THE DIFFERENTIAL IMPACT OF FILIAL RESPONSIBILITY ON LATINX YOUTH INTERNALIZING AND EXTERNALIZING PROBLEMS

by

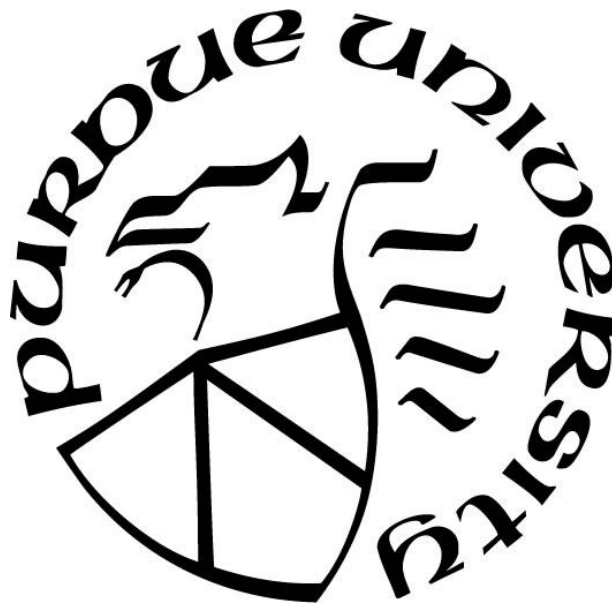**Fabiola Herrera**

A Thesis

Submitted to the Faculty of Purdue University

In Partial Fulfillment of the Requirements for the degree of

Master of Science

Department of Human Development and Family Studies

West Lafayette, Indiana

May 2022

THE PURDUE UNIVERSITY GRADUATE SCHOOL
STATEMENT OF COMMITTEE APPROVAL

Dr. Zoe E. Taylor, Co-Chair

Department of Human Development and Family Studies

Dr. Rosa I. Toro, Co-Chair

Department of Psychology in California State University, Fresno

Dr. David J. Purpura

Department of Human Development and Family Studies

Approved by:

Dr. David J. Purpura

TABLE OF CONTENTS

ABSTRACT

Latinx adolescents from immigrant families often face more challenges than their peers due to simultaneously navigating the demands of two cultures. Many Latinx children are expected to contribute to the household in multiple ways, such as engagement in tasks like filial responsibility, which can impact their development. Filial responsibility is composed of three dimensions 1) instrumental caregiving (e.g., cleaning, translating, and paying bills), 2) emotional caregiving (e.g., providing emotional support to the family), and 3) perceived unfairness (i.e., feelings about whether caregiving tasks are fair). The present study aimed to examine the dimensions of filial responsibility and their relations to internalizing and externalizing problems in Latinx youth and whether perceived unfairness acted as a mediator. Participants were 176 Latinx youth (Mage = 15.51 years, 66% female). Our SEM model demonstrated that filial responsibility (instrumental and emotional caregiving) did not have a mediating effect on perceived unfairness in youth adjustment. Evidence was found for filial responsibility (emotional and instrumental caregiving) being differentially related to youth adjustment directly over time. Instrumental caregiving at T1 negatively predicted internalizing behaviors at T2, while T1 emotional caregiving positively predicted both internalizing and externalizing behaviors at T2 (controlling for prior youth adjustment). Results demonstrate the importance of independently examining the impact of instrumental and emotional caregiving on youth adjustment. Future studies should assess the impact of caregiving tasks on other youth outcomes such as academic success.

Keywords: *Filial responsibility, instrumental caregiving, emotional caregiving, perceived unfairness, Latinx youth adjustment*.

CHAPTER 1. INTRODUCTION

Introduction

The immigrant population in the United States (U.S.) is steadily increasing, with about 44.5 million immigrants currently living in the U.S. (Zong et al., 2019). In fact, more than one in four of all U.S. children under the age of five are children of immigrants (Park & Katsiaficas, 2019). Given these increasing numbers, it is important to understand these families' lived experiences, family expectations, and dynamics affecting youth's development. One area of inquiry is cultural variation in immigrant families regarding the roles and responsibilities youth engage in within their families. Many youths from Latinx immigrant families are expected to contribute to the home. A core belief in the Latinx culture is to provide support (i.e., familism support) through filial responsibility (Kuperminc et al., 2013; Stein et al., 2014). Filial responsibility is conceptualized through three subscales assessing engagement in tasks and how youth feel about engaging in the tasks. Filial responsibility is typically measured as 1) instrumental caregiving (e.g., cleaning, translating, and paying bills), 2) emotional caregiving (e.g., supporting parent(s) emotionally), and 3) perceived unfairness (i.e., if they find emotional and instrumental caregiving to be fair) (Jurkovic et al., 2004; Kuperminc et al., 2009, 2013). Youth from Latinx immigrant families take on more home responsibility given that they are adhering to their cultural expectation of familism values which is to assist their family (Orellana, 2003; Fuligni et al., 1999).

Although engaging in filial tasks appears to be more normative and commonplace for youth from immigrant families, research assessing how filial responsibility impacts youth development and adjustment has mixed findings. Some researchers have found that filial responsibility is linked to maladaptive youth outcomes (e.g., increased use of substances and higher levels of distress; Orellana, 2003), and others have found adaptive or beneficial associations (e.g., higher self-esteem; Telzer et al., 2014). It suggests that filial responsibility could positively and negatively impact youth who engage in such tasks. It could also be the case that the impact of filial responsibility on youth adjustment is mediated by whether the youth perceive the tasks as fair or unfair. Given the theoretical understanding of filial responsibility and gaps, further research is needed to understand better how filial responsibility relates to youth adjustment and in what

contexts. Although filial responsibility is a cultural variable among immigrant families, we focus on findings of Latinx youth.

Theoretical Framework: Integrative Risk and Resilience Model

The Integrative Risk and Resilience Model is a theoretical framework assessing the impact of cultural values among immigrant families (Suárez-Orozco et al., 2018). The Integrative Risk and Resilience Model builds off the Bioecological Systems Theory (Bronfenbrenner & Morris, 2006) and the integrative model for studying developmental competencies in minority children (García Coll et al., 1996). It explicitly considers cultural contexts that specifically impact immigrant-origin youth and children (IOC&Y). The theoretical model provides a culturally relevant approach to understanding risk and resilience factors that influence the adaptation of Latinx immigrant-origin youth and children. The model posits that immigrant youth's adaptation should be examined through a developmental/universal task's perspective, such as positive social relationships and mental health, while inclusive to IOC&Y, which includes learning and maintaining home culture and bridging cultures. Factors that impact the adaptation of IOC&Y include individual-level competencies (e.g., cognitive resources), microsystems (e.g., family support and cohesion), and the broader societal context of how immigrant families are treated (e.g., xenophobia). Most relevant to the current study are the microsystem (families), individual-level (intersecting social positions/positionality), and the three indices of children and youth adaptation (developmental tasks, psychological adjustment, acculturative and enculturative tasks). The three adaptation indices indicate the risk and resilience are specific to IOC&Y groups: developmental tasks (*universal tasks*), psychological adjustment (*universal tasks*), and acculturative and enculturative tasks (*immigrant-origin specific tasks*). Universal tasks are defined as expected milestones common to all adolescents, such as self-regulation and responsibility, social relationships, and civic participation. The model is specific to IOC&Y as it focuses on the impact of acquiring host culture competencies, language acquisition, bridging cultures, and the engagement of developmental/universal tasks.

This model is fundamental to the present study as it highlights how the cultural context shapes the experiences and development of IOC&Y, especially in regard to the importance of the microsystem. The microsystem helps explain the activities and interactions in the youth's lives that occur in neighborhoods, schools, and families. Immigrant families often continue to share the

collectivist orientations and expectations (such as the importance of family) from their origin countries with their children which can positively impact their children's adjustment (Suárez-Orozco et al., 2018). The model also suggests that navigating two cultures can be difficult for immigrant-origin youth & children (e.g., intergenerational conflicts, cross-cultural conflict, and stress) and can result in maladjustment (Suárez-Orozco et al., 2018). Youth engaging in filial responsibility is an example of a cultural responsibility that may be normative for immigrant-origin families but may be seen negatively or as a non-normative task by the host culture (Fuligni & Flook, 2005, Kuperminc et al., 2009, 2013; Orellana, 2001, 2003; Pomerantz et al., 2011; Weisskirch, 2005), Developing cultural competencies that span two cultures could, thus, present both challenges and opportunities for youth. In particular, this suggests that youth's perception of the tasks their families give them, especially whether they view them as fair or unfair, is likely to relate to their adjustment.

Familism: A Cultural Context for Latinx Youth

Familism

Familism refers to the importance of close and supportive family relationships, family members' obligations to one another, and individual family members' behaviors that impact the family as a whole and serve as role models to others (Stein et al., 2014). Familism is a core cultural value in Latinx immigrant and nonimmigrant families (Stein et al., 2014). Immigrant and nonimmigrant Latinx families, although similar, differ in cultural contexts, and their adherence to familism is different (Esparza & Sánchez, 2008; Stein et al., 2014; Valenzuela & Dornbusch, 1994). Youth's adherence to familism could impact parents' expectations of them, which directly influences children's roles (duty) to their family. Therefore, it is possible that immigrant families could place greater importance on engaging in culturally related tasks in comparison to nonimmigrant families (Stein et al., 2014; Suárez-Orozco et al., 2018). There are two ways familism can be measured 1) is through attitudinal (i.e., beliefs) or 2) through behavioral familism (i.e., actions; (Hernandez & Bamaca-Colbert, 2016; Kuperminc et al., 2009; Stein et al., 2014). The focus of the current paper is on behavioral familism. Filial responsibility (behavioral familism) families indicated engagement is normative for immigrant families (Hernandez & Bamaca-Colbert, 2016; Stein et al., 2014). Tasks such as assisting with household chores and looking after

younger siblings are considered normative developmental tasks (Orellana, 2003, 2001). The impact of such responsibilities remains understudied, with a need to understand the effects filial responsibilities have on youth adjustment. Examining contextual factors in caregiving in relation to familism is critical in understanding youth adjustment.

Caregiving Constructs

Parentification and Adultification

Traditionally, researchers have examined caregiving through the constructs of adultification and parentification (reflecting a deficit perspective) rather than filial responsibility (a cultural perspective). Parentification and adultification both refer to children taking on household tasks and caregiving responsibilities that are typically seen as a parent's responsibility (Borchet et al., 2016; Burton, 2007; Van Loon et al., 2017). These tasks have typically been defined as being nonnormative and detrimental for the developing youth in nonimmigrant youth (Burton, 2007; Godsall et al., 2004; Oznobishin & Kurman, 2009; Peris et al., 2008). For example, researchers describe adultification as occurring when there is role-reversal between parents and their children— the child becomes aware of dysfunction (marriage or financial problems) in the home that is not age-appropriate for the child (Garber, 2011). As a result, an adultified child is expected to take on adult roles (Burton, 2007). A conceptual model of adultification demonstrated that children from lower socioeconomic backgrounds often are expected to take on caregiving tasks due to a lack of resources in the family (Burton, 2007). Burton (2007) also found that adultification is more common and stressful when a household deals with parent divorce, parent disability, chronic illness, parent drug addiction, and parent alcoholism. Similarly, parentification occurs when the child takes on the parent(s) role and engages in expressive and instrumental tasks to compensate for the help not being fulfilled by the parent (Burton, 2007). Both adultification and parentification are used in the literature to describe nonnormative roles that children fulfill in their families that are most often seen as detrimental and result in poor outcomes.

