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**THE DEVELOPMENT AND CORRELATES OF MEXICAN-ORIGIN YOUTH'S TIME  
WITH PARENTS FROM ADOLESCENCE INTO YOUNG ADULTHOOD**

A Dissertation in  
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by

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## ABSTRACT

Guided by three interrelated perspectives (family systems, developmental, and cultural ecological), my dissertation examines the development and correlates of Mexican-origin youth's time spent with parents from adolescence to young adulthood, advancing the literature on family dynamics in several key ways. First, I direct attention to the complexity of families by examining dyadic parent-youth and triadic parent-youth-sibling relationship experiences as well as characteristics of the larger family such as gender that may influence family dynamics. Second, because families are dynamic – changing over time as a result of changing circumstances and changes in families, I utilize 8-year longitudinal data to examine the development and potentially bidirectional correlates of Mexican-origin youth's time spent with mothers and fathers from adolescence into young adulthood, a largely uncharted area of study. And finally, answering the call of cultural ecological theorists to investigate the substantial variation that exists within ethnic groups, I use an ethnic homogenous design to study the correlates of parent-youth shared time within Mexican-origin families.

Study 1 charts the longitudinal trajectories of Mexican-origin youth's time with mothers and fathers from early adolescence to young adulthood and tests two models regarding the associations between parent-youth shared time and youth adjustment: (a) mother's and fathers' time predicts youth adjustment; and (b) youth adjustment problems predict mother-youth and father-youth shared time. Study 2 examines whether siblings' differential time with parents positively predicted relatively more parent-youth similarity relative to a sibling, and/or whether youth's relative similarity to parents predicted their spending more time with parents as compared to their sibling. This dissertation further explored whether mother-youth and father-youth associations differed as a function of youth's and siblings' gender.

Study 1 results demonstrated that youth's time with mothers and with fathers declined from early adolescence to young adulthood, and further, that the developmental course of parent-youth shared time varied by youth gender and gender constellation of the sibling dyad, such that fathers spent more time with sons as compared to daughters and both parents spent more time with youth in mixed-gender than those in same-gender dyads. Results also indicated that mother-youth shared time neither predicted nor was predicted by youth adjustment. Father-youth shared time did not predict later adjustment, however, youth from mixed gender sibling dyads who reported more risky behaviors spent more time with fathers at the next occasion of measurement. Study 2 results revealed that mothers' differential time with siblings was not associated with siblings' relative cultural similarity with mothers in either direction. For fathers, siblings' relative cultural similarity did not predict differential time with siblings, however, youth who spent more time with fathers compared to a sibling were more culturally similar to fathers than was their sibling at the next occasion of measurement.

Findings highlight the need to incorporate both mothers and fathers as well as youth and sibling gender in studies of family processes. Such structure characteristics proved important, both in understanding patterns of change over time in parental involvement as well as the links between involvement and both youth adjustment and cultural similarity to parents. For instance, differences in time spent with parents as a function of gender constellation of the sibling dyad suggest that the presence of same-gender offspring may pull in both mothers and fathers to engage more with their opposite-gender offspring. Further, highlighting the dynamic nature of family systems, such findings demonstrate the importance of utilizing longitudinal data to illuminate patterns of change and directions of effect linking family processes and youth adjustment and development.

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## **CHAPTER 1**

### **INTRODUCTION**

This dissertation is grounded in research and theory on the family as a context of youth development, with a focus on adolescence and young adulthood. It builds on work that has examined the role of the larger sociocultural ecology on youth development, particularly in Mexican-origin families. Guided by three interrelated perspectives (family systems, developmental, and cultural ecological), my dissertation examined the development and correlates of Mexican-origin youth's time spent with parents from adolescence to young adulthood, a largely uncharted area of study.

First, a family systems perspective directs attention to the complexities of family dynamics, and highlights that families are best understood by capturing their multiple components. Families are comprised of different subsystems, such as individual family members, dyads, triads and beyond, which together form the family system. In Study 1 I examined mother-youth and father-youth dyads with a focus on the links between parent-youth shared time and youth adjustment in adolescence and young adulthood. This longitudinal study moved beyond the field's more typical focus on European American mothers' time with younger children as an index of parental investment, to examine this family process in an understudied group and to focus on an understudied developmental period. In Study 2, I examined triadic parent-youth-sibling relationships, in an effort to understand sibling differences in their acculturation gaps with parents (i.e., how different youth are from their parents in their cultural practices--relative to their sibling's difference from parents). The inclusion of siblings may further understanding of how acculturation gaps are formed within family systems and builds on the acculturation literature which tends to focus on individual youth and their mothers. This dissertation was also

directed at testing potential bidirectional influences involving parental involvement, indexed by parent-youth shared time. In Study 1 I tested two models regarding the associations between parent-youth shared time and youth adjustment: (a) mother's and fathers' time predicts youth adjustment; and (b) youth adjustment problems predict mother and father shared time, such that parental involvement may both predict and be predicted by youth adjustment. Similarly, in Study 2 I tested whether differential time with parents positively predicted more cultural similarity to parents relative to a sibling, and/or whether youth's cultural similarity to parents predicted their spending more time with parents as compared to their sibling's time with parents. This dissertation also explored how gender played a role in Mexican-origin family relationships by testing mother-youth and father-youth patterns and whether these differed based on youth's and siblings' gender. A focus on the role of gender may illuminate how family dynamics may vary as a function of the characteristics of the family system.

Families are also open systems--embedded within larger contexts that both influence them and are influenced by them. Grounded in a cultural ecological framework, this dissertation relied on an ethnic homogeneous design to study the sociocultural contexts of family dynamics. In contrast to most prior research on minority families, which tends to use ethnic-comparative designs to establish differences between majority and minority groups, this research was aimed at illuminating processes that explain the variability that exists within an ethnic group, specifically, among Mexican-origin families. Whereas ethnic comparative designs run the risk of pathologizing minority families, such as when they differ from the mainstream, referent sociocultural group, using an ethnic homogeneous design, my goals were to identify a protective factor—namely, parent-youth shared time--that may contribute to differences in the well-being

and development of Mexican-origin youth. Such knowledge can pave the way for culturally relevant prevention and intervention programs.

This research was also grounded in the family systems principle that families are dynamic—changing over time as a result of changing circumstances and changes in family members. Thus, these dissertation studies apply a developmental perspective, using longitudinal data to illuminate changes in family processes and youth adjustment in Mexican-origin families over time during a period of dramatic developmental change—adolescence and early adulthood. Indeed, examining periods beyond childhood and adolescence is critical for understanding family socialization—which in theory, extends across the lifespan. To disentangle directions of effect in the processes of interest, I also capitalized on longitudinal data collected an 8-year period and in the context of lagged models, tested bidirectional effects linking parent time to youth characteristics.

In sum, at the most general level, this research was aimed at advancing understanding of the diversity youth and family experiences *within* a particular ethnic group by highlighting the role of siblings, gender, and the cultural practices that impact family dynamics and youth well-being. Toward this end I completed two studies, outlined below.

### **Study 1. Mexican-Origin Sons' and Daughters' Time with Mothers and Fathers from Early Adolescence to Young Adulthood: Developmental Course and Bidirectional Links with Youth Adjustment**

Parent-youth shared time plays a critical role in youth development (Bronfenbrenner, 1979; Larson & Richards, 1994). Most research on parent-youth time and youth outcomes has focused on European American families (Larson, Richards, Moneta, Holmbeck & Duckett, 1996), however, and we know little about the nature and implications of parent-youth time in

other ethnic groups. Latinos are the largest immigrant group in the US (US Census Bureau, 2014), and a growing literature highlights the cultural emphasis of family in Mexican-origin youth's everyday lives (Marin & Marin, 1991); thus, parent-youth time may be an especially salient and influential part of youth's lives in this cultural group. Study 1 utilized phone and home interviews to build on this literature by examining the development of time with parents and links between time with parents and adjustment in Mexican-origin families, an understudied ethnic group with a cultural orientation to close family ties. The goals of Study 1 were to:

1. Chart the longitudinal trajectories of Mexican-origin sons' and daughters' time with mothers and fathers from early adolescence into young adulthood;
2. Examine the bidirectional linkages between time with parents and youth adjustment, specifically, depressive symptoms and risky behavior.
3. Test family structure characteristics, specifically youth gender and the gender constellation of the sibling dyad as potential moderators of these bidirectional linkages.

## **Study 2. Siblings' Differences in Acculturation Gaps with Parents in Mexican-Origin Families: Bidirectional Links with Differences in Time with Parents**

Larger parent-youth differences in acculturation have been linked to Mexican-origin youth's adjustment and poorer parent-youth relationships in childhood and adolescence (Elder, Broyles, Brennan, Zuniga de Nuncio, & Nader, 2005; Schofield, Parke, Kim, & Coltrane, 2008; Smowski, Rose, Bacallao, 2008). Although most Mexican-origin youth in the US grow up with at least one sibling (King et al., 2010), we know little about siblings' role in such family acculturation processes. Grounded in a family systems perspective, Study 2 was designed to

illuminate the role of sibling-related dynamics in family acculturation processes from adolescence into young adulthood. Using a longitudinal design, I aimed to further understanding of the process through which siblings develop differences in the match between their own and their parents' acculturation (i.e., how different youth are from their parents relative to their sibling's difference from parents), and its bidirectional links with sibling differences in their shared time with parents. Thus, Study 2 goals were to:

1. Examine the bidirectional links between sibling differences in time with parents and siblings' *relative* acculturation gaps with parents.
2. Test sibling structural characteristics (e.g., gender, gender constellation of the dyad) as potential moderators of these bidirectional linkages.

## CHAPTER 2

### STUDY 1

#### **Mexican-Origin Sons' and Daughters' Time with Mothers and Fathers from Early Adolescence to Young Adulthood: Developmental Course and Links to Youth Adjustment**

##### **2.1 Introduction**

Parental involvement plays a critical role in youth development (Bronfenbrenner, 1979; Larson & Richards, 1994). In this study I focus on one dimension of involvement, the amount of time parents spend with their offspring, which has been conceptualized as a form of social capital through which parents support and promote their children's development and well-being (Bianchi, 2000; Coleman, 1988; Hofferth & Sandberg, 2001; McNeal 1999; Portes, 1998; Wright, Cullen, & Miller, 2001). In the face of its theoretical significance, the empirical literature on parent-youth shared time has focused almost exclusively on European American mothers' involvement with young children. We know much less about parents' temporal involvement in other racial/ethnic groups (Larson & Verna, 1999), about fathers' involvement with their sons and daughters (Cabrera & Tamis-LeMonda, 2013), or about parent-child shared time in adolescence and beyond—including how parents' temporal involvement may change over time and whether and how it is linked to adjustment in adolescence or young adulthood.

Latinos are the largest and fastest growing ethnic minority group in the US and those of Mexican origin comprise two-thirds of the US Latino population (US Census Bureau, 2016). Because Mexican cultural values emphasize close relationships with family members (Cauce & Domenech-Rodriquez, 2002; Tsai, Telzer, Gonzales, & Fuligni, 2015), mothers' and fathers' involvement, or time spent in shared activities, may be an especially salient and influential for youth in this cultural group. To advance understanding of parental involvement and its

adjustment implications in an understudied ethnic group, I used an ethnic homogenous design to assess changes from adolescence into young adulthood in Mexican-origin sons' and daughters' time with their mothers and fathers and the longitudinal links between shared time with parents and youth adjustment. Previous research has focused on whether and how parental involvement may give rise to positive youth adjustment (Crouter, Head, McHale & Jenkins, 2004; Hofferth & Sandberg, 2001; Furstenberg & Kaplan, 2004; Lam, McHale, & Crouter, 2013; Milkie, Nomaguchi, & Denny, 2015), but an alternative perspective is that youth adjustment may serve as a cause, not just a consequence, of parents' involvement (Bronfenbrenner, 1979; Hawkins et al., 2007; Minuchin, 1974). Thus, this study was also designed to contribute to the literature on parental involvement by testing two models regarding the associations between parent-youth shared time and youth adjustment: (a) mothers' and fathers' time predicts youth adjustment; and (b) youth adjustment problems predict mother and father shared time. To illuminate family gender dynamics in parental involvement, in addition to examining time with both mother and father, I tested youth's and their siblings' gender as potential moderators of these linkages.

### **Developmental Course of Parent-Youth Shared Time**

A growing body of work documents that with whom children and adolescents spend their time has implications for their psychosocial functioning (Crouter, Head, McHale & Jenkins, 2004; Larson & Verma, 1999; Hofferth & Sandberg, 2001; Osgood, Wilson, O'Malley, Bachman, & Johnston, 1996). Indeed, the time parents spend with their children is considered to be an index of positive and supportive parenting (Hays, 1996; Townsend, 2002). Despite the importance of parent-youth shared time in youth development and the continuing significance of parent-youth relationships across the life course, my literature search failed to identify any

longitudinal studies of parental involvement that charted its trajectory beyond adolescence into young adulthood.

An individuation hypothesis posits that adolescents are motivated to gain independence from their parents as they become more involved in peer and romantic relationships (Grotevant & Cooper, 1986; Jager et al., 2015). In addition, young adulthood has been described as a unique life stage when family ties increasingly become a matter of choice and individuals focus on their education and new work roles (Arnett, 2000; Conger & Little, 2010). Prior work further suggests that individuation starts in early adolescence but gains momentum into the 20s (Grotevant & Cooper, 1986). Consistent with this hypothesis, one longitudinal study of European American families found that “social time” with parents, that is, shared time that included others in addition to a parent, declined from middle childhood through adolescence. In contrast, dyadic time, that is time that youth spent with only the parent present, changed in a curvilinear way, rising from early to middle adolescence and then declining. Further, youth spent more time with the parent of their own gender, particularly when they had a sibling of the other gender (Lam, McHale, & Crouter, 2013). These findings suggest that although adolescents may be in a process of individuation from their parents, they continue to have one-on-one opportunities to maintain close relationships with mothers and fathers (Larson & Richards, 1991; Larson et al., 1996). This study also contributed to the literature in showing that family structure, specifically, the gender constellation of the sibling dyad, may have implications for opportunities and choices about shared time. These findings were consistent with prior cross-sectional research that demonstrated that fathers were more involved with sons than with daughters, but further that fathers were more involved with daughters when they also had a son, demonstrating that daughters benefit from being in a mixed-gender sibling dyad (Harris, Furstenberg, & Marmer, 1998; Harris & Morgan,



1991). In another, cross-sectional, study, European American children and young adolescents reported on their time with different social partners. Findings showed that young adolescents spent less time with parents, but more time with peers compared to children (Buhrmester & Furman, 1987). Because time is finite, increasing involvement with social companions outside the home may limit youth's time with parents. By focusing on the period from adolescence into young adulthood, my study advances understanding of changes in parent-child shared time across a developmental period characterized by increased focus on the world beyond the family (Arnett, 2000; Conger & Little, 2010). Together theory and the limited research on parental involvement in adolescence suggest declines in parent-youth shared time across adolescence into young adulthood.

As noted, this study also was designed to extend our knowledge of parental involvement to an understudied ethnic group, Mexican-origin families. A growing literature has directed attention to the role of gender in parent-child relationships in Mexican-origin families (Umaña-Taylor & Updegraff, 2012). Possibly because traditional gender role orientations characterize the father's role as breadwinner and the mother's as homemaker and family caregiver (Azmitia & Brown, 2002; Cauce & Domenech-Rodriguez, 2000), adolescent boys and girls describe relationships with mothers as closer and more open than relationships with fathers (Crockett, Brown, Russell, & Shen, 2007), but we know less about adolescents' time spent with parents. One study found that mothers, but not fathers, spent more time with their same-gender young adolescents in Mexican-origin families (Updegraff, Delgado, & Wheeler, 2009), but these results were specific to one developmental period. Answering the call of cultural ecological theorists to investigate the substantial variation that exists within ethnic groups, I used an ethnic homogeneous design to study the links between mother-youth and father-youth shared time and

gender, an organizing feature of Mexican family life. In sum, to shed new light on parental involvement in Mexican-origin families, the first goal of this study was to chart changes from early adolescence (about age 12) through early adulthood (about age 22) in mother-youth and father-youth dyadic shared time.

