A SOCIO-ECOCULTURAL EXPLORATION OF THE ROLE OF LATINX
YOUTH IN FAMILY FOOD PRACTICES

A Dissertation in
Biobehavioral Health

by

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Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy

August 2018
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Abstract

Children and adolescents (hereafter referred to as youth) make critical contributions in support of their families on a daily basis through what are called family assistance behaviors. One key example of these behaviors includes involvement in family food practices (e.g., cooking meals). Despite the significance for public health challenges related to dietary-health outcomes, such as high rates of obesity, type 2 diabetes, and hypertension, very little is known about the contributions made by youth via family food practices; nor do we know what individual-, family-, and macro-level factors may influence youth’s participation in these practices.

Given these gaps in the literature, this dissertation sought to investigate the role of youth in family food practices using participatory focus groups and in-depth interviews embedded within an ethnographic fieldwork period. This work places a central focus on youth involvement in family food preparation among Latinx families, framing this construct as an example of a family assistance behavior critical for family functioning and health. The following four aims were investigated: 1) developing a framework for understanding youth’s contributions to family functioning and health, 2) exploring youth’s perspectives surrounding their participation within family food preparation, 3) examining the sociocultural and developmental factors that may inhibit or promote youth’s participation in food preparation as perceived by youth, and 4) exploring families’ motivations for and barriers to involving youth in family food preparation. A total of 14 families participated in this series of studies. Sixteen participatory focus groups were conducted with 23 youth (52% boys; M age = 12.4 ± 2.9 years). Eleven in-depth interviews were conducted with parents (91% mothers; M age = 39.5 ± 6.1 years). Interviews with parents were followed by in-depth interviews with six youth who were described as being frequently involved in family food preparation (83% girls; M age = 15.5 ± 1.8 years).

Thematic analyses revealed that youth were involved in family food preparation at varying levels, where youth contributed as consumers, dishwashers, kitchenhands, and/or sous chefs. This variation was influenced by gender, age, and birth order, with older girl siblings being more involved in family food preparation. Family constraints, such as late work schedules for parents and poor parental health, as well as family values and cultural beliefs, shaped youth involvement in family food preparation. More than 25% of youth were frequently involved in preparing meals for the entire family. These youth emphasized the utility in possessing cooking skills and noted the unique bond fostered with family members, particularly mothers, due to this involvement.

These findings highlight the crucial, yet often ignored, role that youth play in family food practices, underscoring the importance of exploring youth as agents of change for health promotion. This dissertation not only presents both conceptual-based and data-based evidence of the unique contributions to health and functioning made by on a daily basis, but also provides a socio-ecocultural account of what youth’s contributions mean for themselves and their families. Future research should investigate pathways to increasing youth agency, competency, and self-efficacy for better health and well-being. Acknowledging the role that Latinx youth play in family functioning and health may help guide our understanding of family roles and may aid in identifying potential targets for prevention and intervention that promote health equity and improve well-being among this underserved population.
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Dedication

To the migrants, the refugees, the slaves, the oppressed, and those who live in poverty all around the world, hoping for a better life, I dedicate this work to you in solidarity.

Para l@s migrantes, l@s refugiad@s, l@s esclavos, l@s oprimid@s y l@s que viven en pobreza en todo el mundo, con la esperanza de una vida mejor, les dedico este proyecto en solidaridad.
Acknowledgements

I am beyond grateful to God and in awe of the love, mercy, and grace shown towards me. Any success I obtain and any goal I achieve are the fruits of this divine grace and mercy, the sacrifice of my ancestors, the care of my parents, the support of my family and friends, the guidance of educators (formal and informal), and the generosity of strangers.

Por haberme permitido conocerles, entrar en su casa, compartir momentos de la vida y su tiempo (y por haberme aguantado jiji), les doy gracias con todo mi corazón a todas las familias que participaron en este proyecto de investigación.

For taking me under her wings con mucho cariño, I thank Judy Robinson.
For providing me with a place to call home, I thank Pat Brown.
For tolerating an intruder with such grace and warm hospitality, I thank Linda Clark, along with other community members.

For running against the clock with me and seeing the value in this research, agradezco al equipo de investigación: Neydi Martínez Luna, Myrta Mathews, Marina Armendariz, Camila Restrepo, Samantha Monteiro, Arizbeth Miguel, y Maria Arreaga.

For believing in my ideas, seeing my potential, sharing knowledge and wisdom, providing guidance, and pushing me to think critically, I thank my graduate advisor, Lori Francis, along with my dissertation committee members, Linda Wray, Shedra Amy Snipes, Mayra Bámaca, and Robert (Bob) Schrauf. I also thank Joyce Hopson-King, Dawn Witherspoon, Jenn Graham-
Engeland, the Biobehavioral Health staff, and the Office of Graduate Educational Equity Programs for their support as well.

For providing the economic support to complete this research, I gratefully acknowledge the following funding mechanisms: National Science Foundation Graduate Research Fellowship (NSF DGE1255832), a Penn State Hintz Graduate Education Enhancement Fellowship, a Penn State Graduate Student Enhancement Fund, and a Doctoral Dissertation Grant from the Fahs-Beck Fund for Research and Experimentation of The New York Community Trust.

For supporting me unconditionally, I thank a host of family, friends, educators, and colleagues: my parents, my siblings, aunts, uncles, and cousins, my neighbors back at home in Miami, Danica Slavish, Cynthia LaCoe-Maniaci, Sully Coleman, Dusti Jones, Jake Schiffer, Silvia Garcia, Delores James, Ron Brenneman, Ena Catalina, Allan Burns, Alba Amaya Burns, Airín Martínez, and so many others.

Por amarme como nadie más puede y por todos sus sacrificos, agradezco mucho a mi querido esposo, Rudis Leonel.

Gracias.

Thank you.
CHAPTER 1: Introduction

Overview and Purpose of the Dissertation

The overarching purpose of this dissertation is to explore the interplay of sociocultural, developmental, and environmental factors related to the participation of Latinx youth in family food practices. In line with this purpose, two major goals have been set. The first goal is to lay out a conceptual framework for understanding the contributions of youth to family functioning and health. To do this, Chapter 2 introduces a framework centered on the engagement of youth via family assistance behaviors, featuring Latinx youth and their families as an exemplar case. Chapter 2 has been written for potential submission to the Journal of Social Science and Medicine for publication.

The second goal of this dissertation is to illustrate an application of the framework using the example of family food preparation behaviors among Latinx families living in rural Northeastern U.S. To do this, a dual-perspective approach embedded within an ethnographic fieldwork period was employed, seeking to understand Latinx families’ experiences within this context. Chapter 3 features the narratives of youth, supplemented with participant-generated photographic evidence, in an exploration of the family food preparation practices of youth. Youth were invited to share their perspectives in a participatory focus group setting where norms surrounding age and gender, along with food decision-making, were discussed. Chapter 3 has been written for potential submission to the Appetite Journal for publication. The specific aims of this study were as follows:

Aim 1: To describe youth’s role in food preparation at home from youth’s perspectives.

- RQ 1.1. What is the type and level of involvement in food preparation?
- RQ 1.2. What types of foods and meals do youth prepare and for whom?
• RQ 1.3. Who determines who participates in family food preparation?
• RQ 1.4. What does this decision-making process of food preparation entail?

Aim 2: To examine sociocultural, developmental, and family-level factors that may inhibit or promote youth’s participation in food preparation.
• RQ 2.1. How may family size, structure and resources influence participation?
• RQ 2.2. What developmental characteristics do youth perceive as important in determining participation?
• RQ 2.3. What sociocultural beliefs do youth identify as determinants for participation?

Through the use of in-depth interviews, Chapter 4 continues the aforementioned exploration by soliciting the perspectives of Latinx parents as well as a select number of youth who frequently prepared food for the family. Parents’ explanations of motivations and barriers to involving youth in food preparation practices, accompanied by the perspectives of youth, reveal pieces of the inner workings of such a dynamic family practice. Chapter 4 has been written for potential submission to the Journal of Social Science and Medicine for publication. The specific aims of this study were as follows:

Aim 3: To explore families’ motivations for and barriers to involving youth in family food preparation at home.
• RQ 3.1. What family goals, values, and needs do youth’s participation in food preparation serve?
• RQ 3.2. Which norms ascribed to characteristics, such as age and gender, inform families’ decision to involve youth in food preparation?
• RQ 3.3. Under what circumstances do families adjust their norm adherence in deciding who participates in family food preparation?

Taken together, this dissertation not only presents both conceptual-based and data-based evidence of youth’s unique contributions to health and functioning on a daily basis, but also provides a socio-ecocultural account of what youth’s contributions mean for themselves and their families. The connections across this work, along with future directions and lessons learned, are discussed in Chapter 5.

Significance and Innovation of the Dissertation

This dissertation is among the first to investigate the direct role that Latinx youth play in food preparation within the home environment. This work represents a paradigm shift in thinking about who is involved in this process and systematically investigates family’s experiences on when, why, and how youth participation occurs. Results from this study may increase our understanding of how youth contribute to family functioning and family health. In addition, this study’s inclusion of Latinx families from non-Mexican backgrounds living in a non-traditional immigrant destination makes for a unique context, which may broaden our understanding of Latinx families’ experiences in general. Furthermore, the use of participatory techniques with youth may provide valuable insight for future research related to the challenges and benefits of using such methods. Ultimately, the results from this series of studies may help to inform prevention and intervention efforts to reduce childhood obesity and improve youth’s mental and physical health.

The Research Site

Chapters 3 and 4 are based on primary data collected in rural Northeastern United States. This research site can be best described as a small piece of “new rural America”, as Burton and
colleagues refer to this phenomenon (Burton, Lichter, Baker, & Eason, 2013): a majority, non-Hispanic/Latinx White community contending with its Latinx newcomers. The research site of interest is comprised of two boroughs and one census-designated area within the same county situated in rural northeastern U.S. County-level demographics include a population of 95% white, non-Hispanic/Latino individuals. Hispanic/Latino origin individuals almost entirely make up the remaining 5%. At the county-level, 12% of the general population lives below federal poverty guidelines. However, this number reaches close to 20% for this specific research site. In addition, more Hispanic/Latino individuals live below the poverty guidelines than any other racial/ethnic groups in the area (United States Census Bureau, 2016). Once a booming area with business, this area now finds itself economically depressed with limited job opportunities. Local residents often described this setting as “dead”. My observations during walks along the sidewalks and car rides in and about the downtown streets confirmed this description. This particular research setting sits within the third ranking county in its state for the highest childhood obesity rates.

I first visited this town in 2013 with a fellow lab member. I remember spotting a Latin American restaurant amongst a row of local businesses. This was my first indication that there were more than the non-Hispanic/Latino, White families who had most likely lived there for generations -- certainly enough to warrant the need for remittance services and offerings of traditional Mexican breads, Salvadoran pupusas, and Puerto Rican pastelillos. I returned in September 2016 in search of a relevant research site for my dissertation work, remembering my brief encounters with a few Latinx families here and there. “Trump for President” signs adorned front porches of local residents’ homes as well as the windowpanes of businesses. I wondered, “What were the experiences of the Latinx families living here?” “Were they unwanted
newcomers to the families who had lived in this area for generations?” “How did the kids of these Latinx families help their parents with limited English proficiency in this context?” I had so many questions and needed to seek out the answers systematically.

In May 2017, I returned once again, this time with the goal of beginning my ethnographic fieldwork. A year after the 2016 election, the “Trump for President” signs that I saw back in September were still there, standing proudly in the yards of neighbors. I began volunteering with a small grassroots advocacy organization in its beginning stage, spearheaded by a retired legal services worker with a compassionate heart for marginalized communities. She invited me to join the group’s weekly efforts in providing critical resources to Latinx families. These resources included simple translation services (e.g., translating a letter received from English to Spanish), connecting individuals to local services (e.g., assisting with a Head Start application for a young child; directing families to a local food pantry), and finding appropriate legal services based on an individual’s needs.

A small, but mighty, group of volunteers (seven individuals including myself) would alternate Friday shifts to staff the makeshift office headquartered out of a local church. I would often hear of the difficulty in accessing health care services; many individuals did not have transportation, which made it a challenge to get to the nearest hospital located in the next county over on the other side of the river. However, once accessed, these healthcare services were often only available in English – and expensive without insurance. Another common issue revolved around locating affordable, trust-worthy immigration attorneys. Many people expressed their

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1 Head Start is a government-funded educational program aimed at promoting school readiness among young children who come from low-income families.
frustration with current attorneys who accepted their case and took the money, but never returned phone calls, leaving clients confused and with little hope.

In June 2017, I started my volunteer work at a local food pantry. I assisted with their summer feeding program for youth. They were in need of a bilingual (English/Spanish) volunteer to help register families and guide youth in selecting their foods for the month. At times, I even found myself assisting Latinx clients throughout the aisles as they gathered monthly goods. During my time at the pantry, I became familiar with community members, those who were volunteers at the food pantry and those who were receiving the services. Majority of the individuals and families who came in were non-Hispanic/Latino white, reflecting the area’s demographics, but when I encountered a Latinx family I could easily note the relief that they felt once they heard me say, “Hola, ¿qué tal? ¿En qué le puedo ayudar?”

With time, I developed relationships with several families throughout the community as I met different individuals while volunteering with the aforementioned organizations and interacting with others in town. During this time, I also paid close attention to the local food environment available to families. Depending on where one lived, you could easily get to a supermarket by car. However, many of the Latinx individuals I met did not own a vehicle, which meant they either went by foot or depended on rides from friends. Even more, the nearest Walmart was located in the next county over (almost 30 minutes away by car), illustrating the rurality of this geographic setting.

Thinking further on place, being among a practically all non-Hispanic/Latino white population, I realized immediately that I stood out: me with my dark brown skin. Like the Latinx

2 In English, “Hi, how are you? How can I help you?”
families I met in the area, I looked different from everyone else. However, my ability to speak English fluently as a native speaker, my title as a university graduate student, and my U.S. citizenship all meant that I most likely fell somewhere higher on the social hierarchy in town – but certainly not above the level of my white counterparts. Conversations with Latinx youth, adults, and other community members exposed incidences of micro- and not-so-micro-aggressions that exemplified discriminatory experiences taking place all throughout the U.S. Some of these aggressions took place at school (spearheaded by local administrators), some took place at the hospital, and at local public service offices; and some even took place within the Latinx community (e.g., colorism). Some of these experiences reminded me of my very own accounts of being discriminated against some miles away from where these families lived. My research participants and I were different from each other, yet we were the same in many ways.

Over the years in working with youth in various cities and states in the U.S. and throughout Central America, the concepts of youth voice and youth agency – youth having opinions, making choices, and actively engaging in their surroundings at home, school, and beyond – emerged to the forefront of my research interests. Applying these concepts to dietary health domains, I set my attention to unveiling and understanding the invisible roles that exist in the everyday practice of food preparation and food choice. I set my goal to bringing the voices of youth with their perspectives and experiences to the forefront of a research field that typically ignores these very contributions enacted through youth agency on a daily basis. This meant challenging what I had been taught since my undergraduate courses on human development and family studies. My experiences with youth pushed me to think distinctly about alternatives to Bronfenbrenner’s ecological systems model – alternatives that would see youth as more than products of their environment. I was pushed to think about alternative frameworks that would
acknowledge what youth do and how youth influence the family, community, and other settings. This required me to become comfortable with the notion of youth having a voice and making choices. It prompted me to think about the multiple possibilities in store for the optimization of health and well-being if we acknowledge the voice and agency of youth all around the world. I thought back on my experiences with food in and out of the kitchen and what those experiences looked like for me. As a daughter of two working parents who often worked beyond the 9 to 5 schedule, dinnertime often meant “Happy Meals” from McDonald’s and the like from other fast-food restaurants. I remember how, at the age of 12 or 13, I made the choice to learn how to cook. I remember how I would search for recipes online and then proceed to try them out with caution, as if they were scientific experiments. That was my experience and, as I soon learned, it was not so different from some of the youth that I encountered over 1000 miles away from the place that I called home.
CHAPTER 2: A Framework for Understanding Youth Contributions to Family Functioning and Health

An emerging body of work is taking a closer look at the instrumental contributions made by youth in support of their families (Weisner, 2001). This act of contributing is often labeled as helping (Orellana, 2003), assisting (Fuligni, 2001a), or pitching in (Rogoff, 2014). Youth help the family through various tasks, such as housework and chores (including cooking and cleaning) (Cogle & Tasker, 1982); caregiving and caretaking (East, 2010; Hafford, 2010); brokering or negotiating across languages, cultures, and media (Kam & Lazarevic, 2014; Katz, 2014); and family work (e.g., helping with the family’s business) (Telzer & Fuligni, 2009). These contributions span different settings, such as the home, school, clinical encounters, and workplace. Often, these contributions occur within contexts that allow for developmental opportunities and are facilitated through the process of participation in family and cultural practices (Weisner, 2001). Although several labels have been used throughout the literature to identify these contributions, we refer to what youth do in support of their families as “family assistance behaviors” as coined by Fuligni and colleagues (Fuligni, 2001a).

Previous research has shown that Latinx adolescents are not only more likely to engage in family assistance behaviors, but also spend more time helping the family than adolescent peers of other racial/ethnic origins (Fuligni, 2001b; Hardway & Fuligni, 2006). From the caretaking of siblings or other relatives (East & Weisner, 2009; Hafford, 2010; Orellana, 2001) to translating and interpreting for parents during medical visits (Orellana, Dorner, & Pulido, 2003), Latinx youth make important contributions in support of family functioning and health. Understanding the factors that potentially determine or influence youth’s efforts in helping the family is critical,
given the significance and practicality of these contributions for the family’s survival and well-being on a day-to-day basis.

Youth engagement in family assistance behaviors has specific implications for both youth personal health and that of their families. Among Mexican-American adolescents, engagement in these behaviors were found to be protective against substance abuse in low parent-child conflict contexts (Telzer, Gonzales, & Fuligni, 2014). In addition, family assistance behaviors have been shown to provide meaningful opportunities that allow for an enhanced sense of purpose and self-esteem for Latinx adolescents (Fuligni, Yip, & Tseng, 2002; Telzer & Fuligni, 2009). In regard to family functioning and health, through their engagement in family assistance behaviors, youth make critical connections to valuable resources for the family that may not occur otherwise. This may be especially true for youth with foreign-born parents or who live in mixed-status families (i.e. documented vs. undocumented), as youth often serve as links between the family and outside institutions due to language barriers, legal status realities, cultural differences, and technological gaps. This act of linking the family to various resources is referred to as brokering. Brokering occurs in multiple contexts, such as a medical visit, parent-teacher meeting at school, and making sense of media content, as youth facilitate interactions and navigate settings for parents and other family members (Katz, 2014).

The purpose of this paper is to propose a framework that outlines the factors that may influence youth engagement in family assistance behaviors. We specifically focus on Latinx youth and their contributions through family assistance behaviors to provide an exemplar of this framework’s utility. The proposed framework is guided by Weisner’s ecocultural theory (2002) where family routines and practices are actively constructed based on sociocultural context, individual characteristics and the family’s own values and goals. These routines and practices
serve as developmental opportunities for youth on a daily basis. This framework also is guided by the family systems theory, in which family is viewed as a dynamic system with multiple players and interdependent relationships (Bavelas & Segal, 1982). It is in this dynamic system where human development, structure, culture, and agency interact constantly throughout time (Foner, 1997). Guided by these perspectives, the proposed framework views youth efforts in helping the family as a dynamic process that results from interactions within and outside of the family system in order to meet the family’s goals and needs.

Conceptualizing Participation

Family assistance behaviors can occur in collaboration with others, such as adults or siblings, or it can occur individually. It can also be described as voluntary, forced, or emergent from a mutual agreement (Goodnow & Lawrence, 2001). In this literature, youth have been identified as active participants (Weisner, 2002), socializing agents (Orellana et al., 2003), or complete social actors (Coppens, Alcala, Mejia-Arauz, & Rogoff, 2014) as they help the family in diverse ways. In this discussion on youth engagement in family assistance behaviors, it is important to delineate what is normative vs. what is non-normative. There is no consensus on whether the benefits of youth contributions outweigh the costs - or vice versa - given the mixed findings. Whereas some studies suggest that youth participation encourages prosocial development (Guan, Greenfield, & Orellana, 2014), increases self-esteem and responsibility (L. Burton, 2007; Orellana, 2001; Weisner, 2001), and provides youth with a sense of purpose (L. Burton, 2007), other studies suggest that participation may be too stressful (East, 2010; Hooper, 2011, 2014; Jurkovic et al., 2004) and detracts from youth academic achievement (Fuligni, 2001b). Understanding the circumstances where participation occurs, in addition to the amount of time dedicated to a specific task, will help to delineate potential consequences.
In a normative circumstance, participation would generally occur under the guidance of an adult family member. In contrast, under a non-normative circumstance, youth are “adultified” (Burton, 2007) or “parentified” (Hooper, 2011). Adultified or parentified youth are noted to dedicate several hours on a weekly or daily basis in adult roles, often in response to family demands. These non-normative circumstances most often happen when a family operates under particularly limited economic constraints (Burton, 2007) or when a parent or adult caregiver is no longer capable of providing care for themselves or others due to an illness, disability, or substance abuse (East, 2010; Jurkovic et al., 2004; Stein, Riedel, & Rotheram-Borus, 1999). The distinction between a normative and non-normative situation can be subtle, where some cases might fall between the two definitions as part of a wide spectrum.

What youth do in support of their families and how they think and feel about these contributions merit attention and warrant further investigation (Goodnow & Lawrence, 2001; Weisner, 2001). The family routines and practices that allow for youth’s engagement in family assistance behaviors are often products of cultural views and expectations; thus, it is imperative to acknowledge this reality in exploring youth’s contributions via these practices (East, 2010; Weisner, 2001). Childhood and its associated conceptualizations are “culturally determined, historicized, politicized, and transmitted between and within cultures” (Trask, 2010). Given this, it is advantageous to look beyond Westernized conceptualizations of childhood itself (Coppens, Silva, et al., 2014; Orellana, 2009; Rogoff, 2014). Under a Westernized conceptualization, youth are generally seen as passive individuals who are dependent upon adults for complete guidance (Orellana, 2009; Trask, 2010). However, a long line of research by Rogoff and colleagues provides evidence of autonomy and interdependence as coexisting characteristics among children who contribute to family household work. Their research, which is based on work from
communities in various parts of Latin America, also notes healthy collaboration between children and adults (i.e., family and community members) as a central element in these communities (Coppens, Alcala, et al., 2014; Coppens, Silva, et al., 2014; Rogoff, 2014). This work is especially relevant for this discussion on family assistance behaviors as it highlights the importance of cultural context in shaping childhood and family expectations.

The proposed framework (figure 2.1) centers heavily on answering the question of who engages in family assistance behaviors, as well as understanding when, how and why this participation may occur. Based on previous research, we know that some factors hinder participation, while others promote participation. This framework highlights both youth-level factors and family-level factors that are important in determining whether youth ultimately participate, and if so, to what extent they participate. Youth-level factors (identified as pentagons in figure 2.1) are divided further into three main categories: (1) youth values and attitudes, (2) youth ascribed characteristics, and (3) youth task-specific factors. Family-level factors (identified as squares in figure 2.1) are also divided into three main categories: (1) family socialization and dynamics, (2) family structure and composition, and (3) family resources and constraints. Macro-level factors (identified as rectangles in figure 2.1), such as societal norms, community resources and goals, and time, are included as well.
Figure 2.1. A conceptual framework for understanding how and why youth contribute via family assistance behaviors.
How Youth Impact their Family Assistance Behaviors

In thinking on youth engagement in family assistance behaviors, it is important to acknowledge that not all youth may be subject to the same expectations set by their families and society. Certain youth-level factors may make youth more likely or less likely to participate in family assistance behaviors. These factors (identified as pentagons in figure 2.1) have been divided into three categories: (1) youth values and attitudes, (2) youth ascribed characteristics, and (3) youth task-specific factors.

