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UNIVERSITY OF CALIFORNIA
SANTA CRUZ

**PARENTAL GUIDANCE AND CHILDREN'S DEVELOPMENT OF
COLLABORATIVE INITIATIVE: CULTURAL CONTEXTS OF
CHILDREN'S PROSOCIAL DEVELOPMENT**

A dissertation submitted in partial satisfaction
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

PSYCHOLOGY

with an emphasis in LATIN AMERICAN & LATINO STUDIES

by

Andrew D. Coppens

September, 2015

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Abstract

Parental Guidance and Children's Development of Collaborative Initiative: Cultural Contexts of Children's Prosocial Development

Andrew D. Coppens

Two studies examined how mothers of 2- to 3-year-olds and 6- to 7-year-olds from a US Mexican-heritage community and a middle-class European American community support children's prosocial helping and development of collaborative initiative in work at home. Together, the studies aim to explain a 'developmental puzzle' suggested by taking into account separate literatures on young children's household work contributions: Toddlers in many communities seem to be interested in helping and taking part in the ongoing activities of the world around them. Yet, at older ages middle-class European American children seem to help minimally and seldom with initiative whereas US Mexican-heritage children commonly contribute extensively and with initiative in work at home.

Findings in both studies were based on interviews with 29 mothers in each community (20 with a child age 2-3, and 9 with a child age 6-7). Study 1 confirmed this 'developmental puzzle', and showed that more US Mexican-heritage 2- to 3-year-olds and 6- to 7-year-olds helped under their own initiative than European American children at these ages. Study 2 showed that most US Mexican-heritage mothers involved their 2- to 3-year-old children collaboratively in shared work, whereas more middle-class European American mothers often avoided their 2- to 3-year-olds' involvement all together. Mothers' reported developmental theories regarding

children's learning and motivation in work at home provided clear rationales for mothers' approaches in each community.

The findings suggest that children's initiative and prosocial helping are encouraged developmentally when children are given meaningful access and opportunities to share work with others at home. Together, the studies challenge and extend current theory and contribute new cultural and analytic perspectives to developmental research on children's prosocial development.

Dedication

For Christina, my strongest supporter and the person that most inspires me.

Acknowledgements

I began to notice the cultural patterns that are the focus of this study during my years as a rural elementary public school teacher in the municipality of El Coral, Chontales, Nicaragua. I am deeply indebted to my students and fellow teachers there, who made me a part of their lives in and out of the classroom and, as a result, introduced me to a powerful way of learning in family and community. Sharing your ways of life with me changed the trajectory of my career.

I owe everything to the generosity of the children, families, and communities in México and California who invited me into their lives and spoke with me about what they do and why they do it. I hope that my research has amplified the voice of these stories.

I would be nowhere close to understanding these cultural patterns and stories without Dr. Barbara Rogoff's guidance. Dr. Rogoff is so generous and seemingly tireless in her mentorship, which is only part of a larger, fierce commitment to social justice in her cultural research. Thank you for teaching me to walk toward these aims, and to "walk on by" less important pursuits. I am honored to join the long list of scholars whose work stands on the shoulders of her ongoing contributions.

I came to know and respect several scholars that have studied in the Rogoff Lab, and learned a great deal from each of them. Thank you Dr. Pablo Chavajay, Dr. Maricela Correa-Chávez, Dr. Rebeca Mejía-Arauz, Dr. Amy Roberts, Dr. Katie G. Silva, Dr. Angélica López, Dr. Lucía Alcalá, Dr. Omar Ruvalcaba, Andrew Dayton,

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The Latin American & Latina/o Studies Department at UC Santa Cruz was a second departmental home for the development of this work. I am indebted especially to Dr. Héctor Perla, Jr., Dr. Jonathan Fox, and Dr. Gabriela Arredondo for pushing me to draw across disciplinary boundaries in the grounding of this research.

I have been interested in the organization of children's learning for over 15 years, which I have called by different names along the way. I am grateful to a special group of friends and mentors at the University of New Hampshire, who worked with me as an undergraduate when I understood this interest as "outdoor education."