However, researchers are increasingly taking a cultural perspective when thinking about the impact of developmental tasks on youth development (Suárez-Orozco et al., 2018). In particular, immigrant families (who typically have a more collectivist orientation) more commonly expect that their children actively contribute to the needs and well-being of the family (Suárez-

Orozco et al., 2018; Tseng, 2004). For example, immigrant children engage more often in household chores, and many children serve as liaisons between the cultural world of their family and the culture of their host country (Weisskirch, 2005). Given the deficit and negative connotations of the terms 'parentification' and 'adultification,' researchers examining the caregiving systems in immigrant families have adopted the value-neutral term *filial responsibility* to refer to children's family caregiving efforts such as caring for siblings, managing household tasks, and translating for parents (Kuperminc et al., 2009).

Filial Responsibility

Researchers describe filial responsibility using three dimensions: *instrumental caregiving*, *emotional caregiving*, and *perceived unfairness* (Jurkovic et al., 2004; Kuperminc et al., 2009; Kuperminc et al., 2013). Instrumental and emotional caregiving is related to behavior, whereas unfairness is related to perceptions of equity and mutuality in how filial responsibilities are distributed in the family (Jurkovic et al., 2004; Kuperminc et al., 2009; Kuperminc et al., 2013). Broadly, *instrumental caregiving* refers to tasks involving physically maintaining the household, such as chores, while *emotional caregiving* provides psychological support to family members such as parents or siblings (Kuperminc et al., 2013). Research assessing instrumental caregiving in Latinx families has most often focused on experiences of language brokering (translating for their parents and helping them navigate the host culture), supporting their siblings through homework, and also providing support through chores (East, 2010; Fuligni & Pedersen, 2002; Telzer & Fuligni, 2009; Weisskirch, 2005, 2007). In contrast, research addressing emotional caregiving is less studied, with much of the research on emotional caregiving under the construct of parentification. Emotional and instrumental caregiving are often combined, and thus, potential differences between these responsibilities in the adjustment of youth have not been adequately explored (Kuperminc et al., 2009, 2013; Telzer et al., 2015).

The third dimension of filial responsibility is perceived unfairness. *Perceived unfairness* is defined as feelings associated with reciprocity and equity when engaging in instrumental and emotional caregiving (Jurkovic et al., 2004, 2005; Kuperminc et al., 2009, 2013). Work in perceived unfairness helps understand how youth feel about caregiving tasks and whether they find the caregiving fair (Jurkovic et al., 2001). Cultural differences in how children view household tasks (e.g., youth from collectivist cultures are more likely to see household responsibilities as fair

compared to those from more individualistic contexts) are therefore likely to display different developmental outcomes for immigrant children (Jurkovic et al., 2001, 2005; Kuperminc et al., 2009).

Filial Responsibility and Latinx Youth Adjustment

Although research examining parentification and adultification often report detrimental effects on youth adjustment and parent-child relationships, research on filial responsibility with immigrant parents has found both adaptive and nonadaptive youth outcomes (Orellana, 2001; Motti-Stefanidi & Masten, 2017; Suárez-Orozco et al., 2015; Suárez-Orozco et al., 2018). This is consistent with the narrative that family responsibilities can come at both a cost and benefit to youth, by potentially causing stress but also providing a sense of competence and purpose (Hetherington, 1999). The research examining filial responsibility is limited, but the available research has supported that caregiving might be normative when considering culture and should be differentiated from the nonnormative constructs of adultification and parentification (Macfie et al., 2015). The impact of filial responsibility for Latinx youth, in particular, also appears to vary depending on the context. Engaging in filial responsibility when youth are experiencing high levels of stressors such as poverty, acculturation challenges, and discrimination can negatively impact their adjustment (Jurkovic et al., 2004). But filial responsibility has also been attributed to positive outcomes such as cooperative behavior and self-efficacy (Kuperminc et al., 2013), happiness due to a sense of fulfillment (Telzer & Fulingni, 2009), and higher academic achievement (Buriel et al., 1998; Fuligni et al., 1999). When instrumental and emotional caregiving is parsed out, there are important differences in youth adjustment discussed below.

Instrumental Caregiving and Adjustment in Latinx Youth

Instrumental caregiving broadly examines helping behaviors such as language brokering, sibling care, cooking, cleaning, and yard work (Kuperminc et al., 2009, 2013; Telzer et al., 2014). These instrumental tasks are common among immigrant families due to how closely tied it is to familism. Work in instrumental caregiving has shown that the youth in Latinx families engage in significantly higher filial responsibility tasks than White non-Latinx youth (Telzer & Fuligni, 2009). Another study found that Mexican-origin youth dedicated twice as much time to engaging

in helping tasks than their White, non-Latinx peers (Telzer & Fuligni, 2009). The tasks appear to be driven by cultural values (a form of familism) as it is their duty to adhere to these tasks (Stein et al., 2014)

Instrumental caregiving shows both positive and negative outcomes on adjustment, depending on the context. For example, researchers have found that Latinx farmworker youth report positive outcomes of working, such as pleasure at helping their family and self-confidence, but also indicate adverse outcomes, including fatigue and poorer academic outcomes (Cooper et al., 2005; Taylor et al., 2019, 2020). Providing instrumental support appears to be intertwined with cultural values of familism; therefore, understanding the context of when youth are providing the support helps with disentangling the findings and knowing the contexts in which instrumental tasks are either having a positive or negative impact on Latinx youth's adjustment (Telzer et al., 2015).

Language brokering

The vast majority of the literature on instrumental caregiving tasks focuses on language brokering. Language brokering occurs when an immigrant child acts as a linguistic intermediary in day-to-day situations for their parents who are not proficient in English (Tse,1995; Weisskirch, 2005, 2007). Many children of immigrant parents take on the role of translators as immigrant parents often have limited language skills, making them more reliant on their more skilled children to navigate the host culture (Dorner et al., 2008). Some researchers have found that higher language brokering relates to higher depressive symptoms in Latinx youth (Kim et al., 2017), and others report fewer depressive symptoms and other adjustment problems (Shen et al., 2020). The context in which youth are brokering appears to be a component in how brokering impacts their adjustment (Shen et al., 2020). When youth translate in high-stakes situations, it causes elevated acculturation stress, negative impact achievement, and increased stress (Kam, 2011; Anguino, 2018). Language brokering has also been shown to negatively impact mental health (i.e., depressive symptoms; Kam & Lazarevic, 2014) and substance use (Love & Buriel, 2007; Martinez et al., 2009). The impacts of the parent-child relationships can also be a factor in whether brokering has positive or negative outcomes depending on the outcome under examination (Kim et al., 2017). When language brokering is examined through the construct of parentification, which occurs when there is role-reversal, youth have adverse outcomes because youth suddenly must take on their parent(s) role, which comes at a cost for youth and takes away from the benefits language brokering could have

on youth (Stein et al., 2007; Peris et al., 2008; Umaña-Taylor, 2003; Weisskirch, 2005, 2007). Language brokering can burden youth by prematurely exposing them to situations that are not age-appropriate, such as translating at a doctor's office (Kam, 2011). Parent-child relationships can also affect feelings associated with language brokering such that it promotes better feelings of language brokering (only seen among males; Tilghman-Osborne et al., 2016).

On the other hand, other researchers have found that youth who engage in language brokering for their families show fewer depressive symptoms and higher self-esteem and confidence (Juang & Cookston, 2009; Shen et al., 2020). For example, positive outcomes occur when everyday translations were considered low stakes youth experienced positive academic achievements while stress was unaffected (Anguiano, 2018)—additionally, having positive feelings towards language brokering improved feelings associated with their ethnic identity (Weisskirch, 2005). Endorsing and enjoying brokering can be a protective factor for youth (Kam & Lazarevic, 2014). The task of translating (instrumental caregiving) appears to be a normative part of assisting their family (Dorner et al., 2008). Youth typically have better language skills and are more acculturated to the host culture, resulting in positive adjustment feelings of competence and value to the family (Dorner et al., 2008).

These findings reinforce the idea that outcomes depend on the context. For example, when a child feels the language brokering to be demanding or stressful, this often results in poor mental health outcomes (Anguiano, 2018; Kim et al., 2017; Martinez et al., 2009). In situations where language brokering was seen as low stakes and youth were almost sure to be successful in translating correctly, youth's mental health was not impacted (Anguiano, 2018; Kim et al., 2017; Kim et al., 2017). Youth appear to have better outcomes when they still regard their parent(s) as authority figures, contrary to the parentification view where role-reversal occurs and impacts youth due to the burden of taking on their parent(s) role (Kam & Lazarevic, 2014).

Family assistance

Another instrumental caregiving task is family assistance. *Family assistance* is defined as helping around the home through sibling care, cooking, cleaning, and house or yard work (Fulingi et al., 2009; Telzer & Fuligni, 2009). Family assistance tasks can also result in costs and benefits (East, 2010), similar to language brokering (Telzer et al., 2015). East et al. (2006) found that youth experienced stress from taking care of siblings, but youth managed to do well in school considering

their stress. More recent work found the opposite effect, such that youth had lower grades and more stress due to their engagement in the tasks (Telzer et al., 2015).

The family context is influential—where youth engaged in family assistance behaviors combined with high conflict in the home and reported higher substance use (cigarette/alcohol use, marijuana use, and other illicit drugs; Telzer et al., 2014). When the youth had a negative life event that required them to provide more family assistance, it protected their negative outcomes (Telzer et al., 2014). Providing instrumental support during a challenging time can bring harmony to the family and taking on the assistance is not a burden and instead helps with their well-being. Telzer and colleagues (2015) found that the caregiving context and reason needed to engage in the task were most important in understanding why the literature is mixed. For example, in scenarios where there were changes in parents' behaviors, such as physical or psychological distress, the youth had more maladjustment problems when engaging in caregiving tasks (Telzer et al., 2015). In sum, the literature on instrumental caregiving demonstrates that these tasks have both positive and negative effects on Latinx youth's adjustment.

Emotional Caregiving and Adjustment in Latinx Youth

The second dimension of filial responsibility is emotional caregiving. *Emotional caregiving* is defined as youth supporting parents or family's psychological well-being (Kuperminc et al., 2009, 2013). Emotional caregiving is critically understudied as a dimension of filial responsibility. The research focused on Latinx populations has often been examined in the context of adult children providing emotional support to their parents due to medical conditions (Breitborde et al., 2010; Kopelowicz et al., 2006). The literature in emotional caregiving takes a parentification perspective that typically indicates negative outcomes. There is limited research that examines emotional caregiving through the perspective of familism or through a cultural lens. Further, emotional caregiving (the effect of communicating premature conversations) is limited and not typically examined in immigrant families (Shin, 2019).

Impact of emotional caregiving on Latinx youth

Like instrumental caregiving, emotional caregiving is associated with positive and negative outcomes in Latinx youth. When examining emotional caregiving through a familism perspective,

researchers found an association with feelings of roll-fulfillment (Tsai et al., 2015). Through the use of daily diaries, a sample of 421 dyads (M_{age} = 15 years) examined the effects of emotional caregiving on parental stress (Tsai et al., 2016). The daily diaries demonstrated that youth provided emotional support to their parents when parents had a stressful day. Providing support made them feel good and feel family obligation (familism) and role-fulfillment. This study showed that a sense of obligation could be directly connected to the values taking away from the engagement of the emotional support. In a college-aged sample, qualitative findings demonstrated that emotional caregiving was an expectation such that youth needed to be listeners, emotional support systems, and advocates for the family (Covarrubias et al., 2019). The study also noted that college students were expected to model the behavior from parent to child to then child to parent when providing the emotional support (the expectation was that youth provided the support because of how parents previously provided emotional support (Covarrubias et al., 2019). Another mixed-method study also found some positive outcomes for Latinx youth in farmworker families. In qualitative interviews, adolescents stated that being aware of and witnessing their family's challenges (particularly their mothers) made them feel strong, proud, and positive (Taylor et al., 2020).