### **Parent-Youth Shared Time and Youth Adjustment**

From an ecological perspective, parental involvement in youth's daily activities provides opportunities for building and strengthening interpersonal bonds, learning skills, and forming a self-identity (Bronfenbrenner, 1979; Larson & Verma, 1999). In line with this perspective, Coleman's (1988) conceptualization of social capital theory highlights that parents' investment of time in shared activities with children is a key resource for fostering positive youth development (Flouri & Buchanan, 2003; 2004; Harris & Manner, 1996; Yeung, Hill, & Duncan, 2000). The current study was grounded in the idea that parent-youth shared time may afford parents with opportunities to cultivate competencies in their children, as well as promote close, nurturing relationships that are critical for protecting youth from a variety of stressors that put youth at risk for depression (Crouter, Head, McHale, & Tucker, 2004; Johnson & Galambos, 2014; Larson & Richards, 1994; Larson & Collins, 2004; Meadow et al., 2006; Steinberg, 2001). Youth time with parents may further be important to protect youth from involvement in risky activities through blocking opportunities, but also encouraging more prosocial thinking (Milkie, Nomaguchi, & Denny, 2015; Pleck, 2010). Indeed, qualitative work indicates that mothers with teenagers believe that spending time with their children after school reduces youth's time spent in unsupervised settings with peers (Kurz, 2000) an important predictor of problem behavior (Osgood et al., 1996). Thus, parent-youth shared time may be particularly protective in the case of depressive symptoms, and risky and delinquent behaviors during adolescence, given their

increases across this developmental period (Substance Abuse and Mental Health Services Administration, 2014).

Prior work has documented the links between European American mothers' involvement with their children and youth well-being, including fewer internalizing and externalizing behaviors, promoting academic achievement, improving general self-worth and social competence (Bulanda & Majumdar, 2009; Crouter, Tucker, Head, & McHale, 2004; Demo, Small, & Scavin-Williams, 1987; Kerns, Klepac, & Cole, 1996; Milkie, Nomaguchi, & Denny, 2015). Fathers' involvement with their children also may have important implications for youth adjustment, especially because such paternal involvement may be highly salient to youth and perceived as special (Maccoby, 1990; 1998; Milkie, Simon, & Powell, 1997). Indeed, comparisons of mothers' and fathers' involvement in European American families reveals that fathers are less involved with adolescents compared to mothers (Parke & Buriel, 1998; Lam, McHale, & Crouter, 2013). Consistent with the idea that parental involvement has unique implications, prior research has demonstrated that fathers' involvement in European as well as in African American families is related to better adolescent adjustment, including fewer internalizing and externalizing behaviors, even after accounting for mothers' involvement (Barnes & Farrell, 1992; Simons, Whitbeck, Beaman, & Conger, 1994; Wenk, Hardesty, Morgan, & Blair, 1994). We know very little about the implications of parents' involvement beyond adolescence, however, one cross-sectional study of European American young adults demonstrated that perceived overinvolved parenting was related to poorer psychological well-being (LeMoyne & Buchanan, 2011), possibly because youth are less well able to establish their independence under such circumstances (Schiffrin et al., 2014). These findings highlight that more parental involvement does not necessarily equate to larger benefits, but rather may be

detrimental to youth development (Bayer et al., 2010; Montgomery, 2010). Conversely, Fingerman and colleagues (2012) found that European and African American women and men in their early twenties reported better sense of their goals and the skills and abilities to achieve such goals as well as life satisfaction when they had more involved parents who provided emotional, practical, and financial support. The current study built on this cross-sectional work to examine the longitudinal links between parent-youth shared time and both risky behavior and depressive symptoms across adolescence and into young adulthood in another ethnic group.

As noted, previous research shows that Mexican culture emphasizes close family relationships and familial interdependence (Sabogal et al., 1987). The cultural value of familism, common to Mexican-origin families, refers to “feelings of loyalty, reciprocity, and solidarity towards members of the family, as well as to the notion of the family as an extension of self,” (Cortez, 1995, pp. 249). Thus time with parents may be especially important in this cultural group. Consistent with these ideas, an ethnic-comparative study showed that Hispanic (but not European or African American) male adolescents’ self-reports of communication and time spent with mothers predicted lower levels of delinquency six months later (Smith & Krohn, 1995). The authors suggested that maternal involvement may be especially important for youth from Hispanic families, possibly due to the importance of solidarity, cohesion, and interdependence compared to more mainstream American pressures for independence and reduced family influence in some instances. Further, this study highlighted the importance of fathers’ presence, in that, coming from a single-parent, mother-headed household was associated with increased delinquency for Hispanic, but not for European or African American adolescents. In other words, Hispanic adolescents appeared to respond more negatively to absence of a father than their European and African American counterparts. Cabrera and

colleagues (2000) highlight the need to examine within-group variation in the implications of father involvement on youth development rather than relying solely on studies that compare adolescents in father-present versus father-absent families. This present study responds to this call by testing the role of father involvement in explaining variations in adjustment among Mexican-origin youth.

Another important step toward understanding the associations between parental involvement and youth adjustment is to explore their potential bidirectional linkages. Most prior research has examined whether and how shared time gives rise to positive youth adjustment (Crouter, Tucker, Head, & McHale, 2004; Milkie, Nomaguchi, & Denny, 2015). From a family systems perspective, however, youth adjustment and parenting are mutually influential (Minuchin, 1974; Bell & Harper, 1977). For instance, Flouri and colleagues (2015) examined the bidirectional relations between paternal involvement and child problem behavior in cross-lagged models. Results showed no evidence that father involvement predicted child problem behavior, but rather, higher levels of hyperactivity and conduct problems at age 3 predicted more father involvement at age 5. Such findings are consistent with work suggesting that fathers are more involved with youth who are facing difficulties compared to those who report more positive adjustment (Brown et al. 2011; Jia et al. 2012; Zhang 2013). Further, research on Mexican-origin families highlights fathers as the authority figure and disciplinarian of the household (Cauce & Domenech-Rodriguez, 2002; Mirande, 1988; 1991), with adolescents describing fathers as the parent to enforce rules, stating that, "...you know that if you do something bad you're going to hear from him," (Crockett & Russell, 2013, p.6). Studying the reverse direction of effect (i.e., children's behavior and adjustment shape parental involvement) is a useful corrective to traditional perspectives that view child socialization as primarily a one-way process (Hawkins et

al., 2007). In effort to identify the conditions under which parent involvement is linked to adjustment in other developmental periods, in this study, I moved beyond the prior focus of bidirectional linkages in families of young children (e.g., Coley and Medeiros, 2007; Hawkins et al., 2007) to study these processes across an 8-year period, as Mexican-origin youth develop from adolescence into young adulthood.

### **The Moderating Role of Youth Gender**

Prior studies have examined youth gender and sibling gender constellation as potential moderators in the connections between parent involvement and youth adjustment, with mixed results. The gender intensification perspective (Hill & Lynch, 1983), highlights that parents play a more central role in the development of offspring of their own gender. From this perspective, mothers may feel more responsible for socializing daughters, and fathers, for socializing sons. Likewise from a social learning perspective, youth tend to seek out and imitate those whom they resemble—such as their same-gender parent (Bandura, 1977). Indeed, prior work with European American families demonstrated that fathers were more involved with sons than with daughters, and mothers were more involved with daughters than sons when adolescents had an opposite-gender sibling (Crouter, Manke, & McHale, 1995; Harris, Furstenberg, & Marmer, 1998; Harris & Morgan, 1991; Lam, McHale, & Crouter, 2013). Importantly, these studies conducted within-family comparisons (i.e., mothers' and fathers' involvement with sons and daughters in the same families), rather than relying on the more typical, between-family comparisons (i.e., comparing fathers' involvement with sons in one group of families and fathers' involvement with daughters in another) to better illuminate gendered patterns of parental involvement.

In line with research on European American families, as noted, there is evidence that gender is an organizing feature of Mexican-origin family roles and relationships (Azmitia &

Brown, 2002). Thus, gender may be a factor in these parents' involvement with sons relative to daughters. Indeed, prior work has demonstrated that gender distinctions were common in socializing children (Cauce & Domenech-Rodriguez, 2002), such that sons were allowed more freedom and autonomy, whereas daughters were monitored more, kept closer to home, and subjected to stricter standards (Domenech Rodriguez, Donovan, & Crowley, 2009; Suarez-Orozco & Qin, 2006; Raffaelli & Ontari, 2004). Such differences in socialization may set the stage for differences in the meaning and implications of sons' and daughters' time with their mothers and fathers. The current study built on this literature to test whether the longitudinal links between mothers' and fathers' shared time with offspring from adolescence into young adulthood were moderated by youth gender and/or the gender constellation of the sibling dyad.

### **The Proposed Study**

In sum, prior theory (Bronfenbrenner, 1979; Coleman, 1988) and empirical research, mostly on European American families, highlights the significance of parent-youth shared time for youth adjustment. This study built on this literature by examining the longitudinal course and correlates of parent-youth shared time in Mexican-origin families, an understudied ethnic group with a cultural orientation to close family ties. Specifically, I addressed three goals.

1. Chart the longitudinal trajectories of Mexican-origin sons' and daughters' time with mothers and fathers from early adolescence to young adulthood;
2. Examine the bidirectional linkages between time with parents and youth adjustment, specifically, depressive symptoms and risky behavior.
3. Test family structure characteristics, specifically youth gender and the gender constellation of the sibling dyad as potential moderators of these bidirectional linkages.

## 2.2 Method<sup>1</sup>

### Participants

The data came from a longitudinal study of 246, two-parent Mexican-origin families (Updegraff, Delgado, & Wheeler, 2009). Participating families were recruited through schools in a southwestern metropolitan area. The criteria for participation at Time 1 were that: (a) family membership included a seventh grader, at least one older adolescent sibling, a biological mother and a biological or adoptive father figure (all non-biological father figures had lived with the target children for at least 10 years) - all of whom had to be living in the home; (b) mothers were of Mexican origin (93% of fathers also were of Mexican origin, although this was not a study criterion); and (c) fathers were employed for pay for at least 20 hours/week at the time of recruitment, but at any given time fathers may not have been employed. Mothers, fathers, and siblings were interviewed in their homes on three occasions over eight years.

To recruit families, letters in English and Spanish were sent to families, and follow-up telephone calls were made by bilingual staff to determine eligibility and interest in participation. Recruitment materials were developed in consultation with the project's Latino advisory board of parents and professionals in the community. Families' names were obtained from five school districts and five parochial schools. Schools represented a socioeconomic range, with the proportion of students receiving free or reduced lunch varying from 8% to 82% across schools.

At Time 1 (T1), families represented a range of education and income levels. The percentage of families that met federal poverty guidelines was 18.3%, a figure similar to the 18.6% of two-parent Mexican-origin families living in poverty in the county from which the

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<sup>1</sup> Participants and Procedures for Study 1 and Study 2 are the same



sample was drawn (US Census Bureau, 2000). The median family income was \$41,000 ( $SD = \$45,381$ ; range = \$3,000 to over \$250,000). Mothers and fathers had completed an average of 10 years of education ( $M = 10.34$ ,  $SD = 3.74$ ;  $M = 9.88$ ,  $SD = 4.37$ , respectively). Most parents had been born outside the United States (70%); this subset had lived in the U.S. an average of 12.4 ( $SD = 8.9$ ) years (mothers) and 15.2 ( $SD = 8.9$ ) years (fathers). About two thirds of the parents were interviewed in Spanish. With respect to siblings, the sample included 68 girl-girl pairs, 55 girl-boy pairs, 57 boy-girl pairs, and 66 boy-boy pairs. Most siblings were full biological pairs ( $n = 234$ ; 95%). Average spacing between siblings was 2.96 years ( $SD = 1.63$ , range = 1–9), and the number of siblings living in the household averaged 3.39 ( $SD = 1.20$ , range = 2–8). Older siblings were 15.48 ( $SD = 1.57$ ) years old, on average, 47% were born in Mexico, and 82% were interviewed in English. Younger siblings were 12.55 ( $SD = .60$ ) years of age, on average, 38% had been born in Mexico, and 83% were interviewed in English.

Time 2 (T2) interviews were completed when older siblings averaged 20.65 ( $SD = 1.56$ ) years of age, and younger siblings averaged 17.72 ( $SD = .57$ ) years. Time 3 (T3) interviews were completed when older siblings averaged 22.57 ( $SD = 1.57$ ) years of age, and younger siblings averaged 19.6 ( $SD = .66$ ) years. Retention rates were 75% and 70% for T2 and T3, respectively. Those who did not participate: could not be located ( $n = 44$  at T2;  $n = 45$  at T3), had moved to Mexico ( $n = 2$  at T2;  $n = 4$  at T3), could not presently participate or were difficult to contact ( $n = 5$  at T2;  $n = 12$  at T3), or refused to participate ( $n = 10$  at T2;  $n = 12$  at T3). At T2, participating families differed from non-participating families on T1 maternal education ( $M = 10.62$ ,  $SD = 3.80$  versus  $M = 9.48$ ,  $SD = 3.45$ ) and T1 family income ( $M = \$59,517$ ,  $SD = \$48,395$  versus  $M = \$37,632$ ,  $SD = \$28,606$ , respectively). At T3, participating families differed from non-participating families on T1 maternal education ( $M = 10.75$ ,  $SD = 3.75$  versus  $M = 9.35$ ,  $SD =$

3.53), T1 paternal education ( $M = 10.46$ ,  $SD = 4.37$  versus  $M = 8.49$ ,  $SD = 4.08$ ), and T1 family income ( $M = \$59,136$ ,  $SD = \$46,674$  versus  $M = \$41,635$ ,  $SD = \$39,095$ ). Thus, income and education (socioeconomic status) were controlled in the analyses.

### **Procedure**

In each year of the study, after obtaining informed consent and assent (for youth under age 18), data were collected in home interviews that lasted an average of 3 hours for parents and 2 hours for youth. Interviews were conducted individually by bilingual interviewers using laptop computers; questions were read to all participants to account for variability in reading levels. During the following 2-3 week period on each occasion of measurement, a series of phone-diary interviews were conducted during the 3-4 weeks following the home interviews. Youth were telephoned on seven occasions (five weekday evenings and two weekend evenings) reported on their activities during the 24-hour period that ended at 5 p.m. on the day of the call; mothers and fathers were interviewed on four of the seven calls (3 weekday evenings, one weekend evening). Families received \$100 for home and phone interviews at T1 and \$125 at T2, and each family member received \$75 at T3. The University's Institutional Review Board approved all procedures.

### **Measures**

**Dyadic time with parents.** Youth's amounts of time with mothers and time with fathers were measured using phone interview data. On each of the seven phone calls (at each time of data collection), youth were guided through a list of activities and probed for both duration (in minutes) and social contexts (i.e., with whom youth engaged in each activity) using a cued-recall procedure (McHale, Crouter, & Bartko, 1992). To calculate each siblings' dyadic time (i.e., no one else present) with mothers and fathers, I summed the amounts of time youth spent alone with

their mothers and alone with their fathers across all activities and all seven phone calls at each wave of data collection. Correlations between siblings' reports of their shared time across all phases ( $r = .71 - .83, p < .001$ ), were calculated to determine inter-reporter reliability of youth's time-use reports, and these suggest substantial agreement across reporters.

**Depressive symptoms.** Youth's depressive symptoms were assessed (at each time of data collection) using the 20-item Center for Epidemiological Studies Depression Scale (Radloff, 1977). Items were rated on a 4-point rating scale (0 = *rarely or none of the time* to 3 = *all of the time*) to describe the frequency of experiences (e.g., "I had crying spells," "I felt sad.") over the past month. Items were summed, with higher scores reflecting more depressive symptoms. Cronbach's alphas ranged from .84 to .90.

**Risky behaviors.** Youth's risky behaviors were assessed (at each time of data collection) using a 23-item measure developed for the Michigan Study of Adolescent Transitions (Eccles & Barber, 1990). Youth used a 4-point rating scale (1 = *never* to 4 = *more than 10 times*) to describe the frequency of their engagement in different activities (e.g., "stole something worth less than \$50."). Items were averaged to create the overall risky behavior score, with higher scores reflecting more risky behavior during the past year. Cronbach's alphas ranged from .89 to .91.