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This study would not have been possible without the help of Guadalupe Rosas and Valeria Curiel, two research assistants that went far beyond the expectations of

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Christina and I are going to miss California, where we met outstanding friends, started our marriage, and probably spent a bit too much time at our desks. While I was at my desk (in the living room of our first apartment) working on this project, Christina always asked, “How is it going?” and not “When do you finish?” That support has made an enormous difference. Our support and encouragement for what each other finds important and where each other finds meaning is the core of our love and friendship. I am lucky to continue our walk together through life.

Parental Guidance and Children's Development of Collaborative Initiative: Cultural Contexts of Children's Prosocial Development

Everyday work at home represents a widely available and rich context for children learning to collaborate with others, make contributions to culturally valued activities, and observe the world around them to find meaningful, motivating purposes for their actions. How children's participation is organized and supported in these activities may shape what children learn from their involvement, and whether children have opportunities to make contributions to their families and communities.

In cultural communities where children and adults commonly collaborate and contribute together in joint productive efforts, these everyday opportunities for children's prosocial learning and helping may be exceptionally rich. In particular, some ways of organizing children's participation in work at home may support children's development of "*collaborative initiative*" – an impressive form of participation that involves children being attentive to how they can help in shared work going on around them, and contributing in that work voluntarily (Coppens et al., 2014b, p. 154).

This study examines how children's involvement in work at home may vary between a US Mexican-heritage community and a middle-class European American community, and how different forms of involving children may be linked to how and whether children help their families. Few studies have examined cultural variation in how children contribute in everyday productive endeavors, even though intriguing cultural questions exist regarding how children's helpfulness develops from early to middle childhood.

The introduction first suggests the existence of a ‘developmental puzzle’ regarding children’s prosocial helping, by connecting separate literatures that note (a) suggestions of widespread helpfulness among toddlers and (b) cultural differences in older children’s contributions. The subsequent sections of this introduction suggest promising explanations for this puzzle. Together, the suggested puzzle and the promising explanations form the basis of the research presented in this dissertation.

A ‘Developmental Puzzle’ Regarding Children’s Prosocial Helping

A recent surge in scholarly interest regarding young children’s prosocial development suggests that toddlers readily and spontaneously help others in a variety of tasks. Although much of the field is focused on identifying the origins of this tendency in social-cognitive aspects of development, an equally puzzling (though largely unexamined) question concerns how children’s inclinations toward prosocial helping take shape as children gain skills, learn cultural expectations and values, and participate more fully in the roles that are made available to them in their cultural communities.

The ‘developmental puzzle’: Findings across several literatures, put together, suggest that toddlers’ prosocial helpfulness continues to expand into middle and late childhood in families with connections to Indigenous American communities, whereas older children in many middle-class communities are minimally and reluctantly involved in work that benefits their whole family (not just themselves) when compared with children from many Indigenous American communities.

Toddlers voluntarily get involved and help. Toddlers from many cultural communities show interest in taking part in productive everyday activities, sharing goals and intentions with others in a range of activities, including those not necessarily directed at them, without needing to be asked (Brownell, 2013; Callaghan et al., 2011; Correa-Chávez, Roberts, & Martínez Pérez, 2011; Gaskins & Paradise, 2010; Lancy, 2010; Meltzoff, 1995; Warneken & Tomasello, 2007; 2012; Warneken, Chen, & Tomasello, 2006). Toddlers generally seem to take initiative when learning language, striving to participate and contribute in their linguistic communities (Akhtar, 2005; Akhtar, Jipson, & Callanan, 2001). Many toddlers also spontaneously help adults with goal-directed tasks, without needing rewards or requests for their assistance (Dahl, 2015; Dunfield & Kuhlmeier, 2013; Liszkowski, Carpenter, & Tomasello, 2008; Rheingold, 1982; Svetlova, Nichols, & Brownell, 2010; Warneken & Tomasello, 2008).

In many Indigenous-heritage families and communities of the Americas, this early interest in taking part and helping seems to occur alongside young children's access to mature productive endeavors (de León, 2000; Morelli, Rogoff, & Angelillo, 2003; Paoli, 2003; Rogoff, 2003; Rogoff, Morelli, & Chavajay, 2010). For example, in a Yucatecan Maya community toddlers spent over a quarter of their day observing and contributing to household work under their own initiative, and chose to do so more frequently than playing (Gaskins, 1999). Toddlers and slightly older children in many of these communities observe and begin to pitch in with work going on around them, making real contributions to their families' well being (Martí, 2011; Rogoff,

Mistry, Göncü, & Mosier, 1993; Whiting & Whiting, 1975). For these young children to find ways to collaborate and be helpful is a culturally valued and supported developmental goal (López, Rogoff, Najafi, & Mejía-Arauz, 2012).

