in risky behaviors. On the other hand, as adolescents experience more internalizing problems, parents may be more likely to want to learn about the youth’s concern, as it is potentially more natural for parents to address emotional concerns. At the same time, this may vary based on membership in ethnic-minority groups, as expression of emotion is discouraged in some cultures (Chang, 2015). To further address the bidirectional and transactional nuances between self-disclosure and youth adjustment, specific assessment tools of behavioral and emotional self-disclosure are warranted. Such additional work can target the psychometrics of new emotional self-disclosure scales to ensure that the new measures are clear, concise, and demonstrate validity and reliability to best be able to answer and expand upon these remaining research questions.

Aim 2: Predictors of Self-Disclosure

Research demonstrates the importance of many contextual factors in predicting adolescent self-disclosure; however, no studies had considered all factors together, nor incorporated cultural factors using an emic approach. This study did both, finding that although it is likely that maternal reactions to self-disclosure, cultural values, and language gaps may influence whether adolescents choose to disclose in the correlational analyses, it is still relationship quality that continues to find support as a predictor, and was the only significant predictor of both behavioral and emotional self-disclosure once taking the other factors into account in the model. The overarching importance of relationship quality in predicting self-disclosure is consistent with prior work (Hare et al., 2011; Keijsers et al., 2016; Smetana et al., 2006; Yun et al., 2016).
Given the importance of relationship quality in influencing youth self-disclosure, future research would benefit from examining alternative models to understand the role of various relational factors in predicting adolescent self-disclosure processes. For example, it is possible that the other predictors (e.g. maternal reactions to disclosure, cultural values, and language gaps) influence relationship quality, which then influences adolescent disclosure, but without a longitudinal study, it is difficult to examine this relationship quality mediational model. On the other hand, it is also possible that relationship quality is the foundation for establishing positive maternal reactions to adolescent self-disclosure and for influencing youth to endorse cultural values and to ameliorate any difficulties posed by a language gap, a second model to be examined by future research. Finally, as is most likely the case, all predictor variables examined in this study, given their transactional nature, should be tested in a bidirectional model, noting that these processes influence each other over time, which can best be captured by an actor-partner statistical model longitudinal design. Overall, future work should focus on better understanding the role of adolescent-reported relationship satisfaction with their mothers and adolescent self-disclosure, given its overarching importance in this and other studies.

This study identified primarily relationally focused predictors of adolescent self-disclosure; however, the identified predictors are not all-inclusive of the myriad of factors that may influence a Latina/o adolescent to self-disclose to mothers. One additional factor not examined in this study that likely plays a role in Latina/o self-disclosure is the practical factor of maternal availability. Mothers who are not physically in the home are
not available for an adolescent to initiate conversations with them, and thus are not available as recipients of adolescent self-disclosure, be it behavioral or emotional. There are many reasons that mothers may be physically absent from the home, and there are several reasons that are more relevant to low-income and immigrant families. First is financial burdens faced by many Latina/o families that result in mothers carrying multiple jobs in order to provide for their family (Bacallao & Smokowski, 2007). Moreover, Luthar and Latendresse (2005) demonstrate that in addition to parental unavailability being a relevant experience for low income youth, children from high income families also often perceive their parents as unavailable, leading to the same detrimental impacts of parental unavailability. A second relevant factor that is unique to some immigrant families is the mother’s risk of deportation by the U.S. government. Recent immigration laws and changes in the socio-political climate in the U.S. have made some families at risk for losing a mother who may not have the necessary documentation to remain in the U.S, tragically resulting in children and adolescent losing physical access to their mothers (Androff, Ayon, Becerra, & Gurrola, 2011). This experience that exclusively affects some immigrant families, in addition to making a mother physically unavailable in the worst case, instills fear and negatively impacts the family’s health (Cervantes, Mejia, & Guerrero Mena, 2010). Thus, these unfortunate circumstances of extensive time on the job for youth of both low income and high income families and the added potential for immigrant parents to be forced from one’s home, make maternal physical availability a relevant factor for Latina/o adolescents to have an opportunity to disclose to their mothers, and presents itself as a factor that can be included in future studies investigating
the predictors of Latina/o adolescent self-disclosure. Therefore, future work should consider income as either a proxy variable to better understand potential nuances in this area, or directly assess for maternal physical availability in the home.

Importantly, although the identified cultural factors (e.g. cultural values and language gaps) did not significantly predict youth self-disclosure in the original Aim 2 model, this was likely related to the overarching role of relationship quality as a strong predictor self-disclosure and its strong correlations with the other predictor variables. Statistically, the correlation between relationship quality and the other predictor variables (maternal reactions, cultural values, and language gaps) would have accounted for much of the explained variance of those variables, leaving little variance in those variables available to independently predict self-disclosure. If the true model was accurate in including all of the study variables as predictors, that would be positive; however, as proposed earlier, there may be other alternative models with relationship quality as a mediator or as an initial predictor in a mediating model, that may better capture the influences on adolescent self-disclosure. Therefore, a post-hoc analysis of the same model not including relationship quality was conducted to examine any potential role of cultural factors, and results indicated that cultural value endorsement significantly predicted more adolescent emotional self-disclosure, consistent with similar work by Villalobos and Smetana noting cultural values’ relationship with behavioral self-disclosure (2012). This result was also in line with the original correlations for Aim 2. Therefore, future research should consider alternative models as it pertains to the role of relationship quality in predicting self-disclosure, as indicated above, to ensure that
researchers are fully capturing the role of cultural factors in adolescent-parent relationship quality and self-disclosure. Moreover, this sample was overall a well-acculturated sample, and future work should continue to investigate the role of cultural values and language gaps in Latina/o adolescent self-disclosure for less acculturated individuals.