**Family background characteristics.** At T1, mothers and fathers reported on their highest level of education on a scale ranging from less than a high school degree (e.g., 10 for 10<sup>th</sup> grade) to graduate or professional degree (e.g., 21 for PhD, JD, or MD). Parents reported on their annual income at T1, and scores were log-transformed to correct for skewness. Family SES was the standardized average of mothers' and fathers' education and log-transformed family income. In addition, youth-reported *relationship quality* was assessed using the 8-item warmth subscale

from the Child's Report of Parental Behavior Inventory (CRPBI; Schaefer, 1965; Schwarz, Barton-Henry, & Pruzinsky, 1985). Youth used a 5-point scale (1 = *not at all*, 5 = *very much*) to rate their experiences with each of their parents (e.g., "My mom/dad understands my problems and worries") during the past year. Items were averaged, with higher scores reflecting more warmth. Cronbach's alphas ranged from .84 to .94. Information on youth age, birth order (1 = younger sibling), gender (1 = boy), and gender constellation (1 = mixed-gender dyad) were also collected from parents at T1.

### **Analytic Plan**

Given the clustered (time within sibling, siblings within families) and unbalanced design (i.e., siblings assessed at different ages, with different intervals between data collection time points), I used a multilevel modeling (MLM) approach (Aiken & West, 1991; Raudenbush & Bryk, 2002; Singer & Willett, 2003). An advantage of MLM is that it accommodates missing data, and thus effectively reduces biases and standard errors (Schaefer & Graham, 2002).

I began by charting the developmental trajectory of youth's time with their mothers and fathers. To address this first study goal, I used an accelerated longitudinal design in which older and younger siblings were treated as two age cohorts, using younger siblings' age as the metric of time. This approach allowed me to examine different age cohorts over the same data collection period; it is advantageous because short-term longitudinal data points are combined into a single longitudinal growth pattern (Duncan, Duncan, & Hops, 1996). I centered at age 12 (the mean age across all younger siblings at T1) and estimated a saturated means model, in essence using an ANOVA model to estimate the mean pattern with the fewest parameters as possible. Deviance tests comparing the log likelihoods of nested models were used to determine which random variances (i.e., better error structure) to include for each dependent measure. I

focused on time with parents from 12 to 22 years of age because of the low number of data points after age 22. An example of the three-level growth curve equations for time with parent is as follows.

Level 1:

$$\text{Time with parents}_{t_{si}} = \beta_{0si} + \beta_{1si}\text{Age}_{t_{si}} + e_{t_{si}}$$

Level 2:

$$\beta_{0si} = \gamma_{00i} + \gamma_{01i}\text{Gender}_{si} + \mu_{0si}$$

$$\beta_{1si} = \gamma_{10i} + \gamma_{20i}\text{Gender}_{si} + \mu_{1si}$$

Level 3:

$$\gamma_{00i} = \pi_{000} + \delta_{00i}$$

$$\gamma_{01i} = \pi_{010}$$

$$\gamma_{10i} = \pi_{100}$$

$$\gamma_{20i} = \pi_{200}$$

where  $t$  indicates time,  $s$  indicates sibling, and  $i$  indicates family.

To address my second goal, I tested two competing hypotheses, separately for mothers and fathers and for depressive symptoms and risky behaviors: (a) youth's time with parents predicts youth adjustment; and (b) youth adjustment predicts youth's time with parents. Specifically, I tested time with parents as lagged (i.e. Time  $N-1$  predicts Time  $N$ ) predictors of youth adjustment, controlling for prior adjustment, as well as whether youth adjustment as lagged predictors, explained youth's time with parents on the following occasion, controlling for prior time with parents. In these lagged models, the coefficients predict residualized change in each of the dependent variables. For all models, I will use the PROC MIXED procedure in SAS 9.3.

Eight, three-level models were estimated (i.e., four for mother-youth and four for father-youth relationships). In the first set, *shared time predictor models*: At Level 1 (individuals over time) I included time with parents as a lagged, grand-mean centered (i.e., centered at the sample mean) predictor of youth's adjustment. In these models, indices of youth's prior adjustment were

included as lagged, grand-mean centered covariates. By including youth's prior adjustment, I was able to test whether time with parents was a significant predictor of later adjustment, after accounting for prior adjustment. I also included parent-youth relationship quality as a lagged, grand-mean centered covariate. At Level 2 (within-family) birth order (0 = older siblings; 1 = younger siblings) and gender (0 = female; 1 = male) were included. At Level 3 (between-family) family gender constellation of the dyad (0 = same-gender; 1 = mixed-gender) and family SES were added. I also tested these family structural characteristics as potential moderators of the time-adjustment linkages. As noted, these analyses were conducted separately for mothers and fathers and by index of adjustment (i.e., depressive symptoms and risk behaviors). An example of the three-level equations for time with parent predicting depressive symptoms is as follows.

Level 1:

$$\begin{aligned} \text{Depressive Symptoms}_{t_{si}} &= \beta_{0si} + \\ &\beta_{1si} \text{Time with parents}_{(t-1)si} + \beta_{2si} \text{Relationship quality}_{(t-1)si} + \\ &\beta_{3si} \text{Depressive symptoms}_{(t-1)si} + \beta_{4si} \text{Age}_{t_{si}} + e_{t_{si}} \end{aligned}$$

Level 2:

$$\begin{aligned} \beta_{0si} &= \gamma_{00i} + \gamma_{01i} \text{Birth order}_{si} + \gamma_{02i} \text{Gender}_{si} + \mu_{0si} \\ \beta_{1si} &= \gamma_{10i} + \mu_{1si} \\ \beta_{2si} &= \gamma_{20i} \\ \beta_{3si} &= \gamma_{30i} \\ \beta_{4si} &= \gamma_{40i} \end{aligned}$$

Level 3:

$$\begin{aligned} \gamma_{00i} &= \pi_{000} + \pi_{001} \text{SES}_i + \pi_{002} \text{Gender constellation}_i + \delta_{00i} \\ \gamma_{10i} &= \pi_{100} + \pi_{101} \text{Gender constellaion}_i + \delta_{10i} \\ \gamma_{01i} &= \pi_{010} \\ \gamma_{02i} &= \pi_{020} \\ \gamma_{20i} &= \pi_{200} \\ \gamma_{30i} &= \pi_{300} \\ \gamma_{40i} &= \pi_{400} \end{aligned}$$

where  $t$  indicates time ( $t = 1, 2, 3$ ),  $s$  indicates sibling, and  $i$  indicates family.

The *adjustment predictor models* were similarly structured, but for these, youth adjustment was included as a lagged, grand-mean centered (i.e., centered at the sample mean)

predictor of youth's time with parents. Prior time with parents was also included as a lagged, grand-centered control to account for prior time with parents and isolate the effects of adjustment. Again, parent-youth relationship quality and age were included at Level 1, birth order (0 = older siblings; 1 = younger siblings) and gender (0 = female; 1 = male) were included at Level 2, and gender constellation of the dyad (0 = same-gender; 1 = mixed-gender) and family SES were included at Level 3. I further tested these sibling structural characteristics as potential moderators of the time-adjustment linkages.

## 2.3 Results

### Developmental Trajectories of Youth's Time with Mothers and Fathers

Table 1 shows the correlations, means, and standard deviations for older and younger siblings' time with mothers and fathers (in hours) as well as their depressive symptoms and risky behaviors. Across Times 1 through 3, dyadic time with mothers averaged 90.98 minutes per 7 days ( $SD = 120.14$ ) across siblings, and dyadic time with fathers averaged 41.94 minutes per 7 days ( $SD = 77.15$ ) across siblings. On average, youth scored below the mid-point on the depressive symptoms scale, indicating that they had experienced most of the symptoms "some of the time" or less during the past week. With respect to average risky behavior, youth reported engaging in fewer than half of the risky behaviors on the scale once during the past year. These findings suggest that youth were generally well-adjusted. Further, across there was significant stability from Times 1 through 3 in both depressive symptoms ( $r = .28 - .53$ ) and risky behaviors ( $r = .32 - .74$ ), suggesting that the variation left to explain was limited. Additional analyses indicated that youth's reports of time with parents were not highly correlated with depressive symptoms ( $r = .02 - .06$  for mothers;  $r = .01 - .11$  for fathers), or risky behavior ( $r = .05 - .13$  for mothers;  $r = .01 - .11$  for fathers). Shared time also was not highly correlated with parental

warmth, a control variable in all analyses ( $r = .02 - .15$  for mothers and  $r = .01 - .12$  for fathers), In contrast, parent-child relationship quality was correlated with depressive symptoms ( $r = .05 - .35$  for mothers;  $r = .01 - .25$  for fathers) and risky behavior ( $r = .07 - .28$  for mothers;  $r = .04 - .27$  for fathers).

The developmental course (i.e., average across all youth in the sample) of time with parents was characterized by a decline from adolescence into young adulthood as indicated by a significant linear effect (Figure 1). The separate analyses of youth's time with mothers and with fathers revealed significant fixed linear effects (Table 2),  $\gamma = -3.11$ ,  $t = -3.70$ ,  $p < .001$ , and  $\gamma = -4.57$ ,  $t = -8.34$ ,  $p < .001$ , respectively. Interaction analyses further revealed a significant Gender X Linear interaction for fathers ( $\gamma = -4.29$ ,  $t = 1.08$ ,  $p < .001$ ), but not for mothers ( $\gamma = 1.13$ ,  $t = 1.66$ ,  $p = .49$ ): Follow-up tests suggested that the linear effect of time with fathers differed for boys ( $\gamma = -6.65$ ,  $t = -8.59$ ,  $p < .001$ ) and girls ( $\gamma = -2.36$ ,  $t = -3.15$ ,  $p < .001$ ). Specifically, fathers' time with youth was gendered such that fathers spent more time with sons than daughters, but the decline in time together was steeper for sons than daughters. Figure 2 illustrates the significant Sibling Gender Constellation X Linear interactions. For both mothers and fathers, the linear effect of time differed for same-gender,  $\gamma = -1.51$ ,  $t = -1.15$ ,  $p = .19$ ;  $\gamma = -3.29$ ,  $t = -4.40$ ,  $p < .001$ , versus mixed-gender sibling dyads,  $\gamma = -5.01$ ,  $t = -4.07$ ,  $p < .001$ ;  $\gamma = -6.11$ ,  $t = -7.61$ ,  $p < .001$  for mother- and father-youth shared time, respectively. These findings indicated that the dyad average time for siblings in mixed-gender dyads was greater than for siblings in same-gender dyads, but siblings in mixed-gender dyads also experienced more rapid declines in both mother- and father-shared time. The three-way (Gender X Gender Constellation X Linear) was not significant for time with mothers or fathers.

### **Time with Parents Predicts Youth Adjustment**



Coefficients for fixed effects for the parent-youth time predictor models can be found in Table 3. Effects for the covariates indicated that boys and youth in mixed-gender dyads reported more risky behaviors than girls and youth in same-gender dyads, respectively. Further, when youth reported more positive relationships with parents, they also reported fewer risky behaviors. None of the hypothesized effects were significant, however: Controlling for current adjustment, neither time with mothers or fathers predicted later depressive symptoms or risky behaviors.

### **Youth Adjustment Predicts Time with Parents**

Coefficients for fixed effects for the youth adjustment predictor models can be found in Table 4. Effects for the covariates indicated that boys reported more time with fathers and less time with mothers compared to girls, but youth-reported relationship quality was not predictive of time with parents. Findings revealed that youth's reports of depressive symptoms were not predictive of youth's later time with fathers or with mothers. Findings further revealed that youth's reports of risky behaviors were predictive of youth's time with fathers ( $\gamma = 0.02, t = 2.00, p < .05$ ), but not with mothers. The effect of youth's risky behaviors on time with fathers was qualified by an interaction with gender constellation of the sibling dyad such that youth in mixed-gender dyads who reported more risky behaviors, also reported more time with fathers on the following measurement occasion,  $\gamma = 0.64, t = -2.45, p < .05$ , but there was no association for youth in same-gender dyads,  $\gamma = -0.32, t = -1.15, p = .25$ .

## **2.4 Discussion**

In effort to advance understanding of parental involvement in an understudied ethnic group, I examined the links between youth's time with parents and adjustment across adolescence and into young adulthood, in Mexican-origin families. My study goals were to chart changes in youth's time with mothers and fathers across eight years, from early adolescence into

young adulthood, and assess whether and how (changes in) youth's time with mothers/fathers were linked to (changes in) youth's adjustment. I expanded on prior research by: (a) using an ethnic homogenous design to chart age-related changes in Mexican-origin youth's time with mothers and fathers from early adolescence to young adulthood; (b) examining the bidirectional linkages between youth's time with parents and adjustment using longitudinal data in the context of a multilevel model to address direction of effect; and (c) studying the experiences of sons and daughters and brothers and sisters vis a vis their mothers and fathers to illuminate the potential role of gender in these family dynamics.

### **Developmental Course of Youth's Time with Mothers and Fathers**

This study contributed to an understanding of parent-youth shared time in Mexican-origin families by using nightly phone diary data to describe how youth's time with their mothers and fathers changed across time as youth developed across the adolescent years and into young adulthood (i.e., 12 to 22 years of age). Most prior studies of parent-youth time have focused on mothers as the primary caregiver in childhood and to a lesser extent, adolescence, in European American families. To my knowledge, this is the first study to examine the developmental trajectory of youth's time with mothers and fathers across adolescence and into young adulthood, a component of parental involvement thought to be significant for youth's adjustment and well-being (Crouter, Tucker, Head, & McHale, 2004; Milkie, Nomaguchi, & Denny, 2015). On average, both youth's time with mothers and with fathers declined across this time period. Consistent with an individuation hypothesis, youth may spend less time with their parents as they shift their focus from parents to peers in adolescence (Grovettant & Cooper, 1986). Although I could find no prior work examining how youth's time with parents changes across the transition into young adulthood, the individuation process, as indexed by shared time, appeared to continue

in this sample into young adulthood-- a life-stage characterized by an increasing focus on the world beyond the family (Arnett, 2000). An important future research direction will be to examine whether and when declines in youth's time with parents stabilizes. For instance, significant status changes, such as when youth become parents themselves, may bring parents and youth together. As such, it will be important to examine how parent-youth time changes across the years beyond the transition into young adulthood.

Although time with parents declined for the entire sample, the developmental course of father-youth shared time varied by youth gender and the course of both mother- and father-youth shared time, by gender constellation of the sibling dyad. Further, on average, both fathers and mothers spent more time with their same-gender offspring. As others have noted, parents may feel most responsible for socializing their same-gender offspring (Hill & Lynch, 1983), but youth also may seek out their same-gender parent more so than their opposite-gender parent (Bandura, 1977). Latino adolescents, in particular, have reported that life experiences unique to their gender made relating to a same-gender easier than relating to an opposite-gender parent (Crocket & Russell, 2013). More generally, these findings are in line with previous research on European American families that document gendered parent involvement (Crouter, Manke, & McHale, 1995; Harris, Furstenberg, & Marmer, 1998; Harris & Morgan, 1991; Maccoby, 2003).

Although a previous report using data from this Mexican-origin sample found that mothers' time was gendered (Updegraff, Delgado, Wheeler, 2009), the analysis focused only on the younger siblings when they were in seventh grade. The current study extended this earlier work to examine changes in parent-youth time from adolescent and into young adulthood and also examined the role of sibling gender constellation in youth's time with mothers and fathers. On average, youth in mixed-gender dyads spent more time with mothers and fathers than did

youth in mixed-gender dyads. Consistent with work by Harris and Morgan (1991), having a sibling of the other gender may be advantageous in time with a parent of the other gender, possibly because of parents' efforts to minimize differential treatment of their offspring. In other words, the presence of an offspring of their own gender may pull in both mothers and fathers to engage more with their opposite-gender offspring. Taken together, these findings demonstrate the gendered nature of youth's time with parents in Mexican-origin families and are aligned with a family systems perspective (Minuchin, 1974) in highlighting the importance of family composition for shaping parent-youth dynamics.

### **Links between Parent-Youth Shared Time and Youth Adjustment**

Despite the emphasis on time with parents as a significant factor in children's and adolescents' adjustment (Crouter, Tucker, Head, & McHale, 2004; Milkie, Nomaguchi, & Denny, 2015), I did not find predictive links between time with parents and adjustment across adolescence and young adulthood. My results revealed that neither youth's time with mothers nor with fathers predicted later depressive symptoms and that neither time with mothers nor with fathers predicted later risky behaviors. Parents' gendered roles may mean that time with fathers is more often described as a special event, whereas mothers' involvement is assumed (Milkie, Simon, & Powell, 1997). Although time with fathers did not predict better adjustment, due to their developmental stage, youth may react differently to shared time. Indeed, previous work found that time with fathers, but not mothers, was linked to higher general self-worth and social competence. These scholars suggested that shared time may provide youth opportunities to observe their fathers' interpersonal behavior and learn social skills (Lam, McHale, & Crouter, 2012). It may be that shared dyadic time is less important in later adolescence and young adulthood. In the current sample, however, youth reports of depressive symptoms and risky

behaviors were relatively low and showed moderate to high stability, making it difficult to detect the unique effects of parental time. It also may be that shared time during these developmental periods is linked to other domains of adjustment such as social competence and romantic relationship quality. Future research should investigate other domains of adjustment and well-being as time with parents may be influential in other ways as youth move into the third decade of life (Lam, McHale, Crouter, 2012).