Youth values and attitudes. Emerging literature has paid close attention to youth’s own family obligation values and attitudes during adolescence and young adulthood (Freeberg & Stein, 1996; Fuligni & Pedersen, 2002; Fuligni, Tseng, & Lam, 1999; Fuligni et al., 2002). Family obligation values are defined as the psychological processes related to family support, responsibility, and respect (Telzer et al., 2014). Work has shown that Latinx youth who strongly endorse family obligation values report improved emotional well-being (Fuligni & Pedersen, 2002), more parental support (Tsai, Telzer, Gonzales, & Fuligni, 2015), and are more likely to contribute to the family through family assistance behaviors (Fuligni, 2001a). Moreover, Milan and Wortel found family obligation values to represent a protective factor for risky behaviors (e.g., substance use) among a sample of low-income adolescent girls (2015). However, they also found family obligation values to be a risk factor for poor mental health outcomes (Milan & Wortel, 2015). In addition, in a study on language brokering, language brokering frequency was positively associated with language brokering attitudes among youth from immigrant Latinx families (Tilghman-Osborne, Bámaca-Colbert, Witherspoon, Wadsworth, & Hecht, 2016). These findings underscore the importance of youth’s own family obligation values and attitudes, not only for the engagement in family assistance behaviors, but also for perceived and measured
benefits and costs. Youth’s attitudes toward helping the family, also referred to as family assistance attitudes, have often been studied in conjunction with family obligation values, making it difficult to separate the two.

**Youth ascribed characteristics.** Age, gender, and birth order are distinct personal attributes that an individual does not control, yet these attributes make a significant impact in determining youth engagement in family assistance behaviors. Based on work with European American adolescents, Lam, Greene, & McHale (2016) found that the time spent in housework changed across developmental periods where time spent in housework increased from middle childhood to middle adolescence. Supporting this increase in task load as youth get older, Suárez-Orozco and Suárez-Orozco suggest that, with time, youth develop a desire to help pay back parents in recognition of the sacrifices made by parents for the good of the family (Suárez-Orozco & Suárez-Orozco, 2009). In addition to age as an influence, gender (or the norms ascribed to gender), often dictates who participates in which task. Family assistance behaviors are often gendered tasks. For example, doing laundry is often seen as a task for girls and women, while working outside (e.g., mowing the lawn) is viewed as men’s work (Cogle & Tasker, 1982). Illustrating this reality, research with Latinx families have found that more household responsibilities are given to girls than boys (McHale, Updegraff, Shanahan, Crouter, & Killoren, 2005; Orellana, 2001).

Beyond age and gender, birth order stands as an important factor to consider as it influences family life where multiple siblings are present. Past research suggests that being an older sibling may implicate having more responsibilities (Punch, 2001). Among Mexican-American families, adolescents identified as the youngest in the family generally participated in fewer tasks, compared to those identified as an only child or as an older sibling (Tsai et al.,
2015). However, gender norms have been shown to override the importance of birth order. For example, younger daughters were found to contribute more to household work when mothers reported high levels of work demands (Crouter, Head, Bumpus, & McHale, 2001). Crouter and colleagues’ finding of gender being powerful enough to override birth order under the circumstance of parent work overload speaks to the dynamic interplay of age, gender, and birth order.

**Youth task-specific factors.** The proposed framework was developed to provide researchers with a tool to study youth contributions in specific domains. Each family routine or practice serves a particular function to meet a certain goal. In order to meet this goal, youth must have, or be equipped with, specific skills or knowledge that facilitate in the completion of a task. For example, the task of translating a document from English to Spanish for a parent requires written and verbal bilingual capabilities. English and Spanish fluency enables youth to assist non-English speaking family members (Katz, 2014; Orellana, 2009). However, being functionally bilingual may not necessarily be needed to complete a different task, such as cooking a meal for the family or taking care of a sick family member. Each task requires a specific set of skills, where some youth might have the skills necessary to complete a task and others might not. In addition to skills and knowledge, an important task-specific factor is youth preference for engaging in certain behaviors. Preference, defined as a liking for one task compared to another, might also determine who engages in which family assistance behaviors. For example, youth who have an affinity for cooking might choose to engage in preparing family meals, regardless of the family’s expectations tied to characteristics, such as gender or age. Each family assistance behavior is distinct and youth’s own skillsets, knowledge and preferences may vary with each task.
How the Family Impacts Youth Family Assistance Behaviors

In this framework, youth engagement in family assistance behaviors is conceptualized as an adaptive cultural resource for the family, a concept highlighted in Garcia Coll’s integrative model for minority child development (Coll et al., 1996). We posit that Latinx families incorporate youth’s contributions via family assistance behaviors, as an adaptive cultural resource in response to daily demands. As members of the family system, youth serve as critical sources of support. Because youth frequently interact with adult family members (e.g., parents) as well as their siblings and other relatives, it is important to recognize the potential impact of several family-level factors. These factors have been divided into three main categories (identified as squares in figure 2.1): (1) family socialization and dynamics, (2) family resources and constraints, and (3) family structure and household composition.

Family socialization and dynamics. Youth participation in family practices via family assistance behaviors serves as a socializing opportunity where youth learn specific roles and responsibilities based on the family’s goals (Klein, Graesch, & Izquierdo, 2009; Tsai et al., 2015; Weisner, 2001). These goals are guided by different values, attitudes, beliefs, and norms. In many Latinx families, family unity, support, and respect form important aspects of everyday life. These values are ingrained during childhood and throughout adolescence (Calderón-Tena, Knight, & Carlo, 2011; Tsai et al., 2015; Umaña-Taylor, Alfaro, Bámaca, & Guimond, 2009). For example, familismo or familism is a cultural value which emphasizes shared ties between kinship network members (i.e., nuclear, extended, and friends) and the expectancies and/or obligations of these relationships. It has been identified as a hallmark of Latinx culture (Ayón, Marsiglia, & Bermudez-Parsai, 2010; Pulgarón, Patiño-Fernández, Sanchez, Carrillo, & Delamater, 2013). Latinx youth engagement in family assistance behaviors can be framed as a
familism-consistent behavior (Hernandez & Bamaca-Colbert, 2016), as youth are actively involved in the support of the family and often place greater weight upon the family’s needs or desires, in comparison to their own.

As family goals dictate distinct scripts for appropriate behavior, one is led to wonder what might happen when youth’s code does not align with that of the family. This misalignment of values, beliefs, and attitudes between parents and youth is referred to as cultural orientation dissonance (Bámaca-Colbert & Gayles, 2010; Gonzales et al., 2008; Phinney, Ong, & Madden, 2000). Often reflecting an acculturation gap between adult family members (e.g., parents) and youth, this misalignment often disrupts the power dynamics within a family and has distinct implications for family functioning and the well-being of youth (Lau et al., 2005; Sabogal, Marín, Otero-Sabogal, Marín, & Perez-Stable, 1987; Telzer, 2011; Updegraff & Umaña-Taylor, 2015). In considering youth engagement of family assistance behaviors, youth who do not share the same values as their parents regarding family unity, support, and responsibility may feel detached or disengaged. This feeling of detachment from the family may increase youth’s perception of burden in assisting the family, especially when levels of assistance are high (Telzer et al., 2014).

Family communication, connectedness, and cohesion are also elements that add to the relationships across the family. A communicatively open environment allows for mutual idea and opinion exchange between youth and adults (Fitzpatrick, 2004; Ritchie & Fitzpatrick, 1990). Communication within the family is often studied as part of family connectedness and cohesion. Adolescents from Mexican and Chinese immigrant families have been noted to view family obligation and assistance as key elements of family connectedness (Hardway & Fuligni, 2006). In addition, parent-adolescent closeness, an indicator of a positive family relationship, has been
linked with positive language brokering attitudes among youth from immigrant Latinx families (Tilghman-Osborne et al., 2016). These preliminary findings suggest family communication, connectedness, and cohesion to be important constructs as they influence family functioning and dynamics.

**Family resources and constraints.** In understanding why youth participate in family practices, it is critical to acknowledge the family’s own resources and constraints. Resources may allow families to gain access to different opportunities, such as formal caregiving of younger children or elderly relatives. Constraints, on the other hand, likely place limits on family members’ time, energy, and availability to perform certain tasks, such as preparing a family meal. Together, resources and constraints make up a dynamic continuum that influences how a family functions every day. For example, income and education might serve as a resource for families who fall higher on these scales; that is, families with more money or higher education levels might have greater access to opportunities. However, for other families with less income or low levels of educational achievement, income and education might serve as constraints, increasing the likelihood of a parent to experience work overload and greater stress (Cooke & Rousseau, 1984; Frone, Russell, & Barnes, 1996). Further exhibiting the importance of parent workload in the context of family assistance behaviors, past research concerned with internalizing symptoms among Mexican-American families found that adolescents were more likely to participate in housework on days when mothers worked or were exhausted (Tsai, Telzer, Gonzales, & Fuligni, 2013). These findings corroborate the importance of considering the family’s existing resources and constraints in this discussion of youth engagement in family assistance behaviors.
Family structure and household composition. The family structure and household composition of a family dictate who might be involved at home. Family arrangements, often distinguished by the terms “nuclear” and “extended”, vary and have changed over time in the U.S. The number of single-parent homes has risen, constituting 26% in 2014, while the face of two-parent homes has changed with more youth living with remarried, cohabitating, and/or same-sex parents than ever before (Pew Research Center, 2015). A two-parent home is expected to offer different opportunities compared to a single-parent home and has implications for the health and well-being of all family members (Brody & Flor, 1998; Lansford, Ceballo, Abbey, & Stewart, 2001; Weiss, 1979). In addition, youth have been noted to contribute more in single-parent homes (L. Burton, 2007; Gager, Cooney, & Call, 1999). Family size determines how many people are available to help, as well as how many people are needed to be cared for (East, 2010; Goodnow & Lawrence, 2001). Gager, Cooney, and Call found that adolescents from larger families engaged in more household labor (Gager et al., 1999). The age range of family members, including age gaps between siblings, along with the gender makeup of the family (e.g., all boy children vs. 3 girls and 1 boy) are also important to consider. Furthermore, extended kin members, such as grandparents, aunts, uncles, and cousins, living in or near the household might also influence how a family goes about meeting its needs and goals. The inclusion of extended kin in family routines and practices is especially relevant for Latinx families as the structure of these families often entails diverse kinship ties (Landale, Oropesa, & Bradatan, 2006).

Youth and Family in Greater Context

In addition to youth- and family-level factors, there are other factors that need to be considered when examining youth engagement in family assistance behaviors. The family system adapts in response to changes and demands that are imposed by internal and/or external
forces. This adaptation throughout time often necessitates changes in roles, in turn, changing who does what and by how much (Goodnow & Lawrence, 2001). For example, in the event of a crisis, families may rely more on youth to meet the needs of the family by watching over younger siblings more frequently. Moreover, community resources, goals, and identity, as well as societal norms related to childhood and gender, are also examples of external forces that impact the family. Community resources dictate what residents have available to them (as well as what they do not). Living in an economically-depressed area results in a different experience compared to living in an economically-thriving area. Furthermore, the geographic characteristics of a neighborhood (e.g., rural vs. urban) are known to shape the experiences of families, including access to resources for education and health. Community goals are set to reflect shared values, closely tied to community identity as they determine who is or who is not accepted as community members. Specific to this discussion on Latinx families, the climate of community reception for families living in a rural, non-traditional immigrant destination may elicit particularly different experiences compared to living in an urban, well-established immigrant destination (Burton, Lichter, Baker, & Eason, 2013; Lichter, Parisi, Taquino, & Grice, 2010; Stein, Gonzales, Coll, & Prandoni, 2016). However, very little is known to date about how these factors specifically impact youth’s engagement in family assistance behaviors (Tilghman-Osborne et al., 2016).

Local and federal policies are also of importance. In immigrant, Latinx families, the legal status of family members (i.e., whether a person is documented in the U.S.; and if documented, visa vs. permanent resident vs. U.S. citizen), combined with national immigration policy and its changes, significantly shapes the family’s interactions outside the home and their access to resources (Mendoza, 2009; Suárez-Orozco, Yoshikawa, Teranishi, & Suárez-Orozco, 2011;
Moreover, legal status differences among family members, where some members may have legal protection and others may not (e.g., mother’s temporary protected status expires and has one U.S. citizen child) likely shapes who (e.g., parent vs. youth) is involved in certain arenas inside and outside of the home.

**Implications and Future Directions**

This framework specifically focuses on Latinx youth and the contributions that they make to the family, as they are more likely to engage in family assistance behaviors compared to peers of other racial/ethnic origins. However, the literature available on Latinx youth has predominantly come from studies on Mexican-American adolescents. Latinx youth and their families are a heterogeneous ethnic group that spans two continents, various geographic regions, and over 25 countries. It is important to recognize this diversity in future research. It is also important to note that this model and its implications may not be limited to Latinx youth and families. Future research should explore how this conceptual framework may apply to youth and families from various racial/ethnic backgrounds, as well as among other pertinent sociodemographic characteristics, including socioeconomic status.

In regard to methodological considerations, family assistance behaviors are conventionally grouped together to form a dichotomous variable or as an incremental index based on general frequency (see Tsai, Telzer, Gonzales, & Fuligni, 2013 as example). However, treating these behaviors as such does not allow for the investigation of the impact of certain tasks on youth and family health; that is, by grouping all behaviors together, we are not able to look at the implications of each one separately. Thus, the use of this convention raises two important questions: Are all family assistance behaviors created equally? Do all family assistance behaviors implicate the same importance for youth’s health and development? For example, does...
cleaning up after a younger sibling bear the same weight as interpreting during a medical appointment for a parent? Future research should investigate the distinct health and developmental outcomes associated with family assistance behaviors, paying attention to specific domains.

There are many questions that remain in regard to youth engagement in family assistance behaviors and the implications of this engagement. Much of what we currently know is derived from research on academic adjustment (Fuligni, 2001b) and psychological well-being (Telzer & Fuligni, 2009) of adolescents who are involved in these practices. Very little is known beyond these dimensions of development. This framework invites the call to critical questions to garner a comprehensive understanding of the many contributions that youth make in support of their families on a daily basis. Answering these questions will enable us to begin to understand and better study various ways to optimize the meaningful contributions that youth make to their personal health and development, as well as to the health and development of their families – a sentiment expressed years ago by Goodnow and Delaney (1989). Recognizing youth family assistance behaviors as they contribute to supporting the family may provide critical insight into youth’s daily experiences and, ultimately, into strategies that may work to promote optimal health and development.
Funding Support

This research is supported in part by the National Science Foundation under Grant No. DGE1255832 awarded to Michelle Y. Martin Romero. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

Acknowledgements

A preliminary presentation of this paper was made at the annual meeting of the American Public Health Association, Atlanta, GA (November 5, 2017). The author is grateful for the insightful feedback from Dr. Cynthia LaCoe-Maniaci.
CHAPTER 3: It all goes in the pot: Exploring how gender, age, and culture shape the food preparation practices of Latinx youth

Introduction

Childhood obesity remains a major, multi-faceted public health concern in the United States. Similar to other public health issues, there are evident disparities in obesity across racial/ethnic groups. According to the most recent wave of data from the National Health and Nutrition Examination Survey, a staggering 25.8% of Latinx youth were obese in 2015-2016, compared to 14.1% among non-Hispanic white youth aged 2 to 19 years (Centers for Disease Control and Prevention, 2017). Both short- and long-term adverse outcomes are associated with childhood obesity, including increased risk for type 2 diabetes and cardiovascular disease, as well as discrimination, depression, and reduced quality of life (Dietz, 1998; Reilly et al., 2003). Studies have shown that obesity and its associated consequences often persist into adolescence and adulthood (Reilly & Kelly, 2011). This trajectory of childhood obesity tracking into adolescence and adulthood highlights the serious need to understand and address its determinants early in life.

Traditionally, childhood obesity research has investigated the ways in which parents contribute to family eating patterns. From parenting styles and parent feeding styles (Faith, Scanlon, Birch, Francis, & Sherry, 2004; Patrick, Nicklas, Hughes, & Morales, 2005) to parents’ food preferences and the beliefs and attitudes placed on certain foods (Birch & Fisher, 1998; Birch, 1999; Nicklas, Baranowski, Cullen, & Berenson, 2001; Patrick & Nicklas, 2005), previous research has provided valuable evidence in characterizing the ways in which parents, particularly mothers, shape youth dietary patterns. In fact, Golan and colleagues have emphasized the sole use of parents as agents of change in child obesity interventions (Golan &
However, by exclusively focusing on parents as agents of change for childhood obesity prevention, we ignore the importance of other members within the family system – in particular, youth.

**Youth involved in family food practices: What do we know?** To date, little is known about youth involvement in family food practices at home. Much of this work has centered on children’s influence on food purchase decision-making. It is a consistent finding that children exert substantial influence upon family food decision-making in multiple settings, such as the kitchen, the dinner table, and grocery stores (Atkin, 1978; Ekstrom, Tansuhaj, & Foxman, 1987; Henry & Borzekowski, 2011; Maubach, Hoek, & McCreanor, 2009; O’Dougherty, Story, & Stang, 2006; Rimal & Flora, 1998). However, this influence in food decision-making is often noted to be adverse for dietary health. For example, parents of children aged 8 and younger were observed yielding frequently to children’s requests for sugary foods (e.g., donuts and candy) while grocery shopping (O’Dougherty et al., 2006). In another study, parents expressed frustration in bringing children to the grocery store due to their affinity for choices high in sugar, salt, and fat (Wingert, Zachary, Fox, Gittelsohn, & Surkan, 2014).

Beyond food decision-making, a small, but growing body of work has begun to look at youth involvement in food preparation and its possible links to food intake. At the survey level, a few studies have examined the frequency with which youth participate in cooking practices at home and possible associations with various demographic characteristics and health outcomes. Chu, Storey, and Veugelers (2014) found a positive association between higher frequency of involvement in food preparation at home and better diet quality among a large Canadian sample of 10 and 11-year-old children. More than half (63%) of the children in their study reported assisting with food preparation at home at least once a week (Chu et al., 2014). Using the same
sample, Chu and colleagues also found a positive association between higher frequency of involvement in food preparation at home and higher fruit and vegetable preference (Chu et al., 2013). Likewise, among a diverse sample of more than 4000 adolescents in Minnesota from Project Eating and Activity in Teens (EAT) in years 1998/1999, 68.6% self-reported helping prepare dinner at least once during the past week (Larson, Story, Eisenberg, & Neumark-Sztainer, 2006). Adolescents were more likely to be involved in these tasks if they were: female, in middle school, of Asian American descent, from a low socioeconomic status household, reported to frequently eat meals together with the family, or overweight. Findings from these three survey studies suggest that being involved frequently in food preparation may be associated with better diet quality for children (Chu et al., 2014) and adolescents (Larson, Perry, Story, & Neumark-Sztainer, 2006), as well as higher fruit and vegetable preference (Chu et al., 2013). Consistent with the aforementioned findings, Berge and colleagues found adolescents’ involvement in family food preparation to be positively associated with better diet quality as well as more family meals eaten together. This particular analysis used more recent data from the Eating and Activity in Teens 2010 and the Families and Eating and Activity among Teens studies, demonstrating the consistency of this pattern at separate time points (Berge, MacLehose, Larson, Laska, & Neumark-Sztainer, 2016). However, survey results from a sample of 289 low-income African-American 9- to 15-year-old youth demonstrated no significant association between diet quality (as measured by Healthy Eating Index scores) and the frequency of youth preparing food, despite these youth preparing food 6.7 times a week on average (Sattler et al., 2015).

In addition to survey work, many intervention studies have focused on involving youth in food preparation, particularly within school-based and after school-based programs. These
programs often combine gardening and cooking skills (e.g., Heim et al., 2009) or food tasting sessions paired with cooking classes (e.g., Cunningham-Sabo & Lohse, 2013). Limited experimental work has examined food preparation and its association with fruit and vegetable preference and intake. Van der Horst, Ferrage, and Rytz (2014) invited one group of 6-to-10-year-old children to prepare a lunch with the help of a parent (“child cooks” condition), while the other group of children waited while their parents prepared a lunch for them (“parent cooks” condition). Children who prepared the lunch ate more of the meal, including more salad, compared to children in the “parent cooks” condition, suggesting children’s involvement to be important for dietary intake. However, the findings are not consistent. For example, in a similar study conducted by Allriot and colleagues (2016), no statistically significant difference was found between children (7-to-11 years old) in the experimental group who participated in a one-hour cooking workshop and children in the control group. These mixed findings from both survey research and intervention studies point to the need for future work to investigate youth involvement in food preparation, paying attention to the variation in youth’s participation beyond frequency and the potential links between their involvement and dietary outcomes.

**The current study.** The findings from this body of work leave many questions unanswered. To date, very little is known about the process of youth participation in family food preparation in the context of the home; nor do we know what developmental and sociocultural factors may influence youth’s participation in this context. Furthermore, we do not know about youth’s own perspectives regarding their role in food preparation. The present study addresses a major gap in the literature by exploring youth perspectives related to their role in family food preparation through the use of a rich, qualitative design that incorporates community-based, participatory methods. Further, this study purposefully centers on youth who come from Latinx
families living in a non-urban setting. As Latinx youth and their families rank among the highest for both obesity and type 2 diabetes incidence, it is clear that this diverse ethnic group deserves urgent attention.

The focus of this study is on low-income, Latinx (predominantly Central American) youth. It is theoretically informed by ecocultural theory (Bernheimer, Gallimore, & Weisner, 1990; Weisner, 1984, 2002) and family systems theory (Bavelas & Segal, 1982; Yerby, 1995). Weisner and colleagues’ ecocultural theory extends Bronfenbrenner’s ecological systems theory to encompass a distinct focus on the family’s daily activities and the meanings surrounding them. Family routines and practices are actively constructed based on sociocultural context, the characteristics of individual family members, as well as the family’s own values and goals. These routines and practices serve as developmental opportunities for youth on a daily basis. Complementary to ecocultural theory, family systems theory views the family as a dynamic system with multiple players and interdependent relationships. Consistent with these theoretical perspectives, we view Latinx youth’s involvement in family food preparation as an example of a family assistance behavior enacted in response to the family’s needs, values, and goals.

**Study aims and research questions.** The primary aim of this study was to explore youth’s perspectives surrounding their participation in the context of family food preparation. Family food preparation, for the purposes of this study, is defined as a set of behaviors used to make or arrange a meal or snack to be consumed by at least one family member (other than oneself). The following research questions guided this aim:

1. What is the type and level of youth’s involvement in food preparation?
2. What types of foods and meals do youth prepare and for whom are these foods prepared?
3. Who determines who participates in family food preparation?
(4) What does this decision-making process of food preparation entail?

The second aim was to examine the sociocultural, developmental, and family-level factors that may inhibit or promote youth’s participation in food preparation. The following research questions guided this aim:

(1) What sociocultural beliefs do youth identify as determinants for participation in food preparation?