Parentification is also examined more specifically through emotional caregiving, with researchers finding negative impacts on youth who are confidantes to help their parents navigate the world (García et al., 2002; Shin, 2019). Parents who are not typically English proficient among immigrant families rely on their youth to support, comprehend, and understand the information. Therefore, communicating sensitive information can, in turn, have a negative on their behaviors (Kam, 2011; Orellana, 2003; Shin, 2013; Stein et al., 1999). For example, awareness of parent(s) (or their own) undocumented status results in significant stress and anxiety for Latinx children and adolescents (Gulbas & Zayas, 2017; Yoshikawa et al., 2017). Additional work indicates that providing emotional support can impact their distress, exhaustion (Hooper et al., 2008; Titzmann, 2012), identity, self-regulation, peer relationships, and psychopathology (Macfie et al., 2015).

Overall, the research in emotional caregiving points to different outcomes depending on the variables being examined. Given this, it is important for research on filial responsibility to separately examine emotional caregiving since it is typically combined with instrumental caregiving (Telzer et al., 2015). Previous findings could have hindered how these constructs impact adjustment in Latinx youth. The present study aimed to untangle the differential impact of instrumental and emotional caregiving by first understanding their individual effects on

adjustment. Furthermore, the construct of fairness (or perceived unfairness) of caregiving tasks could help disentangle the impact that instrumental and emotional caregiving has on youth outcomes (Macfie et al., 2015) and add to the limited work on Latinx youth.

Perceived (Un)fairness and Adjustment in Latinx Youth

While considering the influence of engagement in filial responsibility has been the primary focus of current research, it is also important to consider the perceptions or feelings associated with undertaking caregiving tasks. Therefore, the third dimension is *perceived unfairness* which refers to how youth view their caregiving responsibilities and whether they feel a sense of equity, reciprocity, and recognition for their caregiving within the family (Kuperminc et al., 2013). Most of the work in perceived unfairness has been primarily examined in the parentification literature. Given the differences between parentification and filial responsibility, there is a need to understand these tasks' influence on Latinx youth adjustment (Jurkovic et al., 2001, 2004, 2005).

Perceived unfairness as a dimension and moderator

Perceived unfairness was first adopted as a dimension of filial responsibility by Jurkovic and colleagues (2001). There is limited research examining perceived unfairness and filial responsibility (Kuperminc et al., 2013). Work has explored the effects of perceived unfairness as a moderator, and while it is informative, its effects have been inconsistent. For example, Kuperminc and colleagues (2013) did not find a moderating effect of perceived unfairness but mentioned that perceived unfairness is an important variable that should be examined on its own. Indeed, Toro et al. (2019) found that perceived unfairness was positively associated with depression symptoms in Latinx college students while accounting for engagement in filial responsibility. In the same study, it was found that instrumental caregiving buffered the impact of perceived unfairness on depression symptoms in Latinx college students. Furthermore, other work with a non-Latinx sample found perceived fairness to moderate the association between caregiving and fairness on academic grade and discipline grade (Jurkovic et al., 2008). Results showed that it positively affected their academic and discipline grades, indicating that caregiving helped youth in the school setting. A moderating effect was found where perceived fairness moderated the association between caregiving and fairness on self-restraint, but only when youth reported high

perceived fairness (Kuperminc et al., 2009). These studies indicate that perceived unfairness acts differently on what (i.e., outcomes like mental health, school), how (as a predictor or moderator), and who is being studied. Thus, examining whether filial responsibility imparts an influence differently (i.e., mediation) would provide greater insight.

Perceived unfairness as a mediator

The present study aimed to test the mediating effects of perceived unfairness in a largely Latinx immigrant sample. While previous research in filial responsibility has not tested perceived unfairness as a mediator, related research provides some support for this perspective role of perceived unfairness. Jankowski and colleagues (2013) tested if perceived unfairness would mediate the effects of parentification and mental health (depression) among college students. The results indicated that the relationship between parentification and mental health (depression) was mediated by perceived unfairness. It is important to note that two mediation effects were detected 1) perceived unfairness acted as a mediator on its own, and 2) when the differentiation of self (DoS) was added as a mediator in conjunction with perceived unfairness. Thus, findings supporting perceived unfairness as a mediator indicated that experiences of parentification in the sample had long-term effects on their mental health symptoms (Jankowski et al., 2013). Future work in the study points to the inclusion of more diverse and culturally-centered samples that could indicate differential results and implications (Jankowski et al., 2013). Additionally, given that filial responsibility was adapted from the parentification/adultification literature, it is necessary to further test and follow similar theorized models indicating differences among the dimensions and test different mediation models, such as the inclusion of other related variables they did by including the DoS.

Filial Responsibility Summary

Overall, researchers have demonstrated that filial responsibility can have both costs and benefits for youth in immigrant families--meaning that these types of tasks appear differentially related to different domains of adjustment and developmental outcomes (Hetherington, 1999). Specifically, labeling these types of family caregiving tasks with solely negative connotations (such as what is typically described in the parentification and adultification literature) does not

accurately take into account the different cultural contexts in which children and youth develop or the positive impacts of caregiving tasks on youth's development. There is a need to understand better how filial responsibility may have both positive and negative impacts on immigrant-origin youth, particularly Latinx youth. To understand the effects of filial responsibility, it is essential to independently examine the dimensions of filial responsibility (Macfie et al., 2015; Telzer et al., 2015). Typically work in filial responsibility has grouped it as a single construct due to the highly correlated constructs (Kuperminc et al., 2009, 2013). Therefore, it is essential to examine if the dimensions of filial responsibility impact youth adjustment differently.

The Present Study

The current study aims to expand the literature on filial responsibility by examining how dimensions of caregiving (instrumental and emotional) and attributions associated with caregiving (perceived unfairness) are longitudinally associated with Latinx youth adjustment across time (with internalizing and externalizing problem behavior assessed separately). Past work has combined both constructs into a single indicator (Kuperminc et al., 2009, 2013), and no study has examined each dimension (instrumental and emotional caregiving) individually (Telzer et al., 2015). Given that the literature on filial responsibility often shows positive and negative effects on Latinx youth adjustment (Jurkovic et al., 2004), assessing these constructs independently may help clarify in what circumstances filial tasks are associated with negative adjustment in Latinx youth. In conjunction, further understanding of the impact of perceived unfairness needs to be studied as few studies have examined its mediating effects (Jankowski et al., 2013).

Given the gaps, the present study examined 1) how instrumental and emotional caregiving at Time 1 (T1) separately impacted Latinx youth's adjustment at Time 2 (T2) assessed through both internalizing and externalizing problems, and 2) whether perceived unfairness at T1 mediated the relationships between caregiving and youth adjustment. We hypothesized that there would be differences across filial responsibility tasks on internalizing and externalizing problems. Second, we hypothesized that instrumental and emotional caregiving would be mediated by perceived unfairness resulting in more problem behaviors for Latinx youth. Prior work has found instrumental and emotional caregiving to be highly intercorrelated and grouped both constructs together. In the current study, we extended the prior work by parsing out the constructs of instrumental and emotional caregiving and separately examining if they differentially affected

youth problem behaviors (internalizing and externalizing). We first tested a confirmatory factor analysis to assess whether instrumental and emotional caregiving constructs should be examined separately.

CHAPTER 2. METHOD

Participants and Procedures

Data come from a study of acculturation differences between Latinx immigrant parents and adolescents in California's central valley funded by Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) and National Institute of General Medical Sciences (NIGMS) (SC2HD090724: Principal Investigator (PI) Dr. Rosa I. Toro). Participants were recruited from a high school in California's central valley area, which consisted primarily of Latinx youth (92.48%) and Title I eligible (98.6%, indicating extreme financial need). The school targeted to recruit had a high enrollment of Latinx youth. Parents were also recruited (primarily mothers) but were not included in the study due to low recruitment numbers at T1 and T2. Based on youth surnames obtained by the teacher and principal, a total of 469 participants were identified as prospective participants that mainly were Latinx. First-time high school students were made aware of a study in the elective course taken by all first-year students. All 9th-grade students attending school during the 2017 – 2019 academic semesters were eligible for the study if they self-identified as Latinx.

The sample for the present study included 176 participants indicating a 60% recruitment rate which is slightly lower than other studies in the area (Conger, 2013). The sample ($N = 178$; 76% retention rate) included all participants that had completed a survey at T2 (1-year post) (Mage = 15.51 years, $SD_{age} = .58$, 66% female). Most adolescents were U.S. born 93.8%. All foreign-born students were from Mexico and arrived in the U.S. at a young age ($M_{age} = 4.80$ years, $SD_{age} = 4.49$). About 66% of parents responded to the demographic questions. Parents were mostly born outside the US 48.3%, 40.3% were married, and most of the parent's income is less than $34,999.

Participants were recruited through an elective course taken by all freshmen. At the beginning of each class the PI and research assistants (RAs) explained the purpose of the study, expectations for participation, time commitment, and compensation for participation. Students were given a parent consent form to take home (in English and Spanish) and an assent form to turn back in within the week. The PI and a team of RAs came back to the school to administer the 60-minute survey to those students who had signed consent and assent forms. The survey was administered in Qualtrics (Qualtrics, Provo, UT) in either English or Spanish as preferred by the

participant (all participants completed the survey in English). There were four prospective participants with limited English proficiency and thus would have completed a survey in Spanish, but they declined to participate. During the class period, RAs walked around to answer any questions regarding the survey. If participants were unable to complete the survey during the class were able to finish at home using an individualized online link. Participating youths were sent a personalized link to complete the survey on their own time. The second wave of data was collected one year later. Participants were compensated with a pizza party at the teacher's lounge and received community service credit at both times.

Measures

Instrumental caregiving

Instrumental caregiving was assessed through youth self-reports at T1 using the instrumental caregiving subscale from the Filial Responsibility Scale-Youth (FRS-Y, see Appendix, Kuperminc, et al., 2009). This scale included 12 items (e.g., "I often do the laundry in my family" and "I helped my brothers or sisters a lot with their homework"). Items were rated on a 4-point Likert scale (1 = not at all true, 2 = a little, 3 = somewhat, 4 = very true). Higher scores reflected more instrumental caregiving ($\alpha = .75$). To create a latent variable, items were randomly assigned to the parcels to create three indicators (Kishton & Widaman, 1994).

Emotional caregiving

Emotional caregiving was assessed through youth self-reports at T1 using the emotional caregiving subscale from the Filial Responsibility Scale-Youth (FRS-Y, see Appendix; Kuperminc et al., 2009). The scale included 11 items (e.g., "It seems like people in my family are always telling me their problems" and "I often feel caught in the middle of my parents' conflicts"). Items were rated on a 4-point Likert (1 = not at all true, 2 = a little, 3 = somewhat, 4 = very true). Higher scores reflect higher levels of emotional caregiving ($\alpha = .73$). To create a latent variable, items were randomly assigned to the parcels to create three indicators (Kishton & Widaman, 1994).

Perceived unfairness

Perceived unfairness was assessed through youth self-reports at T1 using 13 items from the Filial Responsibility Scale-Youth (FRS-Y, see Appendix; Kuperminc et al., 2009). Items included: "It often seems that my feelings don't count in my family" and "In my family, I am often asked to do more than my share." Items were rated on a 4-point Likert scale (1 = not at all true, 2 = a little, 3 = somewhat, 4 = very true). Higher scores reflected higher perceived unfairness (α = .84). To create a latent variable, items were randomly assigned to the parcels to create three indicators (Kishton & Widaman, 1994).

Internalizing problems

Youth internalizing problems behaviors were assessed through self-reports at T1 and T2 using the Youth Self-Report (YSR, see Appendix; Achenbach & Rescorla, 2001). The *internalizing scale* (31 items) included three subscales *anxious/depressed* (13-items), *withdrawn/depressed* (8-items), and *somatic complaints* (10-items). Examples of internalizing behaviors included: "I feel worthless or inferior" and "I am afraid I might think or do something bad." Responses were on a 3-point Likert scale (1 = not true (as far as you know)*,* 2 = somewhat or sometimes true*;* 3 = very true or often true). The Youth Self-Report is typically measured using a scale of 0-2, but we used a 1-3 scale as we did not want our scale to start at zero. Higher scores reflected higher internalizing behaviors (T1 α = .92; T2 α = .94). Latent variables were created at T1 and T2 by using each subscale as indicators. T1 was included to control for prior levels of internalizing problems. T1 and T2 subscales were significantly correlated (T1 range = 1 to 3, T2 range = 1 to 3; r (174) = .64, $p <$.05).