An important contribution toward understanding the associations between parental involvement and youth adjustment was this study's examination of the direction of effects linking youth's time with parents and their adjustment. Previous research on parental involvement focused on parent-youth shared time as an impetus to positive youth well-being (Crouter, Tucker, Head, & McHale, 2004; Milkie, Nomaguchi, & Denny, 2015), but from a family systems perspective, these associations are likely to be bidirectional (Minuchin, 1974). Prior research has examined predictors of both mother and father involvement, including parental attributes such as maternal depression and paternal gender role orientations and contextual factors such as parental employment (Cabrera et al., 2011; Pleck, 1997). The literature on child effects on parents (Brown et al. 2011; Jia et al. 2012; Zhang 2013), however, led me to examine the role of children's attributes, specifically their adjustment problems, in predicting mothers' and fathers' involvement.

My results demonstrated that youth in mixed-gender dyads who reported more risky behaviors spent more time with fathers, but not mothers, at the next occasion of measurement. That is, controlling for current time with father, paternal warmth and family socioeconomic status, youth's reports of risky behaviors predicted their father's later involvement. The controls in this model suggest the robustness of this association. The findings are consistent with the idea

that youth are not passive recipients of family influences, but play a role in their own family experiences (Brown et al. 2011; Jia et al. 2012; Zhang 2013). Prior research suggests that in general, fathers' parenting is more influenced by contextual factors than mothers' (Doherty, Kouneski, & Erikson, 1996; Raley & Bianchi, 2006). In this case, fathers may have increased their engagement with their children in response to their children's problem behaviors:

Consistent with traditional gender roles in Mexican-origin families, fathers are deemed the disciplinarians of the family and to be obedient and thus may become more involved when their children exhibit problems (Crockett, & Russell, 2013; Mirande, 2008). As part of fathers' role, they may be more attuned to youth's outwardly expressed behaviors compared to youth's internalizing symptoms and thus, be more responsive when youth who exhibit risky behavior. Indeed, Mexican-origin adolescents report receiving instrumental support and guidance from fathers in regard to their specific problem behaviors more often than emotional support (Crockett, & Russell, 2013). Further, youth's reported relatively low levels of both depressive symptoms, possibly making their moods and feelings difficult to detect. Because this association was found for youth in mixed-gender dyads only, gender differences in youth risky behavior may mean that fathers are calibrating the behavior of their sons relative to their daughters such that boys' risky behaviors are more salient when they have a sister, raise more paternal concern, and promote fathers' time with their offspring. As noted, although fathers' spent more time with youth who engaged in more risky behaviors, time with fathers did not reduce subsequent risky behaviors. To my knowledge, this is the first study to attempt to disentangle the links between parental involvement and adjustment in Mexican-origin families in adolescence and young adulthood. Thus, it is important for future research to further explore such associations in an

effort to better our understanding of child characteristics that predict parental involvement and the conditions under which involvement is related to positive youth development.

### **Limitations**

Despite its contributions, there are several limitations to the present study. First, the sample was drawn from particular geographic region that is not representative of the larger population of Mexican-origin families. Future investigations should include families from other geographic regions and examine families that differ in structure to determine whether similar patterns emerge in the links between youth's time with parents and youth's adjustment and further the role of gender in these processes. Further, I focused on a limited set of youth adjustment measures and thus additional research is needed to examine a broader range of youth characteristics that may relate to time with parents. In addition, the developmental scope of my study was limited to adolescence and early adulthood, and given the significance of family relationships in Mexican-origin families, future research should examine these dynamics further into adulthood.

Finally, it is important to note that although I tested the temporal ordering of these links, correlation does not imply causation. There may be other individual, relationship, and contextual third variables that account for the link between youth adjustment and shared time with father. In addition, I studied parent-youth dyadic time under the assumption that such time reflected reciprocal interest in involvement. I was unable, however, to determine whether youth played an active role in seeking out their parents or whether they spent time with parents when they had nothing better to do or because of family demands. Relatedly, in the current study I examined quantity of time, which does not equate to quality time. Youth's subjective evaluations of their

time with parents should be directly measured in future studies in efforts to better understand the nature and correlates of youth's time with parents.

### **Conclusions**

The current study responds to the call to examine the diversity in youth's family experiences *within* particular cultural groups (McLoyd, 1998; Marks, Godoy, Garcia Coll, 2014; Roosa, Gonzales, Knight, & Vargas, 2014) by examining parent-youth time and its youth adjustment correlates in Mexican-origin families. As the first study to examine how Mexican-origin mothers' and fathers' involvement changes over time and whether and how it is linked to adjustment in adolescence or young adulthood, results speak to the importance of considering the role of gender as an organizing feature of Mexican-origin family relationships. In addition to including time with both mothers and fathers and youth gender, this study incorporated a focus on the gender constellation of the sibling dyad, a relatively rare focus of investigation in the family and youth development literatures, but a family structure characteristic that proved important here both in understanding patterns of change over time in parental involvement as well as its links to youth adjustment. Highlighting the dynamic nature of family systems, including longitudinal data was critical for illuminating patterns of change as well as directions of effect linking family processes and youth adjustment, with findings highlighting the significance of "child effects" on paternal involvement. Together the findings direct attention to the importance of understanding the correlates of parent-youth shared time within ethnic groups, the role of gender, and in the context of changes over time to better understand how families operate as social and socializing systems.



## 2.5 Tables and Figures

Table 1

*Correlations, Means, and Standard Deviations (SDs) for Study Variables (N = 246)*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Mother-youth time (T1)	-											
2. Mother-youth time (T2)	0.26**	-										
3. Mother-youth time (T3)	0.14*	0.25**	-									
4. Father-youth time (T1)	0.00	-0.07	-0.07	-								
5. Father-youth time (T2)	0.06	0.06	-0.09	0.11†	-							
6. Father-youth time (T3)	-0.05	-0.08	0.01	0.07	0.02	-						
7. Depressive symptoms (T1)	-0.06	0.04	-0.00	-0.05	-0.00	-0.08	-					
8. Depressive symptoms (T2)	-0.02	-0.03	-0.02	-0.07	-0.05	0.01	0.33**	-				
9. Depressive symptoms (T3)	0.04	0.00	-0.00	-0.11†	-0.05	0.11†	0.28**	0.53**	-			
10. Risky behaviors (T1)	-0.13**	-0.09	-0.08	0.06	0.04	-0.02	0.41**	0.10†	0.10†	-		
11. Risky behaviors (T2)	-0.05	-0.12†	-0.07	0.03	0.01	0.12†	0.04	0.15**	0.17**	0.32**	-	
12. Risky behaviors (T3)	-0.09	-0.12†	-0.11†	0.04	-0.02	0.08	0.04	0.12†	0.17**	0.36**	0.74**	-
Younger sibling means	1.78	1.61	1.42	1.11	0.59	0.43	16.42	13.26	13.34	1.37	1.52	1.49
SD	2.10	2.81	2.63	1.55	1.10	0.95	9.89	9.46	8.82	0.39	0.40	0.40
Older sibling means	1.69	1.40	1.17	1.05	0.68	0.34	17.19	13.00	12.58	1.49	1.48	1.48
SD	2.21	2.28	1.70	1.59	2.19	0.82	9.82	9.45	9.56	0.43	0.37	0.39

*Note.* T1 = Time 1; T2 = Time 2; T3 = Time 3. Parent-youth shared dyadic time measured in hours/7 days.

† $p < .10$ , \* $p < .05$ , \*\* $p < .01$

Table 2

*Gamma Coefficients ( $\gamma$ ) and t-Ratios for Multilevel Models of Youth Shared Dyadic Time with Mothers and Fathers*

<i>Fixed effects</i>	Mothers		Fathers	
	$\gamma$	<i>t-ratio</i>	$\gamma$	<i>t-ratio</i>
Intercept	109.93	17.22**	69.81	17.50**
Linear effect	-3.11	-3.70**	-4.57	-8.34**
Gender	-71.79	-5.92**	54.06	6.98**
Gender X Linear effect	1.14	0.69	-4.29	-3.97**
Gender constellation	49.03	3.97**	28.75	3.61**
Gender constellation X Linear effect	-3.50	-2.08*	-2.81	-2.57**
Birth order	-0.18	0.01	-12.14	-1.45
Birth order X Linear Effect	1.08	0.60	-0.73	-0.61

\* $p < .05$ . \*\* $p < .01$ .

Table 3

*Gamma Coefficients ( $\gamma$ ) and t-Ratios for Multilevel Models of Shared Dyadic Time with Parents Predicting Youth Adjustment*

	Depressive Symptoms				Risky Behaviors			
	Mother		Father		Mothers		Fathers	
	$\gamma$	t-ratios	$\gamma$	t-ratios	$\gamma$	t-ratios	$\gamma$	t-ratios
Intercept	0.91	0.57	1.75	1.32	1.45	9.48**	1.48	11.65**
Age	0.00	0.01	-0.08	-0.46	0.01	0.52	0.00	0.12
Family SES	-0.26	-0.83	-0.28	-0.90	0.03	0.80	0.02	0.77
Birth order (1 = younger)	0.39	0.74	0.30	0.58	-0.07	-1.53	-0.08	-1.72†
Gender (1 = boy)	-0.48	-0.88	-0.69	-1.31	0.17	3.43**	0.18	3.73**
Gender constellation (1 = mixed)	0.06	0.11	0.05	0.10	0.10	2.09*	0.10	2.17*
Warmth	-0.20	-0.59	-0.34	-1.22	-0.06	-2.11*	-0.07	-2.93**
Prior adjustment	-0.60	-15.11**	-0.60	-14.69**	0.40	4.59**	0.40	4.58**
Prior shared time	0.02	0.14	0.06	0.40	-0.01	-0.57	-0.02	-1.30

† $p < .10$ . \* $p < .05$ . \*\* $p < .01$ .

Table 4

*Gamma Coefficients ( $\gamma$ ) and t-Ratios for Multilevel Models of Youth Adjustment Predicting Shared Dyadic Time with Parents*

	Depressive Symptoms				Risky Behaviors			
	Mother		Father		Mothers		Fathers	
	$\gamma$	<i>t</i> -ratios	$\gamma$	<i>t</i> -ratios	$\gamma$	<i>t</i> -ratios	$\gamma$	<i>t</i> -ratios
Intercept	1.30	1.26	-0.35	-0.90	1.15	0.95	0.42	0.74
Age	-0.10	-1.19	-0.02	-0.58	-0.10	-1.09	-0.05	-1.12
Family SES	-0.14	-0.73	-0.00	-0.05	-0.13	-0.64	-0.01	-0.12
Birth order (1 = younger)	0.12	0.43	0.12	0.87	0.09	0.31	0.06	0.42
Gender (1 = boy)	-0.94	-3.27**	0.39	2.87**	-1.07	-3.35**	0.37	2.54*
Gender constellation (1 = mixed)	0.10	0.32	0.05	0.37	0.08	0.24	-1.44	-2.54*
Warmth	0.20	1.02	0.13	1.77†	0.19	0.92	0.12	1.54
Prior shared time	0.10	1.76†	-0.10	-2.48*	0.09	1.59	-0.08	-1.94†
Prior adjustment	0.00	0.00	0.01	0.87	0.14	0.31	-0.32	-1.15
Prior adjustment X gender const.	-	-	-	-	-	-	<b>0.97</b>	<b>-2.63**</b>

† $p < .10$ . \* $p < .05$ . \*\* $p < .01$ .

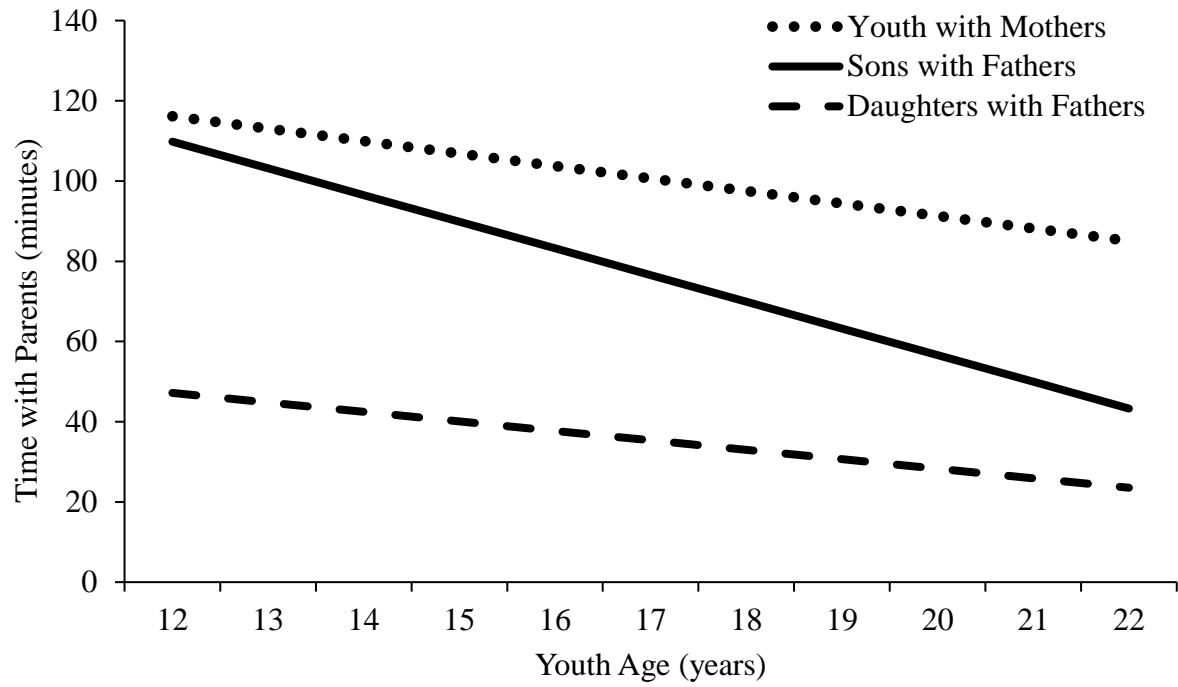


Figure 1. *The developmental trajectories of youth's time spent with parents and declines in time with fathers moderated by gender.*