**Post-Hoc: Contextual Factors and Youth Adjustment**

The identified relational predictors (e.g. maternal reactions) directly influenced internalizing and externalizing problems in this study’s sample. For example, more supportive maternal reactions to adolescent wrongdoings were related to fewer internalizing problems, while more unsupportive reactions to wrongdoings were related to more externalizing problems. Unsupportive reactions to emotions were related to both more internalizing and more externalizing problems. Overall, this indicates, as expected, that unsupportive maternal reactions influence poorer youth adjustment, while supportive ones influence better adjustment, consistent with past work (Almas et al., 2011; Martin et al., 2017; Tokić et al., 2011), and that in general, having strong parental reactions, be they negative or positive, influence youth communication processes (Main et al., 2018), as demonstrated in the Aim 2 post hoc analyses showing that both supportive and unsupportive maternal reactions to emotional self-disclosure predicted more youth emotional self-disclosure. The specificity of the measures of maternal reactions was not particularly helpful in this analysis, as there was likely too much overlap in maternal reactions across topics. For example, it is may be rarer to find a mother who has a negative reaction to an adolescent expressing distress, and not also a negative reaction to
the adolescent sharing that they did something wrong. Maternal reactions to either of these events likely impact the mother-adolescent relationship, and thus impact general youth adjustment. Overall, these findings are additional support that relationship factors predict youth self-disclosure in Latina/o samples and that the context of disclosure is important.

**Cultural Factors**

Importantly, cultural factors were directly related to youth adjustment, such that more endorsement of familism and respect values was related to fewer externalizing and internalizing problems. This is in line with other research finding that familism predicts fewer internalizing problems (Kuhlberg et al., 2010; Pina-Watson & Castillo, 2015). It is likely that youth who hold that the family is important and respect their parents are more likely to be engaged with the family, which may serve as a protective factor. Perhaps having those values takes the place of parental monitoring, as the youth is likely to spend more time with the family and less time in situations that may lead to engagement in risky externalizing behaviors. Similarly, it is likely that youth who have close family relationships and respect their mothers have more social support, which is protective against internalizing problems. This is evident in the correlations in this study that indicate that cultural values were positively correlated to relationship satisfaction ($r = .56$) and to positive maternal reactions to emotional and behavioral self-disclosure ($r = .51; r = .57$, respectively). Overall, cultural values promote and are associated with positive family relationships, which contributes to positive youth adjustment (Hernández & Bámaca-Colbert, 2016). Moreover, as noted above, when relationship quality was not
included in the model, cultural values did indeed significantly predict more youth emotional self-disclosure, which is a similar result to Villalobos and Smetana’s (2012) finding of cultural values predicting behavioral self-disclosure. Additional research should continue to investigate the role of cultural values in Latina/o adolescent self-disclosure processes.

The language gap is a less studied construct, and results from this sample indicate that although the language gap is not related to youth self-disclosure, the larger the perceived language gap between mothers and adolescents, the more internalizing problems adolescents report. It is possible that the gap does not allow Latina/o adolescents to benefit as much from the social support provided in many Latina/o families, which may lead to poorer ability to manage internalizing problems, or may lead to more conflict in the home, related to more negative feelings. It is also possible that the language gap is more relevant for adolescent self-disclosure concerns in a clinical sample, as those are the youth who do not have coping mechanisms to manage their difficulties with adjustment, and who seek professional help. For example, in this sample, the language gap was associated with both more internalizing ($r = .47$) and more externalizing ($r = .39$) problems. Therefore, there may be a selection bias in clinical samples that may have illustrated the hypothesis that language gaps make it more difficult or burdensome for Latina/o youth to disclose to mothers; however, only a longitudinal study and compare design of a clinical and non-clinical Latina/o population could best address those questions. Future research must continue to explore the role of
the language gap in Latina/o adjustment broadly and in adolescent self-disclosure specifically.

**Limitations**

The current study, although a contribution to the growing literature on adolescent self-disclosure, particularly for Latina/o youth, is not without its limitations. One of the major limiting factors of this study was its’ cross-sectional design. Most previous research has investigated adolescent self-disclosure and adjustment using longitudinal designs, which allows for changes over time in disclosure to more clearly capture how it affects youth outcomes. Moreover, this study argues for a transactional model, and future research may benefit from using actor-partner statistical models and to collect data from mothers as well to more closely examine that transactional relationship, as noted in the discussion. Similarly, this study was limited in that the question at hand may have been better explored in a clinical population. Although it is important to understand the general population, it is important to recognize that there are many ways for adolescents to cope with internalizing and externalizing problems, and that self-disclosure may be most relevant for certain youth and not for others.

Although a strength of this study was its’ representation of the immigrant Latina/o population across the country, several of the demographic questions indicate that this sample included adolescents with well-acculturated mothers. For example, about half the mothers preferred to speak English. The hypotheses of this study are housed in the acculturation gap theory, and if there is not a large gap, then it is possible that the cultural factors may not be as relevant. A follow-up to address this concern was conducted in the
current sample, testing Aim 2 in a sub-set of the sample whose mother’s preferred Spanish (e.g. more of a gap) and was not found to be significant, while testing Aim 2 without the relationship quality variable included indicated that cultural value endorsement significantly predicted more adolescent emotional self-disclosure, a related concept to Villalobos and Smetana’s (2012) results regarding behavioral self-disclosure. Thus, future work should gather data from other samples, including samples only in emerging immigrant communities to better understand communication processes for these families. Additionally, as alluded to previously, a longitudinal study would help to clarify the trajectory of whether a language gap from childhood predicted more internalizing problems over time through less adolescent self-disclosure. This current study demonstrated that a language gap is related to more internalizing problems for youth but did not capture the mechanism for this. A study comparing the relevance of the language gap in a clinical and non-clinical sample, with the hypothesis that the language gap is most relevant for youth who have psychopathology, would help to answer these research questions.

The main constructs of this study are somewhat complex and to complete questions about the constructs requires a good amount of insight into the relationship one has with his or her mother. In many cases, online samples consist of participants who would like to earn the compensation, rather than spend time considering the nuances of their relationship with their mother. Although responses completed in less than a certain amount of time were excluded, it is difficult to ensure that all respondents completed the questionnaires to the best of his or her ability, and it is not possible to guarantee that it
was the adolescent who completed the questionnaires and not the mother. To prevent these challenges, future work should attempt experimental methods to examine how changes in contextual factors may change youth outcomes and to model conversations in an experimental lab. A few researchers are broaching these areas and have found some success. For example, Main et al. (2018) engaged adolescents and mothers in a 10-min conflict discussion and coded adolescent emotional disclosure and maternal emotional response. They found that strong maternal reactions of either positive or a negative nature led to more adolescent disclosure, informing the developmental literature that strong reactions from mothers may be indicative of quality in parent-adolescent relationships. This contradicts other work that suggests that negative reactions from mothers discourages disclosure (Martin et al. 2017), indicating the need for more nuanced methods of collecting data to tease apart these conflicting findings.