Externalizing problems

Youth externalizing problems behaviors were assessed through self-reports at T1 and T2 using the Youth Self-Report (YSR, see Appendix; Achenbach & Rescorla, 2001). The *externalizing scale* (32 items) was composed of two subscales: *rule-breaking* (15-items) and *aggressive behavior* (17-items). Items included: "I get in many fights" and "I argue a lot." Responses were on a 3-point Likert scale (1 = not true*,* 2 = somewhat or sometimes true*;* 3 = very true or often true). Note, the Youth Self-Report is typically measured using a scale of 0-2, but we

used a 1-3 scale as we did not want our scale to start at zero). Higher scores reflected higher externalizing behaviors. (T1 α = .87; T2 α = .87). Latent variables were created for each time point using each subscale as indicators. T1 was included to control for prior levels of internalizing problem behaviors. Subscales were significantly correlated (T1 range = 1 to 3, T2 range = 1 to 3; r (174) = .47, p < .05).

Covariates

Covariates for the study included child nativity (1 = birthplace US, 0 = not born in the US), child sex (0 = male, 1 = female), and primary caregiver nativity (1 = born outside the US, 0 = born in the US). For primary caregiver 82.1% were moms, 13.6% were dads, and the rest were 4.27% grandparents, aunt, foster parent, or a stepmom. Previous research has shown differences in caregiving practices by whether a child is U.S or foreign-born (Juang & Cookston, 2009). Participants stated what country they were born in to assess nativity. Sex was included as a covariate since research has shown differences in sex role expectations among Latinx females; typically, girls are expected to help out with household tasks more than boys (Kuperminc et al., 2009).

Analytic Strategy

Data were analyzed using IBM SPSS Statistics (Version 26) and Mplus Program (Version 8.6; Muthén & Muthén, 1998-2020). First, descriptive statistics and correlations among the variables and covariates were examined in IBM SPSS Statistics (Version 26). Variables were also examined for skewness and kurtosis. Structural Equation Modeling (SEM) in the Mplus program (Version 8.6) was used to test the research hypotheses. Q1: Does instrumental and emotional caregiving at T1 separately impact Latinx youth adjustment at T2 (assessed through both internalizing and externalizing problems) and Q2: Does perceived unfairness at T1 mediate the relationship between filial responsibility (assessing instrumental caregiving and emotional) at T1 and Latinx youth maladjustment (internalizing behavior and externalizing behaviors) at T2. The model tested instrumental and emotional caregiving indirect effects through perceived unfairness and latent variables with their respected indicators of internalizing and externalizing behaviors.

SEM models used full information maximum likelihood (FIML) estimation, which uses all available data and drops cases only when information is missing on all manifest variables in the analysis. FIML produces less biased and more efficient estimates compared with listwise or pairwise deletion (Arbuckle, 1996). Standard cut-offs for good model fit were assumed if Comparative Fit Index (CFI) and Tucker-Lewis index (TLI) are greater than .95, Root Mean Square Error of Approximation (RMSEA) less than .05, whereas adequate model fit can be assumed if CFI and TLI are greater than .90, RMSEA is less than .08 (Kline, 2011). The model controlled for prior levels of T1 internalizing behaviors, T1 externalizing behaviors, child sex, child nativity status, and parent nativity status (primarily mothers).

CHAPTER 3. RESULTS

Preliminary Findings

We first examined descriptive statistics. In regard to skewness and kurtosis, T1 externalizing had a slight skewness of 1.29 ($SE = .18$), kurtosis of 2.50 ($SE = .37$), T2 internalizing had a slight skewness of 1.27 ($SE = .18$) and kurtosis of 1.03 ($SE = .37$), and T2 externalizing had a slight skewness of 1.30 ($SE = .18$) and kurtosis of 1.77 ($SE = .37$). Bivariate correlations for the study variables are shown in Table 1. As expected, internalizing and externalizing symptoms correlated with one another concurrently and across both time points. The filial responsibility tasks (instrumental caregiving, emotional caregiving, and perceived unfairness) were all highly positively correlated. Emotional caregiving and perceived unfairness were significantly positively correlated to both T1 and T2 internalizing and externalizing behaviors, but instrumental caregiving was only marginally correlated to T1 internalizing. In regard to significant covariates, youth nativity (born in the US) was negatively correlated with T1 externalizing behaviors, and sex (females) was significantly positively correlated with T2 internalizing behaviors.

Structural Equation Model (SEM) Results

The proposed model (see Figure 1) demonstrated adequate fit to the data ($\chi2_{(178)} = 335.56$, $p < .01$; RMSEA $= .07$; CFI $= .92$; TLI $= .90$). Covariates were regressed on all the main T1 variables and retained in the analysis if significant, or close to significance. Prior levels of internalizing and externalizing behaviors at T1 were also regressed on T2 internalizing and externalizing behaviors (not shown in the model for simplicity). Factor loadings for the latent variables were all significant and ranged between $.51 - .97$. Internalizing and externalizing behaviors were significantly correlated at both time points (T1: $r = .66$, $SE = .06$, $p < .01$ and T2: $r = .78$, $SE = .06$, $p < .01$) and were highly stable across time (T1 to T2 internalizing $\beta = .71$, $SE = .09$, $p < .01$; T1 to T2 externalizing $\beta = .36$, $SE = .10$, $p < .01$). Additionally, T1 internalizing predicted T2 externalizing ($\beta = .22$, $SE = .11$, $p < .05$), but T1 externalizing behaviors was not significantly associated with T2 internalizing behaviors. In regard to the filial responsibility variables, we found that instrumental caregiving and emotional caregiving at T1were both positively associated with T1 perceived unfairness. Instrumental caregiving at T1 negatively

predicted T2 internalizing behaviors (controlling for prior T1 internalizing behaviors) but was not significantly associated with T2 externalizing behaviors. Emotional caregiving at T1 positively predicted both T2 internalizing and T2 externalizing behaviors. Perceived unfairness at T1 did not directly predict either internalizing or externalizing behaviors at T2 and did not mediate the association between instrumental and emotional caregiving and adjustment at T2. Sex (females) was significantly correlated with internalizing behaviors T1 ($r = .16$, $SE = .08$, $p < .05$). Youth nativity (born in the US) was negatively correlated with T1 externalizing behaviors ($r = -.17$, $SE = .08$, $p < .05$), and marginally with T1 internalizing behaviors ($r = -.13$, $SE = .08$, $p = .10$. Primary caregiver nativity (born outside the US) was marginally associated with T1 instrumental caregiving ($\beta = .19$, $SE = .11$, $p < .10$).

CHAPTER 4. DISCUSSION

Filial responsibility is generally referred to as a youth's engagement in caregiving tasks (Kuperminc et al., 2013; 2009). Research on engagement in filial responsibility has been mixed. For example, some work has linked it to having maladaptive youth outcomes (e.g., increased use of substances and higher levels of distress; Orellana, 2003), while other research has linked it to adaptive outcomes (e.g., increased cooperative behavior and interpersonal self-efficacy; Kuperminc et al., 2013). These inconsistencies suggest that the dimensions of filial responsibility should be distinguished by independently assessing each of the dimensions (e.g., instrumental and emotional caregiving and perceived unfairness; Telzer et al., 2015). The current study assessed the differential impact of instrumental and emotional caregiving on youth adjustment one year later and examined whether perceived unfairness mediated these relationships. The results suggest that consideration of the type of filial responsibility was important as differences were found between the type of filial responsibility and youth adjustment outcomes over time. However, the expectation that perceived unfairness would mediate the association between filial responsibility and youth adjustment was not supported.

Differential Impact of Instrumental and Emotional Caregiving on Latinx Youth Adjustment

Through closer examination, filial responsibility constructs were found to differentially impact youth adjustment. The results support the 'competence at a cost' perspective of the impact of filial responsibility on adjustment (Hetherington, 1999; Jurkovic et al., 2005; Kuperminc et al., 2009). Specifically, instrumental caregiving supported the competence perspective, whereby engagement in such tasks was associated with decreasing internalizing problem behaviors over time (Hetherington, 1999). On the other hand, emotional caregiving supports the cost perspective, where engagement was indicative of an increase in both internalizing and externalizing problem behaviors over time (Hetherington, 1999). Therefore, the findings highlight the importance of assessing the impact of caregiving tasks separately. While the results were encouraging, Carbajal & Toro (2021) note that the 'competence at a cost' in relation to filial responsibility should be interpreted with caution because of the novelty of the findings.

27

The expectation that differences among instrumental and emotional caregiving on adjustment were supported. Consistent with previous work (Telzer et al., 2015; Telzer & Fuligni, 2009), it was found that instrumental caregiving was associated with lower internalizing symptoms over time. Given that the nature of instrumental caregiving tasks involves language brokering, cleaning, and paying bills, it is likely that engaging in such tasks highlights a sense of purpose and belonging for youth within the family system (Kuperminc et al., 2009, 2013; Stein et al., 2007; Weisskirch, 2005). The Integrative Risk and Resilience Model further supports instrumental caregiving as a culturally-driven, developmentally adaptive task that promotes positive youth outcomes (Suárez-Orozco et al., 2018). Further, it may indicate that Latinx youth may feel a sense of pride when engaging in instrumental caregiving tasks (Dorner et al., 2008). Thus, the engagement of instrumental caregiving may serve a meaningful role in Latinx youth's lives that could indicate the youth could manage the tasks (Kuperminc et al., 2009) at this particular point of development and, in turn, linked to lower internalizing. On the other hand, externalizing behaviors did not demonstrate this same pattern of association as with internalizing behaviors. It is unclear why instrumental caregiving was not significantly associated with fewer externalizing problems and this should be examined in the future research. We were unable to run two-group analyses and it is possible the association was moderated by sex.

In contrast, emotional caregiving was found to have a detrimental effect on both internalizing and externalizing behaviors, which is consistent with the related research in filial responsibility (Kam, 2011; Shin, 2019; Shin & Hecht, 2013). Our findings further support the narrative that emotional caregiving may be indicative of family dysfunction and detrimental regardless of cultural connotations and expectations. However, other studies have found that youth who engaged in family obligations provided emotional support that was not detrimental but rather encouraging to the family (Tsai et al., 2016). Tsai and colleagues (2016) demonstrated that infrequent emotional support did not result in adverse outcomes but rather was linked to positive outcomes for Latinx youth in their sample. The results in the current study are informative as it could indicate that youth were engaging in emotional support to a higher degree, which impacted their adjustment (more internalizing and externalizing problems behaviors). Taken together, the findings highlight the importance of critically examining emotional caregiving. Specifically, implementing more extensive strategies when measuring emotional caregiving (e.g., daily diaries) that consider the frequency in engagement in emotional caregiving.

While the literature shows differences in engagement in caregiving by ethnic group membership, where individuals from European backgrounds tend to engage in caregiving tasks less than Latinx youth (Hardway & Fuligni, 2006), it is plausible that unaccounted variables could explain the inconsistencies between prior work and the current study. Specifically, factors such as familism and acculturation are noteworthy constructs to consider. Including familism can elucidate the nuanced impact of emotional caregiving as previous work supports this perspective (Hernández & Bámaca-Colbert, 2016). Considering the developmental stage of participants, it is also plausible that the influence of filial responsibility was impacted by their acculturation process (Iturbide et al., 2019), which is well underway during this developmental phase. In other words, the dynamic nature of the changing endorsement of the mainstream and heritage cultures can impact their perception and impact of engaging in caregiving tasks. Future work should examine culturally-relevant variables and salient processes that influence Latinx youth.