(2) What characteristics (e.g., age, development, personality) do youth perceive as important in determining participation in food preparation?

(3) How might family size, structure, and resources influence youths’ participation in food preparation?

Methods

Study design and setting. A non-random, critical case sampling design paired with snowball sampling (Onwuegbuzie & Collins, 2007) was employed to recruit youth of Latinx families between the ages of 9 and 17. To investigate the aforementioned aims, this study invited youth to join a series of participatory focus group sessions (PFGs) during the month of October 2017. This series of PFGs was embedded within a larger ethnographic fieldwork period that spanned from May 2017 to April 2018. The Institutional Review Board (IRB) at the Pennsylvania State University approved all study procedures.

The research site of interest is comprised of two boroughs and one census-designated area, all within the same county situated in a rural region of northeastern U.S. Important in characterizing this study’s participants and community members, this research site of interest sits within the third ranking county in its state for the highest childhood obesity rates. County-level demographics include a population of 95% white, non-Hispanic/Latino individuals. Hispanic/
Latino origin individuals almost entirely make up the remaining 5%. At the county-level, 12% of the general population lives below federal poverty guidelines. However, this number reaches close to 20% for this specific research site. In addition, more Hispanic/Latino individuals live below the poverty guidelines than any other racial/ethnic groups in the area (United States Census Bureau, 2016).

**Recruitment and sample.** Recruitment flyers in Spanish and English were posted throughout the community (e.g., in local food pantry, at laundromat) where the study took place (see Appendix A for recruitment materials). The principal investigator (PI; MMR) also handed flyers to parents of potential youth participants during community encounters based on her knowledge of the family’s cultural background and possible routines. Parents of youth were asked to inform the PI of their interest in the study and, if interested, enroll their child(ren) via phone call or text. Participants included 23 youth from 14 different families between the ages of 9-17 years who had at least one parent whose native language was Spanish. A wide age range was selected to allow for the examination of potential differences associated with age, sibling dynamics, and birth order. Youth were excluded if they had any condition that would impair their ability to communicate verbally (in English or Spanish).

**Participatory Focus Group (PFG) Session Procedures**

Parent consent was obtained prior to the start of the study and youth assent was an active, ongoing process throughout the entire study (see Appendix B for consent forms). Youth were invited to participate in eight sequential PFGs, each lasting approximately one hour. Each PFG was followed by a short (30 minutes or less) recipe lesson. Youth also received a $10 gift card from a different vendor at the completion of each PFG. The timing of disbursement and variety in gift cards, along with the inclusion of recipe lessons, were done strategically to encourage
participant retention. All PFGs and recipe lessons were facilitated by the lead investigator (MMR) and were conducted in a mixture of English and Spanish based on the linguistic needs of participating youth. All PFGs were audio-recorded. In line with the participatory nature of this study, youth were invited to select a pseudonym for themselves during the last session. Pseudonyms were selected during the last session rather than the first session to avoid the possibility of performance under a new identity (i.e., the chose pseudonym). Participant pseudonym selection was chosen in order to enhance greater agency in the labeling and description of participant’s narratives as suggested by Allen and Wiles (2016). In a few cases, the PI was required to select the final pseudonym due to participant absence during the last session or due to pseudonym repetition.

The youth who participated in this study attended school from 8:30 a.m. to 3:20 p.m., Monday through Friday. Conducting the participatory focus group (PFG) sessions after school necessitated an energetic environment that did not resemble a classroom setting. I aimed to create an environment that was inclusive and where youth felt welcome and comfortable in sharing their valuable experiences. I attempted to avoid the use of didactic structure, positioning youth as equals with important perspectives that I wanted to hear and understand. Aware of the power dynamics innate to the research process, I took care in establishing relationships with youth where they felt respected and appreciated. Past research studies with youth have suggested emphasizing the importance of youth’s own perspectives and sharing control throughout dialogues (Christensen, 2004; M. Hill, 1997; Pearce et al., 2009).

In addition, youth were consistently reminded at the beginning of, and throughout each session, that this was a research study and they were volunteers, meaning they did not have to do anything that they did not want to do. However, despite my efforts in emphasizing that I was not
a teacher or similar figure, along with the group setting being different from a classroom, youth insisted on calling me “maestra” or “teacher” and often referred to the research project as a “class”. They also categorized the various activities as “tarea (homework).” It did not help that the age difference between me and the youth participants was apparent (although, admittedly, the youth thought I was at least five years younger than my actual age, as they saw me as a “normal” college student from Penn State).

Each PFG was designed to provide youth with multiple ways to express their experiences while addressing a distinct research question. Guided by the study’s purpose, PFGs featured inclusive discussions and participatory techniques, such as draw-write-tell activities, photo-elicitation activities, a decision-making chart activity, and listing activities. The participatory nature of this study was developed with the intention to encourage greater participation, acknowledging the diverse age range. In addition, the use of multiple methods allowed for the gathering of richer data along with the ability to establish greater validity and reliability via triangulation (Golafshani, 2003). See Appendix C for participatory technique guides.

**Group discussions.** Youth were invited to participate in multiple discussions throughout the study. The first discussion, “How I Help”, asked youth to talk about how they help out in the family, initiated by the first prompt of “Tell me about a time when you help your family.” The second discussion, “Talking about Norms”, asked youth to discuss existing norms related to helping the family in general and then specifically about food preparation. An example question included, “When you all think about the different ways you help out your family, what are things that only girls should do?” Specific probes related to culture, age and gender were explored. In the final PFG, youth were asked to provide their opinions of the different activities used in the study, along with their opinions related to the overall research study. Youth were also asked to
verify information and answer any final clarification questions according to a participant confirmation sheet created by the lead investigator. This confirmation sheet included basic information about each participant and prompted youth to correct any errors. Specifically, each sheet featured quotes from each participant and included details about their family and experiences. All questions throughout the discussions were presented in a conversational nature to encourage open-ended responses.

**Draw-write-tell activity.** The draw-write-tell method asks participants to draw about a certain theme, write a description of the drawing and then discuss the drawing and description during an interview (Angell, Alexander, & Hunt, 2015). For this study, youth were asked to draw and/or write about themselves and their family during the first PFG. This was done to introduce all group members and the facilitator. Youth were given the option to draw or write, or to do both. Each participant was provided with a personal drawing pad, along with pencils, pens, and coloring markers to use during the PFGs.

**Photo elicitation activities.** Photo elicitation methods typically prompt participants to photograph images that relate to a specified theme. Participants are then are asked to elaborate on those images during an individual interview (Epstein, Stevens, McKeever, & Baruchel, 2006; Harper, 2002). In this study, youth were asked to participate in two photo elicitation activities. The first activity asked youth to take pictures of examples of how they help in general at home over a 7-day period. The second activity asked youth to take pictures of the meals they ate in and out of the home over a 7-day period. Youth were prompted to describe meal contents and indicate who prepared the meal. For both activities, youth were asked to only take pictures of non-identifiable objects or parts of people (e.g., no faces, tattoos, or anything particularly identifiable). Due to a limited number of cameras available, as well as personal preference of
participants, some youth used a digital camera provided to them by the study while others chose
to use a personal camera, phone, or tablet device. Youth in the same family (i.e., siblings) were
encouraged to share the same camera, but were asked to indicate who took each photo. This
sharing of the camera among siblings allowed younger youth to be guided by older youth, while
still encouraging full participation across ages. Once photos were submitted, all photos were
printed and then discussed, prompting youth to provide details about each photo that was taken.
The final photos presented in this paper were selected by MMR based on the following criteria:
(1) clearness of image and (2) relevance to specific theme as indicated by the participant’s photo
description and/or actual contents of photo.

**Decision-making chart activity.** The decision-making chart activity asks participants to
think about and describe what decisions are made and by whom by making a chart (O’Kane,
2000). For this study, youth were asked to create a chart that displayed what they typically eat,
who typically makes the food, and who typically decides what will be eaten. Youth were
prompted to provide details for different time points in the day (i.e., morning, afternoon, and
evening). The charts were then used to generate discussion among the group.

**Listing activities.** For this activity, youth were invited to form smaller groups (based on
their own designation) and create lists related to the following topics: (1) foods they eat
(categorized by standard mealtimes, such as lunch; as well as their favorite foods), (2) names of
places where they buy or consume food, and (3) cooking skills by age. All lists were used to
generate discussion amongst the group as a whole.

**Recipe lessons.** At the end of each PFG, youth were invited to participate in a short
recipe lesson. These lessons included recipes that featured simple preparation techniques, such as
making a fruit smoothie and no-bake oatmeal cookies. Youth were encouraged to suggest recipe ideas for the final four sessions. See Appendix G for recipe example.

Together, these participatory techniques generated both textual and visual data related to youth’s food preparation practices as they positioned youth as a social actors within the research process (O’Kane, 2000). Before and during all activities, youth were reminded that they could choose not to answer any questions and/or not participate in any activity.

**Data Preparation and Analysis**

To maintain consistency and reliability, transcripts were produced by the principal investigator (MMR). Transcripts were then reviewed for accuracy by a bilingual, bicultural professional. This study utilized a modified constructivist grounded theory approach where the collection and preliminary analysis of data occurred simultaneously while theory was derived directly from the data (Charmaz, 2006). Upon leaving the field, a thematic analysis (Braun & Clarke, 2006) of the data was conducted according to the study’s research objectives. Open coding followed by focused coding (Charmaz, 2006) was performed by hand to search for patterns and outliers. Coding was performed by a bicultural and bilingual research team comprised of the primary investigator (MMR) and two trained research assistants. One central codebook was developed as codes were formed based on each focus group transcript individually. Codes were then used to identify emerging themes derived from transcripts and field notes. See Appendix H for codebook examples. Once transcripts were coded, data from the participatory techniques, such as photos and charts, along with field notes, were analyzed. This additional data served to supplement youth’s narratives from group discussions. Data analysis was a process spanning a four-month period during which each step was collaborative and iterative.
Results

Participants. A total of 23 youth from 14 different families participated. Forty-eight percent were girls and the average age was 12.4 ± 2.9 years. All youth came from low-income families with approximately 71% of these families from Central America (i.e., Honduras or El Salvador). Close to 57% of youth were born in the U.S. mainland. All youth had at least one parent who was born outside of the U.S. mainland, including migrants from Puerto Rico. None of the youth was an only child. The average number of siblings currently living in a household was 3.1, ranging from 2 to 5. Based on the relatively large number of families who showed interest, enrolled youth were divided into two groups that met on separate days. Group A (n = 10) met on Monday and Wednesday evenings at a local church, while Group B (n = 13) met on Tuesday and Thursday evenings at a different local church. The average participation rate was 90% (range: 60% - 100%) for Group A and 94% for Group B (range: 83% - 100%).

Specific to youth’s participation in food preparation, analysis revealed three major thematic categories. These three major thematic categories centered on gender norms, specific cooking skills, as well as the intergenerational nature of the cooking process, and are further divided into subthemes. The following paragraphs will describe these major thematic categories supplemented with examples from youth-generated data, such as photos, lists, charts, and quotes. All names provided are pseudonyms and examples originally in Spanish have been translated to English where appropriate.

Theme 1: Gender norm expectations and participation

Participating youth noted the importance of all siblings completing household tasks; however, they were aware of clear differences in the expectations set by their families for each sibling. These expectations, often demarcated by gender, extended into the kitchen setting and
helped to determine whom exactly was encouraged or even allowed to prepare food. Many girls noted that their families expected them to cook or at least help prepare meals, which resulted in greater participation in food preparation among girls. Youth attributed these gender norm expectancies to growing up in a Latinx household and being a normal part of Latinx culture.

**Girl + older sibling = more responsibilities.** Several of the girls who had younger siblings described themselves as having more responsibilities. This heavier task load for girls was confirmed by younger siblings who were present during the PFGs as they stated all the ways in which their older sisters helped them. Melissa, a 14-year-old girl with two younger siblings, explained her role further:

*I am the oldest in my household. I have to make breakfast when I wake up, I have to bathe them, and dress them and if mommy is not ready before 7:50, I have to take them to school.* – Melissa, 14-year-old girl

Supporting Melissa’s example, other girls shared similar experiences about helping at home with younger siblings and how that often involved meal preparation. Helping in food preparation often began at the age of eight years old. Of the eight girls who had younger siblings, five reported participating in food preparation at least weekly and four described their time in the kitchen as an everyday role. This participation would occur either at the side of their mothers as they assisted or by themselves.

**Task load increase with coming to the U.S.** Many of the youth who were born outside of the mainland U.S. described dramatic changes in the amount and types of tasks they had to complete before coming to their new homes and after. This change was consistently characterized as youth having more responsibilities related to caring for themselves and their family upon arriving to the U.S. These youth often lived with grandparents or other family
members before reuniting with their parents who had migrated at an earlier time to the mainland U.S.

_I think it depends how your parents or how your grandparents are with you because when I was in Honduras I was like the princess of the house and I never [did] like nothing. ...So when I came here everything was different. I have to cook for myself, I have to wash my clothes, I have to do everything for me. ... I was the only girl over there and I was not the oldest because my older brother was living with me. Now I'm the oldest and I have to take care, I'm the second mom of the house._ – Katherine, 15-year-old girl

This change in task load was noted among both girls and boys.

_Just like her, I didn’t do anything. My grandparents… I would just lay down and they would bring me food. Now I have to do everything!_ – Cristiano, 12-year-old boy

When these youth came to the U.S., they now had younger siblings to care for, placing them with the responsibilities associated with being an older sibling.

**Cooking as a future-oriented task.** When describing cooking and talking about the importance in learning to cook, youth noted the utility in cooking for the future. For girls, cooking was seen as a practical skill necessary for marriage. This skill was highly encouraged by their families. For example, one girl described her mother’s reasoning for incorporating girls in the kitchen as this:

_“She’s like you need to learn because when you get married your husband is not going to clean either, he’s going to work and that’s it.”_ – Abisai, 17-year-old girl

When asked if boys should learn how to cook as well, youth shared an affirmative consensus. However, a boy’s or a man’s acquirement of cooking skills was closely tied to gender norms,
dependent upon conditions where a woman may not be able to cook as she normally does, such as pregnancy.

“Men should learn how to cook it, too, because just in case... there’s a lot of women at our church that are pregnant right now and I feel like those men that don’t have somebody else to cook for them and they have extra kids, I feel like they have to learn...”
– Abisai, 17-year-old girl

This link to gender norms was further extended by boys’ own thoughts on the matter.

“I think we should just learn...we gotta learn how to cook, too, because you never know if you’re gonna have a lazy wife (laughter). Some wives can be really lazy.” – Leo, 13-year-old boy

Learning to cook was also noted as a way to save money in the future for boys.

Yeah, because let’s take Leo for example. Let’s say he moves outside of his mom’s house and he’s not gonna get married right away. And if he lives far, say he’s like off somewhere else. He’s gonna have to learn how to cook because not every day he’s gonna have money to buy take-out food or like fast food. He’s gonna have to learn how to cook to save money. – Abisai, 17-year-old girl
Youth were aware of gender role norm expectations and referred to these norms throughout the PFGs. Their discussions often depicted differences between boys and girls as being related to distinct and inherent characteristics. For example, boys were seen as “messy” and “dumb”, while girls were seen as “responsible” and “clean”. These distinct differences, they argued, made it so that girls naturally had greater task loads in helping the family, in and out of the kitchen.

Figure 3.1. Photos taken by youth of the foods they prepare.

**Theme 2: Cooking skills and foods prepared by youth**

Figure 3.1 provides a visual representation of the foods commonly prepared by youth in this study. Youth’s experiences in food preparation greatly varied across genders and ages. For example, most (10 out of 12) of the boys admitted to having very limited, if any, cooking experience. However, an exception to this rule established by traditional gender norms was a set
of twin brothers who did not have any girl siblings. Outside of the experiences of these twin brothers, when boys described a personal cooking experience, this experience was often dependent upon the help of an older sister, such as the case of Logan (11 years old) and his sister, Karnation (13 years old).

Logan: Sometimes I make eggs. Sometimes.

Karnation: Yeah, but I have to turn on the stove. I have to put the oil in the pan. I have to find the pan. I have to crack the egg.

Younger girls (9 – 12 years old) had less experience in the kitchen compared to older girls (13 – 17 years old). This experience was limited to preparing accompanying foods and side dishes rather than complete meals, such as tortillas and plantains, pointing to age as an important factor in food preparation involvement.

Specific ages can do specific things. When prompted to talk about how age could possibly influence a child’s participation in food preparation, youth noted specific requirements for certain tasks. For example, in evaluating the capabilities of younger siblings, one participant said:

The food they can prepare, they can make a sandwich, a peanut butter and jelly sandwich. But it depends on the age because my baby brother he’s 2 years old and he can’t do nothing (Abisai laughs). – Jenni, 15-year-old girl

Table 3.1 presents an example of chronological lists of cooking skills by age as delineated by boys and girls separately. See Appendix E for actual images. Youth chose to complete these lists in groups separately based on gender; that is, boys worked in one group while girls worked in the other. The lists created by these groups present distinct categorizations of cooking techniques that vary by age according to boys versus girls. For example, girls expressed that by age seven a
child should be able to cook eggs; however, boys did not mention this skill until age 11. Some girls indicated the age of 13 as the age maximum for being able to learn how to cook, signaling the importance in learning how to cook at an early age.

Abisai: 13 and up! If you don’t know how to cook, you’re never gonna learn.

Katherine: That’s what Latina moms say!

Facilitator: So after 13, there’s no hope?

Abisai: No, but after 13 it’s so much, because, you know, when you’re younger, your brain retains more when you’re growing, so I think it’s easier if you learn when you’re 7, 8, 9, compared to 13.

Referring to the plasticity of the brain at younger ages, youth indicated the need in developing cooking skills before age 13 to better retain these skills. In addition to age differences, participants’ lists displayed differences in the sheer amount of cooking skills recorded, with girls listing a greater variety of skills compared to boys.

The kitchen and its potential dangers. The kitchen was described as a setting with potential hazards, especially for younger kids. Youth often stated fears of burning oneself or causing a fire as a barrier to cooking and noted the importance in evaluating the age of a child for safety reasons.

For example, I’m not gonna put a 5 year old to mess with the stove. You don’t want to do that. They can do a bowl of cereal or something easy, but messing with hot stuff, no. – Abisai, 17 year old girl

The stove was seen as an obvious hazard for younger children. Youth, especially boys, shared their failed attempts at preparing meals and stated how messy they always were in the kitchen – a
reality that they confessed was frowned upon by their parents. The following excerpt relayed by
two brothers, Anuel (13 years old) and M.W. (9 years old), provides a prime example:

   M.W.: I make an explosion in the house. [For example with] the macaroni and cheese. I
didn’t add the water and the plate burned.

   Anuel: He burned the whole thing! You know those macaroni and cheese bowls that you
have to put the water in? He put it in the microwave and then suddenly lots of sparks
came out. We thought the microwave exploded, but it didn't.

Table 3.1
Chronological lists of cooking skills by age according to youth

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Boys say…</th>
<th>Girls say…</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-6 years old</td>
<td>Make sandwiches</td>
<td>Put juice in a cup</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make sandwiches</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make cereal</td>
</tr>
<tr>
<td>7-8 years old</td>
<td>Use microwave</td>
<td>Use a toaster</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use blender</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make eggs</td>
</tr>
<tr>
<td></td>
<td>Prepping pollo asado (roasted</td>
<td>Make pancakes</td>
</tr>
<tr>
<td></td>
<td>chicken)</td>
<td>Make tortillas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make grilled cheese sandwich</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make rice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make sofrito (a sauce used to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>season foods)</td>
</tr>
<tr>
<td>11-12 years old</td>
<td>Make eggs</td>
<td>Cook meat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cook beans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make French fries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make desserts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make mashed potatoes</td>
</tr>
<tr>
<td>13-14 years old</td>
<td>Make salads</td>
<td>Make spaghetti</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make cake/bread</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make most foods</td>
</tr>
<tr>
<td>15-17 years old +</td>
<td>Start cooking</td>
<td>Can cook pretty much</td>
</tr>
<tr>
<td></td>
<td></td>
<td>anything</td>
</tr>
</tbody>
</table>
“Basic” food vs. “fuerte” (strong) food. Some youth were able to make clear distinctions between types of foods and their difficulty in preparing them. Two general categorizations emerged: (1) basic foods and (2) fuerte (strong) foods (see figure 3.2). Basic foods were described as foods that were easy to prepare. Examples of basic foods included cereal, eggs, ham and cheese sandwiches, and pancakes. Strong foods were said to fully satiate hunger and consisted of a starch (e.g., rice) paired with meat, fish, or poultry. These foods were noted to be more difficult to prepare compared with

<table>
<thead>
<tr>
<th>Table 3.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foods commonly consumed by youth</strong></td>
</tr>
</tbody>
</table>

| **Breakfast** | Beans, eggs, oatmeal, cereal, coffee, bread, bacon, cream, egg sandwich, *arroz con leche* (rice with milk), sweet plantain, cookies with butter, milk, pancakes, tortillas with cheese, salami, *mangu* |
| **Lunch** | Rice, soups, stews, shrimp, tamales, fried plantains, spaghetti, *mofongo, empanadas*, fried cassava, fried chicken, fish, *pupusas*, stuffed potatoes, Salvadoran sandwiches |
| **Dinner** | Soups, tortillas, lasagna, ham and eggs, tamales, pizza, vegetables, pork, |
| **Snacks** | Banana, milkshake, grapes, mango, donuts, |

*Figure 3.2. Photo examples of basic and strong foods taken by youth: Ham and cheese sandwich (left) and fish with plantains and salad (right).*
basic foods. Participants’ definition of “fuerte” food was distinct from the typical concept of “plato fuerte” (main dish) as not all main course meals qualified as fuerte/strong. A common example of a strong food was rice and beans with stewed chicken. Many of the cultural foods mentioned by youth were described as strong foods. Some of these cultural foods were said to be very difficult in preparing and/or time intensive, which resulted in decreased consumption of the food in some families.

*I used to eat mofongo [a popular dish in Puerto Rico and Caribbean Latin America made primarily of fried then mashed green plantains and garlic and accompanied with chicken broth or meat]. I don’t eat it anymore…. Because nobody makes it, it’s too much work.*

*You gotta take out a lot of stuff to do it.* – Anuel, 13-year-old boy

Boys and younger siblings were more likely to only prepare basic foods, while older girls were often involved in preparing strong foods.

*I cook like fuerte food. I also bake. Like I do tres leches, flan, all that stuff. And I also cook all types of rice, all types of meat. I really don’t have a thing that I don't cook.* – Abisai, 17-year-old girl

Along with gender, age played an important factor in determining involvement in food preparation, including specific skills. Older girls often exhibited more advanced preparation techniques and a broader knowledge of recipes compared to boys and younger girls.

**Theme 3: Cooking for the family as a cultural intergenerational process**

All youth in this study described consuming cultural foods from their family’s place of origin on a daily basis at home, as exhibited in table 3.2 (see Appendix E for actual images). Outside of the school context (e.g., lunch meal provided by school), cultural foods were, at times, substituted with American foods or fast food options during the weekend. Families tended
to incorporate these non-traditional foods during the weekend, which was seen as a rest period for the family. Consumption of foods prepared outside of the home were seen as a luxury and associated with special occasions by youth.