The emotional self-disclosure scale in this study assessed adolescent disclosure of negative emotions to mothers given the study’s focus on understanding the relationship between adolescents’ internalizing of negative emotions (e.g. sadness and anxiety) as risk factors for related outcomes (i.e. depression and anxiety). However, it would be important for future studies to consider a resiliency-model approach, by investigating how adolescent disclosure of positive emotions (e.g. happiness, excitement) may be protective against internalizing concerns. This approach would allow research to moreover determine patterns of self-disclosure for teens and associations to youth adjustment. For example, some teens may be high disclosers across all emotions, other may disclose more negative than positive emotions, still others may disclose more
positive than negative, and some may disclose few emotions in general. One suggestion would be to use a latent profile approach, so that researchers can uncover any potential patterns of self-disclosure and factors that influence membership in each possible group to inform nuanced therapeutic strategies to be implemented for the most promotive patterns of self-disclosure.

The current study asked adolescents to focus on disclosure to mothers only; however, for many youths, fathers play an important role in the family. Research has found that gender of both the parent and the child impacts emotion socialization practices (Brand & Klimes-Dugan, 2010) and thus likely impacts youth emotional self-disclosure. Therefore, future research must consider the differential dynamics of disclosure that may occur within a family based on adolescent gender and gender of the parent. Moreover, the current sample consisted of primarily adolescents who identified as female, and additional work should collect more data from males and adolescents with gender fluid identities. Given statistical power constraints, a comparison across gender was not conducted for this study; however, a comparison of means across study variables was conducted using a random subset of the female sample compared to the male sample to help to account for the violation of homogeneity of variance and sample size. The mean comparisons indicated that the males were overall more well-adjusted than females and reported more positive interactions with their mothers. Future research should identify whether there are any unique aspects of gender, or whether gender is a proxy variable for other aspects of the parent-adolescent relationship. Moreover, this study assessed self-disclosure across adolescence (ages 13 to 17), and many of the externalizing problems
may be less relevant for younger youth. Given the unequal distribution of the sample size by age, it would be important for future research to investigate these processes across adolescent development in a more nuanced manner.

A new area of research in adolescent self-disclosure recognizes that society is moving toward technology-based interactions between family members. Specifically, Rudi, Walker, and Dworkin (2015) investigated the use of technology in communication, finding that some families are more likely to communicate over different types of technology than others. The present study was limited by data collection methods, and one possible way to address the concern for confusion between, for example, reports on adolescent self-disclosure of information vs. maternal solicitation of information, would be to code text message and social media messages. This medium would allow researchers to objectively determine who initiated the conversations. It may also allow for a better understanding of how language may impact Latina/o adolescents’ use of technology mediums to disclose to parents. Given that some families are more likely to communicate over technology, the present study was not able to capture that aspect explicitly or to tease apart the method by which adolescents are disclosing to mothers and whether the method impacts the outcome.

**Clinical Implications**

The results of this study do not directly support the need for increasing adolescent self-disclosure to mothers to promote youth adjustment, but they do suggest that future research gather information from adolescents and their mothers about the mothers’ responses to adolescent self-disclosure. It is likely unhelpful to encourage youth to
disclose to mothers if the mother will not provide either the emotional support requested or the monitoring of adolescent behavior, and in these cases, a family communication intervention is likely most helpful, as illustrated by other work (Gonzalez et al., 2012; Perrino et al., 2016). Clinicians should also be thoughtful about the specific types of disclosure that is occurring between adolescents and their mothers and recognize that parents may be providing intervention to address one type of disclosure, but not the other. Supplemental results also point to the importance for assessing adolescent cultural value endorsement, as they were related to both more emotional self-disclosure and better youth adjustment broadly, and for assessing the language gap in Latina/o mother-adolescent dyads to allow clinicians to acknowledge and to account for the gaps and problem solve with the family to address this possible barrier to communication.

Conclusions

Latina/o youth are at increased risk for internalizing and externalizing problems, and this study sought to contribute to the literature investigating how contextual factors may impact adjustment for these youths. Specifically, this study examined one mechanism of mother-adolescent communication—adolescent self-disclosure. Housed within an emic bioecological framework and informed by a transactional process model, this study considered existing theories of the role of adolescent self-disclosure in parental obtainment of knowledge to ultimately lead to less youth maladjustments. Results from this study foremost highlight the need to use specific assessment tools when investigating adolescent self-disclosure. Measures of emotional and behavioral self-disclosure independently predicted internalizing and externalizing problems, respectively, and not
indiscriminately. Results also guide future research to explore the relationship between adolescent self-disclosure and youth adjustment and how maternal factors may play a role. Contrary to previous work, this study did not find that adolescent self-disclosure predicted fewer youth internalizing and externalizing problems, with that prior work hinging on mothers engaging in positive practices to support their teens’ adjustment. Future research needs to further tease apart maternal responses to adolescent self-disclosure as an additional piece of the model to capture the importance of the transactional interactions in mother-adolescent relationships.

This study generally adds to research highlighting the importance of mother-adolescent relationship quality for increasing adolescent self-disclosure. It also furthered the argument that an emic approach to research can be important to inform culturally sensitive treatments. For example, the results continued to support the body of literature documenting the positive effects of cultural value endorsement for Latina/o youth adjustment. Moreover, it points to the negative impacts of the language gap on youth internalizing problems, a less studied area. This study therefore directs future research to further tease apart the nuances of mother-adolescent communication in Latina/o families to promote youth adjustment, and to develop more complex longitudinal transactional models to test the hypotheses of this study in more diverse Latina/o samples, including less acculturated immigrant samples.