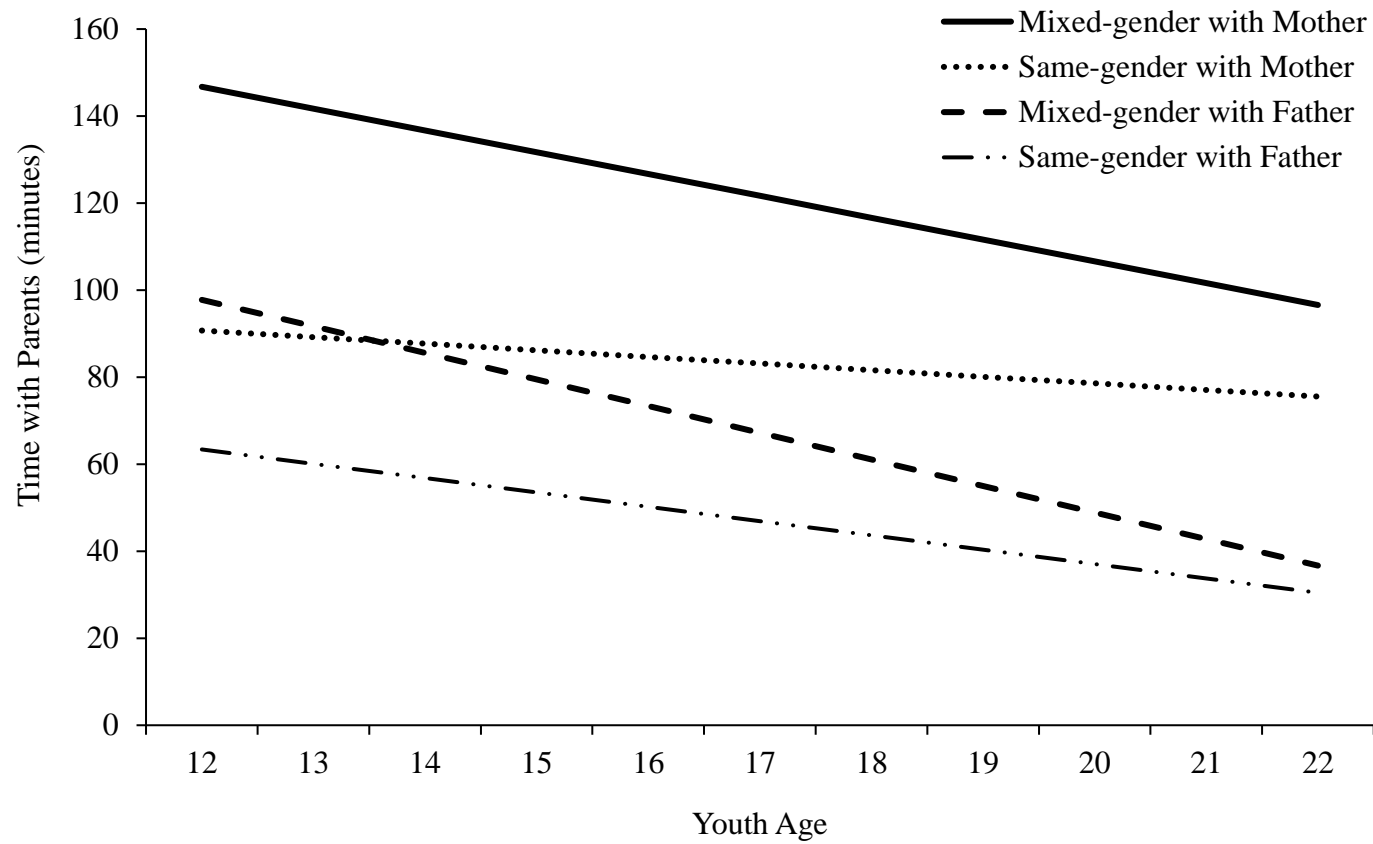


Figure 2. *The developmental trajectories of youth's time spent with mothers and fathers moderated by gender constellation of the sibling dyad.*

## CHAPTER 3

### STUDY 2

#### **Siblings' Differences in Acculturation Gaps with Parents in Mexican-Origin Families: Bidirectional Links with Differences in Time with Parents**

##### **3.1 Introduction**

Latinos are the largest and fastest growing ethnic minority group in the US (US Census Bureau, 2016), with census projections suggesting that by 2050 more than 30% of US residents will be Latino—and that immigration will be a major driving force behind this population increase. Because of their high rates of immigration, most of the US Latino population is of Mexican origin (63%). And, as is the case with other groups, immigrants and their families often face the challenge of balancing their heritage culture (Mexican) practices and values with those of the host (Anglo) culture. Research on this process, termed, acculturation, has found that parents tend to retain their focus on Mexican cultural values and practices, whereas youth more rapidly adopt US cultural orientations (Phinney, Ong, & Madden, 2000; Telzer, 2010). Because Mexican cultural values emphasize tight bonds with family members (Cauce & Domenech-Rodriguez, 2002; Tsai, Telzer, Gonzales, & Fuligni, 2015; Zeiders, Updegraff, Umaña-Taylor, McHale, & Padilla, 2016), parent-youth differences in cultural orientations, including cultural values and practices, may be particularly salient for intergenerational cohesion. Often referred to as *the acculturation gap*, larger parent-youth differences in cultural orientations have been linked to poorer parent-youth relationships and youth adjustment in Mexican-origin families (Elder, Broyles, Brennan, Zuniga de Nuncio, & Nader, 2005; Schofield, Parke, Kim, & Coltrane, 2008; Smowski, Rose, Bacallao, 2008). In this study I built on this work, which has been limited to the acculturation gap within parent-youth dyads (Telzer, 2010), to investigate

how acculturation gaps are formed within family systems by examining the potential role of siblings.

A family systems perspective highlights the interconnections between subsystems within families, including individuals, dyads, triads and beyond, and holds that these family subsystems are mutually influential (Minuchin, 1974). The present study was grounded in such ideas, and aimed to advance understanding of the acculturation gap by moving beyond a focus on individual parent-youth dyads. Specifically, this study was designed to illuminate the role of sibling-related dynamics in family acculturation processes from adolescence into young adulthood. Using a longitudinal design, my goals were to assess sibling differences in the match between their own and their parents' acculturation (i.e., how different youth are from their parents relative to their sibling's difference from parents), termed here, *siblings' relative acculturation gap*, and its bidirectional links with sibling differences in their parent-youth shared time. Parent-youth shared time may be both cause and consequence of siblings' relative acculturation gap: Sibling differences in time spent with parents may help to explain siblings' relative acculturation gap, and, siblings' relative acculturation gap also may predict sibling differences in time spent with parents. To disentangle the direction of these effects, I tested whether siblings' relative acculturation gaps with their mothers and with their fathers predicted and/or were predicted by sibling differences in shared time with mother and father, respectively. Grounded in social learning theory tenets (Bandura, 1977), I also examined whether sibling structural characteristics, specifically the gender constellation of the dyad, moderated those linkages.

### **Acculturation in a Family Context**



Acculturation is typically examined in the context of immigration, and prior research has focused on individuals' ability to develop and maintain competence in both host and heritage cultures, competence that has been linked to psychological well-being (Berry, 2006; LaFromboise, Coleman, & Gerton, 1993). Most work, however, treated acculturation as a unidimensional process, with an assumption that acculturation into the host culture necessarily entailed loss of the heritage culture (Crane et al., 2005; Juang et al., 2007; Martinez, 2006; Pasch et al., 2006; Pawliuk et al., 1996; Phinney & Vedder, 2006; Phinney & Ong, 2002; Sam & Virta, 2003; Schofield et al., 2008; Silverstein & Chen, 1999; Tardif & Geva, 2006; Zhou, 2001). More recent conceptualizations and empirical research suggest instead, that immigrants can adopt values and practices of a new host cultural group while maintaining those of their heritage culture (Berry, 2006; Telzer, 2010). Thus, examining both host and heritage acculturation gaps within families is key to understanding the experiences of immigrant families and their development (Birman, 2006; Portes & Rumbaut, 2001).

**Host versus heritage dimensions of acculturation.** Substantially more complicated when conceptualized as a family phenomenon, immigrant youth and parents may acculturate differently. Researchers have tested whether gaps involving the host culture versus the heritage culture are similarly problematic for youth adjustment and well-being. Broadly referred to as the *acculturation gap-distress model*, larger parent-youth differences in both cultural practices and values have been linked to family conflict and adjustment problems in childhood and adolescence (Costigan, & Dokis, 2006; Elder et al., 2005; Lau et al., 2005; Phinney et al., 2000; Portes & Rumbaut, 1996). One cross-sectional study of Arab American youth, however, showed that parent-youth gaps in *heritage*, but not host, cultural practices were associated with Arab American adolescents' maladjustment and parent-youth conflict (Goforth, Pham, & Oka, 2015).

In contrast, a cross-sectional study of Mexican-origin middle-school aged youth showed that mother-youth gaps in *host*, but not heritage, cultural practices were linked to poorer youth well-being and less effective parenting (Martinez, 2006). Such findings reflect Telzer's (2010) conclusions that both heritage culture (Atzaba-Poria & Pike, 2007; Costigan & Dokis, 2006; Ho & Birman, 2010; Juang et al., 2007; Liu et al., 2009) and host culture (Atzaba-Poria & Pike, 2007; Birman, 2006, Costigan & Dokis, 2006) gaps may linked to youth adjustment and should be studied separately. Importantly, however, of the 23 studies included in Telzer's review, only 11 distinguished between these two dimensions of acculturation to address the potentially unique implications of host and heritage acculturation gaps (Atzaba-Poria & Pike, 2007; Birman, 2006; Costigan & Dokis, 2006; Elder et al., 2005; Farver et al., 2002; Ho & Birman, 2010; Lau et al., 2005; Lim et al., 2009; Liu, et al., 2009; Smokowski, Rose, & Bacallao, 2008; Weaver & Kim, 2008). Accordingly, to contribute to the literature on acculturation gaps in Mexican-origin families, I used measures of parents' and siblings' orientations toward both Anglo host culture and Mexican heritage culture in an effort to evaluate which dimensions of acculturation gaps were more strongly related to family functioning.

**Parent-youth acculturation gaps.** Research in this area has focused on the differences between mothers and their adolescent children (Berry, 2006; Telzer, 2010), and we know less about the correlates of father-youth acculturation gaps. Indeed, in many studies, mother-youth and father-youth differences in cultural orientations are not distinguished--i.e., youth are asked about how they differ from their "parents," or one parent (usually the mother) is the focus, and parent gender differences are not assessed--with the seeming assumption that maternal and paternal acculturation processes are the same (Boehnke, 2001; Telzer, 2010; Costigan & Dokis, 2006; Goforth, Pham, & Oka, 2015). Based on their reviews of this literature, both Birman

(2006) and Telzer (2010) suggested that mother-youth and father-youth acculturation gap findings are inconclusive, in large part, because of differences and limitations in the ways that acculturation has been operationalized and measured. Indeed, of the 11 studies that distinguished between host and heritage culture, only 3 recognized that mothers and fathers might exhibit different patterns of cultural orientation given proscribed parenting roles and parent-child relationships (Atzaba-Poria & Pike, 2007; Costigan & Dokis, 2006; Weaver & Kim, 2008). Because traditional gender norms in immigrant families highlight fathers' role beyond the home as the breadwinner and mothers' role as the socializer of heritage culture (Raffaelli & Ontai, 2004), there may be distinct dimensions of acculturation gaps that are salient for mother-youth and father-youth relationships. Indeed, the few studies that have examined both mothers and fathers underscore the importance of examining them separately. For example, East Asian, Filipino, and Latin American adolescents who shared heritage language fluency with mothers had the closest relationships with mothers, but this association was not found for father-youth relationships (Tseng & Fuligni, 2000). In contrast, a cross-sectional study of Mexican-origin families found that father-youth, but not mother-youth, differences in cultural practices were linked to parent-youth conflict, particularly when overall relationship quality was poor (Schofield et al., 2008). In another cross-sectional study focused on immigrant Chinese adolescents, father-youth heritage differences in cultural *values* but mother-youth heritage differences in language use (cultural *practices*) were linked to youth adjustment problems (Costigan & Dokis, 2006). In addition to distinguishing between mothers and fathers, these studies highlighted the importance of distinguishing between different domains of acculturation to better understand these differences. As such, in the current study I examined both mother- and father-youth acculturation gaps pertaining to both heritage and host culture.

**Domains of acculturation.** As suggested, adding to its complexity, acculturation also operates in several domains, specifically, behavioral practices, such as language use, social contacts, celebrations and traditions, media preferences (Pasch et al., 2006; Liu et al., 2009) and cultural values, such as beliefs in the importance of family or individuality and autonomy (Phinney & Vedder, 2006; Sam & Virta, 2003), as well as cultural identification, such as sense of belonging to the cultural group (Birman, 2006; Ho & Birman, 2010). Measurement of these domains has been inconsistent, however, and most studies have focused on a single domain or combined multiple domains into a global index of acculturation (Martinez, 2006; Zhou, 2001). Given that they may not operate in the same ways, scholars have recommended that acculturation be treated as a multi-dimensional construct, assessed both in terms of orientations to the host and heritage cultures as discussed above, as well as in terms of its several domains (Costigan, 2010; Telzer, 2010; Phinney, 2010). Indeed, an individual's preference for adaptation to host culture and heritage culture maintenance may vary across domains (Kim et al., 2001): For example, host culture practices, such as English language use may be assimilated, while Mexican values pertaining to the importance of family continue to be upheld. These scholars emphasized that not all studies need to examine all dimensions of acculturation, but that the field will be best advanced by investigators targeting particular dimensions.

Most research on the acculturation gap has focused on behavioral practices and identifications (Kim, Atkinson, & Yang, 1999; Knight, Jacobson, Gonzales, Roosa, & Saenz, 2009; Knight et al., 2010), and we know less about parent-youth differences in cultural values and identification (Germán, Gonzales, & Dumka, 2009; Gonzales et al., 2008; Knight et al., 2010; Padilla, McHale, Rovine, Updegraff, & Umaña-Taylor, 2016). Findings to date suggest, however, that gaps pertaining to *behavioral practices* may be more salient than those pertaining

to identification and values (Kim et al., 2001; van de Vijver & Phalet, 2004), with variation in language use the focus of a majority of studies on acculturation gaps (Telzer, 2010). Indeed, language is a critical means through which immigrants develop their understanding of a new culture (Kim et al., 2001), with the possibility that youth more quickly orient themselves to the host language, along with other elements of host cultural practices given their everyday, direct exposure in school, with peers, and the like (Birman, 2006). For instance, Costigan and Dokis (2006) found that young Chinese adolescents preferred speaking English and using English media to a greater extent than did their parents-- demonstrating preference for host cultural practices-- whereas parents and youth were more similar in the domain of heritage cultural values. The gap in practices, in turn, was linked to poorer family relationships. Cordova and colleagues' (2014) qualitative work further highlights the acculturative stress surrounding language use of bilingual children and their monolingual, Spanish speaking parents: Adolescents were often expected to speak English in contexts that benefitted parents (i.e., serving as a translator), but conflict arose when English was used in other contexts (i.e., with peers or at home). This was because of parents' belief that adolescents were speaking in English to keep things from them, which led parents to a mistrust of the English language, more generally. In itself, language incompatibility in Mexican families is related to less intergenerational cohesion (Gonzales, Deardorff, Formoso, Barr, & Barrera, 2006; Silverstein & Chen, 1999; Strom, Buki, & Strom, 1997), as well as adolescent conduct problems, (Gonzales, Deardorff, Formoso, Barr, & Barrera, 2006) and substance use (Felix-Ortiz, Fernandez, & Newcomb, 1998). Given these findings, the current study focused on acculturation gaps with parents in behavioral practices, which may reflect clashing preferences between parents and youth and corresponding declines in their shared time.

**Developmental timing.** Importantly, acculturation gaps may change over time: The challenges of adapting to a host culture while maintaining connection to the heritage culture remain for as long as individuals are in contact with two cultures (Berry, 1980; 2006). The parent-youth acculturation gap, however, has rarely been studied as a developmental phenomenon. Most research has assessed acculturation gaps at a single point in development (Bamaca-Colbert, Umaña-Taylor, & Gayles, 2012; Elder, Broyles, Brennan, & Zuniga de Nuncio, 2005; Updegraff et al., 2006), most often during adolescence when youth are focusing on identity formation and the world beyond family, both of which may motivate their active involvement in their cultural development (Bernal, Knight, Garza, Ocampo, & Cota, 1990; Telzer, 2010; Umaña-Taylor, Zeiders, & Updegraff, 2013). Almost nothing is known about acculturation gaps in young adulthood, despite youth's increasingly active role as agents of their own acculturation during this period (Garcia Coll & Pachter, 2002; Phinney, 1990; Umaña-Taylor, Zeiders, & Updegraff, 2013). Given the almost exclusive focus on early adolescence and reliance on cross-sectional designs, we know little about whether and how acculturation gaps change *within families* over time. As suggested, because of youth's focus on the world beyond family, they may become increasingly different from parents during adolescence and young adulthood. It is also possible that there are short periods of larger differences between family members, or that the implications of differences change across development. Szapocnik and colleagues (1993) noted, for example, that acculturation gaps are most pronounced at times of transition and referenced the transition to adolescence; the same may hold for the transition to adulthood. Accordingly, in an effort to further understanding the development of parent-youth acculturation gaps, in this study I focused on the transition period from adolescence into young adulthood.

## **Differential Time with Parents as a Context for the Development of Sibling Differences**

With this complexity in mind, in the current study I move beyond the study of parent-youth differences in acculturation to understand how acculturation gaps are formed within family systems by examining the potential role of dyadic time with parents. Parents' and youth's time together is a critical opportunity for parents to share cultural traditions and activities (Garcia Coll et al., 1996; Maccoby, 1992; Park & Buriel, 1998) and thus may promote similarities in their cultural practices (Bandura, 1977; Mischel, 1966). Indeed, in their time together parents can cultivate their children's ties to their cultural heritage such as by talking to their children about important cultural or historical figures, celebrating cultural holidays and eating ethnic foods, speaking the language, and exposing children to culturally relevant literature, arts, music, and stories (Hughes & Chen, 1997; Knight, Bernal, Garza, & Cota, 1993; Suarez-Orozco & Suarez-Orozco, 1995; 2001; Tsai, Telzer, Gonzales, & Fuligni, 2016).