**Mothers and older daughters negotiate food preparation.** In families where older girls were actively involved in the kitchen, cooking was described as an agentic process that allowed for negotiation in deciding the family’s menu. As table 3.3 (see Appendix E for actual images) demonstrates, older girls and mothers often worked together to choose and prepare meals for the family, especially during dinner time. Older girls noted that they were actively involved in making sure that everyone in the family was fed and saw the importance in fulfilling this responsibility. These girls described their role in the kitchen as a dynamic one where they had to be attuned to family members’ preferences, but also had to balance time and feasibility. The foods that these girls prepared were often, if not always, traditional foods from the family’s place of origin.

When mothers decided the menu alone, both boys and girls revealed the advantage in knowing how to cook if one did not want to eat the food that was prepared. For example,

> You could decide, but if you *know how to make it yourself*. My mom, if you don’t want to *eat her food then you just do whatever, you make whatever you want to eat.* – Leo, 13-year-old boy

However, youth also noted their mothers’ awareness of their food preferences and sometimes catered to these preferences.

> Leo: *Sometimes she makes us whatever we want. Sometimes. Not all the time. ...She *knows* what we want to eat. She *just makes it*. When we wake up we already smell it.*

> Facilitator: *Oh, okay. So she already knows what your favorite foods are?*
Table 3.3
An example of one older girl’s decision-making chart

<table>
<thead>
<tr>
<th></th>
<th>What you eat</th>
<th>Who decides?</th>
<th>Who prepares?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>Cereal, Coffee with bread</td>
<td>Me</td>
<td>Me</td>
</tr>
<tr>
<td>Lunch</td>
<td>SCHOOL/ shrimp soup, meat, beans</td>
<td>Me</td>
<td>Me</td>
</tr>
<tr>
<td>Dinner</td>
<td>Roasted meat, rice with chicken, beans, plantains,</td>
<td>Me/mom</td>
<td>Me/mom</td>
</tr>
<tr>
<td>Snacks</td>
<td>Fast food, Chinese food, tamales, toasted bread, beans with fried plantain, tortillas with cheese</td>
<td>Me</td>
<td>Me</td>
</tr>
</tbody>
</table>

Learning to cook traditional foods by watching mothers. When asked how they came to learn to prepare the foods they currently make, youth indicated watching their older family members, particularly mothers, as the primary learning source. Girls who were more active in family food preparation were better able to describe this didactic process that centered on observation.

_I look at what she does. Most of the time she doesn’t teach me step-by-step how to make something, like add this, add that. When I want to learn something that she knows how to do I simply watch what she adds._ – Abisai, 17-year-old girl

These girls attributed the restriction to learning by observation to their mothers’ lack of patience, generalizing this characteristic to being “a Latina mom”.

_My mom doesn't have that patience to be like ‘Here, look, add this’. She’s like ‘get out of my way!’ (laughter)_ – Abisai, 17-year-old girl

Further confirming this experience, another girl quickly added,
My mom, nuh-uh. She says just watch me because I'm not explaining anything. – Jenni, 15-year-old girl

Technology as a cultural bridge in the kitchen. Many of the youth mentioned the use of technology for finding recipes or for entertainment related to food preparation. Technology included YouTube, Tasty, Facebook, and tailored Google searches.

Facilitator: Does anyone ever look up recipes online?

Abisai: Yes! Facebook provides with that.

Jenni: YouTube! …I have an app for Tasty. It's good. I love Tasty.

Another set of girls added,

I use Google, too, to help me with decorating cakes and stuff like that. – April, 12 years old

[I watch the] “Cooking, but not really” show (referring to a YouTube video channel series) – Luna, 12 years old

Many of the girls noted the utility of these digital platforms as they allowed them to learn new recipes. These new recipes were often foods outside of traditional cultural foods; foods that youth said their moms could not teach them because they did not know how to make them.

Jenni: I use it a lot when my mom doesn't know how to do something.

Facilitator: What kind of recipes do you look for?

Jenni: Random ones.


As youth accounts illustrate, cooking was more than a task done to feed the family. Cooking served as a socialization opportunity for families and fostered unique bonds between youth and parents, especially among daughters and mothers.
Discussion

The Latinx youth in this study participated in various family routines and practices. These routines and practices were characterized by shared responsibilities among family members and were implemented to accomplish goals related to household maintenance and functioning. This was especially true for older girls with younger siblings, where some play such a significant role in the family that they perceived themselves as “the second mom of the house.” Such responsibilities often included helping in food preparation. The experiences youth identified align well with past literature related to cultural values often associated with Latinx families, such as familism and cooperation (Bridges et al., 2012; Telzer et al., 2014). Previous ethnographic work exploring Latinx youth and their involvement in helping the family have more generally noted these experiences as well (Denmark & Jones Harden, 2012; Orellana, 2001, 2003).

Gender norms dominated participants’ conceptualizations of food preparation roles. Age was also a salient factor in shaping youth involvement in food preparation. However, on a whole, youth believed that everyone should at least know how to cook as it could save money in the future and serve as an advantage whether as a wife or the husband of a “lazy wife.” Latin American culture was also believed to dictate who prepares food and what types of foods are prepared. Discussions with youth revealed a binary categorization of foods, designating some foods as “basic” and others as “fuerte (strong).” Basic foods were items that required less skill, including eggs, sandwiches, and cereal. These findings corroborate previous work by Kaplan (2000) where eggs emerged as a common food prepared by youth among a sample of middle school-aged youth from non-Latino white and black racial/ethnic backgrounds. Fuerte foods involved from-scratch recipes and were almost exclusively prepared by older girl siblings.
Findings from this work have direct implications for prevention and intervention efforts of diet-related health conditions, such as obesity, type 2 diabetes, and hypertension. Youth noted a sense of limited agency in food choice at home if one did not have the knowledge and skills to prepare your own meal. This condition of knowing how to cook for food choice is critical to further explore as it highlights a possible area of intervention, suggesting the importance in providing youth with opportunities to develop food preparation skills. In addition, many youth indicated using digital platforms, such as Facebook, Tasty, and YouTube, to search for new recipes and food preparation techniques. Future nutrition-based prevention and intervention programs would do well to incorporate the aforementioned platforms and keep current with technology as it rapidly evolves.

**Photovoice and its potential for dietary health behavior change.** Photovoice, an example of a photo elicitation method similar to what was implemented in this study, aims to empower individuals to document and reflect on their lives, including issues related to health (Wang & Burris, 1997; Wang, 2006). This participatory method, developed by Wang and Burris (1997), prompts individuals to not only take pictures of their surroundings, but also encourages participants to think critically and consciously about the topic at hand (Carlson, Engebretson, & Chamberlain, 2006). Photovoice is commonly used to identify community-level factors, such as environmental hazards for asthma (Schwartz, von Glascoe, Torres, Ramos, & Soria-Delgado, 2015) and physical activity barriers for childhood obesity prevention (Findholt, Michael, & Davis, 2011; Hennessy et al., 2010). However, this method can also be used to capture and dissect factors at the individual- and family-level. With its utility at all levels of Bronfenbrenner’s ecological system, photovoice may have the potential to not only better understand barriers and enablers of health issues, but also encourage health behavior change. In
fact, Photovoice has been used as an evaluation tool (Raber et al., 2016; Sands, Reed, Harper, & Shar, 2009) and a needs assessment tool (Wang & Burris, 1997), as well as an intervention in itself. For example, Russinova and colleagues (2014) have used Photovoice as an intervention for anti-stigma, while Mizock and colleagues (2015) have used the method as intervention for mental illness.

Specific to dietary health, Martin and colleagues suggest that Photovoice may “empower the participants as they strive to understand and meet their own and their families’ daily nutritional needs” (p. 96, Martin, Garcia, & Leipert, 2010). In thinking on the youth who participated in the present study, some with extensive cooking skills and contributions to the family diet, Photovoice as an intervention would ask youth to reflect on the multiple contributors to family food practices – prompting youth to take pictures of individual, family, community and other-level factors. As an intervention, Photovoice is able to acknowledge the voice of youth while providing youth and researchers with the tools necessary to analyze areas of agency, such as youth who cook at home (e.g., many of the older girl siblings in the present study).

Conclusion

There are a few limitations to take into account when interpreting this study’s findings. The cross-sectional design only offers a snapshot of the lives of the youth who participated in this study at one point in time. Longitudinal work may provide more accurate descriptions of changes in food preparation behaviors over time, as seasons change and as family structure changes. Such a design would be especially advantageous in further understanding the finding of task load increase with migration to the U.S. In addition, the narratives presented here are specific to low-income, im/migrant Latinx families living in a small, rural area of northeastern U.S. These experiences may not necessarily be shared among all Latinx families nor among all
low-income families in the U.S. Future work should investigate this role among other socio-economic groups and other racial/ethnic groups to further disentangle socio-economic influences from cultural ones. Furthermore, the experiences identified in this study are limited to youth who were able to participate in the project. Non-random convenience sampling may have resulted in a biased sample; perhaps the youth who participated in this study may have had fewer responsibilities at home and/or more free time, which ultimately enabled them to participate. One 14-year-old girl and her shortened participation in the study due to an intensified role in caring for her younger siblings in the face of a family emergency emphasized this possibility. This example may be a particularly relevant reality necessary to consider in the development and design of future research efforts, including exploratory studies and interventions. However, despite these limitations, this study offers valuable insights from Latinx youth’s own perspectives, never before explored.

This qualitative study is among the first to investigate the role of Latinx youth in family food preparation. Findings from this study elucidate the very real experiences of youth as they help in the critical family practice of food preparation. Importantly, this study highlights the dynamic process of food preparation and sheds light on an agentic opportunity for some youth, especially older girl siblings. Future research should further explore this role among youth from families of economically-, culturally-, and geographically-diverse backgrounds.

**Funding support**

This work was financially supported by the National Science Foundation under Grant No. DGE1255832, the Fahs-Beck Foundation, as well as the Department of Biobehavioral Health and College of Health and Human Development at the Pennsylvania State University. Any opinions, findings, and conclusions or recommendations expressed in this material are those of
the author(s) and do not necessarily reflect the views of the abovementioned funding agencies.

A preliminary presentation of this paper was made at Yale University, New Haven, CT (March 28, 2018).

Acknowledgements

The author would like to express immense gratitude to the youth who participated in this project for sharing their invaluable experiences. The author thanks Maria Arreaga, Samantha Monteiro, Marina Armendariz, and Dr. Myrta Mathews for their assistance in various project assistance tasks that were critical for this study’s success. The author would also like to thank Dr. Cynthia LaCoe-Maniaci for her valuable feedback during the preparation of this paper.
CHAPTER 4: Many hands make light work: Understanding family contexts in Latinx youth involvement in family food preparation

Introduction

Food and its associated practices (e.g., meal preparation and grocery shopping) are often used to express a multitude of sentiments, such as love and pride, along with notions of care among family members (Bramble, Cornelius, & Simpson, 2009; Kaplan, 2000; Kaufman & Karpati, 2007; Yates-Doerr, 2013). They also serve as a means for the preservation of culture, tradition, and identity (Meigs, 1987; Moisio, Arnould, & Price, 2004; Weller & Turkon, 2015), as well as socialization opportunities for younger family members (Ochs & Shohet, 2006; Orrell-Valente et al., 2007). Food practices often reflect contexts and boundaries set by the geographic environment (e.g., agricultural landscape) and economic conditions (e.g., food security) available to the family. However, despite the meaning of food that spans beyond meeting one’s daily nutritional needs for human survival, along with its variation in practices by context, nutrition education and obesity prevention efforts often disassociate meal preparation, food choice, and eating from these existing socio-ecocultural contexts (Yates-Doerr, 2013, 2014).

One particularly ignored aspect of food practices is the importance in acknowledging who may take part in shaping and performing these practices. The conventional approach to the exploration of food practices has focused predominantly, if not exclusively, on mothers and their influence in choosing, procuring and preparing food for the family. However, the family system is dynamic, and often consists of multiple contributors to family functioning and facets of health, including fathers, grandparents, and youth, among others. Thus, investigations should treat the family as such. Families come in different shapes and sizes, with contexts varying for each one. Research does a disservice to families when this variability is ignored. Youth are often seen as a
passive family member that contributes little to the food context (Christensen, 2004). Children and adolescents (hereafter collectively referred to as youth) may play a significant role in family food practices through tangible contributions, such as meal preparation and the feeding of younger siblings and other relatives. This may be especially true for youth living in Latinx families as these youth have been shown to assist the family in various ways and at higher frequency rates compared to their peers (Fuligni, 2001b).

Youth helping the family in Latinx families. Work by Rogoff and colleagues (see Coppens, Silva, et al., 2014; Rogoff, 2014), centered on a concept they refer to as Learning by Observing and Pitching in (LOPI), suggests that a healthy collaboration between children and adults (i.e., family and community members) is an important characteristic of indigenous-heritage communities in Mexico and Central America. Their work posits that families from these regions, even if they do not identify as indigenous or having indigenous heritage, may exhibit these characteristics. For example, children from Mexican-heritage families in the U.S. were more likely to collaborate amongst themselves and ser acomedido (i.e., help without being asked) compared to children from European-heritage families (López, Ruvalcaba, & Rogoff, 2015). This body of research demonstrates that autonomy and interdependence can coexist among children who contribute to family household work (Coppens, Alcalá, et al., 2014; Coppens, Silva, et al., 2014; Rogoff, 2014). It also emphasizes the alignment of children’s helping behaviors with the family’s cultural values and goals, as families purposefully involve youth in these tasks for the good of the family.

This line of thinking is directly applicable to the discussion on food practices among Latinx families in the U.S today. Food practices, such as family food preparation and food decision-making, serve as opportunities for collaboration and socialization among family
members, including youth. From a peripheral view, Latinx youth have frequently been noted to be involved in family food practices. In her ethnographic account on the daily activities of Mexican and Central American immigrant youth living in California, Marjorie Faulstich Orellana observed children in the first-grade assist with grocery unpacking, feeding younger siblings, and preparing traditional cultural foods (e.g., pupusas and tamales) (Orellana, 2001). Similarly, Central American immigrant mothers described a number of ways in which their young, preschool-aged children (3-5 years old) assisted them with simple meal preparation tasks, such as setting the table and washing dishes (Denmark & Jones Harden, 2012). These preliminary findings point to the relevance of investigating youth involvement in family food preparation. To date, very little is known regarding Latinx youth involvement in family food preparation, including a lack of understanding of the family contexts in which this involvement occurs. Understanding the sociocultural and developmental contexts in which food practices occur and identifying who is performing these practices are important to consider, given the impacts of food practices on dietary health and cardiometabolic health outcomes, such as obesity and diabetes.

**The current study.** The focus of this study is on low-income, im/migrant Latinx (predominantly Central American) families with youth between the ages of 9 and 18. It is theoretically informed by ecocultural theory (Bernheimer et al., 1990; Weisner, 1984, 2002) and family systems theory (Bavelas & Segal, 1982; Yerby, 1995). Weisner and colleagues’ ecocultural theory extends Bronfenbrenner’s ecological systems theory to encompass a distinct focus on the family’s daily activities and the meanings surrounding them. Family routines and practices are actively constructed based on sociocultural context, the characteristics of individual family members, as well as the family’s own values and goals. These routines and practices
serve as developmental opportunities for youth on a daily basis. Complementary to ecocultural theory, family systems theory views the family as a dynamic system with multiple players and interdependent relationships. Consistent with these theoretical perspectives, we view Latinx youth’s involvement in family food preparation as an example of a family assistance behavior enacted in response to the family’s needs, values, and goals.

Highlighting the meanings placed on different food practices using a socio-ecocultural, family system-centered approach may provide valuable insight necessary to improve prevention and intervention efforts aimed at family-based dietary health outcomes. The purpose of this study was to understand families’ perspectives surrounding youth’s participation in family food preparation. Family food preparation, for the purposes of this study, is defined as a set of behaviors enacted to make or arrange a meal or snack to be consumed by at least one family member (other than oneself). More specifically, the aim was to explore families’ motivations for and barriers to involving youth in family food preparation at home. The following research questions guided this aim:

(1) What family goals, values, and needs do youth’s participation in family food preparation serve?

(2) How might norms ascribed to characteristics, such as age and gender, inform families’ decision to involve youth in family food preparation?

(3) Under what circumstances do families adjust their norm adherence in deciding who participates in family food preparation?

We present narratives from parents, as well as their youth who noted frequent participation in family food preparation. This dual perspective is used as a means of
understanding both adult and youth perspectives and experiences related to family food preparation, while highlighting families’ socio-ecocultural contextual realities.

Methods

The current investigation is a part of a larger qualitative study conducted between May 2017 and April 2018. Ethics approval was obtained through the Institutional Review Board at the Pennsylvania State University. A non-random, critical case sampling design (Onwuegbuzie & Collins, 2007) was employed to recruit parents and youth of Latinx families.

Study setting. The research site of interest is comprised of two boroughs and one census-designated area, all within the same county, situated in a rural region of northeastern U.S. Important in characterizing this study’s participants and community members, this research site of interest sits within the third ranking county in its state for the highest childhood obesity rates. County-level demographics include a population of 95% white, non-Hispanic/Latino individuals with Hispanic/Latino individuals almost entirely making up the remaining 5%. At the county-level, 12% of the general population lives below federal poverty guidelines. However, this number reaches close to 20% for this specific research site. In addition, more Hispanic/Latino individuals live below the poverty guidelines than any other racial/ethnic groups in the research site (United States Census Bureau, 2016).

Recruitment and sample. Parents of youth previously enrolled in the larger study (The Youth Food PREP Project) were invited to participate in the present study. Enrolled youth (n = 23) coming from 14 different families were sent home with a letter to their parents (see Appendix A), inviting parents to participate in a face-to-face in-depth, semi-structured interview. Eleven parents, representing 78% of enrolled youth from The Youth Food PREP
Project, agreed to participate in an interview. Following the interviews with parents, six youth were invited and agreed to participate in a semi-structured interview over the phone.

**Interviews with parents.** Informed consent was obtained prior to each in-depth, semi-structured interview with parents. All interviews were conducted in Spanish, were audio recorded, and were held in the participant’s place of choice (e.g., participant’s home, public library, and church office). In addition, all interviews were facilitated by the same individual (investigator MMR) to ensure consistency. Table 4.1 presents the questions used to guide the interviews with parents. Each participant was assigned a unique alphanumeric identifier at the time of enrollment. Upon completion of the interview, each participant was invited to choose their own pseudonym. This was done to allow for greater agency in the labeling and description of participant narratives, as suggested by Allen and Wiles (2016). In a few cases, the PI was required to select the final pseudonym due to pseudonym repetition or per participant’s request. Each parent was compensated with $30 (either in the form of cash or gift card) at the end of the interview. The average length of parent interviews was 1.32 hours long (range: 33 minutes – 2.65 hours).

**Interviews with youth.** Informed consent from parents was obtained prior to each interview conducted with youth under 18 years old. Youth who were 18 years old provided consent for themselves (see Appendix B). All interviews took place over the phone, were audio-recorded, and were conducted in youth’s preferred language (Spanish or English). All youth interviews were facilitated by the same individual (investigator MMR) to ensure consistency. Table 4.2 presents the questions used to guide the interviews with youth. Youth received a $10 gift card for compensation. Youth interviews lasted approximately 30 minutes each. Pseudonyms presented in this paper were selected by youth during their enrollment in an earlier phase of the
project (refer to chapter 3). Interviews with youth took place over the phone rather than in person due to schedule constraints.
Table 4.1
*Caregiver interview guide questions related to youth’s role in family practices*

<table>
<thead>
<tr>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In what ways do your children influence or participate in family routines?</td>
</tr>
<tr>
<td>2. Do any of your children ever help out at home? In what ways?</td>
</tr>
<tr>
<td>3. When it comes to food prep, do any of your children ever help? In what ways?</td>
</tr>
<tr>
<td>4. What about outside of the home, how do any of your children help?</td>
</tr>
<tr>
<td>5. How do(es) your child(ren)’s involvement in these tasks/practices contribute to your family’s needs?</td>
</tr>
<tr>
<td>6. How did <em>(child’s name)</em> come to have that role at home?</td>
</tr>
<tr>
<td>7. How important is this role for <em>(child’s name)</em>? For your family?</td>
</tr>
<tr>
<td>8. Can you describe how this process of involving <em>(child’s name)</em> in meal preparation works for your family?</td>
</tr>
<tr>
<td>9. Why do you think this is a family practice of yours?</td>
</tr>
<tr>
<td>10. Do any of your other children help in this same role? Why or why not?</td>
</tr>
<tr>
<td>11. When you were a kid, how did you help your family?</td>
</tr>
<tr>
<td>12. How comfortable would you feel if your child started to cook (more)?</td>
</tr>
</tbody>
</table>

Table 4.2
*Categories and questions from youth interview guide*

<table>
<thead>
<tr>
<th>Subject</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspectives and opinions</td>
<td>How do you feel about cooking and why?</td>
</tr>
<tr>
<td>Food prep process</td>
<td>Walk me through what it is like when you have to cook a meal for your family.</td>
</tr>
<tr>
<td>Frequency of food</td>
<td>How often do you prepare food for yourself?</td>
</tr>
<tr>
<td>preparation participation</td>
<td>How often do you prepare food for your family?</td>
</tr>
<tr>
<td>Circumstance of food</td>
<td>Why do you think you are the one who prepares the meals?</td>
</tr>
<tr>
<td>preparation participation</td>
<td></td>
</tr>
<tr>
<td>Decisions and initiative</td>
<td>Who decides who cooks?</td>
</tr>
<tr>
<td></td>
<td>Who decides what type of food is prepared?</td>
</tr>
<tr>
<td></td>
<td>Is participation voluntary or in response to a request or a command?</td>
</tr>
<tr>
<td>Intergenerational influences</td>
<td>How did you learn how to cook?</td>
</tr>
<tr>
<td></td>
<td>Who taught you how to cook?</td>
</tr>
<tr>
<td></td>
<td>What type of foods did they teach you to prepare?</td>
</tr>
<tr>
<td>Culture</td>
<td>How does food represent culture to you/ for you and your family?</td>
</tr>
<tr>
<td>Challenges and</td>
<td>What makes food preparation difficult or challenging for you?</td>
</tr>
<tr>
<td>opportunities</td>
<td>What makes food preparation easier for you?</td>
</tr>
</tbody>
</table>
**Photo elicitation activity.** The photo elicitation activity asked youth to take pictures of the meals they ate in and out of the home over a 7-day period. Youth were asked to only take pictures of non-identifiable objects or parts of people (e.g., no faces, tattoos, or anything particularly identifiable). Some youth used a digital camera provided to them by the study, while others chose to use a personal camera, phone, or tablet device. Once photos were submitted, all photos were printed and then discussed. The discussion prompted youth to identify who prepared each featured meal, along with detailing meal contents.

**Data preparation and analysis.** To maintain consistency and reliability, verbatim transcripts of parent interviews were produced by one Spanish-speaking professional familiar with Central American Spanish dialects. Youth interview transcripts were transcribed verbatim in the original language (English/Spanish) by a team of two trained, bilingual, bicultural research assistants. All transcripts were then reviewed for accuracy by a bilingual, bicultural professional familiar with various regional Spanish-language dialects. This study utilized a modified constructivist, grounded theory approach where the collection and preliminary analysis of data occurred simultaneously, while theory was derived directly from the data (Charmaz, 2006). Upon leaving the field, a thematic analysis of the data guided by the study’s research objectives and theoretical constructs surrounding families’ daily activities and cultural values was conducted (Braun & Clarke, 2006). Open coding followed by focused coding (Charmaz, 2006) was conducted by hand to search for patterns and outliers. Coding was performed by a bicultural and bilingual research team comprised of the primary investigator (MMR), a colleague (MA), and two trained research assistants. One central codebook was developed as codes were created, based on each interview. See Appendix H for an excerpt of the codebook. Codes were then used
to identify emerging themes derived from transcripts, photos, and ethnographic field notes. Data analysis spanned a four-month period where each step was collaborative and iterative.