There are many next steps for research on adolescent self-disclosure, and this study has strongly informed two. 1) Longitudinal studies incorporating reports from both adolescents and mothers assessing not only adolescent self-disclosure and adjustment, but
also youth perception of parental intervention based on the adolescent-provided knowledge. For example, getting a better picture of the transactional relationship in mother-adolescent communication by assessing maternal socialization of emotions with children, later child disclosure and parental response to that disclosure (e.g. providing or not providing some sort of support), and later adolescent outcomes. Although disclosure is important during adolescence, less research has studied its development over time as a transactional process and studying this construct during middle childhood is an important next step. 2) Additional within-group studies with Latina/o populations, further restricting samples by acculturation level to create a wholistic picture of how cultural values and language gaps impact youth self-disclosure and adjustment. Cultural values were demonstrated to be important in predicting youth emotional self-disclosure outside of relationship quality, and more generally to predict better youth adjustment. Moreover, given this study’s result that language gaps predict more youth internalizing problems, it is important for future research to tease apart the mechanism of this construct. It could be that having a greater language gap negatively impacts mother-adolescent relationships, or that youth are not able to functionally and practically communicate. This likely varies across both contexts and with an interaction effect. For example, language gaps may only negatively influence youth if they do not have another individual from whom they can seek emotional support, including in their preferred language, such as a sibling, friend, or other family member. It may be that having the gap only has a truly negative impact at the extreme, such that having virtually no alignment in ability to communicate in the same language may be detrimental, but having varied abilities is less than ideal, but not
indicative of poor adjustment. It is important to understand these nuances to inform interventions.

Adolescent self-disclosure is an important and complex construct that requires ongoing research to better understand its processes. Researchers have been expanding studies on disclosure to differentiate the type of disclosure (e.g. routine vs. emotional) (Tilton-Weaver et al., 2014), but have also begun to differentiate amongst disclosure, secrecy, and lying (Almas et al., 2011; Jäggi, Drazdowski, & Kliewer, 2016). The current study contributes a small, yet important piece to this growing literature by tackling the relevant question of what self-disclosure processes look like for Latina/o youth, a growing population in the U.S. who are at-risk for maladjustment. This study has confirmed that relationship quality is a significant predictor of adolescent self-disclosure, clarified that emotional and behavioral self-disclosure should indeed be studied together yet distinctly, garnered additional support for the role of cultural values in protecting Latina/o youth from maladjustment and in promoting youth self-disclosure as separate from relationship quality, and finally, pointed to the need for additional research on a somewhat newer construct—the language gap. Because mother-adolescent communication processes are indeed important in predicting youth adjustment, future work must build on the current study to continue to parse apart an understanding of the contextual factors that impact Latina/o youth self-disclosure and adjustment to inform clinical interventions aimed at reducing mental health disparities.
REFERENCES


Burleson, B. R., & Kunkel, A. W. (1996). The socialization of emotional support skills in childhood. In Handbook of social support and the family (pp. 105-140). Springer US.


http://dx.doi.org/10.1037/fam0000436


Table 1

Participant Demographic Information

<table>
<thead>
<tr>
<th>Maternal Country of Origin</th>
<th>Percentage</th>
<th>Residence</th>
<th>Percentage</th>
<th>Social Class</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>5.1%</td>
<td>Midwest</td>
<td>19.4%</td>
<td>Poor</td>
<td>20.3%</td>
</tr>
<tr>
<td>Bolivia</td>
<td>4.6%</td>
<td>Northeast</td>
<td>25.3%</td>
<td>Working class</td>
<td>40.6%</td>
</tr>
<tr>
<td>Chile</td>
<td>6.9%</td>
<td>South</td>
<td>42.9%</td>
<td>Middle class</td>
<td>34.6%</td>
</tr>
<tr>
<td>Colombia</td>
<td>7.8%</td>
<td>West</td>
<td>11.5%</td>
<td>Affluent, Wealthy, or Rich</td>
<td>4.6%</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1.8%</td>
<td>Other</td>
<td>.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuba</td>
<td>12.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>4.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td>1.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td>2.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guatemala</td>
<td>1.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td>2.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>37.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicaragua</td>
<td>1.4%</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Panama</td>
<td>2.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paraguay</td>
<td>.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uruguay</td>
<td>1.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venezuela</td>
<td>3.2%</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Table 2

Behavioral Self-Disclosure Measure: Sample Percentages and Means

<table>
<thead>
<tr>
<th></th>
<th>Engaged in Activity at Least Once</th>
<th>Mean Disclosure (1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prudential Items</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whether I smoke cigarettes or vape e-cigarettes</td>
<td>60.4%</td>
<td>3.68</td>
</tr>
<tr>
<td>Whether I use marijuana or other illegal drugs</td>
<td>58.5%</td>
<td>3.69</td>
</tr>
<tr>
<td>Whether I go to parties where alcohol is served</td>
<td>68.7%</td>
<td>3.61</td>
</tr>
<tr>
<td>Whether I cut class or school</td>
<td>71.9%</td>
<td>3.41</td>
</tr>
<tr>
<td>Whether I have unprotected sex</td>
<td>68.2%</td>
<td>3.37</td>
</tr>
<tr>
<td>Whether I drink beer or wine</td>
<td>71.9%</td>
<td>3.44</td>
</tr>
<tr>
<td><strong>Multifaceted</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What I write in social media</td>
<td>92.2%</td>
<td>3.27</td>
</tr>
<tr>
<td>Whether I watched a movie with explicit sex or violence</td>
<td>82.9%</td>
<td>3.37</td>
</tr>
<tr>
<td>Whether I stay out late</td>
<td>88.0%</td>
<td>3.59</td>
</tr>
<tr>
<td>Whether I go out with friends my mom does not approve of</td>
<td>85.3%</td>
<td>3.36</td>
</tr>
<tr>
<td>Whether I am going to get a tattoo</td>
<td>75.1%</td>
<td>3.51</td>
</tr>
<tr>
<td>Whether I am dating or have a girl- or boyfriend</td>
<td>90.8%</td>
<td>3.43</td>
</tr>
<tr>
<td>Whether I finish or turn in my homework</td>
<td>94.9%</td>
<td>3.44</td>
</tr>
</tbody>
</table>
Table 3