The larger family context of such parental socialization, however, has rarely been taken into account. In the US, for example, most Mexican-origin children grow up with at least one sibling (King et al., 2010), yet we know little about siblings' role in family acculturation processes. This study was grounded in the idea that parents' transmission of their cultural orientations may be better understood by moving beyond the experiences of a single parent-child dyad to examine whether siblings' cultural orientations have implications for parent-youth acculturation gaps. From a family systems perspective, differences in parents' relationships with their offspring (termed, parents' differential treatment, PDT) is a sibling-related family process and one component of the nonshared family environment that has implications for the development and well-being of individual siblings as well as for sibling differences in their development and well-being (Plomin & Daniels, 2011). Drawing on this literature, in this study I

examined the links between sibling differences in their shared time with parents and siblings' relative acculturation gap. I expected that sibling differences in shared time with parents would reflect siblings' differential exposure to parents' cultural practices, which in turn would lead one sibling to become more similar to their parent relative to the other sibling. That is, because culture is embedded in family activities and everyday routines, differential parent-youth shared time may promote sibling differences in the size of the acculturation gap.

### **Cultural Similarity Fosters Parental Preferences**

This study also was designed to advance knowledge about the acculturation gap by examining bidirectional linkages between siblings' relative acculturation gap and differences in their shared time with parents. A focus on bidirectional processes is consistent with a family systems perspective (Minuchin, 1974). The longitudinal design of this study allowed for assessing whether sibling differences in parent-youth shared time explained their relative differences in acculturation as described above, whether sibling differences in acculturation gap predicted differences in parent-youth shared time, such that cultural similarity (relatively smaller acculturation gaps) between a parent and one of their children fostered increased contact, or whether there was evidence of both directions of effect. In the face of norms about parents' equal treatment of siblings and established links between differential treatment and youth adjustment (Conger & Conger, 1994; Richmond, Stocker, & Rienks, 2005; Tamrouti-Makkink, Dubas, Gerris, & Van Aken, 2004), most parents report that they treat their offspring differently, most often in response to their perceptions of differences in siblings' personalities, interests, abilities, and needs (McHale, Crouter, & Whiteman, 2003). That is, youth are not passive recipients of parental socialization, but development is an interactive process in which individuals both influence and are influenced by their exposures and experiences (Scarr & McCartney, 1983).



Because one sibling has more in common with a parent than the other, differences between siblings' acculturation may lead to differences in the amounts of time parents spend with each of their children. Specifically, I expected that parents would spend relatively more time with the child who held cultural orientations that were most similar to their own.

Some prior work has shown that parent-child similarity may help to explain parents' preferential treatment of their offspring. For instance, research on siblings in midlife showed that European American mothers were more likely to maintain positive relationships with adult children who were more similar to them on important social dimensions such as gender and global values and attitudes (Silverstein & Bengtson, 1997, Suito & Pillemer, 2000; Suito, Pillemer, & Sechrist, 2006). In fact, consensual solidarity, or agreement in beliefs, orientations, and values, is one of the most important dimensions of similarity to explain relationships between parents and their adult offspring in European American families (Bengtson, 2001; Suito & Pillemer, 2000; Suito, 1987). These findings on European American families are consistent with the acculturation literature, previously described, which shows that smaller parent-youth differences in cultural orientations were linked to more positive family relationships in childhood and adolescence (Elder et al., 2005; Lau et al., 2005). In the case of parent-child similarity and parental preferences for offspring, however, most prior research has relied on data collected from one family member at a single point in time and focused on mothers and their adult children, and none has focused on cultural similarity. In the present study, I built on this prior research to incorporate information collected from mothers, fathers and two siblings in each family and, using lagged analyses in the context of a longitudinal design that captured the period from adolescence into young adulthood, tested whether

Mexican-origin siblings' relative acculturation gap with mothers and fathers predicted or was predicted by sibling differences in shared time with each parent.

### **The Role of Gender in Parent-Youth Relationships**

Prior literature on Mexican-origin families directs attention to gender as an organizing feature of family life (Umaña-Taylor & Updegraff, 2012). Traditional gender role orientations that characterize Mexican-origin families highlight the father's role as breadwinner and the mother's as homemaker and family caregiver (Azmitia & Brown, 2002). For example, both adolescent boys and girls describe relationships with mothers as closer and more open than relationships with fathers (Crockett, Brown, Russell, & Shen, 2007), but we know less about adolescents' time spent with parents. One study found that mothers, but not fathers, spent more time with their same-gender young adolescents in Mexican-origin families (Updegraff, Delgado, & Wheeler, 2009). A gender intensification perspective argues that as girls and boys become increasingly different in early adolescence, both mothers and fathers are likely to pair up with their same-gender offspring because parents see socializing their same-gender offspring as central to their parental roles (Hill & Lynch, 1983). Likewise, from a social learning perspective, youth are more likely to seek out and imitate their same-gender parent than their opposite-gender parent (Bandura, 1977). Consistent with these ideas, prior work with European American families demonstrates that fathers were more involved with boys than with girls, and mothers were more involved with girls than boys, when adolescents had an opposite-gender sibling (Crouter, Manke, & McHale, 1995; Harris, Furstenberg, & Marmer, 1998; Harris & Morgan, 1991; Lam, McHale, & Crouter, 2013). Such findings highlight that parental involvement was influenced by youth's own as well as their siblings' gender. An important question for this study is whether these gender dynamics are evident in Mexican-origin families given the traditional

gender roles of this ethnic group. Thus, to examine the potential role of gender in the links between sibling differences in parent-youth shared time and siblings' relative acculturation, I tested sibling dyad gender constellation as a potential moderator. Based on the existing literature, I expected that sibling differences in parental involvement and corresponding differences in parent-youth acculturation gaps would be larger in families with mixed-gender sibling dyads.

### **The Proposed Study**

In sum, grounded in a family systems perspective, this study was designed to advance understanding of the family contexts of parent-youth acculturation gaps. Moving beyond a focus on individual parent-child dyads, and using temporally ordered variables to test direction of effect, I tested whether youth's time spent with mother/father relative to their sibling's time (i.e., parents' differential time), predicted siblings' relative acculturation gap and/or, controlling for average acculturation gaps, whether siblings' relative acculturation gaps vis a vis mothers and fathers predicted siblings' relative time with each parent. Research on cultural transmission led me to expect that relatively more time with parents would predict a smaller acculturation gap relative to a sibling. Further, research on parental favoritism led me to expect that a relatively smaller acculturation gap would predict youth spending relatively more time with parents as compared to a sibling.

## **3.2 Method**

### **Participants**

The data came from a longitudinal study of 246, two-parent Mexican-origin families (McHale, Updegraff, Shanahan, Crouter, & Killoren, 2005). Participating families were recruited through schools in a southwestern metropolitan area. The criteria for participation at Time 1 were that: (a) family membership included a seventh grader, at least one older adolescent sibling,

a biological mother and a biological or adoptive father figure (all non-biological father figures had lived with the target children for at least 10 years), all of whom were living in the home; (b) mothers were of Mexican origin (93% of fathers also were of Mexican origin, although this was not a study criterion); and (c) fathers were employed for pay for at least 20 hours/week at the time of recruitment, but at any given time fathers may not have been employed. Mothers, fathers, and siblings were interviewed in their homes on three occasions over eight years.

To recruit families, letters in English and Spanish were sent to families, and follow-up telephone calls were made by bilingual staff to determine eligibility and interest in participation. Recruitment materials were developed in consultation with the project's Latino advisory board of parents and professionals in the community. Families' names were obtained from five school districts and five parochial schools. Schools represented a socioeconomic range, with the proportion of students receiving free or reduced lunch varying from 8% to 82% across schools.

At Time 1 (T1), families represented a range of education and income levels. The percentage of families that met federal poverty guidelines was 18.3%, a figure similar to the 18.6% of two-parent Mexican-origin families living in poverty in the county from which the sample was drawn (U.S. Census Bureau, 2000). The median family income was \$41,000 ( $SD = \$45,381$ ; range = \$3,000 to over \$250,000). Mothers and fathers had completed an average of 10 years of education ( $M = 10.34$ ,  $SD = 3.74$ ;  $M = 9.88$ ,  $SD = 4.37$ , respectively). Most parents had been born outside the United States (70%); this subset had lived in the U.S. an average of 12.4 ( $SD = 8.9$ ) years (mothers) and 15.2 ( $SD = 8.9$ ) years (fathers). About two thirds of the parents were interviewed in Spanish. With respect to siblings, the sample included 68 sister–sister pairs, 55 sister–brother pairs, 57 brother–sister pairs, and 66 brother–brother pairs. Most siblings were full biological pairs ( $n = 234$ ; 95%). Average spacing between siblings was 2.96 years ( $SD =$

1.63, range = 1–9), and the number of siblings living in the household averaged 3.39 ( $SD = 1.20$ , range = 2–8). Older siblings were 15.48 ( $SD = 1.57$ ) years old, on average, 47% were born in Mexico, and 82% were interviewed in English. Younger siblings were 12.55 ( $SD = .60$ ) years of age, on average, 38% had been born in Mexico, and 83% were interviewed in English.

Time 2 (T2) interviews were completed when older siblings averaged 20.65 ( $SD = 1.56$ ) years of age, and younger siblings averaged 17.72 ( $SD = .57$ ) years. Time 3 (T3) interviews were completed when older siblings averaged 22.57 ( $SD = 1.57$ ) years of age, and younger siblings averaged 19.6 ( $SD = .66$ ) years. Retention rates were 75% and 70% for T2 and T3, respectively. Those who did not participate: could not be located ( $n = 44$  at T2;  $n = 45$  at T3), had moved to Mexico ( $n = 2$  at T2;  $n = 4$  at T3), could not presently participate or were difficult to contact ( $n = 5$  at T2;  $n = 12$  at T3), or refused to participate ( $n = 10$  at T2;  $n = 12$  at T3). At T2, participating families differed from non-participating families on T1 maternal education ( $M = 10.62$ ,  $SD = 3.80$  versus  $M = 9.48$ ,  $SD = 3.45$ ) and T1 family income ( $M = \$59,517$ ,  $SD = \$48,395$  versus  $M = \$37,632$ ,  $SD = \$28,606$ , respectively). At T3, participating families differed from non-participating families on T1 maternal education ( $M = 10.75$ ,  $SD = 3.75$  versus  $M = 9.35$ ,  $SD = 3.53$ ), T1 paternal education ( $M = 10.46$ ,  $SD = 4.37$  versus  $M = 8.49$ ,  $SD = 4.08$ ), and T1 family income ( $M = \$59,136$ ,  $SD = \$46,674$  versus  $M = \$41,635$ ,  $SD = \$39,095$ ). Thus, income and education (socioeconomic status) were controlled in the analyses.

## **Procedure**

After obtaining informed consent and assent (for youth under age 18), data were collected in home interviews that lasted an average of 3 hours for parents and 2 hours for youth. Interviews were conducted individually by bilingual interviewers using laptop computers; questions were read to all participants to account for variability in reading levels. During the following 2-3 week

period on each occasion of measurement, a series of phone-diary interviews were conducted during the 3-4 weeks following the home interviews. Youth were telephoned on seven occasions (five weekday evenings and two weekend evenings) reported on their activities during the 24-hour period that ended at 5 p.m. on the day of the call; mothers and fathers were interviewed on four of the seven calls (3 weekday evenings, one weekend evening). Families received \$100 for home and phone interviews at T1 and \$125 at T2, and each family member received \$75 at T3. The University's Institutional Review Board approved all procedures.

## Measures

**Parents' differential time with siblings.** Youth's time with mothers and time with fathers were measured using phone interview data. On each of the seven phone calls (at each phase), youth were guided through a list of activities and probed for both duration (in minutes) and social contexts (i.e., with whom youth engaged in each activity) using a cued-recall procedure (McHale, Crouter, & Bartko, 1992). To calculate each siblings' dyadic time (i.e., no one else present) with mothers and fathers, I summed the amounts of time youth spent alone with their mothers and alone with their fathers across all activities and all seven phone calls. To calculate the *differential time* variables, younger siblings' reports of dyadic time with each parent were subtracted from older siblings' reports to create the measure of sibling differences in time with parents; separate scores were calculated for mothers and fathers. Because my analyses compared two siblings from each family, the difference scores created by subtracting younger siblings' scores from older siblings' scores were perfectly negatively correlated with the difference scores created by subtracting older siblings' from younger siblings' scores. Thus, the magnitude and interpretation of the associations between the difference scores would be the same, regardless of which sibling's score was subtracted from the other's. Further, in my models,

a positive relation between differential time and relative acculturation gap, reflected that, whichever sibling experienced “favored” treatment (i.e., more time with parent relative to their sibling) also reported more similarity (smaller acculturation gaps) to parent compared to the sibling, whereas a negative relation reflected that whichever sibling experienced “unfavored” treatment (i.e., less time with parent relative to the sibling) also reported more similarity (smaller acculturation gaps) to parent compared to the sibling. To create the average time with parent control variables, the mean of older and younger siblings’ reports of dyadic time with mothers and with fathers were calculated at each occasion. Correlations between siblings’ reports of their shared time ( $r = .71 - .83, p < .001$  across the three phases), were calculated to determine inter-reporter reliability of youth’s time-use reports, and they suggested substantial agreement across reporters.

**Youth’s and parents’ acculturation scores.** I operationalized cultural orientations via two subscales of the Acculturation Rating Scale for Mexican Americans (ARSMA II; Cuellar et al., 1995), a subscale measuring Mexican-oriented (i.e., heritage) behavioral practices and a subscale measuring Anglo-oriented (i.e., host) behavioral practices. The former includes 17 items that assess Spanish language usage (e.g., “I speak Spanish, I think in Spanish), social contacts (e.g., “My friends are of Mexican origin) and media preferences (e.g., “I enjoy listening to music in Spanish”), and the latter includes 13 items assessing English language usage (e.g., “I speak English, I think in English”), social contacts, (e.g., “My friends are of Anglo origin”) and media preferences (e.g., “I enjoy listening to music in English”). Items are rated on a 5-point scale (1 = *not at all* to 5 = *extremely often or always*), with higher scores reflecting more Mexican or Anglo orientation, respectively. Cronbach’s alphas ranged from .87 to .89 for mothers, .90 to .91 for fathers, .89 to .91 for older siblings, and .89 to .91 for younger siblings,

for Mexican orientation, and from .90 to .95 for mothers, .91 to .92 for fathers, .85 to .88 for older siblings, and .75 to .82 for younger siblings, for Anglo orientation.

Past research shows that youth and their parents make inaccurate judgments about one another's acculturation levels, and that measures of acculturative gaps using both youth and parent reports are less biased (Merali, 2002; Smokowski et al., 2008). As such, I used mothers', fathers' and both older and younger siblings' individual reports to calculate the measures of siblings' relative acculturation gaps. In a first step, I calculated the absolute value of the difference between each parent's and each sibling's report of their Mexican orientations, such that higher scores signified greater intergenerational differences in Mexican orientation. In step two, I subtracted the older sibling-parent acculturation difference score from the younger sibling-parent acculturation difference score and I subtracted the younger sibling-parent acculturation difference score from the older sibling-parent acculturation difference score to create the index of relative similarity for siblings. As such, the difference scores created by subtracting younger siblings' scores from older siblings' scores were perfectly negatively correlated with the difference scores created by subtracting older siblings' from younger siblings' scores. Thus, the magnitude and interpretation of the associations between the difference scores would be the same, regardless of which sibling's score was subtracted from the other's. Accordingly, in the analytic models, a positive relation between relative acculturation gap and differential time, for example, reflected that the sibling who was more similar (i.e., smaller acculturation gap with parent relative to their sibling) also experienced "favored" treatment (i.e., more time with parent relative to their sibling), whereas a negatively relation reflected that the sibling who was less similar (i.e., larger acculturation gap with parent relative to their sibling) also experienced "favored" treatment (i.e., more time with parent relative to their sibling).