Little is known about the everyday context of middle-class toddlers' prosocial development. The large majority of studies in this community use laboratory tasks where demand characteristics for children's helping may be high, making it difficult to generalize the findings to children's voluntary helping in everyday contexts. Nonetheless, a little work suggests that middle-class toddlers' helping is common in everyday family life (e.g., Dahl, 2015).

Young children may learn family and community norms of childhood responsibility very early in development (e.g., Schmidt & Sommerville, 2011; Shure, 1968). At young ages, middle-class children may learn to see helping as outside of what is expected of them (Hay & Cook, 2007). By contrast, research in many Indigenous American communities suggests that, if anything, 2- to 3-year-olds' collaboration with the family is expanding (Bolin, 2006; de León, 2000; Gaskins, 1999; Martí, 2011; Rogoff, 2003).

Developmental discontinuity by middle childhood: Middle-class children's minimal involvement and low initiative in work at home. In contrast with indications of early interest in helping, older children from many middle-class European-heritage communities contribute minimally to household work and other productive endeavors involving adults (Hofferth & Sandberg, 2001; Larson & Verma, 1999). Eight- to 10-year-old children in middle-class families in Los Angeles spent

just 2% of their day helping with household work (Klein, Graesch, & Izquierdo, 2009; Ochs & Kremer-Sadlik, 2013). Across three studies, children at this age from middle-class Mexican families helped with a narrower and less complex range of household work than children living in a nearby Indigenous-heritage community (Alcalá, Rogoff, Mejía-Arauz, Coppens, & Dexter, 2014; Coppens, Alcalá, Mejía-Arauz, & Rogoff, 2014a; Coppens, Alcalá, Mejía-Arauz, & Rogoff, 2015).

In middle-class communities, not only are contributions minimal, but in addition, initiative may seldom be a part of older children's contributions to their families. Many families report considerable struggle and little success in eliciting children's help with household work (Montemayor, 1983). In a detailed ethnographic study of 30 middle-class families in Los Angeles, no children regularly helped with initiative in family household work (Klein et al., 2009; Ochs & Kremer-Sadlik, 2013). For middle-class communities in the US and UK, low initiative was also accompanied by unclear expectations as to whether and in what ways children were to help out the family (Brannen, 1995; Klein et al., 2009). These patterns may apply to other communities with comparable Western schooling and related cultural practices: Children from middle-class Mexican communities were less likely to help their families with initiative when compared with children in a nearby Indigenous-heritage community (Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015).

Developmental continuity by middle childhood: Mesoamerican children's extensive helpfulness and collaborative initiative in work at home. In contrast with the patterns of children in many middle-class communities, children in many

Indigenous American communities contribute extensively to a wide range of household work and other productive endeavors (Bolin, 2006; Chamoux, 1992; de Haan, 1999; Hilger, 1951; Modiano, 1973; Ochs & Izquierdo, 2009; Paradise & Rogoff, 2009; Rogoff, 2003; Rogoff et al., 2014a). For example, mothers of 6- to 10-year-olds in an Indigenous-heritage community in Guadalajara reported children contributing to activities such as childcare, household maintenance, cooking, and running errands (Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015). Yucatan Maya children spent about 50% of their out-of-school time helping with family household work (Gaskins, 1999). In a Nahua community of central Mexico, toddlers contributed productively to their families and by age 10 often helped their families for up to 12 hours per day (Magazine & Ramírez Sánchez, 2007; Ramírez Sánchez, 2007). Contributions of this extent were valued as reflecting children's full participation in productive cultural activities.

Beyond the extent of their contributions, children commonly contribute with initiative to family and community endeavors in many Indigenous American communities (Bolin, 2006; de Haan, 1999; Levin, 1990; Paradise & de Haan, 2009; Paradise & Rogoff, 2009; Ramírez Sánchez, 2007). Children's collaborative initiative was striking across three studies examining children's contributions to family household work in an Indigenous-heritage community of Guadalajara, and was more common than among children in two nearby middle-class communities (Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015). Although 9- to 10-year-old children in both the Indigenous-heritage and a middle-class community stated that

everyone in the family should help with household work, children in the Indigenous-heritage community more often contributed with initiative, sharing family responsibilities (Coppens et al., 2014a).