Behavioral Self-Disclosure Measure: Percentage Engagement in Activities

<table>
<thead>
<tr>
<th>Possible Engagement in 0 to 13 Activities</th>
<th>Reported Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 of 13 activities</td>
<td>2.3%</td>
</tr>
<tr>
<td>1 of 13 activities</td>
<td>.5%</td>
</tr>
<tr>
<td>2 of 13 activities</td>
<td>2.3%</td>
</tr>
<tr>
<td>3 of 13 activities</td>
<td>2.3%</td>
</tr>
<tr>
<td>4 of 13 activities</td>
<td>2.3%</td>
</tr>
<tr>
<td>5 of 13 activities</td>
<td>4.1%</td>
</tr>
<tr>
<td>6 of 13 activities</td>
<td>6.9%</td>
</tr>
<tr>
<td>7 of 13 activities</td>
<td>3.2%</td>
</tr>
<tr>
<td>8 of 13 activities</td>
<td>7.8%</td>
</tr>
<tr>
<td>9 of 13 activities</td>
<td>3.7%</td>
</tr>
<tr>
<td>10 of 13 activities</td>
<td>6.9%</td>
</tr>
<tr>
<td>11 of 13 activities</td>
<td>3.2%</td>
</tr>
<tr>
<td>12 of 13 activities</td>
<td>4.6%</td>
</tr>
<tr>
<td>13 of 13 activities</td>
<td>49.8%</td>
</tr>
</tbody>
</table>
Table 4

Bivariate Correlations of Aim 1 Study Variables with Means and Standard Deviations

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relationship quality</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Externalizing problems</td>
<td>-.25**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Internalizing problems</td>
<td>-.42**</td>
<td>.52**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Behavioral self-disclosure</td>
<td>.29**</td>
<td>.18**</td>
<td>.06</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>5. Emotional self-disclosure</td>
<td>.33**</td>
<td>.12</td>
<td>.06</td>
<td>.49**</td>
<td>1.00</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>3.35 (.76)</td>
<td>2.34 (.80)</td>
<td>1.86 (.46)</td>
<td>3.23 (.82)</td>
<td>3.07 (.72)</td>
</tr>
</tbody>
</table>

* Correlation is significant at $p < .01$

** Correlation is significant at $p < .05$
Table 5

Bivariate Correlations of Aim 2 Study Variables with Means and Standard Deviations

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relationship quality</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Sup. Rx. to behavioral SD</td>
<td>.58**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Unsup. Rx. to behavioral SD</td>
<td>-.31**</td>
<td>-.24**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Sup. Rx to emotional SD</td>
<td>.55**</td>
<td>.61**</td>
<td>-.35**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Unsup. Rx. to emotional SD</td>
<td>-.21**</td>
<td>-.32**</td>
<td>.57**</td>
<td>-.09</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Cultural values</td>
<td>.56**</td>
<td>.57**</td>
<td>-.29**</td>
<td>.51**</td>
<td>-.32**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Language gap</td>
<td>-.26**</td>
<td>-.33**</td>
<td>.40**</td>
<td>-.12</td>
<td>.53**</td>
<td>-.24**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Behavioral self-disclosure</td>
<td>.29**</td>
<td>.18**</td>
<td>.06</td>
<td>.16*</td>
<td>.13</td>
<td>.06</td>
<td>.08</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>9. Emotional self-disclosure</td>
<td>.33**</td>
<td>.20**</td>
<td>-.04</td>
<td>.30**</td>
<td>.14*</td>
<td>.21**</td>
<td>.10</td>
<td>.49**</td>
<td>1.00</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>3.35</td>
<td>3.28</td>
<td>2.80</td>
<td>3.42</td>
<td>2.89</td>
<td>3.64</td>
<td>3.14</td>
<td>3.23</td>
<td>3.07</td>
</tr>
</tbody>
</table>

* Correlation is significant at \( p < .01 \)

** Correlation is significant at \( p < .05 \)
Table 6

Key Study Variable Means and Standard Deviations by Gender

<table>
<thead>
<tr>
<th>Study Variables</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males (n = 46)</td>
</tr>
<tr>
<td>Relationship quality</td>
<td>3.70 (.82)</td>
</tr>
<tr>
<td>Externalizing problems</td>
<td>1.98 (.87)</td>
</tr>
<tr>
<td>Internalizing problems</td>
<td>1.55 (.49)</td>
</tr>
<tr>
<td>Behavioral self-disclosure (SD)</td>
<td>3.18 (1.02)</td>
</tr>
<tr>
<td>Emotional self-disclosure (SD)</td>
<td>3.00 (.95)</td>
</tr>
<tr>
<td>Sup. Rx. to behavioral SD</td>
<td>3.69 (.77)</td>
</tr>
<tr>
<td>Unsup. Rx. to behavioral SD</td>
<td>2.49 (.68)</td>
</tr>
<tr>
<td>Sup. Rx to emotional SD</td>
<td>3.65 (.82)</td>
</tr>
<tr>
<td>Unsup. Rx. to emotional SD</td>
<td>2.45 (.93)</td>
</tr>
<tr>
<td>Cultural values</td>
<td>4.02 (.74)</td>
</tr>
<tr>
<td>Language gap</td>
<td>2.71 (1.15)</td>
</tr>
</tbody>
</table>
Table 7

Bivariate Correlations of Aim 1 Study Variables by Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relationship quality</td>
<td>1.00</td>
<td>-.18*</td>
<td>-.40**</td>
<td>.32**</td>
<td>.39**</td>
</tr>
<tr>
<td>2. Externalizing problems</td>
<td>-.29</td>
<td>1.00</td>
<td>.43**</td>
<td>.26**</td>
<td>.15</td>
</tr>
<tr>
<td>3. Internalizing problems</td>
<td>-.26</td>
<td>.61**</td>
<td>1.00</td>
<td>.04</td>
<td>.06</td>
</tr>
<tr>
<td>4. Behavioral self-disclosure</td>
<td>.26</td>
<td>.00</td>
<td>.09</td>
<td>1.00</td>
<td>.46**</td>
</tr>
<tr>
<td>5. Emotional self-disclosure</td>
<td>.27</td>
<td>.05</td>
<td>.03</td>
<td>.55**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* Correlation is significant at $p < .01$