Perceived Unfairness as a Mediator

Although informed by prior work (Jankowski et al., 2013), results from the current study indicated that perceived unfairness did not function as a mediator in the relationship between filial responsibility and youth adjustment. While surprising, several considerations could explain the current study's findings. First, the current study examined youth in early adolescence. Research supporting the mediating influence of perceived unfairness included college-aged students (Jankowski et al., 2013). Therefore, indicating the perception of filial responsibility as being unfair may be more salient in later developmental periods when individuals have developed a more concrete sense of self (Erikson, 1959) and are engaging in more personal responsibilities that are outside of the family system (Carbajal & Toro, 2021). Second, the current study had an all Latinx sample, while Jankowski and colleagues (2013) found a mediating effect among primarily non-Hispanic White participants. Thus, variations based on ethnic group membership may be indicative of culturally-based differences that may explain the obtained results (Orellana, 2003). Outside of the single study that supported the mediating effect of perceived unfairness, the majority of research has treated perceived unfairness as an informative moderator that influences engagement in filial responsibility (Kuperminc et al., 2009, 2013). Thus, these findings suggest that a more critical examination of perceived unfairness and considering its function outside of mediation is warranted.

Strengths and Limitations

There are noteworthy strengths of the current investigation that warrant highlighting. 1) We independently assessed the dimensions of filial responsibility (instrumental and emotional caregiving) and youth adjustment (internalizing and externalizing behaviors). Notably, most of the research in caregiving has typically examined a combined measure of emotional and instrumental caregiving (Telzer et al., 2015). 2)We assessed perceived unfairness as a mediator, which, to the best of our knowledge, is the first study to examine mediating effects of perceived unfairness on instrumental and emotional caregiving. While no significant mediating effects were found, researchers should aim to better understand how perceived unfairness has an effect on youth adjustment. 3) Having a longitudinal design was also a strength that allowed us to control prior internalizing and externalizing problem behaviors at T1. 4) Another contribution is having a rural Latinx sample, given that there is little research on rural communities, and is qualitatively different from Latinx communities in urban settings (Ponting et al., 2018).

The study was not without limitations. First, the sample was primarily of Mexican origin from central California, limiting generalizability to other Latinx groups such as those from other regions. Second, the study only utilized youth self-reports for problem behaviors. Therefore, future studies should test these associations with multiple reporters. Parent data was available (for the child behavior checklist), but these data were not used due to low parent completion of surveys. If these data were used, it would have decreased our sample size significantly and affected the current study's statistical power. Finally, the current study utilized two waves of data. Some research indicates that in order to truly assess mediation, three-time points should be utilized (Maxwell & Cole, 2007). Therefore, an additional data point may have identified relationships that were not observed by the available data in the current study and permitted proper temporal inferences.

Future Directions and Implications

Overall, the current study demonstrated that instrumental caregiving had a positive effect on internalizing problem behaviors, whereas emotional caregiving had a detrimental effect on internalizing and externalizing behaviors. Therefore, future work should assess the differential impact of caregiving tasks on other domains of youth adjustment (especially positive outcomes), such as academic competence, resilience, self-esteem, and self-efficacy. It would allow for a better

understanding of how caregiving tasks are associated with different aspects of youth adjustment and well-being. Given the nature of filial responsibility as a family-related construct, future research should also examine family process variables (e.g., family conflict). Considering that emotional caregiving is likely driven by family dysfunction (Burton, 2007), including family process variables, can further highlight the differential influence of each type of filial responsibility at the family level (Suárez-Orozco et al., 2018; Telzer et al., 2014). Assessing engagement in caregiving tasks at different ages will also be important as these tasks are likely to have a differential impact (Kuperminc et al., 2013). It would show the developmental aspect of engagement of the tasks into emerging adulthood, which some work indicates is when filial responsibility may have a stronger impact (Kuperminc et al., 2013). Finally, it will be important for future research to adopt a mixed-methods approach to understand how children and youth view the caregiving tasks they engage in and deepen our understanding of how children navigate these tasks within their families.

The findings of the current study have noteworthy implications. First, findings demonstrating the association between instrumental caregiving and lower internalizing problem behaviors point to a potential promotive influence of this type of filial responsibility. Indeed, previous research has shown that instrumental caregiving may decrease internalizing problem behaviors through fostering a sense of purpose, self-efficacy, and pride in helping their family (e.g., Telzer & Fuligni, 2009; Telzer et al., 2015). In other words, engagement in instrumental caregiving may be fulfilling for Latinx youth. It could also mean that the support they are providing for the family could be demonstrating a sense of familism (although not measured) but gives a possible indication that instrumental tasks are normative among the sample under examination, which supports the numerous studies in familism (Stein et al., 2014). In terms of instrumental caregiving, it would be important for Latinx families to be informed about the prospective positive effects of engagement in these tasks on youth adjustment. Therefore, supporting parents' knowledge on the positive effects of engaging in instrumental tasks could help parents create an environment where youth feel supported and acknowledged for their contributions to the family.

As previously stated, the presence of emotional caregiving may be an indicator of family dysfunction. Therefore, the positive association between emotional caregiving and internalizing and externalizing of problem behaviors is not surprising and has important implications for families and youth. Specifically, it demonstrates that children's engagement in emotional

caregiving may be indicative of parents' need for emotional support (Titzmann, 2012). Thus, providing parents with the appropriate support (i.e., counseling) would alleviate the burden of emotional caregiving for children and equip parents with effective strategies to implement when experiencing emotional distress. Similarly, these findings also indicate that supportive services for children engaging in emotional caregiving are important. Involvement in these types of efforts may buffer the impact of emotional caregiving.
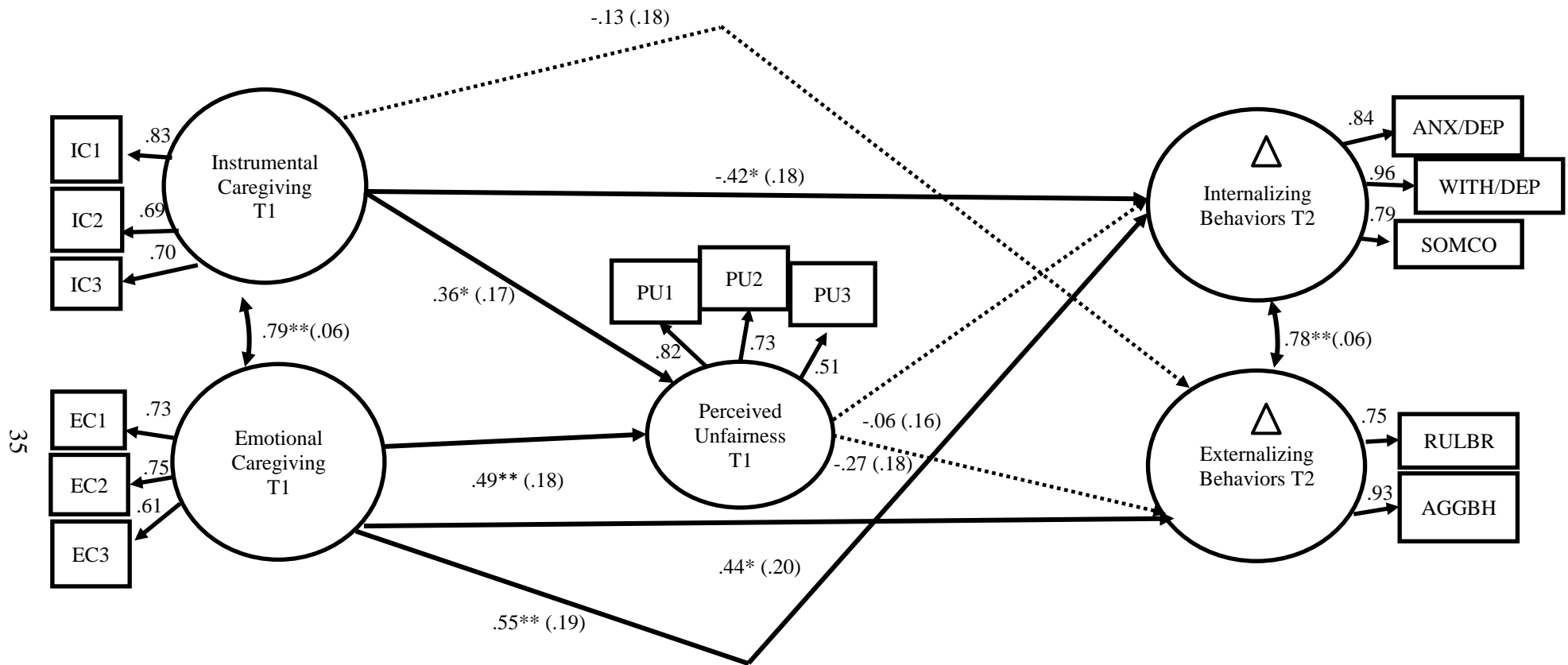
CHAPTER 5. CONCLUSION

The present study highlights the importance of the contextual factors that impact immigrant families' lived experiences. For example, a routine occurrence within immigrant families is children's engagement in filial responsibility. In the current study, filial responsibility had a differential impact on youth adjustment. Instrumental caregiving mitigated the negative effects of internalizing behavior in youth. In comparison, emotional caregiving for youth in the sample reported more internalizing and externalizing problem behaviors over time. This work indicates that there should be a greater understanding of the nuanced influence of these dimensions by examining previously tested and including new variables. The study demonstrates the importance of differentiating between dimensions of filial responsibility and supports that work should examine the dimensions separately.

Table 1. Bivariate correlations among variables and covariates

	1	2	3	4	5	6	7	8	9	10
1. Internalizing Behaviors T1	1.00									
2. Externalizing Behaviors T1	.56**	1.00								
3. Internalizing Behaviors T2	.64**	.31**	1.00							
4. Externalizing Behaviors T2	.41**	.47**	.66**	1.00						
5. Instrumental Caregiving T1	$.13^{\dagger}$	.02	.04	.09	1.00					
6. Emotional Caregiving T1	.30**	.20**	.29**	.25**	.60**	1.00				
7. Perceived Unfairness T1	.53**	.38**	.37**	.23**	.40**	.49**	1.00			
8. Youth Nativity	$-.13^{\dagger}$	-.16*	-.12	$-.14^{\dagger}$	-.02	-.11	-.08	1.00		
9. Youth Sex	.15	.04	.15*	.00	-.06	.02	.02	.02	1.00	
10. Primary Caregiver Nativity	-.05	-.01	-.08	.09	$.17^{\dagger}$	$.16^{\dagger}$	.03	-.06	.00	1.00
Mean (*M*)	1.45	1.28	1.39	1.23	2.02	1.90	1.76	.94	.66	.77
Standard Deviation (*SD*)	.32	.22	.35	.20	.54	.51	.60	.24	.47	.43

Note: $* p < .01. ** p < .05. ^{\dagger} p < .10$, (two-tailed). T1 = Time 1, T2 = Time 2. Covariates: Youth nativity (1 = Born in US; 0 = Born outside the US), Youth Sex (Female = 1; Male = 0), Primary caregiver nativity (1 = Born outside the US; 0 = Born in the US).

Figure 1. SEM model (*N* = 178)

Note: χ2(178) = 335.56, p <.01, Root Mean Square Error of Approximation (RMSEA) = .07, Comparative Fit Index (CFI) = .92, Tucker–Lewis Index (TLI) = .90. **p < .01, *p < .05, †p < .10, (two-tailed). Results are standardized (standard errors in parentheses). Covariates included in the model were sex (female = 1; male = 0); age (in years), nativity (1 = Born in US; 0 = Born outside the US) primary caregiver nativity (1 = Born outside the US; 0 = Born in the US). Dashed paths in the model indicate that they were not significant. △= controlling for T1 internalizing and externalizing behaviors. T1 = Time 1; T2 = Time 2; IC = Instrumental Caregiving; EC = Emotional Caregiving; PU= Perceived Unfairness; ANX/DEP = Anxious/Depressed; WITH/DEP = Withdrawn/ Depressed; SOMCO = Somatic Complaints; RULBR = Rule-Breaking Behavior; and AGGBH = Aggressive Behavior.