Results

Participants. A total of 11 parents completed a face-to-face interview. The majority of parents were originally from Central America, including Honduras (n=6) and El Salvador (n=3); while two mothers were from the Dominican Republic (n=1) and Puerto Rico (n=1). Ten of the 11 parents were mothers. Parents ranged in age from 29 to 51 (\(M_{\text{age}} = 39.5 \pm 6.1\) years). Education levels ranged from seventh grade to a college degree. The majority (all but one) of parents were clients of a local charitable food dispensing agency that requires a household income of 50% below federal poverty level or less. The average continuous length of stay in the mainland U.S. was 11.1 years, ranging from 1.5 to 17.0 years. Almost all mothers (80%) who participated in the study were homemakers at the time of the interview, while the one father who participated worked at a local food processing plant. Six youth completed a telephone interview. All but one were girls and fell between the ages of 13 and 18 years old (\(M_{\text{age}} = 15.5 \pm 1.8\) years). Youth grade levels ranged from 7\(^{\text{th}}\)-through 12\(^{\text{th}}\)-grade. Two of the six youth were born in the mainland U.S., while the other youth came to the mainland U.S. between the ages of 4 and 15 years old. All examples originally in Spanish have been translated to English for the purpose of this paper.

Emergent themes. Analysis revealed several emergent themes surrounding families’ motivations for and barriers to involving youth in family food preparation. A distinct typological spectrum of youth’s participation in family food preparation emerged from families’ narratives, as shown in figure 4.1. The following sections describe these results, presenting direct quotes
from both parents and youth, along with photos taken by youth to help illustrate participants’ experiences as they fall along the family food preparation typological spectrum.

*Figure 4.1. A typological spectrum of family food preparation roles.*
“If you didn’t want to learn how to cook, then you should have been born a man.”: The intertwinements of entrenched gender norms and family circumstances

Natalia, originally from the Dominican Republic, is a heavy-set homemaker on disability. She lives with her three children, her mother, and her husband. Her oldest child who happens to be her only daughter, eighteen-year-old Abisai, is also heavy-set and is responsible for meal preparation at least four times a week. However, this number often ends up being six or seven times a week. Abisai explained,

“Like, let’s say that my mom is really ill or something, which is often. So that means I have to cook that whole week.”

Natalia suffers from multiple chronic health conditions, including depression. As a result of these health complications, Abisai frequently takes on the role of the sous chef to make sure that everyone is fed. Natalia expressed how big of a help it is to have Abisai in the kitchen, either assisting alongside her or Abisai cooking on her own. Natalia first started to integrate Abisai in the kitchen at the age of eight, and, although she thinks perhaps it was a little too early, she insists that one must incorporate their children in the kitchen at an early age (before 12 years) or it will be too late.

“You have to involve them when they are young so that they know that it is something that they need to do. At 12 years old, it’s already too hard. It’s difficult to get them to participate. That’s what happened with my 14-year-old son...”

Natalia went on to explain how her son, although only 4 years younger than Abisai, does not do anything related to the kitchen- not even dish washing. This sibling distinction entrenched by gender norms became evident as Natalia admitted,
“Hispanic parents have this belief that if you put males to do something [in the kitchen], they will become feminine.”

Her daughter, Abisai, later added,

“[My mom] tells me all the time, if you didn’t want to learn how to cook, then you should have been born a man.”

Other mothers held this similar cultural belief and explained the ways in which it informs their decisions about who to allow in the kitchen, noting cultural differences between their Latin American places of origin and the United States. Reflecting on these cultural differences and her parenting methods with her son, one mother stated:

“Sometimes if he [my son] sees dirty dishes he’ll start to wash them, but, you know the culture here is different from the culture of our countries. In our countries, the men don’t have to wash dishes, so, for us, it is odd to see a man washing dishes. Sometimes I scold him. I tell him, ‘No, you don’t have to do that.’”

Washing dishes, along with other tasks confined to the kitchen setting, were clearly marked as women’s work among many families. However, some mothers attempted to take an egalitarian approach to household tasks, such as Isabela, a single mother of three children under the age of 18. Isabela, originally from Honduras, described the role of her two younger sons and her only daughter, Katherine, as a team where everyone was responsible for cleaning up after him/herself. Despite these teamwork goals, the reality of age differences among siblings combined with Isabela’s irregular work shifts at a local restaurant meant more responsibilities for 15-year-old Katherine. Isabela described Katherine’s role as this:

“Katherine is a complete baby-sitter. She knows how to do everything. She prepares dinner at 7 p.m., lets them [her brothers] watch television after, gives
them a bath at 8 p.m., and puts them to bed at 8:30 p.m. When I arrive, the two boys are already asleep.”

Because of Isabela’s work schedule, Katherine is responsible for taking care of her two younger siblings, which includes food preparation. When asked about who decides what to prepare, Katherine gave the following example,

“Today [my mom] went to work at 4 p.m., so she cooked. On Friday she goes to work at 11 a.m. That doesn’t give her time to cook, so I come home and cook and I decide what I want to prepare.”

Katherine described her role as sous chef, filling in and adapting as necessary throughout the week in response to her mother’s work schedule. The fluid nature of the decision-making process in food preparation was emphasized, with both mother and daughter taking turns in cultivating the family menu.

Natalia and Isabela implemented specific strategies in response to illness (Natalia) and irregular work schedules (Isabela). These strategies called on the instrumental support of older daughters to prepare food for the family frequently. Such strategies complement Devine and colleagues’ (2006) conceptualization of food choice coping strategies, defined as “the ways that people actively conceptualized and managed food selection in response to the emotional, temporal, or physical strain of conflicting work and family roles”). Moreover, Natalia and Isabela, two mothers originally from two distinct regions of Latin America (Dominican Republic in the Caribbean vs. Honduras in Central America), each viewed cooking as an important skill that is necessary for survival. Although they noted the value in boys learning how to cook, they cited their tendency to emphasize their daughters’ involvement more due to deeply ingrained cultural norms regarding gender roles. These views were corroborated by other parents who
referred back to gender norms that designated greater kitchen access to women and girls. Roles among parents (mother vs. father) often reflected these gender norms, with mothers being the primary cook and fathers having very limited knowledge of food preparation tasks. Natalia confessed,

“When I met my husband, [he was] skinny. He only ate Burger King and I said to him, ‘how have you survived all this time?’ His sisters would come and cook for him every week!”

As a man, Natalia’s husband was never taught how to cook, nor was he expected to learn. As a young adult, his sisters came to his hunger rescue, demonstrating ingrained gender norms in a past generation. However, despite these gender norms, many parents expressed the practical need for knowing how to cook, mentioning the independence it affords. These observed gender role expectations in this domain of family food preparation parallel well with expectations set for language brokering among Latinx families, where it is common and expected for girls to participate in language brokering more than boys (Tse, 1995; Valenzuela, 1999).

**Cooking as a gendered intergenerational experience**

As a cultural practice, cooking serves as an opportunity for mothers and daughters to share time together and simultaneously introduces daughters to family traditions. This was the case for Jasmin, a stay-at-home mother of five under the age of 18, and her 15-year-old daughter, Jenni. Jasmin, originally from El Salvador, who was pregnant at the time of the interview, noted that, out of all of her kids, Jenni was the one to help the most in the kitchen. Jenni expressed how she helps her mother in the kitchen almost every day afterschool and on the weekends:

“When I have to help her out, it’s usually things like getting this and that for her and like, I usually like mostly like watch her, what she does. And I usually follow along. And after
that, I can help her clean up after cooking, I help her clean. Usually things, like small things like that.”

As a kitchenhand, Jenni described her role as frequent, yet limited to mostly assisting her mother. She admitted to only cooking by herself once a week. Figure 4.2 is a photo taken by Jenni and depicts an example of a dish she assisted her mother in making. For Jenni, her role as a kitchenhand meant more than simply passing ingredients to her mother. Using the example of making tamales, Jenni described how she feels about her time in the kitchen with her mother:

“My favorite meal to make with her [my mom] would be tamales ... I feel like when we make those we bond more; it’s more like something she’s always done. It’s more like her best recipe, I guess. She is teaching me how to do something that she knows how to do...”

Katherine also noted the value in cooking alongside her mother, as that time together created special moments:

“To be honest, I like cooking more with [my mom]. For example, if something is wrong, it is her fault (laughs), but also I know that I cherish these moments with her and I learn more because the things that my mom teaches me, my grandma taught her, and what my
great-grandmother taught my grandma and what my grandma taught my mom, she is teaching me. Maybe when I have a daughter myself, maybe I will be able to teach my daughter because it is a chain that comes from the kitchen.”

Here Katherine emphasizes the profound link between tradition and cooking, depicting how the kitchen serves as a site for a unique intergenerational exchange. By cooking alongside parents, –mainly mothers—youth (most often daughters) learn how to make family recipes passed from one generation to the next. This practice prepares youth who are currently sous chefs and kitchenhands to become the next executive chef for their own families in the future.

All participating families described daily menus dressed with cultural foods from the family’s place(s) of origin. *Arroz con gandules* (rice with pigeon peas) was a staple mentioned by Puerto Rican and Dominican families, while *tamales* (a traditional Mesoamerican encased dish) and *enchiladas* (a Central American food comprised of a fried tortilla with different toppings) were common for families from Honduras and El Salvador. The consumption of cultural foods on a daily basis aligns well with past studies centered on Latinx mothers’ influence on the home food environment. In a study by Evans and colleagues, the majority of families ate traditional Mexican foods more

\[ \textbf{Figure 4.3.} \] Photo taken by Abisai. Her description states: “*Pollo frito con arroz con gandules* (fried chicken with rice and peas). Make most of the time.”
frequently than American foods among a sample of 34 Spanish-speaking Latinx parents of preschool-aged children (Evans et al., 2011).

The act of passing down tradition was vividly illustrated through the foods that were photographically captured by youth. Figure 4.3 provides an example of a dish prepared by Abisai, featuring arroz con gandules, fried chicken, and salad. Both mothers and daughters described learning by observation as a process that predominantly characterized how youth learned how to cook. On this matter, Natalia detailed how she would invite Abisai to observe her when she was a little girl: “I would tell her, come, look at me, watch me, watch what I do…” Similarly, Bowen and Devine (2011) also uncovered this process of learning by observation among a sample of 10-to-18 year old Puerto Rican girls living in the New York City metropolitan area and Puerto Rico. The girls from Bowen and Devine’s study also cited watching family members in the kitchen as the primary method in learning how to cook at an early age. However, based on some mothers’ accounts, inviting youth to get involved in the kitchen was not always without difficulty. For example, when talking about her daughter Jenni’s help in the kitchen, Jasmin stated time as a barrier to actively teaching Jenni how to cook: “You know that with them, you need to have time to teach them.” She then went on to describe the economic costs of her daughter cooking on her own:

“I tell her, ‘Oh, my child, but you waste so much of my money on that!’ I tell her, ‘No!’

[and Jenni asks] ‘But, mom, how am I going to learn how to make those things?’”

When cooking on her own, Jenni liked to try new recipes from different cultures. However, her experimentation in the kitchen did not always yield edible results, which was not appreciated by her mother. Time and money were emphasized as limited resources for parents. With low education levels, limited English proficiency, and, for many, limited or no protected legal status
in the U.S., surviving each day was noted as the family’s primary goal. Although not always easy or convenient, youth’s involvement in family food preparation helped the family to meet this daily goal.

Similar to the roles of Abisai and Katherine, fifteen-year-old Melissa helps with family food preparation frequently throughout the week as sous chef. Her mother, Alanis -- a heavy-set, 30-year-old, stay-at-home mother of three from Puerto Rico-- described the changes in Melissa’s role at home since the family’s arrival to the mainland U.S.,

“Between the ages of 10 and 12 she started to help me more, but even more when we arrived here about 2 years ago.”

Alanis attributed this change in Melissa’s role to her development as a young woman, noting the importance in girls knowing how to be clean and orderly as obligated by “la naturaleza” (nature). Previous research has shown participation in housework to increase with age during adolescence with a gendered division of tasks being more pronounced, supporting the gender intensification hypothesis (Crouter, Manke, & McHale, 1995; Hill & Lynch, 1983; McHale, Crouter, & Whiteman, 2003). Alanis then went on to describe certain characteristics that allow Melissa to be successful in this family role as sous chef.

“They [my children] are all different. Melissa likes to serve more. She’s more giving.”

As Melissa’s case demonstrates, paired with age differences among siblings, characteristics related to development and personality help shape specific roles in the family.

**Privilege and preference**

Antonio, originally from El Salvador, is a father of three boys, two of whom live with him in the U.S. Antonio and his wife, the stepmother of 17-year-old twin boys Azael and Jesús, work at a local food processing plant. Although Azael and Jesús are twins, they have very
different personalities and preferences. For example, Azael likes to cook; he learned by watching his grandmother and stepmother. Jesús, on the other hand, does not like to cook as much as his brother and prefers to only cook for himself. Azael’s involvement in the kitchen is best described as sporadic compared to other youth who were interviewed, as he would cook one to four times in a given week. He explained,

“Sometimes my stepmom cooks and I don’t have to. She always cooks, but sometimes I want to make something different so I do it. For example, when she made chili, I didn’t really like it so I made something else.”

Figure 4.4. Photo taken by Azael. His description states: “Tacos de carne. Hecho por mí. (Beef tacos. Made by me.)”

Figure 4.4 depicts a meal consisting of beef tacos prepared by Azael. Azael’s ability to cook afforded him the choice in deciding what he eats, especially in the event of an undesired meal prepared by someone else. Aware of gender norms, Azael exclaimed:

“Cooking is good. There are some people who don’t like to cook because they think only women can cook. But we all can cook, no? We all have hands. That’s just a sexist thing.”
As a boy, Azael holds a privileged role as he has the ability to choose to cook if and when he wants to because cooking is not expected of him. However, due to his fondness of cooking, he makes meals for himself and his family at times, moving between the roles of sous chef, kitchenhand, and consumer throughout the week without question.

Melissa and Jenni also expressed a liking towards cooking, which encouraged them to try out new and different recipes from time to time. Abisai, on the other hand, described a newfound ambivalence towards cooking. During the day of the interview with her mother, Abisai was in the kitchen, preparing the family’s Sunday meal. Two big pots were on the stove. With a phone in one hand and a seasoning packet in the other, Abisai stood over the pots to watch them carefully as she intermittently let out tired sighs. Later on she confessed:

“Well... sometimes I do like it [cooking]. You know, to learn different things about like different foods is intriguing, but then sometimes just doing it every day makes you tired....tired of doing it so much. Like I can cook a whole week, but on weekends, I just want time to not cook.”

Abisai prepared meals for the family more often than all other youth participants. She noted the strain that her role in family food preparation created, but with her mother’s poor health, she had little choice but to cook—whether she liked it or not.

**Closing the kitchen door: The reality of fear and educational priorities**

Many parents noted fear as a significant barrier to incorporating their children in the kitchen, especially without supervision. All of the mothers who were interviewed cited fears of youth injuring themselves and causing accidents (e.g., a house fire) as a reason for limiting their children’s participation in the kitchen. Jessica, a stay-at-home mother of two from Honduras, described her experiences with her 12-year-old daughter Luna,
“Sometimes I do let her try, but I am always there to supervise. I’m always supervising. I tell her, ‘you do it like this...slowly’. I try to let her do it because she can do it, but it’s almost like I am little scared, but she says, ‘Mamí, no, I’ll do it!’ I tell her, ‘Okay’, but I always am there to make sure nothing happens to her, so that she will not burn herself or anything else... but I try to teach her, because she watches me all the time in the kitchen and she says, ‘Mamí, I want to cook!’”

Jessica’s enactment of a typical experience in the kitchen with her daughter depicts parents’ fears in letting youth cook unsupervised despite youth’s willingness to learn and be involved. In addition to fears, some parents mentioned how their children were often inundated with homework and other academic commitments, which did not leave youth with much time to participate in household tasks. Silvia, a stay-at-home mother of six originally from Honduras, explained,

“That’s another thing I ask myself and my husband! These kids, they are always busy with homework. I don’t know if it’s because they don’t [...] how do I say this, if they just let all the work pile up or... I don’t know, but every day they have a lot of homework from school. So we make sure that they get a good night’s sleep or when they come home I have dinner ready for them so that that’s all they do, finish homework, but sometimes it’s 9:00 p.m. and they haven’t finished ...so I don’t know if that, partly, it’s them working too slow.”

Silvia, along with other mothers, expressed the importance of their children’s education and emphasized the need to make sure that youth were able to meet homework deadlines and fulfill other school assignments. This often meant reducing or eliminating household tasks, emphasizing the importance of education as a family value and priority. Because of parental
fears and an emphasis on education as priority, youth in these families had very limited experience in food preparation (for themselves and for the family). These youth fell along the typological spectrum as consumers and/or dishwashers, rather than kitchenhands and sous chefs. For example, none of Silvia’s children, including her oldest daughter Elizabeth who turned 18 shortly after enrolling in the study, were described as taking part in family food preparation. They were all consumers. Aware of her family’s non-compliance with cultural socialization norms, Silvia admitted,

“So [my husband’s family] thinks [Elizabeth] is too big to not know how to serve or how to assist… she doesn’t know about that, but I know that later on she can take some classes and she will know how to prepare a meal or something.”

Silvia, confident in her daughter’s intelligence, relies on future educational opportunities to prepare her children to fulfill roles related to family food preparation.

Each participating family presented a distinct circumstance, highlighting the reality of varying family contexts. Older girls generally participated more in family food preparation compared to younger siblings and boys. However, youth’s experiences differed in the reasoning behind participation in the domain of family food preparation. Family constraints, such as irregular work schedules and poor parental health, resulted in heightened participation in family food preparation for youth. Family goals shaped by beliefs and values, such as culturally sanctioned gender norms (and the resulting expectations), along with parents’ desire for youth’s educational achievement, translated to less involvement in family food preparation for some youth. Together, these factors collide and contrast to create a unique family context for youth’s contributions to family functioning and health via family food practices.
Conclusion

The findings from this study provide evidence for the need to investigate the role of every family member who has a hand in food practices, which may be different for each family. Rather than shift attention away from mothers and the important ways they contribute to the family’s survival, this paper serves as a call to expand our research interests to include consideration of the ways in which youth participate and contribute to family functioning and health. Referring back to the typological spectrum presented in figure 4.1, youth fell along different notches as their participation in family food preparation varied. Youth who were frequently involved in feeding the family by themselves, like Abisai, Katherine, and Melissa, acted as “executive chefs-in-training” through their role of sous chef. These older girls worked alongside mothers in the kitchen as they learned family food traditions and negotiated family menus. Among participating families, mothers were clearly the executive chefs of the household as they decided who was allowed access to the kitchen and were responsible for purchasing the family’s groceries. However, power related to food choice and food preparation was, at times, shared between mothers and older daughters, which points to the significance in further exploring these dynamics.

The current study complements and extends a growing body of work that seeks to provide a comprehensive socio-ecocultural understanding of family food practices. This body of work includes studies that shed light on the role of fathers in family food practices, such as fathers’ feeding practices among Mexican-American families (Penilla et al., 2017), fathers’ influences on family food practices (Fielding-Singh, 2017; Kaufman & Karpati, 2007), as well as understanding fathers’ influence from the child’s perspective (Curtis, James, & Ellis, 2009). This body of work also includes those that have investigated the role of grandparents in family food
From this growing body of work we know that fathers and grandparents play an important role in shaping family food practices. The findings from the present study push the literature forward as we highlight the importance in exploring the influence of youth who may take part in everyday family food practices.

This work has its limitations. The narratives presented here are specific to low-income Latinx families living in a small, rural area of northeastern U.S. These experiences may not necessarily be shared among all Latinx families, nor among all low-income families in the U.S. Future work should investigate family food preparation practices among groups of other socioeconomic statuses and races/ethnicities to further disentangle socioeconomic influences from cultural ones. In addition, no objective measure of weight status or diet quality was included in this study. Although this information would have been helpful in exploring associations between food practices and diet-related outcomes, such explorations were beyond the objectives/scope of this study. We did not want to sensitize participants to links between food and health outcomes; nor did we want to place participants in an uncomfortable situation by discussing a potentially sensitive topic, especially as some family members were noticeably overweight and obese. Such work is especially salient for Latinx families due to the disparaging incidences of cardiometabolic health conditions that consistently plague this population.

This dual-perspective, qualitative study is among the first to investigate the involvement of Latinx youth in family food preparation. The data in the current study help to represent the diversity of Latin American narratives by presenting those of families from El Salvador, Honduras, Puerto Rico, and the Dominican Republic. This work expands the literature as it focuses on non-Mexican Latinx populations. Most importantly, this work makes visible the often
invisible role of youth as they participate in a practical activity critical to family functioning and health: food preparation.

**Funding support**

This work was financially supported by the National Science Foundation under Grant No. DGE1255832, the Fahs-Beck Foundation of the New York Community Trust, as well as the Department of Biobehavioral Health and College of Health and Human Development at the Pennsylvania State University. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the abovementioned funding agencies.

**Acknowledgements**

The author would like to express immense gratitude to the families who participated in this project for sharing their invaluable experiences--this work would not have been possible without their generosity. The author would also like to thank Arizbeth Miguel Jimenez, Camila Restrepo, Maria Arreaga, Samantha Monteiro, Neydi Y. Martínez Luna, and Dr. Myrta Mathews for their assistance in various project tasks that were critical for this study’s success. The author is also grateful for the insightful feedback from Dr. Cynthia LaCoe-Maniaci.
CHAPTER 5: Summary, Future Directions, and Lessons Learned

The purpose of this chapter is three-fold: (1) to summarize and serve as a bridge between chapters 2, 3, and 4, highlighting key findings from each chapter while emphasizing how they build on one another and link to existing literature, (2) to discuss future directions, and (3) to describe lessons learned from the field when using participatory methods with Latinx youth, including challenges and victories.

Summary of Findings

Chapter 2 introduced a framework for understanding youth engagement in family assistance behaviors in support of family functioning and health. Family assistance behaviors are a diverse set of tasks through which youth actively contribute to the family’s well-being. Examples include youth watching over younger siblings and interpreting English-language interactions for non-English speaking parents. As Latinx youth have been noted to engage in family assistance behaviors more often than their peers, these youth and their families present an ideal case for thorough exploration of these behaviors. Investigation centered on the context in which these contributions occur allows us to better understand the needs of both youth and their families. As the conceptual framework asserts, viewed from a socio-ecocultural perspective, multiple factors may help determine youth’s engagement of family assistance behaviors. Youth-level and family-level factors are divided further into six main categories: (1) youth values and attitudes, (2) youth ascribed characteristics, (3) youth task-specific factors, (4) family goals and dynamics, (5) family structure and composition, and (6) family resources and constraints. Macro-level factors, such as societal norms, community resources and goals, and time, are included as well. Together, these factors work in tandem to shape the family assistance behaviors
of youth, where some factors might be more salient than others in response to specific family contexts.