** Correlation is significant at $p < .05$

Note: Male ($n = 46$) in White; Female ($n = 171$) in Gray
Table 8

Bivariate Correlations of Aim 2 Study Variables by Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relationship quality</td>
<td>1.00</td>
<td>.55**</td>
<td>-.30**</td>
<td>.52**</td>
<td>-.20*</td>
<td>.51**</td>
<td>-.22**</td>
<td>.33**</td>
<td>.39**</td>
</tr>
<tr>
<td>2. Sup. Rx. to behavioral SD</td>
<td>.57**</td>
<td>1.00</td>
<td>-.10</td>
<td>.58**</td>
<td>-.26**</td>
<td>.50**</td>
<td>-.28**</td>
<td>.17*</td>
<td>.29**</td>
</tr>
<tr>
<td>3. Unsup. Rx. to behavioral SD</td>
<td>-.16</td>
<td>-.33*</td>
<td>1.00</td>
<td>-.26**</td>
<td>.49**</td>
<td>-.17*</td>
<td>.37**</td>
<td>.07</td>
<td>-.10</td>
</tr>
<tr>
<td>4. Sup. Rx to emotional SD</td>
<td>.55**</td>
<td>.63**</td>
<td>-.47**</td>
<td>1.00</td>
<td>-.02</td>
<td>.50**</td>
<td>-.11</td>
<td>.21**</td>
<td>.46**</td>
</tr>
<tr>
<td>5. Unsup. Rx. to emotional SD</td>
<td>-.04</td>
<td>-.23</td>
<td>.67**</td>
<td>-.07</td>
<td>1.00</td>
<td>-.21**</td>
<td>.46**</td>
<td>.18*</td>
<td>.15</td>
</tr>
<tr>
<td>6. Cultural values</td>
<td>.59**</td>
<td>.56**</td>
<td>-.35*</td>
<td>.45**</td>
<td>-.32*</td>
<td>1.00</td>
<td>-.22**</td>
<td>-.02</td>
<td>.19*</td>
</tr>
<tr>
<td>7. Language gap</td>
<td>-.19</td>
<td>-.29</td>
<td>.35*</td>
<td>-.01</td>
<td>.57**</td>
<td>-.09</td>
<td>1.00</td>
<td>.13</td>
<td>.08</td>
</tr>
<tr>
<td>8. Behavioral self-disclosure</td>
<td>.26</td>
<td>.26</td>
<td>.02</td>
<td>.12</td>
<td>.01</td>
<td>.25</td>
<td>-.04</td>
<td>1.00</td>
<td>.46**</td>
</tr>
<tr>
<td>9. Emotional self-disclosure</td>
<td>.27</td>
<td>.12</td>
<td>.05</td>
<td>.06</td>
<td>.09</td>
<td>.33*</td>
<td>.10</td>
<td>.55**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* Correlation is significant at $p < .01$

** Correlation is significant at $p < .05$

Note: Male (n = 46) in White; Female (n = 171) in Gray
Table 9

Key Study Variable Means and Standard Deviations by Age

<table>
<thead>
<tr>
<th>Study Variables</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age 13 (n = 16)</td>
</tr>
<tr>
<td>Relationship quality</td>
<td>3.96 (1.00)</td>
</tr>
<tr>
<td>Externalizing problems</td>
<td>1.70 (.70)</td>
</tr>
<tr>
<td>Internalizing problems</td>
<td>1.50 (.51)</td>
</tr>
<tr>
<td>Behavioral self-disclosure (SD)</td>
<td>3.24 (.99)</td>
</tr>
<tr>
<td>Emotional self-disclosure (SD)</td>
<td>3.20 (1.02)</td>
</tr>
<tr>
<td>Sup. Rx. to behavioral SD</td>
<td>3.69 (.74)</td>
</tr>
<tr>
<td>Unsup. Rx. to behavioral SD</td>
<td>2.13 (.61)</td>
</tr>
<tr>
<td>Sup. Rx to emotional SD</td>
<td>3.87 (.71)</td>
</tr>
<tr>
<td>Unsup. Rx to emotional SD</td>
<td>2.20 (1.15)</td>
</tr>
<tr>
<td>Cultural values</td>
<td>4.40 (.65)</td>
</tr>
<tr>
<td>Language gap</td>
<td>2.33 (1.27)</td>
</tr>
</tbody>
</table>
Table 10