APPENDIX

Survey Questions

Demographics

1. Sex: ❏ Male ❏ Female

2. What is your date of birth? Month _____ Day_____ Year_____

3. Were you born in the U.S.? ❏ Yes ❏ No

4. Place of birth: City _____ State_____

5. Where were you born? (Select one) ❏ Mexico ❏ El Salvador ❏ Guatemala ❏ Costa Rica ❏

   Nicaragua ❏ Peru ❏ Colombia ❏ Panama ❏ Other, Specify: _____

6. At what age did you come to the U.S.? _____

7. What is your age? _____

8. What grade are you currently in? ❏ 9th ❏ 10th ❏11th ❏12th

9. What is your ethnic or racial group? (select all that apply)

   ❏Hispanic/Latino ❏ Black/African American ❏ Alaskan Native ❏ American Indian/Native

   American ❏ Asian or Pacific Islander ❏ European American ❏ Other, Specify: _____

Filial Responsibility Measures

Filial Responsibility Scale-Youth (FRS-Y; Instrumental Caregiving, 12-items; Emotional Caregiving, 10-items; Perceived Unfairness, 12-items; Kuperminc et al., 2013**)**

Instructions: For each of the following, how true are these statements.
Scale: 1 = not at all, 2 = a little, 3 = somewhat, 4 = very much

Instrumental Caregiving *(12-Items)*

1. I do a lot of the shopping for groceries or clothes for my family.

2. I often help my brother(s) or sister(s) with their homework.

3. I work to help make money for my family.

4. It's hard sometimes to keep up in school because of my duties at home.

5. I often do the laundry in my family.

6. In my house, I often do the cooking.

7. My parents often ask me to care for my brother(s) or sister(s).

8. I do a lot of work in the house or yard.

9. My parents often ask me to help my brother(s) or sister(s) with their problems.

10. I often do a lot of chores at home.

11. I often help my parents speak to people who don't know Spanish.

12. I often go and help my parents when they have business with people at school or other places.

Emotional Caregiving *(10-Items):*

1. At times I feel I am the only one my mother or father can ask for help.

2. People in my family often ask me for help.

3. My parents tell me that I act older than my age.

4. I often try to keep the peace in my family.

5. It seems like people in my family are always telling me their problems.

6. If someone in my family is upset, I try to help in some way.

7. When my parents fight, they try to get me to help them.

8. I feel like I have to take care of my family.

9. I often feel caught in the middle of my parents' conflicts.

10. My parents often talk bad to me about each other.

Perceived Unfairness *(12-Items):*
1. In my family, I am often asked to do more than my share.

2. Even though my parents care about me, I cannot really depend on them to meet my needs.

3. It often seems that my feelings don't count in my family.

4. I feel like people in my family disappoint me.

5. No one in my family sees how much I give up for them.

6. My parents are very helpful when I have a problem.

7. Sometimes it seems like I am more responsible than my parents are.

8. My parents often criticize my attempts to help out at home.

9. For some reason, it is hard for me to trust my parents.

10. My parents often expect me to take care of myself.

11. In my family, I often give more than I receive.

12. My parents give me the things I need like clothes, food, and school supplies.

Youth Maladjustment Measures

Youth Self Report (YSR; Scales measuring **Internalizing Behaviors** with subscales of *Anxious/Depressed* (13-items)*; Withdrawn/Depressed* (8-items)*; Somatic Complaints (10-items)* and **Externalizing Behaviors** with Subscales of *Rule-Breaking* (15-items) *and Aggressive Behavior (17-items)*; Achenbach & Rescorla, 2001)

Instructions: Below is a list of items that describe kids. For each item that describes you now or **within the past 6 months**, please select **3** if the item is **very true or often true** of you. Select the **1** if the item is **somewhat or sometimes true** of you. If the item is **not true** of you, select the **1**.
Scale: 1 = Not True (as far as you know), 2 = Somewhat or Sometimes True, 3 = Very True or Often True

Internalizing Behaviors*: Anxious/Depressed (13-items)*

1. I am afraid of certain animals, situations, or places, other than school.

2. I am afraid of going to school.

3. I am afraid I might think or do something bad.

4. I feel I have to be perfect.

5. I feel that no one loves me.

6. I feel worthless or inferior.

7. I am nervous or tense.

8. I am too fearful or anxious.

9. I feel too guilty.

10. I am self-conscious or easily embarrassed.

11. I think about killing myself.

12. I worry a lot.

13. I cry a lot.

Internalizing Behaviors*: Withdrawn/Depressed (8-items)*

1. There is very little that I enjoy.

2. I would rather be alone than with others.

3. I refuse to talk.

4. I am secretive or keep things to myself.

5. I am too shy or timid.

6. I don't have much energy.

7. I am unhappy, sad, or depressed.

8. I keep from getting involved with others.

Internalizing Behaviors: *Somatic Complaints (10-items)*

1. I have nightmares.

2. I feel dizzy or lightheaded.

3. I feel overtired without good reason.

Physical problems *without known medical cause:*

4. Aches or pains (not stomach or headaches) ...………………………………………..

5. Headaches…………………………………………………………………………..

6. Nausea, feels sick………………………………………………………………...………

7. Problems with eyes (not if corrected by glasses) …………………………………….

8. Rashes or other skin problems…………………………………………………………...

9. Stomachaches…………………………………………………………..………………..

10. Vomiting, throwing up…………………………………………………………...………

Externalizing Behaviors: *Rule-Breaking (15-items)*

1. I drink alcohol without parents' approval.

2. I don't feel guilty after doing something I shouldn't.

3. I break rules at home, school, or elsewhere.

4. I hang around with kids who get in trouble.

5. I lie or cheat.

6. I would rather be with older kids than kids my own age.

7. I run away from home.

8. I set fires.

9. I steal at home.

10. I steal from places other than home.

11. I swear or use dirty language.

12. I think about sex too much.

13. I smoke, chew, or sniff tobacco.

14. I cut class or skip school.

15. I use drugs for nonmedical purposes (don't include alcohol or tobacco).

Externalizing Behaviors: *Aggressive Behavior (17-items)*

1. I argue a lot.

2. I am mean to others.

3. I try to get a lot of attention.

4. I destroy my own things.

5. I destroys things belonging to others.

6. I disobey my parents.

7. I disobey at school.

8. I get in many fights.

9. I physically attack people.

10. I scream a lot.

11. I am stubborn.

12. My moods of feelings change suddenly.

13. I am suspicious.

14. I tease others a lot.

15. I have a hot temper.

16. I threaten to hurt people.

17. I am louder than other kids.

REFERENCES

Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA School-Age Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, and Families.

Aldridge, J. (2006). The experiences of children living with and caring for parents with mental illness. *Child Abuse Review: Journal of the British Association for the Study and Prevention of Child Abuse and Neglect*, *15*, 79-88. https://doi.org/10.1002/car.904

Anguiano, R. M. (2018). Language brokering among Latino immigrant families: Moderating variables and youth outcomes. *Journal of Youth and Adolescence*, *47*(1), 222–242. https://doi.org/10.1007/s10964-017-0744-y

J. L. (1996). Full information estimation in the presence of incomplete data. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling: Issues and techniques* (pp. 243–277). Mahwah, NJ: Erlbaum.

Breitborde, N. J., López, S. R. & Kopelowicz, A. (2010). Expressed emotion and health outcomes among Mexican-Americans with schizophrenia and their caregiving relatives. *The Journal of Nervous and Mental Disease, 198*(2), 105-109. https://doi.org/10.1097/NMD.0b013e3181cc532d

Bronfenbrenner, U., & Morris, P. (2006). The bioecological model of human development. In R. M. Lerner and W. Damon (Eds.), Handbook of Child Psychology: Theoretical models of human development (6th ed. Vol. 1, pp. 793–828). New York, NY: Wiley.

Borchet, J., Lewandowska-Walter, A., & Rostowska, T. (2016). Parentification in late adolescence and selected features of the family system. *Health Psychology Report, 4*(2), 116–127. https://doi.org/10.5114/hpr.2016.55921

Burton, L. (2007). Childhood adultification in economically disadvantaged families: A conceptual model. *Family Relations*, *56*(4), 329–345. https://doi.org/10.1111/j.1741-3729.2007.00463.x

Calzada, E. J., Fernandez, Y., & Cortes, D. E. (2010). Incorporating the cultural value of respeto into a framework of Latino parenting. *Cultural Diversity and Ethnic Minority Psychology*, *16*(1), 77–86. https://doi.org/10.1037/a0016071

Champion, J. E., Jaser, S. S., Reeslund, K. L., Simmons, L., Potts, J. E., Shears, A. R., &
Compas, B. E. (2009). Caretaking behaviors by adolescent children of mothers with and
without a history of depression. *Journal of Family Psychology: JFP: Jjournal of the
Division of Family Psychology of the American Psychological Association (Division
43), 23*(2), 156–166. https://doi.org/10.1037/a0014978

Conger, R. D. (2013). Rural children at risk. *Monographs of the Society for Research in Child
Development, 78*(5), 127–138. https://doi.org/10.1111/mono.12055

Cooper, S. R., Cooper, S. P., Felknor, S. S., Santana, V. S., Fischer, F. M., Shipp, E. M., & Vela
Acosta, M. S. (2005). Nontraditional work factors in farmworker adolescent populations:
Implications for health research and interventions. *Public Health Reports, 120*(6), 622-
629. https://doi.org/10.1177/003335490512000610

Covarrubias, R., Valle, I., Laiduc, G., & Azmitia, M. (2019). "You never become fully
independent": Family roles and independence in first-generation college
students. *Journal of Adolescent Research, 34*(4), 381–410.
https://doi.org/10.1177/0743558418788402

Dorner, L. M., Orellana, M. F., & Jiménez, R. (2008). "It's one of those things that you do to
help the family": Language brokering and the development of immigrant
adolescents. *Journal of Adolescent Research, 23*(5), 515–
543. https://doi.org/10.1177/0743558408317563

East, P. L. (2010). Children's provision of family caregiving: Benefit or burden? *Child
Development Perspectives*, *4*(1), 55–61. https://doi.org/10.1111/j.1750-
8606.2009.00118.x

East, P. L., & Weisner, T. S. (2009). Mexican American adolescents' family caregiving:
Selection effects and longitudinal associations with adjustment. *Family Relations*, *58*(5),
562–577. https://doi.org/10.1111/j.1741-3729.2009.00575.x

Erikson, E.H. 1959. *Identity and the Life Cycle* New York: International Universities Press.