Chapters 3 and 4 presented findings from qualitative investigation into the family food practices of Latinx youth living in a rural U.S. community. Through the incorporation of participatory focus groups, chapter 3 took a multi-method approach to exploring the family food preparation-related experiences of Latinx youth, positioning youth’s perspectives as unique and valuable. Analysis revealed that older girls were more likely to have experience in family food preparation. Older girls’ frequency in this task was a direct product of families’ value-based expectations, where family food preparation was predominantly viewed as a productive task for girls and women. Thus, older girls were able to more explicitly describe their role in family food preparation as they recalled their weekly tasks of preparing *fuerte*, or strong food. On the other hand, boys, especially boys with older sisters, most often had little to no experience in family food preparation and described preparing *basic* foods for themselves, such as sandwiches and eggs.

Chapter 4 delved deeper into the family-level factors associated with family food preparation, highlighting the perspectives of parents with their children’s voices overlaid. By presenting the narratives of parents, detailing the cases of six specific youth, the reality of entrenched gender norms emerged where mothers served as *executive chefs* and older daughters as *sous chefs*, training to become the next *executive chef of their future household*. Participants’ narratives emphasized not only the utility of youth’s contributions in the context of family food practices, but also how the act of cooking allows for a unique bonding experience among mothers and daughters. For these families, family food preparation served as a socialization
process for both youth involved and not involved in the kitchen, sending messages regarding norms, values, and beliefs on a daily basis.

Together, chapters 3 and 4 add substance to the conceptual framework presented in chapter 2, highlighting youth’s involvement in family food preparation as a prime example of an important family assistance behavior. Figure 5.1 depicts an applied model based on findings from chapters 3 and 4, citing key examples that emerged from the interviews and participatory focus groups. Being an older daughter (a compound example of ascribed characteristics) elicited clear expectations by parents. These expectations were informed by parents’ cultural beliefs, norms, and values related to proper kitchen roles based on age and gender. Limited availability due to evening work schedules and chronic health conditions proved to be critical family constraints, making youth’s involvement in family food preparation a necessary behavior. In addition, as in Katherine’s case, being in a household with a single-mother meant more frequent involvement in the caretaking of younger siblings as “the second mom” of the house. Youth, like Jenni (female, age 15) and Abisai (female, age 18), were very aware of the sacrifices made by their parents and expressed a genuine desire to “pay them back.” This desire motivated them to engage in family assistance behaviors. Moreover, a general liking towards cooking translated into more time spent in family food preparation, even breaking gender norms as was the case for Azael (male, age 17). Together, these youth- and family-level factors help determine if, when, why, and how often youth assist in family food preparation. The variance in participants’ experiences emphasizes the reality of certain factors being more salient than others, depending on the family.
Figure 5.1. Applied framework to Latinx youth family food preparation engagement.
**Future Directions**

Acknowledging youth’s contributions via their engagement in family assistance behaviors and understanding the factors that encourage or inhibit such contributions help to identify potential targets for prevention and intervention efforts aimed at improving the health and well-being of youth and families. The framework presented as part of this dissertation would benefit from future exploration that uses various examples of family assistance behaviors as well as different contexts to help broaden the framework’s applied utility. Future research should also seek to expand this framework, as there may be several other factors critical to consider related to youth’s engagement in family assistance behaviors. Beyond the conceptual framework, there are several opportunities for future investigation based on the findings from this dissertation.

The findings from this series of studies related to family food preparation help to identify potential targets for prevention and intervention efforts aimed at reducing childhood obesity and promoting dietary health. For many of the families in this study, family food preparation was a shared task for mothers and daughters. These strategies of dividing kitchen tasks and rotating cooking shifts are important to consider as they emphasize the dyadic nature of family food preparation for some households. Future work should further explore the mother-daughter bonding experience mentioned by some families. Specifically, explicit investigation on the ways to optimize this bond for improved health is warranted. Interactions between youth and parents in the kitchen setting may serve as opportunities for cross-transmission of healthier behaviors as they relate to food choice and preparation.

Youth food preparation behaviors varied greatly within this sample. Some youth possessed limited skills in preparing foods for one’s own consumption, while others were extensively involved in cooking for the entire family. This range of involvement has been
identified by past work (Berge et al., 2016; Leak, Aasand, Vickers, & Reicks, 2018; Sattler et al., 2015). For example, through semi-structured interviews, Leak (2018) explored adolescents’ involvement in family food preparation in low-income households, conceptualizing this involvement as a behavioral economic strategy. Similar to our study, adolescent girls often expressed a high level of involvement, attributing their greater involvement to being the oldest sibling or reflecting cultural expectations. Furthermore, Leak (2018) showed that adolescent boys and girls who were frequently involved in family food preparation cited an active role in the food decision-making process. Future interventions should focus on the role of youth in family food preparation and provide youth with the skills necessary to prepare full meals for the family that feature healthful choices. Youth who are actively involved in family food preparation might serve as effective intervention participants as they play a consistent role in making sure the family is fed. In addition, many youth also indicated using digital platforms, such as Facebook, Tasty, and YouTube, to search for new recipes and food preparation techniques. Future prevention and intervention programs would do well to incorporate the aforementioned platforms and keep current with technology as it rapidly evolves.

Objective measures of weight status or diet quality were not included in this dissertation. These measures were not included, as we did not want to place participants in an uncomfortable situation by discussing a potentially sensitive topic, especially as some family members were noticeably overweight. Considering the links between food practices and health outcomes, future work should incorporate measures, such as the height and weight of participants, and diet quality indicators (e.g., Healthy Eating Index). As findings remain mixed concerning the benefits and consequences associated with the engagement of youth in family food preparation, explicit investigation with the aforementioned measures would move this body of research forward. An
additional limitation of this dissertation work is its cross-sectional design. Longitudinal investigation would enhance this line of research by facilitating a temporal exploration of family food preparation (along with other food practices) and family member roles as time passes.

**Lessons Learned from the Field**

Preparing and implementing a multi-method study aimed at exploring the lives of low-income, im/migrant Latinx youth and their families provided many valuable lessons. These lessons include the nuances of conducting research with Latinx families, as well as the advantages and disadvantages of using participatory methods with youth. The following section details these lessons in the hope that they may serve to help other researchers in the future.

**Research with Latinx families.** The Latinx population in the U.S. consists of individuals and families from over 25 Spanish speaking countries, nations, and territories throughout the world (Pew Research Center, 2014). With such diversity comes the necessity of not only having Spanish-language materials and Spanish-speaking team members available, but also having resource specific to participants’ places of origin. These resources include, but are not limited to, research team members being familiar with relevant Spanish-language dialects, as well as those comfortable with the mixing of Spanish and English together (e.g., code-switching) (Umaña-Taylor & Bámaca, 2004). It is also important to note that not all Latinx individuals speak Spanish. For example, some Latinx individuals speak indigenous languages (e.g., K’iche’ language in Guatemala), French, Portuguese, and English, among others.

My extensive volunteer work and research in Central America since 2011 (particularly in El Salvador) helped immensely as I was familiar with the foods, places, and customs mentioned by many participants. These prior experiences also enabled me to understand and effectively use regional *caliche* (e.g., colloquialisms, slang). This familiarity, I believe, created a more relaxed
environment, encouraging participants to share more freely their experiences. Although Umaña-Taylor and Bámaca (2004) recommend having a research team that reflects the ethnicity of each participant, curating such a team for this dissertation proved to be a challenge. The head transcriber of adult interviews was a Salvadoran national, while the transcript reviewer was Puerto Rican. The ethnic backgrounds of interview coders did not reflect those of research participants, with coders being of Colombian, Mexican, Ecuadorian, and Puerto Rican heritage. No one on the research team was Honduran or Dominican, and no coders were of Salvadoran heritage. Nevertheless, all research team members had a great command of Spanish (and English when necessary) and contributed greatly, using the strengths in the diversity of ethnic backgrounds and experiences.

**Using participatory methods with Latinx youth.** Conducting any multi-method study can be challenging, as it requires thoughtful preparation of various data implementation strategies. Although the use of diverse methods to answer research questions was beneficial in generating data not normally acquired via a traditional focus group method, this proved to be, at times, more difficult than anticipated. Focus groups with youth – participatory or not – come with their own unique challenges (Gibson, 2007; Morgan, Gibbs, Maxwell, & Britten, 2002). A facilitator needs to not only have experience in working with youth, but also enjoy spending time with youth. One must also be comfortable with positioning youth as experts who possess valuable knowledge. Moreover, the principal investigator or research team should consider the advantages and disadvantages associated with each method, considering the feasibility in implementing each one. The following sections outline key challenges experienced while implementing the participatory focus group phase with youth of this dissertation.
Technological gaps: The issue with using disposable cameras and digital cameras in today’s selfie age. Photo elicitation methods typically involve the use of a camera given to participants so that they can generate photos that are then shared with the research team. Several types of cameras exist and the principal investigator must decide which type of camera best fits the needs of the research project. Disposable cameras are often cited as a popular choice among projects incorporating photo elicitation methods. The advantages include their relatively low cost and ease of handling and picture taking, as well as reduced fear or less preoccupation about the camera being damaged as it can be replaced at a low cost. However, given the ubiquity and accessibility of digital camera, disposable cameras are no longer readily available in stores, making them more difficult to obtain. In addition, disposable cameras inherently place limits on the number of photos a participant can take (e.g., 27 exposures available using a “Quicksnap” camera). Another disadvantage is that these cameras do not allow participants to see their captured images before printing, nor is one able to delete undesired photos. Furthermore, developing pictures/film, as it is no longer a common practice, represents added cost to be budgeted beforehand. There is also a need to allocate sufficient time for the pictures to be ready as this process takes approximately 7-10 days. Importantly, disposable cameras do not allow investigators to save a digital file of the images produced by participants. Given these disadvantages, digital cameras were deemed the better option.

Although advanced digital cameras (i.e., Digital Single Lens Reflex (DSLR) cameras) are the ideal tool to produce visual data, these cameras are expensive and can be complicated to operate. On the other hand, their point-and-shoot counterparts are not as budget-friendly as they were in the past, as they compete to stay current with technological advancements. Less expensive point-and-shoot options stand on the verge of being extinct/obsolete as individuals
replace them with smart phones that have higher quality cameras. Due to their diminishing popularity, it was very difficult to find functional point-and-shoot cameras at a price that fit the research budget. Thus, cameras were either purchased from second-hand stores or borrowed. However, it was also necessary to find each camera’s accessories (e.g., connecting cables, compatible memory cards), which proved to be even more of a difficult task.

To my advantage, I had experience in using point-and-shoot digital cameras with youth between the ages of 8 and 12 from past research in El Salvador in 2014. I was able to use a portable photo printer, along with a limited number of cameras that I previously used. Based on this prior experience, I expected youth for the current study to be at least familiar with using digital cameras. This was not the case. As soon as I introduced the first photo activity, several of the youth looked at the digital camera dangling from my hand as if it were this artifact from a distant past. Set in 2017, perhaps point-and-shoot digital cameras from 2008 are rightly seen as such. In addition to youth’s unfamiliarity with this older technology, some of the youth raised concerns about losing the camera or damaging it, which discouraged them from taking the camera with them and using it to complete the photo activities. Many youth also shared that they were very forgetful and needed daily reminders, in addition to the verbal reminders I gave them at the end of specified sessions, in order to remember to take the photos. They cited how they relied on mobile applications (apps) to remind them about their daily homework assignments and exams.

This experience and youth’s honest confessions point to a technological gap that should be addressed in the interest of future studies incorporating photo elicitation methods. Using personal cell phones to capture data may be a feasible option and hopeful solution, but one cannot assume that all participants will have access to a personal cell phone, especially when
participants are as young as nine-years-old. Neither can one assume that participants with cell phones will have ones that feature high-quality cameras. Providing cell phones to participants to use for the duration of the study may be a viable, but potentially expensive, solution. As used in mobile health (mHealth) projects, this option provides all participants with the same camera, establishing an equal standard, and allows the researcher to program the cell phone with set reminders (Källander et al., 2013). However, the appropriateness of using such technology should be properly evaluated based on the context of the research site and the goals of the study (Källander et al., 2013).

Avoiding the “classroom feel”. The youth who participated in this dissertation project attended school from 8:30 a.m. to 3:20 p.m., Monday through Friday. Conducting the participatory focus group (PFG) sessions after school necessitated an energetic environment that did not resemble a classroom setting. I aimed to create an environment that was inclusive and where youth felt welcome and comfortable in sharing their valuable experiences. I attempted to avoid the use of didactic structure, positioning youth as equals with important perspectives that I wanted to hear and understand. Aware of the power dynamics innate to the research process, I took care in establishing relationships with youth where they felt respected and appreciated. Past research studies with youth have suggested emphasizing the importance of youth’s own perspectives and sharing control throughout dialogues (Christensen, 2004; M. Hill, 1997; Pearce et al., 2009). In addition, youth were consistently reminded at the beginning of, and throughout each session, that this was a research study and they were volunteers, meaning they did not have to do anything that they did not want to do. However, despite my efforts in emphasizing that I was not a teacher or similar figure, along with the group setting being different from a classroom, youth insisted on calling me “maestra” or “teacher” and often referred to the research project as
a “class”. They also categorized the various activities as “tarea (homework).” It did not help that the age difference between me and the youth participants was apparent (although, admittedly, the youth thought I was at least five years younger than my actual age, as they saw me as a “normal” college student from Penn State).

Moreover, the use of certain participatory methods contributed to a class-like ambience, such as the draw-write-tell method. The draw-write-tell method, as it incorporates the use of paper and pen/pencil, prompts participants to write and/or draw about their experiences and then share them. This method proved to be too similar to what youth have to do daily at school and only served to add to participants’ fatigue rather than alleviate it. Other participatory methods, like the listing activities, seemed to be more enjoyable as youth participants were encouraged to work in groups of their choice. During the last session, which included a general evaluation of the project, many youth, especially the older girls, voiced the relief they felt by being in the project because it allowed them to talk about topics that were important to them.

**How many is too much?** The recommended size for a focus group typically ranges from five to eight participants (not including research team members). This size is based on focus groups with adults and is thought to be a size that allows for optimal interaction and comprehension (Gill, Stewart, Treasure, & Chadwick, 2008). As the schedules of participants sometimes change and participants do not show up, over recruitment is suggested (Umaña-Taylor & Bámaca, 2004). Following this recommendation, I assigned 10 youth to group A, and another 10 to group B. To my delightful surprise, all of the youth showed up on the first day and a few more trickled in over the next few sessions as youth and families spread the word about the project. In fact, I had to turn away prospective participants because I knew that I would not be able to work effectively with such a large group of youth. I was not willing to sacrifice the
quality of my research for the sake of increasing the sample size. Even with the designation of
the sample limit, I had up to 13 youth during one of the sessions. I called on my prior experience
in working with youth in afterschool and summer program settings. With this experience, I was
able to negotiate guidelines with participants. I outlined a schedule (see Appendix F for example)
at the beginning of each session and youth were able to make comments or suggestions. They
often reminded each other and me of the schedule to help keep the group on track. This example
of being proactive on their part contributed to the success of the project overall.

The youth in this project were 9-to-17 years old at the time of enrollment. This wide age
range was critical for a thorough exploration of my research questions. Working with such a
diverse age range required the inclusion and adaptation of methods to that were age-appropriate.
For example, older youth in past studies using the draw-write-tell method have felt
uncomfortable in drawing about an experience, seeing it as something for only younger youth to
do (Angell et al., 2015). Thus, this method was modified to give all participants the choice to
draw or write (or do both) based on their preference. For this project, boys and girls were invited
to participate in the same group; that is, groups were not assigned by gender. Although it might
have been valuable to form groups based on gender, it was simply not practical for youth and
their families. Many youth came from the same family (i.e., they were siblings). Dividing the
family would have likely created unnecessary tension by splitting families apart; many of the
younger siblings were interested in participating in the project because their older siblings were
there. In addition, it is likely that it would have been incompatible with the schedules and
routines of families, bringing one child to one group and another to the second group.

Adapting to the linguistic needs of Latinx youth. Although all participants were of
Latinx background, the youth in this project demonstrated various levels of Spanish and English
fluency. Some youth were born and raised in the U.S. or had been in the U.S. since they were toddlers. These youth often preferred to articulate themselves in English; although most fully understood Spanish as it was the main language spoken at home with parents. In contrast, some youth had recently (less than two years ago) come to the mainland U.S. and were more comfortable sharing in Spanish. Others fell somewhere in between on this linguistic spectrum, as they combined both English and Spanish vocabulary to share their experiences. This wide variation in Spanish and English proficiency among participants not only required an efficient bilingual facilitator, but also mandated the services of a bilingual transcriptionist. None of the transcription services I saw online offered bilingual transcription – only English or Spanish separately. This meant that I was responsible for transcribing the audio files. The combination of Spanish and English paired with lively turned rowdy discussions made the task of transcribing each focus group especially challenging. This task was further complicated by the quick turnaround necessary to accommodate a preliminary analysis while still in the field. It was important to start the analytic process while actively collecting data in order to ask follow-up questions to participants as themes emerged.

Many challenges were encountered during the implementation of this series of studies. These challenges included grappling a technological gap between the researcher and participants, fostering an environment different from the classroom, effectively accommodating a larger than expected sample size, and adapting to the linguistic needs of youth. Although these challenges were difficult to face during the process, they now serve as valuable lessons that can be called upon during future investigations.
Conclusion

The current series of studies was the first to propose a framework for understanding the contributions of youth to family functioning and health, centered on family assistance behaviors. This work was among the first to investigate the role of Latinx youth in family food preparation using a socio-ecocultural, dual-perspective approach. Findings illustrate the utility of the proposed framework as exemplified through the involvement of youth in family food preparation. Findings highlight the crucial, yet often ignored, role that youth play in family food practices, underscoring the importance of exploring youth as agents of change for health promotion. This work may have broader applications to multiple domains of health and development. A few examples of possible applications include family assistance behaviors related to family caregiving and brokering for language-, culture-, and media-related encounters. Acknowledging the role that youth play in family functioning and health may help guide our understanding of youth’s family roles and may aid in identifying potential targets for prevention and intervention that promote health and improve well-being. In addition, participatory methods, such as photo elicitation and decision making chart activities as presented in this work, may prove advantageous in recognizing, understanding, and amplifying youth voice and agency in health domains.
References


Appendix A: Recruitment Materials

Kids Wanted for
The Youth Food PREP Project!

- Kids must be 9 - 17 years old to participate in this research project.
- Kids must have at least one parent who speaks Spanish as native language

Kids will be asked to answer questions, draw, write and take photos related to preparing food and their life over 8 sessions.
Kids may be compensated up to $80 for completing the study.

The purpose of this study is to find out about kids’ experiences in food preparation, food choice, and how they help at home.

For more information and/or to sign up:
Call/text: 814-303-9091
Email: mym119@psu.edu

Principal Investigator: Michelle Y. Martin Romero, M.S., CHEB
December 5, 2017

Dear parent,

Thank you for giving your daughter/son permission to participate in “The Youth Food PREP Project”. Now you have the opportunity to participate! As a parent, you have many unique experiences living here in _______ and I would like to learn about them through an interview with you. The interview will last for 2 hours. To thank you for your time, you will receive $30 once the interview is completed. Your participation is completely voluntary and I will do my best to keep confidential any information you share with me.

If you agree to participate in the interview, please send me a message or call me at 814-303-9091 so that we can schedule the appointment for a day when you are available. I am available to meet any day and time of the week if you let me know in advance and if I do not have another appointment pending. The interview will take place at the location of your choice (e.g. your home).

Thank you very much again. I appreciate your help. This project would not have been possible without your support.

Sincerely,

Michelle Martin Romero, M.S., CHES
Graduate student at Penn State
ATTENTION, MOMS AND DADS

- Do you have a child between 9 and 17 years old?
  - Do you live in ______ County?
  - Is Spanish your native language?

- You will be compensated $30 at completion of this study.
- This study consists of participating in one 2-hour interview.

The purpose of this study is to learn about parents’ experiences related to life in general, health, and how kids help the family.

For more information and to sign up:
Call/text: 814-303-9091
E-mail: mym119@psu.edu

Principal Investigator: Michelle Y. Martin Romero, M.S., CHES
Appendix B: Consent Forms

CONSENT FOR RESEARCH
The Pennsylvania State University

Title of Project: The Youth Food Practices, Experiences, and Patterns (PREP) Project
Principal Investigator: Michelle Y. Martin Romero, M.S., CHES

Address: 219 Biobehavioral Health Building, University Park, PA 16801
Telephone Number: 814-303-0061
Advisor: Lori A. Francis, PhD
Advisor Telephone Number: 814-863-0213

Subject’s Printed Name: ________________________

We are asking your child to be in a research study. This form gives you information about the research.

Whether or not you take part is up to you. You can choose not to take part. You can agree to take part and later change your mind. Your decision will not be held against you. Please ask questions about anything that is unclear to you and take your time to make your choice.

Some of the people who are eligible to take part in this research study may not be able to give consent because they are less than 18 years of age (a minor). Instead we will ask their parent(s)/guardian(s) to give permission for their participation in the study, and we may ask them to agree (give assent) to take part. Throughout the consent form, “you” always refers to the person who takes part in the research study.

1. Why is this research study being done?

   - This research is being done to find out more about children’s experiences related to helping the family, family food practices, culture and health in the U.S.
   - We are asking your child to be in this research study because they have valuable experiences related to helping the family, food preparation, eating, culture and health.
   - Approximately 30 children will take part in this research study throughout

2. What will happen in this research study?

This research study includes your participation in eight 2-hour sessions in a small-group setting.
Each 2-hour session will feature a 1.5 hours long participatory activity followed by a 30 minute recipe lesson. These activities are designed to explore children’s experiences related to family life, food, and health.

Each session will be audio- and video-recorded.

### SESSION 1

**Draw-Write-Tell Activity #1**

Children will be asked to draw and/or write about themselves and their family. All activity materials will be provided. During this activity, children may choose not to answer any questions that they do not want to answer.

*Recipe lesson #1*

Children will be invited to participate in making a smoothie.

### SESSION 2

**“How I Help” Discussion**

Children will be asked to talk about how they help out in the family. All activity materials will be provided. During this activity, children may choose not to answer any questions that they do not want to answer.

*Recipe lesson #2*

Children will be invited to participate in making a smoothie.

### SESSION 3

**“Talking about Norms” Discussion**

Children will be asked to discuss concepts and themes, including norms, related to helping the family, food preparation, culture, age and gender. All activity materials will be provided. During this activity, children may choose not to answer any questions that they do not want to answer.

*Recipe lesson #3*

Children will be invited to participate in making a dessert.

### SESSION 4

**Draw-Write-Tell Activity #2**

Children will be asked to draw and/or write about their role in food preparation and food choice. All activity materials will be provided. During this activity, children may choose not to answer any questions that they do not want to answer.

*Recipe lesson #4*

Children will be invited to participate in making a savory snack.

### SESSION 5

**Photo Activity Discussion #1**

Children will be asked to take photos over a 7-day period. Children will be asked to take pictures of non-identifiable objects or parts of people (no faces, tattoos, or anything particularly identifiable). If we find that there is any identifiable information in a picture, we will destroy the picture immediately and not use it in our study data records. All activity materials, including a digital camera, will be provided. After taking these photos, children will be asked to discuss the photos that were taken. During this activity, children may choose not to answer any questions that you do not want to answer.

*Recipe lesson #5*

Children will be invited to participate in a recipe of their choice.