Key Study Variable Means and Standard Deviations by Income

<table>
<thead>
<tr>
<th>Study Variables</th>
<th>Poor (n = 44)</th>
<th>Working Class (n = 88)</th>
<th>Middle Class (n = 75)</th>
<th>Affluent (n = 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship quality</td>
<td>3.20 (.58)</td>
<td>3.36 (.77)</td>
<td>3.48 (.84)</td>
<td>2.97 (.48)</td>
</tr>
<tr>
<td>Externalizing problems</td>
<td>2.51 (.61)</td>
<td>2.31 (.91)</td>
<td>2.22 (.77)</td>
<td>2.84 (.53)</td>
</tr>
<tr>
<td>Internalizing problems</td>
<td>1.93 (.30)</td>
<td>1.78 (.46)</td>
<td>1.87 (.50)</td>
<td>2.17 (.39)</td>
</tr>
<tr>
<td>Behavioral self-disclosure (SD)</td>
<td>3.04 (.67)</td>
<td>3.37 (.91)</td>
<td>3.21 (.81)</td>
<td>3.05 (.47)</td>
</tr>
<tr>
<td>Emotional self-disclosure (SD)</td>
<td>3.03 (.47)</td>
<td>3.17 (.78)</td>
<td>3.04 (.78)</td>
<td>2.68 (.46)</td>
</tr>
<tr>
<td>Sup. Rx. to behavioral SD</td>
<td>3.03 (.56)</td>
<td>3.40 (.69)</td>
<td>3.34 (.68)</td>
<td>2.85 (.52)</td>
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<tr>
<td>Unsup. Rx. to behavioral SD</td>
<td>2.91 (.52)</td>
<td>2.77 (.71)</td>
<td>2.77 (.61)</td>
<td>2.88 (.46)</td>
</tr>
<tr>
<td>Sup. Rx to emotional SD</td>
<td>3.32 (.33)</td>
<td>3.53 (.65)</td>
<td>3.40 (.70)</td>
<td>3.00 (.54)</td>
</tr>
<tr>
<td>Unsup. Rx. to emotional SD</td>
<td>3.10 (.46)</td>
<td>2.92 (.82)</td>
<td>2.76 (.83)</td>
<td>2.70 (.45)</td>
</tr>
<tr>
<td>Cultural values</td>
<td>3.41 (.40)</td>
<td>3.75 (.59)</td>
<td>3.72 (.68)</td>
<td>3.01 (.47)</td>
</tr>
<tr>
<td>Language gap</td>
<td>3.60 (.68)</td>
<td>3.15 (1.05)</td>
<td>2.91 (.96)</td>
<td>2.73 (.48)</td>
</tr>
</tbody>
</table>
Figure 1. Hypothesized Path Model for Aim 1.
Figure 2. Hypothesized Path Model for Aim 2.
Figure 3. Model of Aim 1 Results. Displays unstandardized/standardized betas, with significant results at $p < .05$ in boldface.
Figure 4. Model of Aim 2 Results. Displays unstandardized/standardized betas, with significant results at $p < .05$ in boldface.
Figure 5. Indirect and Direct Effects Model of Post Hoc Test including all Study Variables. Displays unstandardized/standardized betas, with only significant results displayed to simplify the model ($p < .05$). Significant indirect effects displayed in boldface dash lines. Significant direct effects displayed in boldface. Nonsignificant pathways not displayed.
Figure 6. Model of Aim 2 Post Hoc Results not including the Relationship Quality Variable. Displays unstandardized/standardized betas, with significant results at $p < .05$ in boldface.
Eligibility Questions for Adolescent’s Mother

What is your preferred language?
❑ Spanish
❑ English

What is your sex?
❑ Male
❑ Female

If ‘Female’: What country were you born in?
❑ Argentina
❑ Bolivia
❑ Chile
❑ Colombia
❑ Costa Rica
❑ Cuba
❑ Dominican Republic/Republica Dominicana
❑ Ecuador
❑ El Salvador
❑ Guatemala
❑ Honduras
❑ México
❑ Nicaragua
❑ Panamá
❑ Paraguay
❑ Perú
❑ Uruguay
❑ Venezuela
❑ Other ____________________________

If any except ‘Other’: At what age did you immigrate to the United States?
☐ Before age 18
☐ At age 18 or later

If age 18 or older: Do you children?
☐ Yes
☐ No

If ‘Yes’: With what frequency do you speak to your child(ren) in Spanish?
☐ Never
☐ A few times
☐ Some times
☐ Often

If any other than ‘Never’: Indicate if you have children in the following age ranges (check all that apply):
☐ Age 12 or younger
☐ Ages 13-17
☐ Age 18 or older

If ‘Ages 13-17’, mothers are instructed to choose one child they have between ages 13 and 17 and keep that child in mind for the following questions:

Where was this child born?

☐ The United States
☐ Other

If ‘The United States’: How old is this child?
☐ 13
☐ 14
☐ 15
☐ 16
☐ 17
☐ Other age

If any except ‘Other age’: What country was their biological father born in?
Argentina
Bolivia
Chile
Colombia
Costa Rica
Cuba
Dominican Republic/Republica Dominicana
Ecuador
El Salvador
Guatemala
Honduras
México
Nicaragua
Panamá
Paraguay
Perú
Uruguay
Venezuela
Other ____________________________

If any except ‘Other’: What language does this child prefer to read in?

❑ English
❑ Spanish

If ‘English’: MEETS ELIGIBILITY CRITERIA- PROVIDE INSTRUCTIONS AND CONSENT STATEMENT.

Provides instructions to pass the electronic device to the adolescent. Provides information about the study and an assent statement for the adolescent.

Adolescent Demographic Questions
How do you currently describe your gender identity?
☑ Male
☑ Female
☑ Other

Where do you live in the United States?
☑ Midwest—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, North Dakota, South Dakota, Wisconsin
☑ South—Arkansas, Alabama, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
☑ West—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming
☑ Other, please specify: ___________________

Which social class group do you and your family identify with?
☑ Poor
☑ Working class
☑ Middle class
☑ Affluent, Wealthy, or Rich

What language do you usually use when you talk to your mother?
*Provides a slider to indicate percentage of Spanish-English

EXPLANATION ABOUT LIKERT SCALES AND HOW TO COMPLETE THE FOLLOWING PROVIDED QUESTIONS. SETS OF QUESTIONS WILL BE RANDOMIZED FROM THIS POINT FORWARD.
Behavioral Self-disclosure

Adolescent Self-Disclosure; Yau et al., 2009

Instructions: The next questions are about things that kids do.

Sometimes when kids do things, they tell their mother about it. Other times, their mother asks them if they have ever done any of the things listed in the following questions.

These next questions want to know about how often you tell your mother you have done any of the things listed in the following questions without her asking you first (i.e. you decided to tell her about it on your own).

1 = Never tell
2 = Rarely tell
3 = Sometimes tell
4 = Often tell
5 = Always tell
6 = I never do this

How often do you tell your mother, without her asking you first, about:

Prudential
1. Whether I smoke cigarettes or vape e-cigarettes
2. Whether I use marijuana or other illegal drugs
3. Whether I go to parties where alcohol is served
4. Whether I cut class or school
5. Whether I have unprotected sex
6. Whether I drink beer or wine

Multifaceted
7. What I write in social media
8. Whether I watched a movie with explicit sex or violence
9. Whether I stay out late
10. Whether I go out with friends my mom does not approve of
11. Whether I am going to get a tattoo
12. Whether I am dating or have a girl- or boyfriend
13. Whether I finish or turn in my homework
Emotional Self-Disclosure

_**Adolescent Emotional Self-Disclosure:**_ modified from Smetana et al., 2006 and Yau et al., 2009

**Instructions:** The next questions are about different feelings and emotions that kids have at one time or another.

Sometimes when kids feel a certain way, they talk to their mother about it. Other times, their mother asks them to talk about when they feel certain ways.