Possible Explanations for the ‘Developmental Puzzle’

There is no clear consensus in developmental research on the origins or determinants of children’s helpfulness. Because cultural evidence on children’s helpfulness is especially lacking, I take into account research and speculation across several literatures to link family practices and cultural values that may be important for providing children with everyday helping opportunities.

My and colleagues’ prior work suggests, but does not examine explicitly, a developmental hypothesis to explain both why children’s initiative in voluntarily helping seems to continue from early to middle childhood in Indigenous American communities, and why middle-class children often seem much less interested in helping as they get older (Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015). From an early age, Indigenous American families may promote children’s collaborative initiative by allowing, encouraging, and sometimes facilitating children’s participation in productive family and community endeavors. Children’s collaborative initiative may be an explicit developmental goal held by parents in many Indigenous American communities, informing how they guide children in taking part in family endeavors, with appreciation for children’s efforts to help. Our prior work also suggests that the values and socialization practices of many middle-class families may, in general, discourage collaborative initiative. This may occur by

segregating children from mature aspects of everyday endeavors, undermining children's autonomy with contractually arranged chores, and assigning solitary work dividing children's responsibilities from those of adults. These suggestions from our prior work, and the literature, suggest the following explanations:

Explanation 1. Opportunities to be involved in work early in development encourage participation and initiative. The extent to which children are integrated in or segregated from mature aspects of family and community endeavors may closely relate to whether children help and collaborate with others. In many Indigenous American communities, children's integration as collaborators in mutual family and community endeavors is characteristic of childhood (Corona Caraveo, 2004; Morelli et al., 2003; Orellana, 2003; Paradise & Rogoff, 2009; Pelletier, 1970; Rogoff, 2014). Children's initiative is a recurring finding in ethnographic descriptions of how children participate in family and community life in many Indigenous American communities (e.g., Corona Caraveo, 2006).

By contrast, children's segregation from mature endeavors is a characteristic pattern of childhood in many middle-class communities. Middle-class children seldom have wide access to mature endeavors and may have few opportunities to make productive contributions to their families (Hernandez, 2004; Kagan, 1977; Lareau, 2000; Morelli et al., 2003; Rogoff, 2003; 2014; Rogoff et al., 2010; Zelizer, 1985). This pattern of segregation for many middle-class children is not only a matter of exclusion from participation in 'adult' endeavors, but may be accomplished by a

cultural emphasis on child-specialized ways of children participating in family and community life (Morelli et al., 2003; Rogoff et al., 2010).

One consequence of children's segregation from mature productive endeavors may be relatively greater difficulty in learning the skills necessary to pitch in to help. Some researchers suggest that children in non-Western societies (mainly Indigenous communities of Africa and the Americas) help readily with family work due to early opportunities for children to observe and gradually increase their skills and responsibility in everyday work (Lancy, 2012; Whiting & Whiting, 1975). Lancy (2011) offers a 'critical period' explanation, suggesting that without early opportunities for involvement, and by the time many middle-class parents think of assigning chores to their children, "...the window of opportunity has closed."

Early experience with work is likely formative for children, and children seem to increase their helpfulness by merely observing the helpfulness of others (Eisenberg, Fabes, & Spinrad, 2006). Nonetheless, children being accustomed to and knowing how to do work may not by itself support children's development of collaborative initiative, or prosocial helping in general. Children having opportunities to take part and invest collaboratively in mature goals shared by their families and communities – children's sense of "we" as mutual contributors – may be especially important (Corona Caraveo, 2006; Paradise, 1994).

Parents allowing for, encouraging, and guiding young children's participation may also be necessary for children's development toward voluntary helpfulness in work at home. Cultural values, including expectations for children's helpfulness and

involvement in everyday work, may shed light on how communities support children's helpfulness and initiative.