### SESSION 6

**Decision-Making Activity**

Children will be asked to create a chart that displays how and who makes decisions related to food preparation and meal choice. All activity materials will be provided. During this activity, children may choose not to answer any questions that they do not want to answer.

*Recipe lesson #6*

Children will be invited to participate in a recipe of their choice.
SESSION 7

Photo Activity Discussion #2
Children will be asked to take photos over a 7-day period. Children will be asked to take pictures of objects or places in their homes and neighborhoods that are important to their eating and food preparation habits. Children will be asked to only take pictures of non-identifiable objects or parts of people (no faces, tattoos, or anything particularly identifiable). If we find that there is any identifiable information in a picture, we will destroy the picture immediately and not use it in our study data records. All activity materials, including a digital camera, will be provided. After taking these photos, children will be asked to discuss the photos that were taken. During this activity, children may choose not to answer any questions that you do not want to answer.

Recipe lesson #7
Children will be invited to participate in a recipe of their choice.

SESSION 8

Evaluation Discussion
Children will be asked to provide their opinions of the different activities used in the study. Children will also be asked to discuss their opinions related to the overall research study. All activity materials will be provided. During this activity, children may choose not to answer any questions that they do not want to answer.

Recipe lesson #8
Children will be invited to participate in a recipe of their choice.

3. What are the risks and possible discomforts from being in this research study?

There is a risk of loss of confidentiality if your information or your identity is obtained by someone other than the investigators, but precautions will be taken to prevent this from happening. The confidentiality of your electronic data created by you or by the researchers will be maintained to the degree permitted by the technology used. Absolute confidentiality cannot be guaranteed.

There is also a risk of a possible allergic reaction to any of the foods presented during the recipe lesson. For this reason we ask that you inform the research team about any food allergies beforehand.

4. What are the possible benefits from being in this research study?

4a. What are the possible benefits to you?
Potential benefits include voicing opinion and personal experience related to food and health in PA.

4b. What are the possible benefits to others?
Findings from this research study may shed light upon the current situation of food and health disparities in PA among Latino and black families. These findings may be generalizable to similar regions in the U.S.

5. What other options are available instead of being in this research study?

You may decide not to participate in this research.

6. How long will you take part in this research study?
If you agree to take part in this study, you will be asked to participate in eight sessions over a period of about 2 months. Each session will last approximately 2 hours for a total of 16 hours total for the entire study.

7. How will your privacy and confidentiality be protected if you decide to take part in this research study?

   Efforts will be made to limit the use and sharing of your personal research information to people who have a need to review this information.
   • A list that matches your name with your code number and pseudonym of your choice will be kept as a password protected file on the principal investigator’s password-protected computer.
   • Your research records will be labeled with your code number and pseudonym of choice and will be kept in both secured electronic and physical copy form in a locked office at Penn State.

   In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared.

   We will do our best to keep your participation in this research study confidential to the extent permitted by law. However, it is possible that other people may find out about your participation in this research study. For example, the following people/groups may check and copy records about this research:
   • The Office for Human Research Protections in the U. S. Department of Health and Human Services
   • The Institutional Review Board (a committee that reviews and approves research studies)
   • The Office for Research Protections and
   • The research study sponsors:
     o Fahs-Beck Fund for Research and Experimentation
     o Department of Biobehavioral Health, The Pennsylvania State University

   Some of these records could contain information that personally identifies you. Reasonable efforts will be made to keep the personal information in your research record private. However, absolute confidentiality cannot be guaranteed.

   In addition, there may be limitations to confidentiality based on possible legal issues. For example, if the research team uncovers abuse, neglect, or reportable diseases, this information may be disclosed to appropriate authorities.

8. Will you be paid or receive credit to take part in this research study?

   If you choose to participate in this study, you will receive $10 in the form of a gift card for every session that you participate in. You can receive up to $80 for participating in all eight sessions.

9. Who is paying for this research study?

   This research study is being paid for by grants from the following:
   • Fahs-Beck Fund for Research and Experimentation
   • Department of Biobehavioral Health, The Pennsylvania State University
10. What are your rights if you take part in this research study?

Taking part in this research study is voluntary.

- You do not have to be in this research.
- If you choose to be in this research, you have the right to stop at any time.
- If you decide not to be in this research or if you decide to stop at a later date, there will be no penalty or loss of benefits to which you are entitled.

The person in charge of the research study or the sponsor can remove you from the research study without your approval. Possible reasons for removal include repeated absences during session periods.

11. If you have questions or concerns about this research study, whom should you call?

Please call the head of the research study (principal investigator), Michelle Y. Martin Romero at 814-303-9091 if you:

- Have questions, complaints or concerns about the research.
- Believe you may have been harmed by being in the research study.

You may also contact the Office for Research Protections at (814) 865-1775, ORPProtects@psu.edu if you:

- Have questions regarding your rights as a person in a research study.
- Have concerns or general questions about the research.
- You may also call this number if you cannot reach the research team or wish to offer input or to talk to someone else about any concerns related to the research.
INFORMED CONSENT TO TAKE PART IN RESEARCH

Signature of Person Obtaining Informed Consent

Your signature below means that you have explained the research to the subject or subject representative and have answered any questions he/she has about the research.

Signature of person who explained this research  Date  Printed Name
(Only approved investigators for this research may explain the research and obtain informed consent.)

Signature of Person Giving Informed Consent

Before making the decision about being in this research you should have:

- Discussed this research study with an investigator,
- Read the information in this form, and
- Had the opportunity to ask any questions you may have.

Your signature below means that you have received this information, have asked the questions you currently have about the research and those questions have been answered. You will receive a copy of the signed and dated form to keep for future reference.

Signature of Parent(s)/Guardian for Child

By signing this consent form, you indicate that you permit your child to be in this research and agree to allow his/her information to be used and shared as described above.

Signature of Parent/Guardian  Date  Printed Name
ASSENT FOR RESEARCH WITH CHILD

The research study has been explained to you. You have had a chance to ask questions to help you understand what will happen in this research. You Do Not have to be in the research study. If you agree to participate and later change your mind, you can tell the researchers, and the research will be stopped.

You have decided: (Initial one)  
___ To take part in the research.  
___ NOT to take part in the research.

Signature of Subject ____________________ Date ___________ Printed Name ___________
**Optional part of the study**

In addition to the main part of the research study, there is an additional part of the research. You can be in the main part of the research without agreeing to be in the optional part.

**Optional Storage of Photos, Audio Recordings and Video Recordings for Future Research**

In the main part of this study, we are collecting photos, audio recordings and video recordings that contain identifiable information from you. If you agree, the researchers would like to maintain these photos, audio recordings and video recordings for future research or to be used in publications or at presentations.

- Any future studies may be helpful in understanding youth and families’ experiences related to food preparation, diet, culture, and childhood obesity.
- It is unlikely that any future studies will have a direct benefit to you.

Your photos, audio recordings and video recordings will be labeled with a code number or pseudonym of your choice.

- These recordings will be stored as password-protected electronic files on the principal investigator’s password-protected computer.
- The length of time they will be used is unknown.
- You will be free to change your mind at any time.
- You should contact principal investigator if you wish to withdraw your permission for your recordings to be used for future research or publicly. The recordings will then be destroyed and not used for future research studies or shown publicly.

You should initial below to indicate what you want regarding the storage your photos, audio recordings and video recordings for future research studies.

a. Your identifiable photos, audio recordings and video recordings may be stored and used for future research studies to learn about family food practices, culture and health.
   
   ______ Yes   ______ No

b. Your identifiable photos, audio recordings and video recordings may be shared publicly at presentations or in publications.
   
   ______ Yes   ______ No

**Signature of Person Obtaining Informed Consent**

Your signature below means that you have explained the optional part to the research to the subject or subject representative and have answered any questions he/she has about the research.

Signature of person who explained this research  Date  Printed Name

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Signature of Person Giving Informed Consent

Signature of Parent(s)/Guardian for Child

By signing this consent form, you indicate that you have read the information written above and have indicated your choices for the optional part(s) of the research study.

Signature of Parent/Guardian          Date          Printed Name

ASSENT FOR RESEARCH WITH CHILD

The optional part of the research study has been explained to you. You have had a chance to ask questions to help you understand what will happen. You Do Not have to be in the optional part of the research study. If you agree to participate and later change your mind, you can tell the researchers, and the optional part of the research will be stopped.

You have decided:  (Initial one)          To take part in the research.
                                 ____NOT to take part in the research.

Signature of Subject          Date          Printed Name
CONSENT FOR RESEARCH
The Pennsylvania State University

Title of Project: The Youth Food Practices, Experiences, and Patterns (PREP) Project
Principal Investigator: Michelle Martin Romero, M.S., CHES
Address: 219 Biobehavioral Health Building, University Park, PA 16801
Telephone Number: 814-303-9091
Advisor: Lori Francis, Ph.D.
Advisor Telephone Number: 814-863-0213

We are asking your child to be in a research study. This form gives you information about the research.
Whether or not you take part is up to you. You can choose not to take part. You can agree to take part and later change your mind. Your decision will not be held against you. Please ask questions about anything that is unclear to you and take your time to make your choice.

Some of the people who are eligible to take part in this research study may not be able to give consent because they are less than 18 years of age (a minor). Instead, we will ask their parent(s)/guardian(s) to give permission for their participation in the study, and we may ask them to agree (give assent) to take part. Throughout the consent form, “you” always refers to the person who takes part in the research study.

1. Why is this research study being done?
   • This research is being done to find out more about children’s experiences related to helping the family, family food practices, culture and health in the U.S.
   • We are asking your child to be in this research study because they have valuable experiences related to helping the family and food preparation.
   • Approximately 10 children will take part in this research study

2. What will happen in this research study?
   We are asking you to participate in a one-time interview. The interview will be audio-recorded and will ask you about yourself, your family, and your cooking experiences. The interview can take place wherever you may feel most comfortable.

3. What are the risks and possible discomforts from being in this research study?
   There is a risk of loss of confidentiality if your information or your identity is obtained by someone other than the investigators, but precautions will be taken to prevent this from happening. The confidentiality of your electronic data created by you or by the researchers will be maintained to the degree permitted by the technology used. Absolute confidentiality cannot be guaranteed.

4. What are the possible benefits from being in this research study?
   4a. What are the possible benefits to you?
Possible benefits to you include voicing your opinion and personal experience related to food, health, and life in PA.

4b. What are the possible benefits to others?
Findings from this research project may shed light upon the current situation of food and health disparities in PA among Latino families.

5. What other options are available instead of being in this research study?
You may decide not to participate in this research.

6. How long will you take part in this research study?
If you agree to take part, it will take you about 1 hour to complete this research study. This is a one-time interview.

7. How will your privacy and confidentiality be protected if you decide to take part in this research study?
Efforts will be made to limit the use and sharing of your personal research information to people who have a need to review this information.
- A list that matches your name with your code number will be kept as a password protected file in an online cloud storage system.
- Your research records will be labeled with your code number and will be kept as password protected files in an online cloud storage system.

In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared.

We will do our best to keep your participation in this research study confidential to the extent permitted by law. However, it is possible that other people may find out about your participation in this research study. For example, the following people/groups may check and copy records about this research:
- The Office for Human Research Protections in the U. S. Department of Health and Human Services
- The research study sponsors, Fahn-Beck Fund for Research and Experimentation Department of Biobehavioral Health, The Pennsylvania State University
- The Institutional Review Board (a committee that reviews and approves research studies) and
- The Office for Research Protections.

Some of these records could contain information that personally identifies you. Reasonable efforts will be made to keep the personal information in your research record private. However, absolute confidentiality cannot be guaranteed.

8. Will you be paid or receive credit to take part in this research study?
You will receive $10 via gift card for your participation.

9. Who is paying for this research study?
This study is paid for by the Fahn-Beck Fund for Research and Experimentation and the Department of Biobehavioral Health at The Pennsylvania State University.

10. What are your rights if you take part in this research study?
Taking part in this research study is voluntary.
- You do not have to be in this research.
- If you choose to be in this research, you have the right to stop at any time.
If you decide not to be in this research or if you decide to stop at a later date, there will be no penalty or loss of benefits to which you are entitled.

11. If you have questions or concerns about this research study, whom should you call? Please call the head of the research study (principal investigator), Michelle Martin Romero at 814-303-9091 if you:
   - Have questions, complaints or concerns about the research.
   - Believe you may have been harmed by being in the research study.

   You may also contact the Office for Research Protections at (814) 865-1775, ORP@psu.edu if you:
   - Have questions regarding your rights as a person in a research study.
   - Have concerns or general questions about the research.
   - You may also call this number if you cannot reach the research team or wish to offer input or to talk to someone else about any concerns related to the research.

INFORMED CONSENT TO TAKE PART IN RESEARCH

Verbal Consent of Subject (18 years of age or older)

Tell the researcher your decision regarding whether or not to participate in the research.

Verbal Permission of Parent(s)/Guardian for Child

Tell the researcher your decision regarding whether or not to allow your child to participate in the research.

Assent for Research – Children under the age of 18

The research study has been explained to you. You have had a chance to ask questions to help you understand what will happen in this research. You Do Not have to be in the research study. If you agree to participate and later change your mind, you can tell the researchers, and the research will be stopped.

Tell the researcher your decision regarding whether or not to participate in the research.
CONSENT FOR RESEARCH
The Pennsylvania State University

Title of Project: Exploring Adult Perspectives on Family Practices in and outside the Food Environment

Principal Investigator: Michelle Martin Romero, M.S., CHES

Address: 219 Biobehavioral Health Building, University Park, PA 16801

Telephone Number: 814-303-9091

Advisor: Lori Francis, Ph.D.

Advisor Telephone Number: 814-863-0213

We are asking you to be in a research study. This form gives you information about the research. Whether or not you take part is up to you. You can choose not to take part. You can agree to take part and later change your mind. Your decision will not be held against you. Please ask questions about anything that is unclear to you and take your time to make your choice.

1. Why is this research study being done?
   We are asking you to be in this research because you are a parent with valuable experiences.
   This research is being done to find out adults’ perspectives on how children help the family inside and outside of the home.

2. What will happen in this research study?
   We are asking you to participate in a one-time interview. The interview will be audio-recorded and will ask you about yourself, your family, your health and about life in general. The interview can take place wherever you may feel most comfortable.

3. What are the risks and possible discomforts from being in this research study?
   There is a risk of loss of confidentiality if your information or your identity is obtained by someone other than the investigators, but precautions will be taken to prevent this from happening. The confidentiality of your electronic data created by you or by the researchers will be maintained to the degree permitted by the technology used. Absolute confidentiality cannot be guaranteed.

4. What are the possible benefits from being in this research study?
   4a. What are the possible benefits to you?
   Possible benefits to you include voicing your opinion and personal experience related to food, health, and life in PA.

   4b. What are the possible benefits to others?
   Findings from this research project may shed light upon the current situation of food and health disparities in PA among Latino families.

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5. What other options are available instead of being in this research study?
You may decide not to participate in this research.

6. How long will you take part in this research study?
If you agree to take part, it will take you about 2 hours to complete this research study. This is a one-time interview.

7. How will your privacy and confidentiality be protected if you decide to take part in this research study?
Efforts will be made to limit the use and sharing of your personal research information to people who have a need to review this information.
- A list that matches your name with your code number will be kept as a password protected file in an online cloud storage system.
- Your research records will be labeled with your code number and will be kept as password protected files in an online cloud storage system.

In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared.

We will do our best to keep your participation in this research study confidential to the extent permitted by law. However, it is possible that other people may find out about your participation in this research study. For example, the following people/groups may check and copy records about this research.
- The Office for Human Research Protections in the U.S. Department of Health and Human Services
- The research study sponsors, College of Health and Human Development and the Department of Biobehavioral Health at Penn State
- The Institutional Review Board (a committee that reviews and approves research studies) and
- The Office for Research Protections

Some of these records could contain information that personally identifies you. Reasonable efforts will be made to keep the personal information in your research record private. However, absolute confidentiality cannot be guaranteed.

8. Will you be paid or receive credit to take part in this research study?
You will receive $30 in cash for your participation.

9. Who is paying for this research study?
This study is paid for by the College of Health and Human Development and the Department of Biobehavioral Health at Penn State.

10. What are your rights if you take part in this research study?
- Taking part in this research study is voluntary.
- You do not have to be in this research.
- If you choose to be in this research, you have the right to stop at any time.
- If you decide not to be in this research or if you decide to stop at a later date, there will be no penalty or loss of benefits to which you are entitled.

11. If you have questions or concerns about this research study, whom should you call?
Please call the head of the research study (principal investigator), Michelle Martin Romero at 814-303-9091 if you:
- Have questions, complaints or concerns about the research.
- Believe you may have been harmed by being in the research study.

You may also contact the Office for Research Protections at (814) 865-1775, ORProtections@psu.edu if you:
- Have questions regarding your rights as a person in a research study.
- Have concerns or general questions about the research.
- You may also call this number if you cannot reach the research team or wish to offer input or to talk to someone else about any concerns related to the research.

INFORMED CONSENT TO TAKE PART IN RESEARCH

Tell the researcher your decision regarding whether or not to participate in the research.
Appendix C: Participatory Technique Guides

DRAW-WRITE-TELL ACTIVITY #1

Guide

“Okay, now I want to talk about an activity that we’re going to do today. This is the Draw-Write-Tell Activity. I have some sheets of paper here and some markers for you to use. What we’re going to do now is focus all on you and your family. Are you ready?” (Let children respond)

“Great! Let’s start by thinking about who you are. Draw a picture to describe yourself. Take as much time as you need. You can even draw this like a comic if you want, whatever works for you.” (Allow children to draw response down and talk about it.)

“Okay, so now that you have drawn about who you are, take some time to actually write about what’s going on in this picture. Your response doesn’t have to be long. Sometimes writing things down helps us to better express our thoughts. Be sure to write down your name, age and grade level, too, on the top of the page.” (Allow children to write response down and talk about it.)

“Can you explain what you have drawn here to me, please?” (Let children respond one by one.)

“Okay, now let’s think about your family. Draw a picture to describe your family. Take as much time as you need. You can even draw this like a comic if you want, whatever works for you. Think about who you live with, how many siblings you have, if you have a pet, things like that.” (Allow children to draw response down and talk about it.)

“Okay, so now that you have drawn about your family, take some time to actually write about what’s going on in this picture. Your response doesn’t have to be long. Sometimes writing things down helps us to better express our thoughts. Be sure to tell me how many people are in your family, whether you are the oldest, in the middle, or youngest; and what languages you speak at home.” (Allow children to write response down and talk about it.)

“Can you explain what you have drawn here to me, please?” (Let children respond one by one.)

“Is there anything else you’d like to share with me about you or your family?” (Allow children to respond)

“Do you have any questions for me? Thank you for sharing this all with me.” (Collect all papers.)
“Okay, now I want to talk about an activity that we’re going to do today. This is the Draw-Write-Tell Activity. I have some sheets of paper here and some markers for you to use. What we’re going to do now is focus on you and what you do to help prepare meals for you and your family. Are you ready?” (Let child respond)

“Great! Let’s start by thinking about what you do in the kitchen. Draw a picture to describe your role in food preparation and how you feel about this role. Take as much time as you need. You can even draw this like a comic if you want, whatever works for you.” (Allow child to draw response down and talk about it.)

“Okay, so now that you have drawn about your role and how you feel about it, take some time to actually write about what’s going on in this picture. Your response doesn’t have to be long. Sometimes writing things down helps us better express our thoughts.” (Allow child to write response down and talk about it.)

“Can you explain what you have drawn here to me, please?” (Let child respond)

“That’s interesting! How often do you help prepare meals?” (Let child respond)

“What else can you tell me about this role? Do you like to cook?” (Allow child to respond).

“Do you think that other kids have the same experience as you do?” (Let child respond)

“What makes it hard for you to be in this role sometimes?” (Allow child to respond)

“Is there anything else you’d like to share with me about your role?” (Allow child to respond)

“Do you have any questions for me? Thank you for sharing this all with me.”
“HOW I HELP” DISCUSSION

Guide

“Okay, everyone, to start things off, we are going to talk about how you all help your families on a daily basis. Each of you has a valuable experience to share and I want to hear from everyone so I ask that we take turns when speaking. That means if X is talking then we should all listen and wait for X to finish, right? – or else it will be very hard to hear what X has to say. Does everyone understand?” (Let children respond)

“Great! So the way this works is that I’m going to ask some general questions and if you have an answer, please share it with me. There are no wrong or right answers. I really just want to hear what each of you has to say. And I want this to be like a conversation, so please let’s all be honest and respectful and have fun. Are you all ready?”

“Okay, first question: How does your family help you? Family can be your mom, your dad, or stepparents, your grandparents, brothers, sisters, aunts, uncles- whoever you call your family. Can anyone give me an example?” (Probes: take you to school, buy your clothes, buy your school supplies, etc.)

“Very nice. Second question: In what ways do you help your family? Does anyone help their family? How? Can anyone tell me about a time when you help your family? What did you do? Do you do that often? Do you do anything else to help your family? Together let’s list all the ways you all help your families.” (probes: help sibling with homework, help parent with English, clean house, etc.)

“How do you feel when you help your family? How does helping your family make you feel? Why? When exactly do you feel this way?” (Probes: happy, sad, proud, confused, frustrated, etc.)

“Is there anything else you all would like to share with me about helping your family?” (Allow children to respond)
“TALKING ABOUT NORMS” DISCUSSION

Guide

“Last time we talked about how you all help your family. Today we’re going to talk about how characteristics, like age, gender and culture, help decide or determine what we do or do not do. That may sound confusing so let me give you all an example: When I was a little girl my dad told me that I had to wear dresses and the color pink because of my gender – because I’m a girl. When you all think about the different ways you help out your family, is there something that only girls should do? What? Why? Who told you that? Is there something that only boys should do? What? Why? Who told you that?” (Let children respond. Write down their responses.)

“Let’s talk about food preparation, food choice or any role in the kitchen now. Are there certain things that only girls should do? For example, should girls be the only ones who cook? What do you think? What about things that only boys should do and girls shouldn’t? Let’s make a list together.” (Let children respond. Write down their responses.)

So why do you think that only girls should do X? (Go through list and ask questions for each item listed.)

“Okay, now let’s talk about another characteristic. How might age and family structure help decide what you can or cannot do? For example, I have a younger sister and we were little girls I had to make sure that she was up and dressed for school every day. My mom wanted me to do that because I was the older sister. So that’s an example of how age or being an older sibling decided what I did. Can anyone give me an example about themselves?” (Let children respond.)

“Let’s think about food preparation specifically now. Are there certain things that older siblings should do? What about things that younger kids can do? Let’s make a list together.” (Let children respond. Write down their responses.)

So why do you think that older siblings should do X? What if someone is an only child? Does that change what they’re able to do? (Go through list and ask questions for each item listed.)

“Are there any other reasons or characteristics that may help decide who does what and who doesn’t? How about where your family is from and their culture or their way of doings things? Can anyone give an example of this?” (Allow children to respond)

“Is there anything else you all would like to share with me about what we talked about today?” (Allow children to respond)
PHOTO ACTIVITY DISCUSSION #1 (HELPING FAMILY ASSIGNMENT)

Guide

“Okay, now I want to talk about the next activity. This is a Photo Activity where you will take pictures with a digital camera. Have you ever used one of these before?” (Let child respond)

“What I want you to do with the camera is take pictures of anything in your home or neighborhood that has to do with you helping your family. Remember, your family can include your parents, your siblings, grandparents, whoever else you see as your family. These pictures can be of places or things; anything that is special to you, or you feel like tells a good story—there are no right or wrong pictures. I would like you to try really hard not to take pictures of people’s faces or tattoos though. You will have an entire week to take pictures. At the end of the week, when you are done taking the pictures, you will give the camera back to me, and I will print the pictures. I will give you copies of your pictures, and then I want to sit-down and talk to you about the pictures you took. I’m going to ask you questions, like what are you doing in that picture? When and where did you do that? Things like that so please keep that in mind.”