These next questions want to know about how often you tell your mother about times when you have felt any of the ways listed in the following questions without her asking you first (i.e. you decided to tell her about times when you felt a certain way on your own).

1 = Never tell  
2 = Rarely tell  
3 = Sometimes tell  
4 = Often tell  
5 = Always tell

How often do you tell your mother, without her asking you first, about:

1.____ Times when you felt sad.  
2.____ Times when you felt worried.  
3.____ Times when you felt down.  
4.____ Times when you felt nervous.  
5.____ Times when you felt upset.
Externalizing Problems

**Misconduct Scale** Feldman, et al. (1991)

**Instructions:** The next questions are about things that kids do and how often they do them.

1 = Never 
2 = Once 
3 = Twice 
4 = Several times 
5 = Often 

During the last 6 months, how often have you:

1. Come to school late in the morning 
2. Come to class late 
3. Cheated on a test 
4. Purposely damaged school property 
5. Taken something from school or another student 
6. Threatened a teacher 
7. Hurt a student on purpose 
8. Copied homework or a class assignment from somebody else 
9. Caused trouble by acting up in class 
10. Smoked cigarettes or vaped e-cigarettes 
11. Gambled with money 
12. Drank alcoholic drinks 
13. Stolen things from a store 
14. Read comics or magazines in class 
15. Cut (skipped) classes and school 
16. Used swear words or foul language 
17. Used illegal drugs
Internalizing Problems


Instructions: The next questions list statements that describe kids. Choose how true each statement is for you now or in the past 6 months.

1 Not True
2 Somewhat or Sometimes True
3 Very True or Often True

Now or in the past 6 months:

1. I cry a lot
2. I am afraid of certain animals, situations, or places, other than school
3. I am afraid of going to school
4. I am afraid I might think or do something bad
5. I feel that I have to be perfect
6. I feel that no one loves me
7. I feel worthless or inferior
8. I am nervous or tense
9. I am too fearful or anxious
10. I feel too guilty
11. I am self-conscious or easily embarrassed
12. I worry a lot
Relationship Quality


Instructions: These following questions ask you to think about your relationship with your mother.

1 = Little or none
2 = Somewhat
3 = Very Much
4 = Extremely much
5 = The Most

1. How happy are you with your relationship with your mother?
2. How much do you like the way things are between you and your mother?
3. How satisfied are you with your relationship with your mother?
Maternal Reaction to Wrongdoings

Parental behavior in the Context of Adolescent Disclosure- Reactions (PBAD-R)
(Milaković et al., 2014)

Instructions: Try to recall how your mother usually reacts when you tell her you have done something she would not approve (exp. bad grade, misbehavior, unfulfilled obligations etc.). How often does your mother react in the following ways:

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

When I confess that I did something she disapproved of, my mother...

1. calls me names.
2. calmly expresses her disapproval.
3. gives me an opportunity to explain the reasons for my behavior.
4. hits me.
5. yells at me.
6. respects my opinion even if she disagrees.
7. makes me feel guilty.
8. encourages me to make things right somehow.
9. keeps reminding me of my mistake.
10. tries to understand what I was thinking and how I felt when I did this.
11. clearly explains the possible consequences of my behavior.
12. grounds me.
13. ignores me when I try to explain.
Maternal Reaction to Negative Emotions

**Emotions as a Child Scale, 12 item shortened scale:** modified prompt to “when I was upset” (Guo et al., 2017)

Instructions: Mothers can respond to a child’s emotions in many different ways. The next questions ask how your mother responded to your emotions when you were growing up.

Think of a few times when you felt **UPSET (sad or worried)** growing up.

1. Never
2. Not very often
3. Sometimes
4. Often
5. Very often

1. When I was upset, my mother responded to my being upset.
2. When I was upset, my mother helped me deal with the issue that made me upset.
3. When I was upset, my mother got very upset.
4. When I was upset, my mother told me that I was acting younger than my age.
5. When I was upset, my mother asked me what made me upset.
6. When I was upset, my mother told me not to worry.
7. When I was upset, my mother expressed that s/he was very upset.
8. When I was upset, my mother let me know s/he did not approve of my being upset.
9. When I was upset, my mother told me to cheer up.
10. When I was upset, my mother took time to focus on me.
11. When I was upset, my mother got very upset.
12. When I was upset, my mother comforted me.
Latina/o Cultural Values

MACVS (Familism- support and Respect subscales) Knight et al. (2011)

Instructions: These statements are about what people may think or believe. Remember there are no correct or incorrect responses.

1 = Not at all
2 = A little
3 = Somewhat
4 = Very much
5 = Completely

Choose how much you believe each of the following:

1. Parents should teach their children that the family always comes first.
2. No matter what, children should always treat their parents with respect.
3. Family provides a sense of security because they will always be there for you.
4. Children should respect adult relatives as if they were parents.
5. Children should never question their parents’ decisions.
6. It is always important to be united as a family.
7. Children should be on their best behavior when visiting the homes of friends or relatives.
8. Children should always honor their parents and never say bad things about them.
9. It is important to have close relationships with aunts/uncles, grandparents and cousins.
10. Children should follow their parents’ rules, even if they think the rules are unfair.
11. Holidays and celebrations are important because the whole family comes together.
12. It is important for children to understand that their parents should have the final say when decisions are made in the family.
13. It is important for family members to show their love and affection to one another.
14. Children should always be polite when speaking to any adult.
Perceived Language Gap

Questions modified questions from Basáñez et al. (2014) (Items 5-8).

Instructions: The following questions ask about communication between you and your mother.

Choose how much you agree with each of the following statements

1 = Strongly disagree
2 = Somewhat disagree
3 = Neither agree nor disagree
4 = Somewhat agree
5 = Strongly agree

1. Sometimes it is hard to talk to my mom because I don’t know all the right words in Spanish.
2. Sometimes it is hard to talk to my mom because if I say something in English, she doesn't always understand, and I don't always know the word in Spanish.
3. Sometimes it is hard to talk to my mom because I prefer to speak English and she prefers to speak Spanish.
4. Sometimes it is hard to talk to my mom because I can't always pronounce all of the words correctly in Spanish.