Fuligni, A. J., Tseng, V., & Lam, M. (1999). Attitudes toward family obligations among
American adolescents with Asian, Latin American, and European backgrounds. *Child
Development*, *70*(4), 1030–1044. https://doi.org/10.1111/1467-8624.00075

Fuligni, A. J., Telzer, E. H., Bower, J., Cole, S. W., Kiang, L., & Irwin, M. R. (2009). A preliminary study of daily interpersonal stress and C-reactive protein levels among adolescents from Latin American and European backgrounds. *Psychosomatic Medicine*, *71*(3), 329–333. https://doi.org/10.1097/PSY.0b013e3181921b1f

Fuligni, A. J., & Pedersen, S. (2002). Family obligation and the transition to young adulthood. *Developmental Psychology*, *38*(5), 856–868. https://doi.org/10.1037/0012-1649.38.5.856

García Coll, C., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Vázquez García, H. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development*, *67*(5), 1891–1914. http://dx.doi.org/10.2307/1131600

García, M. F. M., Ramírez, M. G., & Jariego, I. M. (2002). Social support and locus of control as predictors of psychological well-being in Moroccan and Peruvian immigrant women in Spain. *International Journal of Intercultural Relations, 26*(3), 287–310. https://doi.org/10.1016/S0147-1767(02)00005-6

Garber, B. D. (2011). Parental alienation and the dynamics of the enmeshed parent-child dyad: Adultification, parentification, and infantilization. *Family Court Review*, *49*(2), 322-335. https://doi.org/10.1111/j.1744-1617.2011.01374.x

Gonzales, N. A., Germán, M., Kim, S. Y., George, P., Fabrett, F. C., Millsap, R., & Dumka, L. E. (2008). Mexican American adolescents' cultural orientation, externalizing behavior and academic engagement: The role of traditional cultural values. *American Journal of Community Psychology*, *41*(1–2), 151–164. https://doi.org/10.1007/s10464-007-9152-x

Gonzalez-Barrera, A. (2020, September 24). The ways Hispanics describe their identity vary across immigrant generations. https://www.pewresearch.org/fact-tank/2020/09/24/the-ways-hispanics-describe-their-identity-vary-across-immigrant-generations/

Gulbas, L. E., & Zayas, L. H. (2017). Exploring the effects of U.S. immigration enforcement on the well-being of citizen children in Mexican immigrant families. *The Russell Sage Foundation Journal of the Social Sciences, 3*(4), 53-69. https://doi.org/10.7758/rsf.2017.3.4.04

Hafford, C. (2010). Sibling caretaking in immigrant families: Understanding cultural practices to inform child welfare practice and evaluation. *Evaluation and Program Planning, 33*(3), 294-302. https://doi.org/10.1016/j.evalprogplan.2009.05.003

Hernández, M. M., & Bámaca-Colbert, M. Y. (2016). A behavioral process model of familism: Behavioral process model of familism. *Journal of Family Theory and Review*, *8*(4), 463–483. https://doi.org/10.1111/jftr.12166

Hetherington, E. M. (1999). *Should we stay together for the sake of the children? In E. M. Hetherington* (Ed.), Coping with divorce, single parenting, and remarriage: A risk and resiliency perspective (pp. 93–116). Mahwah, NJ: Erlbaum.

Hofferth, S. L., & Moon, U. J. (2016). How do they do it? The immigrant paradox in the transition to adulthood. *Social Science Research*, *57*(1), 177–194. https://doi.org/10.1016/j.ssresearch.2015.12.013

Hooper, L. M., Doehler, K., Jankowski, P. J., & Tomek, S. E. (2012). Patterns of self-reported alcohol use, depressive symptoms, and body mass index in a family sample: The buffering effects of parentification. *The Family Journal*, *20*(2), 164–178. https://doi.org/10.1177/1066480711435320

Hooper, L. M., Tomek, S., Bond, J. M., & Reif, M. S. (2015). Race/ethnicity, gender, parentification, and psychological functioning: Comparisons among a nationwide university sample. *The Family Journal*, *23*(1), 33–48. https://doi.org/10.1177/1066480714547187

Iturbide, M., Gutiérrez, V., Munoz, L., & Raffaelli, M. (2019). "They Learn to Convivir": Immigrant Latinx parents' perspectives on cultural socialization in organized youth activities. *Journal of Adolescent Research*, *34*(3), 235–260. https://doi.org/10.1177/0743558418777827

Jankowski, P. J., Hooper, L. M., Sandage, S. J., & Hannah, N. J. (2013). Parentification and mental health symptoms: Mediator effects of perceived unfairness and differentiation of self. *Journal of Family Therapy, 35*(1), 43–65. https://doi.org/10.1111/j.1467-6427.2011.00574.x

Juang, L. P., & Cookston, J. T. (2009). A longitudinal study of family obligation and depressive symptoms among Chinese American adolescents. *Journal of Family Psychology*, *23*(3), 396–404. https://doi.org/10.1037/a0015814

Jurkovic, G. J., Kuperminc, G. P., Sarac, T., & Weisshaar, D. (2005). Role of filial responsibility in the post-war adjustment of Bosnian young adolescents. *Journal of Emotional Abuse*, *5*(4), 219–235. https://doi.org/10.1300/J135v05n04_03

Jurkovic, G. J., Kuperminc, G., Perilla, J., Murphy, A., Ibañez, G., & Casey, S. (2004). Ecological and ethical perspectives on filial responsibility: Implications for primary prevention with immigrant Latino adolescents. *Journal of Primary Prevention*, *25*(1), 81–104. https://doi.org/10.1023/B:JOPP.0000039940.99463.eb

Jurkovic, G. J., Thirkield, A., & Morrell, R. (2001). Parentification of adult children of divorce: A multidimensional analysis. *Journal of Youth and Adolescence*, *30*(2), 245–257. https://doi.org/10.1023/A:1010349925974

Kam, J. A., & Cleveland, M. J. (2011). Perceived discrimination as a risk factor for Latina/o youth's substance use: Do parent- and peer-based communication and relationship resources act as protective factors? *Health Communication, 26*(2), 111–124. https://doi.org/10.1080/ 10410236.2010.539180

Kam, J. A., Marcoulides, K. M., & Merolla, A. J. (2017). Using an acculturation-stress-resilience framework to explore latent profiles of Latina/o language brokers. *Journal of Research on Adolescence*, *27*(4), 842–861. https://doi.org/10.1111/jora.12318

Kam, J., & Lazarevic, V. (2014). Communicating for one's family: An interdisciplinary review of language and cultural brokering in immigrant families. *Annals of the International Communication Association*, *38*(1), 3–37. https://doi.org/10.1080/23808985.2014.11679157

Khafi, T. Y., Yates, T. M., & Luthar, S. S. (2014). Ethnic differences in the developmental significance of parentification. *Family Process*, *53*(2), 267–287. https://doi.org/10.1111/famp.12072

Kishton, J. M., & Widaman, K. F. (1994). Unidimensional versus domain representative parceling of questionnaire items: An empirical example. *Educational and Psychological Measurement, 54*(3), 757–765. https://doi.org/10.1177/0013164494054003022

Kim, S. Y., Hou, Y., & Gonzalez, Y. (2017). Language brokering and depressive symptoms in Mexican-American adolescents: Parent-child alienation and resilience as moderators. *Child Development*, *88*(3), 867–881. https://doi.org/10.1111/cdev.12620

Knight, G. P., Basilio, C. D., Cham, H., Gonzales, N. A., Liu, Y., & Umaña-Taylor, A. J. (2014). Trajectories of Mexican American and mainstream cultural values among Mexican American adolescents. *Journal of Youth and Adolescence*, *43*(12), 2012–2027. https://doi.org/10.1007/s10964-013-9983-8

Kopelowicz, A., López, S. R., Zarate, R., O'Brien, M., Gordon, J., Chang, C. & Gonzalez-Smith, V. (2006). Expressed emotion and family interactions in Mexican Americans with schizophrenia. *Journal of Nervous and Mental Disease*, *194*(5), 330-334. https://doi.org/10.1097/01.nmd.0000217880.36581.6b.

Kuhlberg, J. A., Peña, J. B., & Zayas, L. H. (2010). Familism, parent-adolescent conflict, self-esteem, internalizing behaviors and suicide attempts among adolescent Latinas. *Child Psychiatry and Human Development*, *41*(4), 425–440. https://doi.org/10.1007/s10578-010-0179-0

Kuperminc, G. P., Jurkovic, G. J., & Casey, S. (2009). Relation of filial responsibility to the personal and social adjustment of Latino adolescents from immigrant families. *Journal of Family Psychology*, *23*(1), 14–22. https://doi.org/10.1037/a0014064

Kuperminc, G. P., Wilkins, N. J., Jurkovic, G. J., & Perilla, J. L. (2013). Filial responsibility, perceived fairness, and psychological functioning of Latino youth from immigrant families. *Journal of Family Psychology*, *27*(2), 173–182. https://doi.org/10.1037/a0031880

Luna, I., Torres de Ardon, E., Lim, Y. M., Cromwell, S. L., Phillips, L. R., & Russell, C. K. (1996). The relevance of familism in cross-cultural studies of family caregiving. *Western Journal of Nursing Research*, *18*(3), 267–283. https://doi.org/10.1177/019394599601800304

Macfie, J., Brumariu, L. E., & Lyons-Ruth, K. (2015). Parent-child role-confusion: A critical review of an emerging concept. *Developmental Review*, *36*, 34–57. https://doi.org/10.1016/j.dr.2015.01.002

Marsiglia, F. F., Parsai, M., & Kulis, S. (2009). Effects of familism and family cohesion on problem behaviors among adolescents in Mexican immigrant families in the southwest United States. *Journal of Ethnic and Cultural Diversity in Social Work*, *18*(3), 203–220. https://doi.org/10.1080/15313200903070965

Martinez, C. R., McClure, H. H., & Eddy, J. M. (2009). Language brokering contexts and behavioral and emotional adjustment among Latino parents and adolescents. *Journal of Early Adolescence*, *29*(1), 71–98. https://doi.org/10.1177/0272431608324477

Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological methods*, *12*(1), 23–44. https://doi.org/10.1037/1082-989X.12.1.23

Motti-Stefanidi, F., & Masten, A. S. (2017). *A resilience perspective on immigrant youth adaptation and development.* In N. J. Cabrera & B. Leyendecker (Eds.), *Handbook on positive development of minority children and youth* (p. 19–34). Springer Science and Business Media. https://doi.org/10.1007/978-3-319-43645-6_2

Motti-Stefanidi, F. (2019). Resilience among immigrant youths: Who adapts well, and why? *Current Directions in Psychological Science, 28*(5), 510–517. https://doi.org/10.1177/0963721419861412

Park, M., & Katsiaficas, C. (2019 April). Mitigating the effects of trauma among young children of immigrants and refugees: The role of early childhood programs. Washington, DC. Migration Policy Institute. https://www.migrationpolicy.org/research/mitigating-effects-trauma-young-children-immigrants-refugees

Piña-Watson, B., Ojeda, L., Castellon, N. E., & Dornhecker, M. (2013). Familismo, ethnic identity, and bicultural stress as predictors of Mexican American adolescents' positive psychological functioning. *Journal of Latina/o Psychology*, *1*(4), 204–217. https://doi.org/10.1037/lat0000006

Orellana, M. F. (2001). The work kids do: Mexican and Central American immigrant children's contributions to households and schools in California. *Harvard Educational Review, 71*(3), 366-389. https://doi.org/10.17763/haer.71.3.52320g7n21922hw4

Orellana, M. F. (2003). Responsibilities of children in Latino immigrant homes. *New Directions for Youth Development*, *2003*(100), 25–39. https://doi.org/10.1002/yd.61

Peris, T. S., Goeke-Morey, M. C., Cummings, E. M., & Emery, R. E. (2008). Marital conflict and support seeking by parents in adolescence: Empirical support for the parentification construct. *Journal of Family Psychology, 22*(4), 633-642. https://doi.org/10.1037/a0012792

Piña-Watson, B., Gonzalez, I. M., & Manzo, G. (2019). Mexican-descent adolescent resilience through familismo in the context of intergeneration acculturation conflict on depressive symptoms. *Translational Issues in Psychological Science*, *5*(4), 326–334. https://doi.org/10.1037/tps0000210

Piña-Watson, B., Ojeda, L., Castellon, N. E., & Dornhecker, M. (2013). Familismo, ethnic identity, and bicultural stress as predictors of Mexican American adolescents' positive psychological functioning. *Journal of Latina/o Psychology*, *1*(4), 204–217. https://doi.org/10.1037/lat0000006

Pomerantz, E. M., Qin, L., Wang, Q., & Chen, H. (2011). Changes in early adolescents' sense of responsibility to their parents in the United States and China: Implications for academic functioning. *Child Development, 82*(4), 1136–1151. https://doi.org/10.1111/j.1467-8624.2011.01588.x

Ponting, C., Lee, S. S., Escovar, E. L., Rapp, A. M., Camacho, A., Calderon, I., & Chavira, D. A. (2018). Family factors mediate discrimination related stress and externalizing symptoms in rural Latino adolescents. *Journal of Adolescence, 69*(1), 11–21. https://doi.org/10.1016/j.adolescence.2018.08.007