I used absolute difference scores rather than directional difference scores in Step 1 because using directional difference scores would change the interpretation of the findings and would not capture the two siblings' relative difference from their parents. That is, the use of directional difference scores in the first step, would not reflect siblings' *relative similarity* to parents but instead, highlight the extent to which *siblings are different from one another* as seen in the example below:

*Step 1.*

*Older siblings' relative acculturation gap (po) = parent (p) - older sibling (o)*

*Younger siblings' relative acculturation gap (py) = parent (p) - younger sibling (y)*

*Step 2.*

*For older siblings, py - po = (p - y) - (p - o) = o - y*

*For younger siblings, po - py = (p - o) - (p - y) = y - o*

In contrast, using absolute parent-youth difference scores in Step 1 captured the magnitude of each sibling's acculturation gap with their parents, and Step 2 captured the comparison of a youth's acculturation gap to that of the sibling, thus directing attention beyond individual parent-youth dyads to siblings' relative positions in a larger family system. As noted, siblings' relative acculturation gap scores were created separately for mothers and fathers and Mexican and Anglo orientations. I also calculated the mean of the older sibling-parent and younger sibling-parent acculturation gap scores to use as control variables so that I was able to determine whether siblings' relative acculturation gap explained unique variance in parents' differential time with siblings beyond the effects of the size of the parent-youth acculturation gap.

**Family background characteristics.** At T1, mothers and fathers reported on their highest level of education on a scale ranging from less than a high school degree (e.g., 10 for 10<sup>th</sup> grade) to graduate or professional degree (e.g., 21 for PhD, JD, or MD). Parents reported on their

annual income at T1, and scores were log-transformed to correct for skewness. Parents reported on their nativity status (1 = U.S. born) and mothers also reported on the nativity status of their children. Family SES was the standardized average of mothers' and fathers' education and log-transformed family income. Information on youth age, birth order (1 = younger sibling), gender (1 = boy), and gender constellation (1 = mixed-gender dyad) were also collected from parents at T1.

### **Analytic Plan**

I estimated a series of 2-level, multi-level models (MLM) using the PROC MIXED procedure in SAS 9.3. This strategy is appropriate when the data are clustered (time within siblings, siblings within families) and unbalanced (i.e., siblings assessed at different ages with different intervals between data collection time points; Aiken & West, 1991; Raudenbush & Bryk, 2002; Singer & Willett, 2003). Another advantage of MLM is that it accommodates missing data, and thus effectively reduces biases and standard errors (Schaefer & Graham, 2002).

Two-level models were tested in which variance was partitioned into (a) within-family/time-varying and (b) between-family/time-invariant components. I tested competing hypotheses, separately for mothers and fathers and for Mexican and Anglo acculturation (eight two-level models in all): (a) changes in parents' differential time with siblings predicted changes in siblings' relative acculturation gaps (i.e., Time  $N-1$  predicts Time  $N$ ), controlling for prior relative acculturation gaps; and (b) changes in siblings' relative acculturation gaps predicted changes in sibling differences in time with parents, controlling for prior sibling differences in time with parents. In these lagged models, the coefficients predict residualized change in each of the dependent variables.

Beginning with the *differential time predictor models*: At Level 1, I included parents' differential time as a lagged, grand-mean centered (i.e., centered at the sample mean) predictor of siblings' relative acculturation gap. In these models, siblings' average time with parents and siblings' relative acculturation gap were included as lagged, grand-mean centered covariates at Level 1. By including siblings' average time with parents and siblings' relative acculturation gap, I was able to isolate the effects of parents' differential time on siblings' relative acculturation gaps, after accounting for siblings' average time with parents and siblings' prior relative acculturation gaps. Age was centered at 15, the approximate mean age of older siblings at T1. At Level 2, family SES was included as a time-invariant control and gender constellation of the dyad (0 = same-gender dyad; 1 = mixed-gender dyad) was tested as a potential moderator of the differential time-relative acculturation gap linkages. Youth and parent nativity were included in preliminary analyses, but proved to be nonsignificant in all models and thus removed from final models (Aiken & West, 1991). As noted, these analyses were conducted separately for each parent and by cultural domain (i.e., separately for Mexican and Anglo acculturation gaps). An example of the two-level equations for differential time predicting relative acculturation gaps is as follows.

Level 1:

$$\begin{aligned} \text{Siblings' Relative Acculturation Gap}_{tj} = & \beta_{0j} + \\ & \beta_{1j} \text{Parents' differential time}_{(t-1)j} + \beta_{2j} \text{Average acculturation gap with parents}_{(t-1)j} + \\ & \beta_{3j} \text{Siblings' relative acculturation gap}_{(t-1)j} + \beta_{4j} \text{Age}_{tj} + e_{tj} \end{aligned}$$

Level 2:

$$\begin{aligned} \beta_{0j} &= \gamma_{00} + \gamma_{01} \text{Family SES}_j + \gamma_{02} \text{Gender constellation}_j + \mu_{0j} \\ \beta_{1j} &= \gamma_{10} + \gamma_{11} \text{Gender constellation}_j + \mu_{1j} \\ \beta_{2j} &= \gamma_{20} \\ \beta_{3j} &= \gamma_{30} \\ \beta_{4j} &= \gamma_{40} \end{aligned}$$

where  $j$  indicates family,  $t$  indicates time ( $t = 1, 2, 3$ ).

The *relative acculturation gap predictor models* were similarly structured, but for these, at Level 1, siblings' relative acculturation gap was included as a lagged, grand-mean centered (i.e., centered at the sample mean) predictor of parents' differential time. In these models, siblings' average acculturation gap and prior differential time with parents were included as lagged, grand-mean centered covariates at Level 1 in an effort to isolate the effects of siblings' relative acculturation gaps on differential time with a parent. Age, family SES, and gender constellation of the dyad were also included in these analyses and conducted separately for mothers and fathers and by cultural domain (i.e., separately for Mexican and Anglo acculturation gaps).

### 3.3 Results

#### Descriptive Analyses

Table 5 shows correlations, means, and standard deviations for siblings' experiences with mothers. Mothers spent more time with younger siblings, but on average, sibling differences in time spent with mothers were small (i.e., approximately a third of an hour or less per week). Further, mother-youth Anglo gaps were larger than mother-youth Mexican gaps, with both Anglo and Mexican acculturation gaps with mothers smaller for older than younger siblings except in the case of Mexican cultural orientations at T3, but here again, sibling differences in acculturation gaps with mothers were small (i.e., means across time for Anglo and Mexican acculturation gaps were 0.96 to 1.20 and 0.60 to 0.65, respectively, on a 5-point scale). Table 6 shows correlations, means, and standard deviations for fathers. Fathers also spent more time with younger siblings (except at T2), but on average, sibling differences in time spent with fathers were even smaller than sibling differences in time spent with mothers. Further, father-youth Anglo gaps were larger than father-youth Mexican gaps, and both Anglo and Mexican

acculturation gaps with fathers smaller for older than younger siblings at all points in time (i.e., means across time for Anglo and Mexican acculturation gaps were 0.87 to 1.08 and 0.54 to 0.61, respectively, on a 5-point scale). In sum, both sibling differences in time and acculturation gaps with mothers and fathers were small, on average, suggesting that significant associations between the two, net of controls for each sibling's individual experiences, would reflect a powerful family dynamic.

### **Parents' Differential Time Predicts Relative Acculturation Gaps**

Table 7 shows coefficients for the fixed effects of the *parents' differential time predictors* on siblings' relative Mexican acculturation gaps. There were no significant covariates in these models. Findings revealed that neither fathers' nor mothers' differential time predicted siblings' relative Mexican acculturation gap. For relative Anglo acculturation gaps, effects for covariates indicated that youth in higher SES families had smaller relative Anglo acculturation gaps. Findings further revealed that mothers' differential time was not a significant predictor. However, a significant effect emerged for fathers' differential time, such that, controlling for current acculturation gap differences, youth who experienced relatively more time with fathers (compared to siblings) exhibited relatively smaller father-youth Anglo acculturation gaps (than siblings) on the next measurement occasion,  $\gamma = 0.02$ ,  $t = 2.00$ ,  $p = .04$ . Gender constellation did not moderate differential time effects.

### **Relative Acculturation Gaps as Predictors of Parent's Differential Time**

In the *relative acculturation gap predictor models* (Table 8), effects for covariates revealed a significant positive effect of age for mothers and a negative effect for fathers, indicating that at older siblings spent more time with mothers but less time with fathers. In addition, an effect of sibling gender constellation indicated and that youth in mixed-gender dyads

differed more than those in same-gender dyads in time with mothers. None of the hypothesized effects were significant, however: Neither siblings' relative Mexican acculturation gaps with fathers nor with mothers predicted parents' differential time with siblings, neither siblings' relative Anglo acculturation gaps with fathers nor with mothers predicted parents' differential time with siblings. Gender constellation did not emerge as a significant moderator.

### **3.4 Discussion**

Grounded in a family systems perspective, this study built on the acculturation gap literature to incorporate the potential role of siblings in this family process in Mexican-origin families. Study goals were to assess whether and how (changes in) siblings' differential time with parents were linked to (changes in) sibling differences in the match between their own and their parents' acculturation from early adolescence into young adulthood. Findings were limited to one pattern: sibling differences in time with father predicted sibling differences in their acculturation gaps to fathers' host culture orientations. Nonetheless, the current study extends prior research on acculturation gaps in several ways. First, using an ethnic homogenous design I examined acculturation with parents as a multi-dimensional construct, assessed both in terms of orientations to the host and heritage cultures and with mothers and fathers, expanding beyond the more typical focus on unidimensional assessments of acculturation gaps with mothers (Juang et al., 2007; Pawliuk et al., 1996; Phinney & Vedder, 2006; Same & Virta, 2003). Second, taking advantage of relatively rare longitudinal data on parent-youth acculturation gaps, I tested the bidirectional linkages between siblings' differential time with parents and sibling differences in acculturation gaps with parents. Third, I moved beyond the study of acculturative experiences of individual parent-youth dyads to incorporate the potential role of siblings in these family dynamics.

My results revealed that sibling differences in time with fathers predicted sibling differences in Anglo, but not Mexican, acculturation gaps with fathers –and that sibling differences in time with fathers did not predict subsequent sibling differences in Anglo or Mexican acculturation gaps with fathers. Further, neither sibling differences in Anglo nor Mexican acculturation gaps predicted time with mothers or vice versa. The significant results highlight the importance of distinguishing between mothers and fathers and host and heritage domains of acculturation as well as directions of effect in understanding family acculturation processes from adolescence into young adulthood. They also suggest that siblings may play a role in family acculturation processes.

Much of the prior acculturation gap literature focused on mother-youth dyads, and considerably less is known about father-youth acculturative processes. Thus, the findings underscore the importance of including fathers in studies of the transmission of cultural practices. In general, research has shown that interactions with fathers tend to be more salient to youth than those with mothers given their less frequent involvement (Maccoby, 1999). Consistent with this idea, prior research on cultural socialization found that father-youth acculturation differences were more closely linked to father-youth conflict than were mother-youth differences (Schofield et al., 2008). In the context of the current study, it may be that fathers' involvement is less scripted than mothers' and thus that father-youth time is effective in promoting similarities because it is perceived as special (Milkie, Simon, & Powell, 1997). In addition, prior work showed that, across the transition into young adulthood, father-youth dyads, but not mother-youth dyads, engaged in reciprocal socialization in which father's cultural values influenced, and were also influenced by youth's cultural values, reflecting a more egalitarian relationship; in contrast, maternal influences were evident from early to late adolescence (Parke

& Buriel, 2006; Perez-Brena, Updegraff, & Umaña-Taylor, 2015). Reciprocal socialization processes in father-youth relationships into young adulthood may explain why the associations between differential time with fathers, but not mothers, were linked to more similar cultural orientations in this study. Given the almost exclusive focus on early adolescence and cross-sectional designs of prior research, future work should use longitudinal methods to study these gaps at different points in development over time.

As mentioned, reviews of the acculturation gap literature highlight the importance of assessing orientations both in terms of host and heritage culture to better understand their potentially distinct correlates. Given few studies have examined both mother-youth and father-youth differences in both host and heritage cultural practices, it is not possible to make definitive comparisons across studies. My findings suggest, however, that Mexican-origin fathers may be particularly influential in the host cultural domain, possibly given their breadwinner role and corresponding connections to the world outside the home. Consistent with this perspective on the paternal role, for example, prior research has shown that fathers are more involved in leisure activities with their offspring compared to day-to-day caretaking activities at home (Coltrane & Adams, 2008; Larson & Verma, 1999). By spending time with youth outside the home or through conversations about the larger world during their time together, father-youth dyads may share experiences related to host cultural practices such as by speaking English, or connecting to Anglo culture through media and other free time activities. In turn, siblings who spend comparatively less time with their fathers may not experience the same connections to Anglo culture as their fathers, and thus become less similar to their fathers than are their siblings.

Given mothers' role as socializer of heritage culture, it might be expected that sibling differences in mother-youth time would predict sibling differences in mothers' Mexican



acculturation. In this sample however, there were generally small differences in youth's Mexican acculturation gaps with mothers as compared to differences in Anglo acculturation with either parent, and sibling differences were neither predictors of nor predicted by parent-youth shared time. Further as noted, sibling differences in time spent with mothers were small, and controls for dyadic time with mothers left little variance for sibling differences maternal or paternal time to predict differences in Mexican acculturation. Sibling differences may be greater at other times in development when siblings differ in status transitions such as when one sibling gets married or becomes a parent. Future work should explore other developmental periods that may be important in explaining the circumstances under which parents differentiate between their children. A family systems perspective highlights that family dynamics are often bidirectional (Minuchin, 1974). Addressing the more typically studied question about the implications of acculturation gaps for parent-youth dynamics and drawing from the parental favoritism literature, I reasoned that one motivating force driving parents' differential time with siblings may be the degree to which one child was more similar to the parent in cultural orientations than was the other. However, my results indicated that sibling differences in acculturation gaps with parents did not predict differences in time with parents: Neither differences in relative Mexican or Anglo acculturation gaps and neither gaps vis a vis mothers or fathers were significant predictors.

These null findings were inconsistent with conclusions from prior work on maternal favoritism toward siblings in midlife (Suitor, et al., 2013; Suitor & Pillemer, 2000; 2007), and there may be both substantive and methodological reasons for the lack of significant effects here. First, the limited research on sibling differences in parent-youth resemblance has focused on elderly mothers' accounts of their relationships with their midlife adult children using European American samples and focused on status variable similarities (e.g., gender, educational

attainment, marital and parental statuses) as well as global ratings of values/opinions. In contrast, the current study utilized a multimethod, multi-informant approach and focused instead on the potential role of shared cultural practices as a force underlying parental favoritism during adolescence and young adulthood in Mexican-origin families. Importantly, prior research also used cross-sectional designs, interpreting correlations as evidence that siblings' relative similarity causes parental favoritism, although findings were also consistent with the opposite direction of effect. The longitudinal scope of the present study, however, allowed for testing both directions of effect, and the pattern of results documented that, in the case of shared time with fathers, sibling differences time predicted subsequent their relative Anglo resemblance with father rather than the other way around.

Finally, the current study aimed to advance understanding of the acculturation gap by moving beyond a focus on individual parent-youth dyads to highlight the potential role of siblings in family acculturation processes from adolescence into young adulthood. As others have noted, parent-youth shared time is a key opportunity for parents to expose youth to cultural practices (Garcia Coll et al., 1996; Maccoby, 1992; Park & Buriel, 1998). Thus, I had hypothesized that sibling differences in shared time would promote sibling differences in parent-youth acculturation gaps such that the sibling who spends more time with a parent is more similar to that parent. My findings provided limited evidence that siblings' may play a role, specifically, in the formation of host acculturative processes with fathers in showing that sibling differences in shared time with fathers, above and beyond average time with fathers, predicted sibling differences in Anglo acculturation gaps with fathers. Although research on parents' differential treatment has shown that sibling differences are most evident for mixed gender dyads (Lam, McHale, Crouter, 2013), the differential time-relative acculturation gap link was not

moderated by sibling dyad gender constellation during the developmental periods in question here. The link between differential father time and father-sibling cultural resemblance, however, was consistent with conceptualizations of the nonshared family environment suggesting that parents' differential treatment can lead to differences between youth in the same family. This study was the first to show that this process operated in the domain of host cultural socialization. Because of controls and small sibling differences in time spent with parents and parent-youth acculturation gaps in the current study, however, it will be important to identify developmental periods and family circumstances in which such differences are larger.