“Just to make sure you know how, I want to show you how to use the camera. This is the button you need to hold down to make the flash work. You need to hold it down until this red light appears. It’s really important that you use the flash if you take pictures inside. If you are outside during the day, you really don’t need the flash.” (Show the child the flash button).

“This is the place where you look through to see what you are taking a picture of. Make sure when you’re taking the pictures that you look through this hole to check and see that you see everything you want for the picture.” (Show the camera hole to the child).

“When you’re ready to take the picture, you just press this little button here.” (Point to the button).

“Do you any questions about what I just told you? Do you all want to take a practice picture to make sure you’ve got the hang of it?” (Give the digital camera to the child and allow the child to take one ‘practice picture’).

“Great! I think you will do an awesome job with the camera. Please let me know if you have any trouble with taking the pictures. I’ll check back with you throughout the week to see how it’s going.”
PHOTO ACTIVITY DISCUSSION #2 (FOOD PREP ASSIGNMENT)

“What I want you to do with the camera is take pictures of anything in your home or neighborhood that has to do with you preparing foods, choosing or buying foods, or even eating foods. These pictures can be of places or things; anything that is special to you, or you feel like tells a good story—there are no right or wrong pictures. I would like you to try really hard not to take pictures of people’s faces or tattoos though. You will have an entire week to take pictures. At the end of the week, when you are done taking the pictures, you will give the camera back to me, and I will print the pictures. I will give you copies of your pictures, and then I want to sit-down and talk to you about the pictures you took. I’m going to ask you questions, like what kind of food did you take a picture of? When and where was that food prepared and by who? Things like that so please keep that in mind.”
EVALUATION DISCUSSION GUIDE

“So during our last session we’re going to think and talk about all of the different activities we’ve done throughout our time together. I want to know what you liked, what you didn’t like, what was confusing, what was fun or not-so fun. I want to know anything and everything about these activities so that we can make them better for kids in the future. How does that sound? (Allow children to respond.)

Okay, great. Let’s start with session 1. (Review the activities done in session 1.)

How did you all feel about that one?

Was there anything in particular that you really liked? If so, what?

Was there anything in particular that you really didn’t like? If so, what?

Was there any confusing part?

Would you want to do this again? Why or why not?

Is there anything you’d change about this one?

Okay, how about session 2? (Review the activities done in session 2.)

How did you all feel about that one?

Was there anything in particular that you really liked? If so, what?

Was there anything in particular that you really didn’t like? If so, what?

Was there any confusing part?

Would you want to do this again? Why or why not?

Is there anything you’d change about this one?

Thank you. Let’s talk about session 3 now. (Review the activities done in session 3.)

How did you all feel about that one?

Was there anything in particular that you really liked? If so, what?

Was there anything in particular that you really didn’t like? If so, what?

Was there any confusing part?

Would you want to do this again? Why or why not?
Is there anything you’d change about this one?

Thank you. Let’s talk about session 4 now. (Review the activities done in session 4.)
How did you all feel about that one?
Was there anything in particular that you really liked? If so, what?
Was there anything in particular that you really didn’t like? If so, what?
Was there any confusing part?
Would you want to do this again? Why or why not?
Is there anything you’d change about this one?

Thank you. Okay, 3 more to go! Let’s talk about session 5 now. (Review the activities done in session 5.)
How did you all feel about that one?
Was there anything in particular that you really liked? If so, what?
Was there anything in particular that you really didn’t like? If so, what?
Was there any confusing part?
Would you want to do this again? Why or why not?
Is there anything you’d change about this one?

Thank you. We’re almost done. Let’s talk about session 6 now. (Review the activities done in session 6.)
How did you all feel about that one?
Was there anything in particular that you really liked? If so, what?
Was there anything in particular that you really didn’t like? If so, what?
Was there any confusing part?
Would you want to do this again? Why or why not?
Is there anything you’d change about this one?
Alright, we’re on the last one now. Let’s talk about session 7. (Review the activities done in session 7.)

How did you all feel about that one?

Was there anything in particular that you really liked? If so, what?

Was there anything in particular that you really didn’t like? If so, what?

Was there any confusing part?

Would you want to do this again? Why or why not?

Is there anything you’d change about this one?

Thank you all for sharing your thoughts with me. I really appreciate it!
Appendix D: Participant Confirmation Sheet Example

[“Abisai”]

- # years old, in the 12th grade; goes to “X” HS; studies Cosmetology at Voc tech in “Y”
- born in Puerto Rico, but raised in the DR until came to the U.S.; family is from the DR
- has lived in the US since 4 years old
- lives with mom, stepdad and 2 younger brothers; is the oldest sibling and the only girl
- likes to talk; cooks fuerte food, todo tipo de arroz, todo tipo de carne, bakes cakes like tres leches, flan; drives/has car
  - cómo defines fuerte food? Escribe algunos ejemplos.
  - preparing to go to college
  - is really proud of her mom and thankful for all the sacrifices she has made
  - helps family by cooking and cleaning throughout the week
    - do you drive your family to places? ______
- 3 words to describe yourself:
  - ______________________
  - ______________________
  - ______________________
- Some things you said that stood out to me:
  - “We’re Hispanic!/ It’s a Hispanic house.”
  - “The man I want is the man from gold that knows how to clean, cook, work, and helps me out too because both of us know how to do both things.”
- What do you think about life here in “Z”? ______________________________
- Do you prefer to speak in Spanish, English, both, or neither? ________________
- ¿Algo más que quieres compartir conmigo? ________________________________
Appendix E: Tabled Images

Photo of boy group’s list of cooking skills by age.

Photo of girl group’s list of cooking skills by age.
### Breakfast/Desayuno
- Cereal
- Cookies w/ butter
- Cakes
- Crema
- Tortillas
- Omelet w/ cheese
- Tostada
- Bacon
- Pancakes

### Lunch/Almuerzo
- Tostada
- Enchiladas
- Carne Asada
- Pollo
- Pico de gallo
- Salad
- Chips
- Carne
- Relleno
- Sopa de fideo
- Saladas
- Enchiladas
- Enchiladas verdes
- Mini-fajitas

### Dinner/Cena
- Chicken
- Rice
- Slow cooker
- Enchiladas
- Tacos
- Tostadas
- Rice

### Snacks
- Cheese
- Chips
- Cookies
- Fritos
- Popcorn

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**Photo of list of foods youth reported to eat.**

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**Photo of one youth participant’s decision-making chart.**

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Appendix F: Schedule Examples

Schedule 10/12
1. active consent
2. turn in cameras
3. "list" activities
4. recipe
5. clean up
6. gift cards

Schedule 10/19
1. photo reminder
2. decision-making chart
3. scenarios
4. reacta
5. photo ?s
6. gift cards + letter
Appendix G: Recipe Example

**PB + Banana + Oat Bread**

**Ingredients**
- 1 c mashed banana
- ¼ c honey
- 2 eggs
- 1 c peanut butter
- 2 tsp vanilla
- 1 tsp cinnamon
- ½ tsp salt
- 1 tsp baking soda
- ½ tsp baking powder
- 1¾ c oats
- ½ c chocolate chips

**Directions**
1. Mix mashed banana, peanut butter, honey, vanilla, and eggs.
2. Add dry ingredients and mix.
3. Add chocolate chips.
4. Bake for 15 minutes at 350°F.
### Appendix H: Codebook Examples

<table>
<thead>
<tr>
<th>Codebook excerpt from PFGs with youth</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Code name</strong></td>
<td><strong>Code definition/description</strong></td>
</tr>
<tr>
<td>girl roles</td>
<td>what a girl should do</td>
</tr>
<tr>
<td>boy roles</td>
<td>what a boy should do</td>
</tr>
<tr>
<td>self image/characteristics</td>
<td>how one sees themselves</td>
</tr>
<tr>
<td>cultural/heritage pride</td>
<td>pride one has for their culture and/or heritage</td>
</tr>
<tr>
<td>gratitude towards parents</td>
<td>participant is able to show appreciation towards their parents for what they do for them</td>
</tr>
<tr>
<td>only girl sibling</td>
<td>participant only has brothers</td>
</tr>
<tr>
<td>parental/family impact on kid's life</td>
<td>how families actions impact the life of the participant</td>
</tr>
<tr>
<td>parental sacrifices</td>
<td>what parents give up for their children</td>
</tr>
<tr>
<td>aware of parent ‘s struggle</td>
<td>the participant is aware how difficult their parents can have it</td>
</tr>
<tr>
<td>how kid helps parent</td>
<td>what kids do to help their parents</td>
</tr>
<tr>
<td>how kid helps sibling</td>
<td>what kids do to help their siblings</td>
</tr>
<tr>
<td>&quot;2nd mom of the&quot;</td>
<td>how participant sees herself and the</td>
</tr>
<tr>
<td>house&quot;</td>
<td>help she does in her family</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>It's a hispanic house&quot;</td>
<td>attribution to culture</td>
</tr>
<tr>
<td>what kid cooks</td>
<td>what participant is able to cook</td>
</tr>
<tr>
<td>cooking ability</td>
<td>what level of cooking a participant is able to do</td>
</tr>
<tr>
<td>basic food</td>
<td>not necessarily meals, more like snacks such as cereal, eggs, or sandwiches</td>
</tr>
<tr>
<td>&quot; fuerte food &quot;</td>
<td>being able to cook a difficult meal. level of cooking ability/ meal that includes staple (like rice) + meat (like chicken)</td>
</tr>
<tr>
<td>happy to help</td>
<td>helping with genuine happiness knowing it makes the life of loved ones easier</td>
</tr>
<tr>
<td>helping = paying back</td>
<td>repayment for all the things that our parents have done for us</td>
</tr>
<tr>
<td>family competition in helping</td>
<td>adding fun for things that aren't so fun</td>
</tr>
<tr>
<td>what parents do for kids</td>
<td>the daily jobs, whether cooking, cleaning, caretaking, that parents do</td>
</tr>
<tr>
<td>help parents with English</td>
<td>teaching English pronunciations, correcting parents</td>
</tr>
<tr>
<td>neg feelings toward helping family</td>
<td>not willing to help because it is boring or hard (laziness)</td>
</tr>
</tbody>
</table>

A100100317 line 40 "it's a Hispanic house."
A100100317 line 45 "i just cook a sandwich."
A100100317 line 70: "I cook like fuerte food..."
A100(10/09) line 73-74 "Ramen Noodles, I know how to make eggs, pancakes."
a100(10/04)line 70 "I also cook todo tipo de arroz, todo tipo de carne. I really don't have a thing that I dont cook A100 10/25 line 30: "it's not basic, it's hard food. I feel like plana food would be like, what they eat, huevo, frijoles, queso, that's soft food. Fuerte food for me is like any food with arroz and pollo combinado."
a100(10/04)line 86 "Yes <likes to help> bc I feel like it's a big help for my mom"
a100(10/04)line 86 "She did all the diaper changes when you were a baby and is just like paying back even though it's not even"
a100(10/04)line 87 "competition which sibling can do better. which sibling makes their parent happier"
a100(10/09) line 189 "me cocinaban ellos, me daban todo, todo lo que yo quiera"
a20010/05 line 64 "we help them speak english"
"mad sometimes. bc sometimes im mad my mom," Line 81 A100 10/04
<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
<th>Page References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos feelings toward helping family</td>
<td>willing to help because it brings ease to parents who work hard</td>
<td>A200 (10/05) Line 107 &quot; does anyone feel happy when they help their family. Line 109 &quot;yes, si, yes, yes&quot;</td>
</tr>
<tr>
<td>The importance of helping family</td>
<td>realizing that actively participating in making the life of your parents better is rewarding</td>
<td>A200 (10/05) Line 92 &quot;so do you guys think that helping out is important to your family?&quot; Line 93/94 &quot;yes, yeh, yeh. Yes, yes. It's a lot important for our family.&quot;</td>
</tr>
<tr>
<td>Parents tired</td>
<td>parents are exhausted after working all day</td>
<td>A200(10/05) Line 95/96 &quot;ppl come home tired, very tired.&quot;</td>
</tr>
<tr>
<td>Gender equality</td>
<td>when roles do not specify a gender</td>
<td>&quot;boys and girls should know how to cook?&quot; Kids agree in 76 of A100(10/09)</td>
</tr>
<tr>
<td>Parents expectations vs. kids' expectations</td>
<td>what parents expect vs what participants expect</td>
<td>A100 (10/09) line 69 &quot;ehh I think everyone should know how to cook&quot;</td>
</tr>
<tr>
<td>What a girl does</td>
<td>what a young girl does at home or her social norms</td>
<td>A100 10/09 lines 65-66 &quot;is it a universal thing that all girls should know how to cook?&quot; 66 &quot;universal. i vote for universal&quot;</td>
</tr>
<tr>
<td>What a boy does</td>
<td>what a young man does at home or outside/his social norms</td>
<td>A100 10/09 lines36-40 &quot;arreglar el patio&quot; &quot;help my dad out&quot;&quot;yardwork&quot;</td>
</tr>
<tr>
<td>Marriage oriented</td>
<td>What a marriage requires or what will prepare one for a successful marriage</td>
<td>A10010/09 line 17-18 &quot;my mom is like, what are you gonna do when you get married? ... Yeah that the first thing they say&quot;</td>
</tr>
<tr>
<td>Make a good wife/women's value</td>
<td>the attributes that would make a woman a good/desirable wife (cooks, cleans)</td>
<td>A100(10/09) line 7 “tu tienes que aprender bc cuando te cases...cuando tu te cases tambien tu marido no va a limpiar, va a trabajar y eso es todo. tiene que aprender a limpiar ya y concinar.”</td>
</tr>
<tr>
<td>Parental beliefs</td>
<td>the cultural values that are held and shared amongst many hispanic families</td>
<td>A100(10/09)line 29-30 &quot;my mom's like, you gotta clean. antes de salir hay que limpiar porque nunca sabe lo van a traer. She’s like tienes que limpiar eso cuando uno quiere salir so that's what happens. ..&quot;Si, o, si no vas a salir. tu no puedes salir limpia y tener la casa sucia”</td>
</tr>
<tr>
<td>Code name</td>
<td>Code definition/description</td>
<td>Text example</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Adapting to the US</td>
<td>Changes gone through by the family after moving to the US</td>
<td>&quot;yo trato de acoplarme, este pues yo (..) es duro&quot;-B203</td>
</tr>
<tr>
<td>Household/ nucleus Family</td>
<td>Members of the family who reside in the same house</td>
<td>&quot;tres hijos (...) vive con su esposa? si&quot;-B201</td>
</tr>
<tr>
<td>Personality traits</td>
<td>words used to described kids specifically</td>
<td>&quot;tiene un caracter más fuerte (...) pero ella es muy buena (...) pero el nene es más como protector con las mujeres&quot;-B203</td>
</tr>
<tr>
<td>gender roles</td>
<td>behavior appropriate to their sex determined by cultural norms</td>
<td>&quot;las mujeres casi siempre debemos ser mas del acto que los hombre casi siempre van afuera&quot; &quot;no me influye nada, sea hombre o mujer&quot;</td>
</tr>
<tr>
<td>Equal responsibilities</td>
<td>No matter the gender, their role in helping is the same</td>
<td>&quot;yo, a mi no me influye todos tienen que limpiar&quot;</td>
</tr>
<tr>
<td>Raising methods</td>
<td>Parenting style: things parent does to teach or discipline children</td>
<td>&quot;Hay que estar un poco mas encima de ellos (...) yo los mando a hacerlo&quot; &quot;ellos me obedecen&quot;</td>
</tr>
<tr>
<td>Established routines</td>
<td>Cosas que hace la familia de manera ciclica</td>
<td>&quot;voy todas las semanas, voy a comprar pan para tomar con café todas las mañanas&quot;-B201</td>
</tr>
<tr>
<td>Language barriers</td>
<td>difficulty communicating because of different languages spoken</td>
<td>&quot;tienen la computadora para traducir&quot; -B203</td>
</tr>
<tr>
<td>Benefits of speaking English</td>
<td>positive effects of a good English proficiency</td>
<td>&quot;ayuda a conocer mas a las personas&quot;-B209</td>
</tr>
<tr>
<td>Security Level in the US</td>
<td>parent's idea of a safe zone, less danger</td>
<td>&quot;tu sabes quien es todo el mundo (..) es un lugar tranquilo y es bueno para ellos&quot;-B206</td>
</tr>
<tr>
<td>Desire to provide family all</td>
<td>Opportunity to achieve success and live a better life</td>
<td>&quot;aca hay mas oportunidades&quot;-B203 &quot;siempre se lucha va, tienen que ellos tener todo&quot;-B201</td>
</tr>
<tr>
<td>Sibling dynamics</td>
<td>Living and distributing responsibilities</td>
<td>&quot;ella es muy buena y si ayuda (...) pero el nene es mas&quot;</td>
</tr>
<tr>
<td>Reasons to move to the US</td>
<td>Motive and purpose of them moving away from country of origin</td>
<td>&quot;En Puerto Rico si era más lucha, ahí pasamos necesidades&quot; , &quot;Para ellos era mejor acá, allá esta bien peligroso&quot;</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Reasons to stay in small town</td>
<td>Justifications for continuing to live in small town</td>
<td>&quot;uno tiene que adaptarse y pues llegar a querer a este país, pues porque es parte de uno, así que no hay de otra que adaptarse&quot;</td>
</tr>
<tr>
<td>Reasons to move to current small town</td>
<td>Justification of the family moving to such a small area</td>
<td>&quot;acá tenía otra hermana que estaba trabajando para Empire entonces y me vine para aca&quot;</td>
</tr>
<tr>
<td>Life in the US vs place of origin</td>
<td>Progress in their everyday life since they moved to the US</td>
<td>&quot;en mi país es totalmente diferente (...) nuestro país uno se siente más libre para todo, y aquí uno siempre anda con el temor de cualquier cosa, pero es muy diferente&quot;</td>
</tr>
<tr>
<td>Life small town vs US city</td>
<td>Differences between Mifflintown and prior US city</td>
<td>&quot;es más barato, en el sentido de la comida y esas cosas que hay más abundancia&quot;</td>
</tr>
<tr>
<td>Food security issues</td>
<td>Lack of primary needs</td>
<td>&quot;nunca se fueron a la cama sin comer, pero si me veía bien escaso&quot;</td>
</tr>
<tr>
<td>Food safety</td>
<td>no lack of primary needs</td>
<td>&quot;alguna vez le ha pasado que no había comida en casa y no tenía para comprar mas - no&quot;</td>
</tr>
<tr>
<td>Role of age difference</td>
<td>Ability of kids to help in the house depending of their age</td>
<td>&quot;la de 8, no va a hacer lo mismo que la de 14&quot;</td>
</tr>
<tr>
<td>How kids help at home</td>
<td>Different roles of kids in the chores of the house</td>
<td>&quot;su cuarto ella lo hacía&quot;, &quot;yo lavo la ropa(...) pero si ella va conmigo, ella me ayuda si, en todo&quot;</td>
</tr>
<tr>
<td>How kids help in the kitchen</td>
<td>Different roles of kids in the kitchen chores</td>
<td>Ya luego va a la cocina a veces en la mañana deja panqueques o algo a los niños, des da de comer a veces&quot;</td>
</tr>
<tr>
<td>Starting age in the kitchen</td>
<td>Time corresponding to the beginning of a kid's involvement in the kitchen</td>
<td>&quot;11 o 12 años, tu sabes que ella empezó a ayudarme más&quot;</td>
</tr>
<tr>
<td>Starting age for helping family</td>
<td>Time corresponding to the beginning of a kid's involvement in the house</td>
<td>&quot;como 8 años tu puedes o antes&quot;</td>
</tr>
<tr>
<td>Food kids make</td>
<td>the specific foods the kids are able to prepare</td>
<td>&quot;el arroz amarillo le queda mejor que a mí&quot;, &quot;el arroz guisado (...) este hace rellenos de papa&quot;-B203 &quot;Arroz, carne guisada, asada, pollo asado&quot;-B201</td>
</tr>
<tr>
<td>Skill improvement in the kitchen</td>
<td>How age and time help kids grow in the kitchen, more and more tasks each day</td>
<td>&quot;sabe más entonces hace más&quot; ; &quot;como usted piensa que eso pueda pasar? dejandola cocinar, dejandola cocinar&quot;-B206</td>
</tr>
<tr>
<td>nutritional practices from place of origin</td>
<td>traditional food made at US home</td>
<td>&quot;les preparo tortillas y frijoles&quot;</td>
</tr>
<tr>
<td>who taught kid to cook</td>
<td>person responsible for kids cooking abilities</td>
<td>&quot;Ya, les enseñé, su mamá también&quot; -B201</td>
</tr>
<tr>
<td>no one taught kid to cook</td>
<td>kids learned to cook by themselves</td>
<td>&quot;no, él se fija como lo hace uno y ya él lo hace&quot;-B201</td>
</tr>
<tr>
<td>learn to cook for survival</td>
<td>cooking in order to avoid hunger and lack of food issues.</td>
<td>&quot;se casan con una muchacha que no sabe cocinar, ellos les enseñan, no van a estar atendido&quot;-B201</td>
</tr>
<tr>
<td>learn to cook for independence</td>
<td>reasons why kids are taught how to cook</td>
<td>&quot;puede porque en un futuro el, el varon se casa, tiene su esposa, la esposa se enferma, Quien va a hacer los quehaceres?&quot;-B208</td>
</tr>
<tr>
<td>learn to cook to be occupied</td>
<td>cook so they distract themselves from other activities</td>
<td>&quot;involucre con otra cosa que no sea el celular, que no sea ir a jugar afuera con los amiguitos&quot;-B208</td>
</tr>
<tr>
<td>kid's cooking frequency</td>
<td>how often kid cooks</td>
<td>&quot;el primero cocinaba más seguido, a veces dos veces por semana&quot;-B201</td>
</tr>
</tbody>
</table>
MICHELLE Y. MARTIN ROMERO
Curriculum Vitae

EDUCATION

2018  Ph.D. Candidate in Biobehavioral Health, The Pennsylvania State University, University Park, PA
2014  M.S. Biobehavioral Health, The Pennsylvania State University, University Park, PA
2012  B.S. Health Education (Summa cum laude), University of Florida, Gainesville, FL

SELECTED FELLOWSHIPS AND AWARDS

2018  Alumni Association Dissertation Award, The Pennsylvania State University
2013-2018  Graduate Research Fellowship, National Science Foundation
2017  Outstanding Student Paper Award, Latino Caucus, American Public Health Association
2017  Hintz Graduate Education Enhancement Award, The Pennsylvania State University
2017  Fahs-Beck Scholar Dissertation Award, Fahs-Beck Fund for Research and Experimentation
2017  Dissertation Research Endowment, The Pennsylvania State University
2013  Top 20 under 30 Alumni Recognition, University of Florida
2012-2013  Bunton-Waller Graduate Fellowship Award, The Pennsylvania State University

SELECTED PUBLICATIONS


SELECTED PRESENTATIONS