Ponizovsky Bergelson, Y., Kurman, J., & Roer-Strier, D. (2015). Immigrant's emotional reactions to filial responsibilities and related psychological outcomes. *International Journal of Intercultural Relations*, *45*, 104–115. https://doi.org/10.1016/j.ijintrel.2015.02.002

Roche, K. M., Lambert, S. F., White, R. M. B., Calzada, E. J., Little, T. D., Kuperminc, G. P., & Schulenberg, J. E. (2019). Autonomy-related parenting processes and adolescent adjustment in Latinx immigrant families. *Journal of Youth and Adolescence, 48*(6), 1161–1174. https://doi-org/10.1007/s10964-019-01010-5

Rodriguez, N., Myers, H. F, Bingham Mira, C., Flores, T., & Garcia-Hernandez, L. (2002). Development of the multidimensional acculturative stress inventory for adults of Mexican origin. *Psychological Assessment, 14*(4), 451-461. https://doi.org/10.1037/1040-3590.14.4.451

Roy, K., Messina, L., Smith, J., & Waters, D. (2014). Growing up as "Man of the house": Adultification and transition into adulthood for young men in economically disadvantaged families: Growing up as "man of the house." *New Directions for Child and Adolescent Development*, *2014*(143), 55–72. https://doi.org/10.1002/cad.20054

Sabogal, F., Marin, G., Otero-Sabogal, R., Marin, B.V., & Perez-Stable, E.J. (1987). Hispanic familism and acculturation: What changes and what doesn't? *Hispanic Journal of Behavioral Sciences, 9*(4), 397-412. https://doi.org/10.1177/07399863870094003

Sang, J., Cederbaum, J. A., & Hurlburt, M. S. (2014). Parentification, substance use, and sex among adolescent daughters from ethnic minority families: The moderating role of monitoring. *Family Process*, *53*(2), 252–266. https://doi.org/10.1111/famp.12038

Santiago, C. D., Ros, A. M., Distel, L. M. L., Papadakis, J. L., Torres, S. A., Brewer, S. K., Fuller, A. K., & Bustos, Y. (2020). Family coping among Mexican-origin immigrants: Links to child mental health. *Journal of Child and Family Studies*, *29*(1), 182–194. https://doi.org/10.1007/s10826-019-01602-6

Schmitz, R. M., & Tyler, K. A. (2016). Growing up before their time: The early adultification experiences of homeless young people. *Children and Youth Services Review*, *64*, 15–22. https://doi.org/10.1016/j.childyouth.2016.02.026

Schwartz, S. J., Unger, J. B., Des Rosiers, S. E., Lorenzo-Blanco, E. I., Zamboanga, B. L., Huang, S., Baezconde-Garbanati, L., Villamar, J. A., Soto, D. W., Pattarroyo, M., & Szapocznik, J. (2014). Domains of acculturation and their effects on substance use and sexual behavior in recent Hispanic immigrant adolescents. *Prevention Science*, *15*(3), 385–396. https://doi.org/10.1007/s11121-013-0419-1

Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *American Psychologist*, *65*(4), 237–251. https://doi.org/10.1037/a0019330

Shin, Y. (2019). How do mothers manage their privacy with adolescents? Exploring mother–adolescent communication in Mexican immigrant families. *Journal of Social and Personal Relationships, 36(11-12)*, 3733-3751. https://doi.org/10.1177/0265407519836282

Shin, Y., & Hecht, M. L. (2013). Does parentification place Mexican-heritage youth at risk for substance use? Identifying the intervening nature of parent-child communication about alcohol. *Journal of Adolescence, 36(1)*, 149–159. https://doi//10.1016/j.adolescence.2012.10.010

Shin, Y., Seo, E., Walt, D. C., & Kim, S. Y. (2020). Stress of language brokering and Mexican American adolescents' adjustment: The role of cumulative risk. *Journal of Early Adolescence*, *40*(3) 400-425. https://doi.org/10.1177/0272431619847526

Stein, G. L., Cupito, A. M., Mendez, J. L., Prandoni, J., Huq, N., & Westerberg, D. (2014). Familism through a developmental lens. *Journal of Latina/o Psychology*, *2*(4), 224–250. https://doi.org/10.1037/lat0000025

Stein, G. L., Rivas-Drake, D., & Camacho, T. C. (2017). Ethnic identity and familism among Latino college students: A test of prospective associations. *Emerging Adulthood*, *5*(2), 106–115. https://doi.org/10.1177/2167696816657234

Stein, G. L., Cavanaugh, A. M., Castro-Schilo, L., Mejia, Y., & Plunkett, S. W. (2019). Making my family proud: The unique contribution of familism pride to the psychological adjustment of Latinx emerging adults. *Cultural Diversity and Ethnic Minority Psychology*, *25*(2), 188–198. https://doi.org/10.1037/cdp0000223

Suárez-Orozco, C., Hernández, M. G., & Casanova, S. (2015). "It's sort of my calling": The civic engagement and social responsibility of Latino immigrant-origin young adults. *Research in Human Development, 12*(1-2), 84–99. https://doi.org/10.1080/15427609.2015.1010350

Suárez-Orozco, C., Motti-Stefanidi, F., Marks, A., & Katsiaficas, D. (2018). An integrative risk and resilience model for understanding the adaptation of immigrant-origin children and youth. *American Psychologist*, *73*(6), 781–796. https://doi.org/10.1037/amp0000265

Taylor, Z. E. & Jones, B. L. (2020). Cultural contributors to ego-resiliency and associations with depressive problems in Midwestern Latino youth. *Journal of Research on Adolescence, 30*(S2), 349-361. https://doi.org/10.1111/jora.12481

Taylor, Z. E., Larsen-Rife, D., Conger, R. D., Widaman, K. F., & Cutrona, C. E. (2010). Life stress, maternal optimism, and adolescent competence in single mother, African American families. *Journal of Family Psychology, 24*(4), 468-477. doi.org/10.1037/a0019870

Taylor, Z. E., Ruiz, Y., & Nair, N. (2019). A mixed-method examination of ego-resiliency, adjustment problems, and academic engagement in children of Latino migrant farmworkers. *Social Development*, *28*(1), 200-217. doi.org/10.1111/sode.12328

Taylor, Z. E., Ruiz, Y., Nair, N. & Mishra, A. A. (2020). Family support and mental health of Latinx children in migrant farmworker families. *Applied Developmental Science.* Advance online publication. doi.org/10.1080/10888691.2020.1800466

Telzer, E. H., & Fuligni, A. J. (2009). Daily family assistance and the psychological well-being of adolescents from Latin American, Asian, and European backgrounds. *Developmental Psychology*, *45*(4), 1177–1189. https://doi.org/10.1037/a0014728

Telzer, E. H., Gonzales, N., & Fuligni, A. J. (2014). Family obligation values and family assistance behaviors: Protective and risk factors for Mexican–American adolescents' substance use. *Journal of Youth and Adolescence*, *43*(2), 270–283. https://doi.org/10.1007/s10964-013-9941-5

Telzer, E. H., Tsai, K. M., Gonzales, N., & Fuligni, A. J. (2015). Mexican American adolescents' family obligation values and behaviors: Links to internalizing symptoms across time and context. *Developmental Psychology*, *51*(1), 75–86. https://doi.org/10.1037/a0038434

Thastum, M., Johansen, M. B., Gubba, L., Olesen, L. B., & Romer, G. (2008). Coping, social relations, and communication: A qualitative exploratory study of children of parents with cancer. *Clinical Child Psychology and Psychiatry, 13*(1), 123–138. http://dx.doi.org/10.1177/1359104507086345

Tsai, K. M., Gonzales, N. A., & Fuligni, A. J. (2016). Mexican American adolescents' emotional support to the family in response to parental stress. *Journal of Research on Adolescence, 26*(4), 658–672. https://doi.org /10.1111/jora.12216

Tse, L. (1995). Language brokering among Latino adolescents: Prevalence, attitudes, and school performance. *Hispanic Journal of Behavioral Sciences, 17*(2), 180–193. https://doi.org/10.1177/07399863950172003

Tseng. (2004). Family interdependence and academic adjustment in college: Youth from immigrant and U.S.-born families. *Child Development, 75*(3), 966–983. https://doi.org/10.1111/j.1467-8624.2004.00717.x

Tilghman-Osborne, E. M., Bámaca-Colbert, M., Witherspoon, D., Wadsworth, M. E., & Hecht, M. L. (2016). Longitudinal associations of language brokering and parent-adolescent closeness in immigrant Latino families. *Journal of Early Adolescence, 36(3),* 319–347. https://doi-org/10.1177/0272431614566944

Titzmann, P. F. (2012). Growing up too soon? Parentification among immigrant and native adolescents in Germany. *Journal of Youth and Adolescence*, *41*(7), 880–893. https://doi.org/10.1007/s10964-011-9711-1

Toro, R. I., Schofield, T. J., Calderon-Tena, C. O., & Farver, J. M. (2019). Filial responsibilities, familism, and depressive symptoms among Latino young adults. *Emerging Adulthood*, *7*(5), 370–377. https://doi.org/10.1177/2167696818782773

Umaña-Taylor, A. J. (2003). Language brokering as a stressor for immigrant children and their families. In M. Coleman & L. Ganong, *Points & counterpoints: Controversial relationship and family issues in the 21st century (an anthology)* (p. 157–159). Roxbury Publishing Co.

Van Loon, L. M. A., Van de Ven, M. O. M., Van Doesum, K. T. M., Hosman, C. M. H., & Witteman, C. L. M. (2017). Parentification, stress, and problem behavior of adolescents who have a parent with mental health problems. *Family Process*, *56*(1), 141–153. https://doi.org/10.1111/famp.12165

Vega, W. A., & Sribney, W. M. (2011). *Understanding the Hispanic health paradox through a multi-generation lens: A focus on behaviour disorders.* In G. Carlo, L. J. Crockett, & M. A. Carranza (Eds.), *Nebraska symposium on motivation: Vol. 57. Health disparities in youth and families: Research and applications* (p. 151–168). Springer Science + Business Media. https://doi.org/10.1007/978-1-4419-7092-3_7

Weisskirch, R. S. (2005). The relationship of language brokering to ethnic identity for Latino early adolescents. *Hispanic Journal of Behavioral Sciences*, *27*(3), 286–299. https://doi.org/10.1177/0739986305277931

Weisskirch, R. S. (2007). Feelings about language brokering and family relations among Mexican American early adolescents. *Journal of Early Adolescence*, *27*(4), 545–561. https://doi.org/10.1177/0272431607302935

Yoshikawa, H., Suárez-Orozco, C., & Gonzales, R. G. (2017). Unauthorized status and youth development in the United States: Consensus statement of the society for research on adolescence. *Journal of Research on Adolescence, 27*(1), 4-19. https://doi.org/10.1111/jora.12272

Zeiders, K. H., Updegraff, K. A., Umaña-Taylor, A. J., Wheeler, L. A., Perez-Brena, N. J., & Rodríguez, S. A. (2013). Mexican-origin youths' trajectories of depressive symptoms: The role of familism values. *Journal of Adolescent Health*, *53*(5), 648–654. https://doi.org/10.1016/j.jadohealth.2013.06.008

Zeiders, K. H., Updegraff, K. A., Umaña-Taylor, A. J., McHale, S. M., & Padilla, J. (2016). Familism values, family time, and Mexican-origin young adults' depressive symptoms: Familism values, family time. *Journal of Marriage and Family*, *78*(1), 91–106. https://doi.org/10.1111/jomf.12248

Zong, J., Batalova, J., & Burrows, M. (2019, March 14). Frequently requested statistics on immigrants and immigration in the United States in 2018. Migration Policy Institute. https://www.migrationpolicy.org/article/frequently-requested-statistics-immigrants-and-immigration-united-states-2018