### **Study Limitations**

Although this study makes important contributions to the literatures on acculturation and sibling and family dynamics in Mexican-origin families, it is not without limitations. Using an ethnic homogenous design, I aimed to illuminate variability within this sample of Mexican-origin families, but the sample is not representative of the larger Mexican-origin population in the US. Rather, families came from a particular geographic region with a heavy concentration of Mexican immigrants. Given the distinct cultural landscapes of bordering states and proximity to Mexico, it may be easier for Mexican-origin families to maintain their ties to their heritage culture, which may, in turn, account for the small differences between family members observed here. Future investigations should include families from other geographic regions, particularly "new destinations" (Lichter & Johnson, 2009), to determine whether links between differential time with parents and siblings' intergenerational discrepancies in acculturation emerge in families wherein differences in parent-youth acculturation gaps may be larger.

In addition, in this study I focused on one domain of acculturation-- cultural practices. Sibling-related processes related to cultural transmission may vary across different domains of

acculturation, which need to be explored in their own right. For instance, based on the favoritism and acculturation gap literatures, cultural values and identification domains of acculturation may play a more prominent role young adult sibling differences in relationships with their parents. As others have noted (Birman, 2006; Costigan, 2010; Telzer, 2010), the field of family cultural socialization will be advanced by investigators focusing on specific domains of acculturation to achieve a more nuanced understanding of the processes of influence.

Further, these analyses incorporated only two siblings in each family. Consistent with national data on Mexican-origin families (King et al., 2010), however, most youth in the sample had more than one sibling. Thus, the processes I studied may be affected by other siblings in the household. Parents' time is finite, and thus, youth's opportunities to spend individual, or dyadic time with parents may be limited due to the time demands of their multiple siblings. In this way, the presence of multiple siblings may set limits on sibling differences in exposure to parents' cultural practices, and in turn, sibling differences in acculturation gaps. An important next step is to include data about all siblings in research on family dynamics to best capture family systems processes.

Finally, the developmental scope of my study was limited to adolescence and early adulthood. Given the significance of family relationships and supports in Mexican-origin families across the lifespan, future research should examine these dynamics in other developmental periods, including childhood as well as midlife, to understand whether sibling differences in parent-youth shared time and acculturation gaps are larger and more closely tied at different points across the lifespan. Parents' time with youth may be more influential in childhood when youth may be less active in their own cultural development or in midlife when variations between siblings' life circumstances may give rise to both larger differences in time

with parents and larger acculturation gaps. Acculturation is a dynamic process that continues to change over time (Berry, 1980; 2006), and thus, research is needed to examine acculturation gaps, and sibling differences in those gaps, across the lifespan.

## **Conclusion**

The current study took a first step in understanding siblings' role in the formation and implications of acculturation gaps with parents by examining whether siblings' relative acculturation gaps with their mothers and with their fathers predicted and/or were predicted by sibling differences in shared time with mother and father. Although effects of siblings differences were only evident in one of the eight models I tested, this study provided preliminary data on the potential significance of siblings for a literature that has focused on snapshots of individual mother-youth dyads and global indices of cultural orientations.

Mexican-origin families represent a large and rapidly growing segment of the US population, and it is critical to understand their cultural and family dynamics. At the most general level, my findings direct attention to the significance of fathers as distinct socialization agents and highlight one way in which youth may influence their own and siblings' cultural development. Because the challenges of adapting to a host culture and maintaining connection to the heritage culture remain for as long as individuals are in contact with two cultures (Berry, 2006), however, it is critical for future research to utilize longitudinal designs to illuminate how cultural and family process unfold, and connect, across the lifespan.

### 3.5 Tables and Figures

Table 5

*Mothers' Correlations, Means, and Standard Deviations (SDs) for Study Variables (N = 246)*

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Mothers' differential time (T1)	-	0.28**	0.12	-0.08	-0.10	-0.13	0.01	-0.03	-0.12
2. Mothers' differential time (T2)	0.28**	-	0.07	-0.07	-0.08	-0.11	-0.02	0.01	0.05
3. Mothers' differential time (T3)	0.12	0.07	-	-0.08	-0.08	-0.08	0.03	-0.05	-0.05
4. Mother-youth Anglo gap (T1)	0.08	0.25	-0.02	-	0.62**	0.61**	-0.08	0.01	-0.06
5. Mother-youth Anglo gap (T2)	0.18*	0.09	0.06	0.61**	-	0.82**	0.00	-0.05	-0.07
6. Mother-youth Anglo gap (T3)	0.23**	0.18†	0.06	0.57**	0.75**	-	-0.09	0.02	-0.12
7. Mother-youth Mexican gap (T1)	0.00	-0.04	-0.02	-0.02	-0.03	-0.07	-	0.42**	0.38**
8. Mother-youth Mexican gap (T2)	-0.14	-0.18†	-0.14	-0.02	0.06	-0.02	0.42**	-	0.49**
9. Mother-youth Mexican gap (T3)	-0.02	-0.18†	-0.05	0.11	0.04	0.04	0.17†	0.63**	-
Younger sibling means	0.09	-0.00	0.32	1.13	1.20	1.12	0.62	0.65	0.62
SD	2.89	3.15	3.15	0.82	0.93	0.81	0.48	0.47	0.47
Older sibling means	-0.09	0.00	-0.32	1.09	1.09	0.96	0.60	0.62	0.64
SD	2.89	3.15	3.15	0.78	0.78	0.69	0.44	0.44	0.49

*Note.* T1 = Time 1; T2 = Time 2; T3 = Time 3. Mother-younger sibling correlations are above the diagonal; mother-older sibling correlations are below the diagonal.

† $p < .10$ , \* $p < .05$ , \*\* $p < .01$ .

Table 6  
*Fathers' Correlations, Means, and Standard Deviations (SDs) for Study Variables (N = 246)*

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Fathers' differential time (T1)	-	0.08	-0.04	-0.06	-0.21	-0.10	-0.05	0.25**	0.28**
2. Fathers' differential time (T2)	0.08	-	-0.17†	-0.04	0.03	-0.03	-0.07	-0.06	-0.08
3. Fathers' differential time (T3)	-0.04	-0.17†	-	0.08	0.08	-0.02	0.13	0.22*	0.13
4. Father-youth Anglo gap (T1)	0.07	-0.11	-0.05	-	0.64**	0.64**	-0.07	-0.05	-0.04
5. Father-youth Anglo gap (T2)	0.05	-0.09	-0.16	0.66**	-	0.79**	-0.06	-0.08	-0.08
6. Father-youth Anglo gap (T3)	0.15	-0.13	-0.07	0.56**	0.73**	-	-0.04	0.02	-0.04
7. Father-youth Mexican gap (T1)	-0.03	0.08	0.08	-0.06	-0.11	-0.07	-	0.22*	0.20*
8. Father-youth Mexican gap (T2)	-0.07	0.09	-0.20†	0.09	0.04	0.02	0.49**	-	0.45**
9. Father-youth Mexican gap (T3)	-0.03	0.12	-0.21*	-0.00	0.10	-0.04	0.31**	0.69**	-
Younger sibling means	0.05	0.09	0.05	1.08	1.07	0.98	0.55	0.58	0.54
SD	2.15	1.72	1.27	0.78	0.78	0.72	0.43	0.45	0.41
Older sibling means	-0.05	-0.09	-0.05	1.03	0.95	0.87	0.58	0.61	0.53
SD	2.15	1.72	1.27	0.76	0.76	0.65	0.45	0.44	0.46

*Note.* T1 = Time 1; T2 = Time 2; T3 = Time 3; F-Y = father-youth. Father-younger sibling correlations are above the diagonal; father-older sibling correlations are below the diagonal.

† $p < .10$ , \* $p < .05$ , \*\* $p < .01$ .

Table 7

*Gamma Coefficients ( $\gamma$ ) and t-Ratios for Multilevel Models with Parents' Differential Time Predicting Sibling Differences in Parent-Youth Acculturation Gaps*

<i>Fixed Effects</i>	Mexican				Anglo			
	Mother		Father		Mother		Father	
	$\gamma$	<i>t-ratios</i>	$\gamma$	<i>t-ratios</i>	$\gamma$	<i>t-ratios</i>	$\gamma$	<i>t-ratios</i>
Intercept	0.41	1.73†	-0.08	-0.36	-0.26	-1.27	-0.03	-0.12
Age	-0.02	-1.62†	0.01	0.31	0.02	1.65†	0.01	0.72
Family SES	0.02	0.86	0.00	0.03	-0.13	-5.19**	-0.12	-4.90**
Gender constellation (1 = mixed; GC)	0.02	0.50	0.04	1.02	0.01	0.33	0.00	0.08
Prior relative acculturation gap	-0.40	-8.14**	-0.37	-8.01**	-0.31	-7.22**	-0.29	-6.60**
Prior average shared time	-0.00	-0.71	-0.02	-0.89	-0.00	-0.17	-0.04	-1.91†
Prior differential shared time	0.01	1.57	0.00	0.09	-0.01	-1.10	<b>0.02</b>	<b>2.00*</b>

† $p < .10$ . \* $p < .05$ . \*\* $p < .01$ .



Table 8

*Gamma Coefficients ( $\gamma$ ) and t-Ratios for Multilevel Models with Acculturation Gap Differences Predicting Parents' Differential Time with Siblings*

	Mexican				Anglo			
	Mother		Father		Mother		Father	
<i>Fixed Effects</i>	$\gamma$	<i>t-ratios</i>	$\gamma$	<i>t-ratios</i>	$\gamma$	<i>t-ratios</i>	$\gamma$	<i>t-ratios</i>
Intercept	-3.15	-2.18*	1.75	2.03*	-3.39	-2.27*	1.96	2.20*
Age	0.15	2.30*	-0.08	-2.08*	0.15	2.17*	-0.09	-2.23*
Family SES	-0.22	-1.54	-0.11	-1.22	-0.27	-1.53	-0.09	-0.88
Gender constellation (1 = mixed; GC)	-0.58	-2.36*	-0.01	-0.07	-0.57	-2.30*	0.00	0.02
Prior differential shared time	-0.05	1.27	-0.10	-2.82**	-0.05	-1.27	-0.10	-2.89**
Prior average acculturation gap	0.15	0.45	0.08	0.41	-0.11	-0.59	0.00	0.02
Prior relative acculturation gap	0.11	0.44	-0.01	-0.06	0.04	0.17	0.15	1.01

† $p < .10$ . \* $p < .05$ . \*\* $p < .01$ .

## CHAPTER 4

### CONCLUSION

Families in the US are becoming increasingly diverse in their ethnic heritage and the need to study minority families in their own right to understand cultural socialization and development in its family context is a growing priority. Thus, this dissertation was directed at exploring the family as a context of Mexican-origin youth development, with a focus on adolescence and young adulthood. Together the two studies that comprised this dissertation were aimed at illuminating how mother-youth and father-youth shared time may play a role in youth adjustment and development. The focus on parent-youth time was grounded in theory and research suggesting that such time may be an opportunity for youth to strengthen bonds with their parents that may promote their cultural similarity as well as build skills and supports that protect against depressive symptoms and risky behaviors (Bandura, 1992; Bronfenbrenner, 1979; Coleman, 1988; Larson & Verma, 1990; Park & Buriel, 1998). In effort to identify the conditions under which parent-youth shared time was linked to youth adjustment and development, I also explored their bidirectional linkages with the idea that youth characteristics—in this study, youth adjustment and cultural similarity to parents—may promote time together. Guided by family systems theory and informed by cultural-ecological, and developmental perspectives, the two studies within this dissertation extend research and illustrate several key ideas that can guide future research.

By moving beyond the more typical focus on mother-youth dyads, the two studies highlight that families are comprised of interdependent subsystems (individual family members, dyads, triads and beyond). Study 1 examined mother-youth and father-youth dyadic involvement and Study 2 focused on triadic parent-youth-sibling processes and both addressed the role of

gender in these family dynamics. Results showed how larger family characteristics impact family experiences. For instance, in Study 1 fathers became more involved with youth in mixed-gender dyads who reported more risky behaviors and in Study 2, sibling differences in time spent with fathers helped to explain relative cultural similarity to fathers compared to siblings. In addition to highlighting the importance of considering the larger family context by incorporating siblings, these studies demonstrated the need to distinguish between mothers and fathers and work to disentangle the direction of effects. Family dynamics are largely interrelated and so it is difficult to isolate their effects—one possible reason for the pattern of nonsignificant results here. Future research needs to be strategic in study design, measurement and analysis, to capture so to distinguish between family, developmental and cultural changes. Future studies should incorporate the perspectives of multiple family members from diverse family backgrounds to capture how families operate as social and socializing systems.

Grounded in a cultural ecological perspective, this dissertation relied on an ethnic homogeneous design to illuminate sources of variation within ethnic groups. Study 1 contributes to understanding parent-youth shared time in Mexican-origin families by using nightly phone diary data to describe how youth's time with their mothers and fathers changed over time as youth developed across the adolescent years and into young adulthood (i.e., 12 to 22 years of age). Although time with both mothers and fathers declined over time for the entire sample, the developmental course of parent-youth shared time varied by gender and gender constellation of the sibling dyad. For instance, fathers spent more time with sons as compared to daughters and both parents spent more time with youth in mixed-gender than those in same-gender dyads. In Study 2, I took a first step toward understanding siblings' role in the formation and implications of acculturation gaps with parents by examining whether siblings' relative acculturation gaps

with their mothers and with their fathers predicted and/or were predicted by sibling differences in shared time with mother and father. These findings provide an opportunity to understand gender dynamics in Mexican-origin families.

This dissertation aimed to show how parent-youth shared time was linked to youth adjustment and development. The largely nonsignificant effects, however, point to the need to study samples of families that are more variable in family structure, cultural orientations and youth adjustment. Because the sample here had with specific characteristics (e.g., two-parent families with at least two adolescents in which fathers were employed), that are not representative of the larger population of Mexican-origin families, future studies should focus on diverse family structures (i.e., single-parent, step-families) to learn how family structure may condition effects of parent-youth shared time. As mentioned, youth were also generally well-adjusted, which limited variability. The current sample of Mexican-origin families also comes from a particular geographic region with a heavy concentration of Mexican immigrants that may make it easier for family members to maintain their ties to their heritage culture which may have been responsible for the small differences between family members' cultural orientations observed here. Future investigations should include families from other geographic regions to better understand family dynamics that are related to culture and allow for the detection of effects beyond controls included here.

Finally, there is a substantial need for future research to advance our understanding of how individual, family, and cultural processes unfold over time. Longitudinal research allows for documenting patterns of change in family dynamics—including bidirectional processes-- and their links to youth development—in contrast to snapshots of family life and youth functioning that have characterized much of the limited literature on minority youth and families. Insights

about how development unfolds within the family and cultural contexts, across development periods and life transitions, may provide new insights into Mexican-origin family life.

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## PUBLICATIONS

- Padilla, J.**, McHale, S. M., Rovine, M. J., Updegraff, K. A., & Umaña-Taylor, A. J. (2016). Parent-youth differences in familism values from adolescence into young adulthood: Developmental course and links with parent-youth conflict. *Journal of Youth and Adolescence*, 45, 2417-2430. doi:10.1007/s10964-016-0518-y
- Padilla, J.**, McHale, S. M., Updegraff, K. A., & Umaña-Taylor, A. J. (in press). Mexican-origin parents' differential treatment and siblings' adjustment from adolescence to young adulthood. *Journal of Family Psychology*. doi: 10.1037/fam0000229
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- Padilla, J.**, McHale, S. M., Rodríguez De Jesús, S. A., Updegraff, K. A., & Umaña-Taylor, A. J. (revise and resubmit). Longitudinal course and correlates of parents' differential treatment of siblings in Mexican-origin families.

## MANUSCRIPTS IN PREPARATION

- Doughty, S., **Padilla, J.**, McHale, S. M. Differential sibling free time interests predict sibling relationship quality and self-worth.
- Padilla, J.**, Jensen, A. C., & McHale, S. M. Sibling differences in time with parents and adjustment from middle childhood through adolescence.
- Padilla, J.**, & McHale, S. M. Development and correlates of siblings' shared time with peers from childhood to late adolescence.
- Sang, S., Updegraff, K. A., **Padilla, J.**, McHale, S. M., Rodriguez, S. A., & Umaña-Taylor, A. J. Perceptions of fairness and jealousy among Mexican American siblings.