Explanation 2. Parents' practices and cultural values encourage children's prosocial helping. The support parents provide in organizing collaborative work to include children may relate to children's development of collaborative initiative (Hastings, Utendale, Sullivan, 2007; Rheingold, 1982). Additionally, parents' ideas or ethnotheories about what very young children are capable of doing, how children learn, and what children are motivated to do can underlie the socialization practices that may support (or limit) children's development of initiative. Parents' ethnotheories and cultural values, including normative expectations about children's roles in everyday activities, may be closely linked (Harkness et al., 2010; Harkness & Super, 1992), and are equally applicable for middle-class communities and Indigenous American communities.

Why don't middle-class older children help more voluntarily? Several scholars speculate that middle-class older children's minimal help in family household work is linked to their parents' practices. For example, Rheingold (1982) argues that parents' desire for efficient completion of household chores prevents opportunities for toddlers' spontaneous involvement in these tasks, reducing the chance that children will help when they are older and parents expect it.

Ochs and Kremer-Sadlik (2013) suggest that getting middle-class older children to help with initiative is a losing proposition – parents should rely “more on delegating tasks to children and less on eliciting their voluntary help” (p. 247). These

and other authors suggest that the reason that middle-class children don't often help is because parents fail to actively manage children's responsibilities with firm, systematic, and consistent chore assignments (Klein & Goodwin, 2013; Klein, Izquierdo, & Bradbury, 2013). However, I speculate that instead of encouraging children's help, the implementation of these practices early in development may differentiate children's and adults' goals and purposes, limit children's autonomy, and reduce children's motivation to help through extrinsic, rule-based control (Warneken & Tomasello, 2008).

Middle-class children may lack initiative in family endeavors due, in part, to a cultural emphasis on "fairness" principles that further delimit children's responsibilities to tasks involving their own things and spaces, or to needs for work that they created (Goodnow, 1988, 1998; Warton & Goodnow, 1991). These contingency-based "rules of engagement" emphasizing children's responsibility for personal chores are socialized early in development (Shure, 1968; White & Brinkerhoff, 1981), and may relate to many middle-class children's diminishing or increasingly selective interest in helping others by age three (Hay, 1994).

Perhaps related to an emphasis on children's personal work that is often of low complexity, many middle-class parents may view young children as largely incapable of making real contributions to productive family endeavors, either due to lack of skill or assumed disinterest in helping the family. Parents' assessments of children's inability to contribute may relate to a belief that chores should be completed as efficiently and quickly as possible, which may circumvent young

children's participation (Kremer-Sadlik, Fatigante, & Fasulo, 2008; Ochs & Kremer-Sadlik, 2013; Rheingold, 1982). Middle-class parents (and some researchers) may not think that young children want to help responsibly, and may interpret toddlers' attempts to contribute as simple mimicry or self-interest (Callaghan et al., 2011; Svetlova et al., 2010). Whatever children's motivations, parents' assumptions about children's intentions may shape whether or not children are given access to and supported in making contributions in work that benefits others.

Why do Indigenous American older children help voluntarily? In many Indigenous American communities, efforts to integrate children in mature, productive family and community endeavors may set the stage for children's development of collaborative initiative (Rogoff, 2014; Rogoff, Moore, Correa-Chávez, & Dexter, 2015; Rogoff & Paradise, 2009). Often, adults collaborate with children by ensuring opportunities for children's involvement. For example, expert canoe-makers in a South American Warao community insist that young boys are present when boats are being made (Wilbert, 1979). Everyone takes responsibility to help in these mutual endeavors because the productive purpose of the activity is shared. Children's sense of belonging in sharing work with others may be a powerful support for the development of collaborative initiative (Walton & Cohen, 2011).

A promising explanation for the helpful initiative of Indigenous American older children may be that children's involvement is allowed for and supported, but not forced or coerced. In a Mazahua community of Mexico, mothers viewed "too much teaching" as detrimental to children's initiative and learning: "The child's will

to participate, her motivation to learn, is given a more important place than the parent's effort to involve her" (de Haan, 1999, p. 91). These Mazahua mothers were not uninvolved in their child's learning. Rather, mothers' focus was on flexibly opening spaces for children's contributions in the ongoing flow of the activity rather than being responsible for motivating or incentivizing children's participation. Children are allowed the autonomy and flexibility to try things out in the flow of ongoing activities (Paradise & de Haan, 2009).

Children's collaborative participation and learning are key to productive family and community endeavors in many Indigenous American communities, and children's presence is important to long-term community goals (Chamoux, 2010; Coppens et al., 2014a; Corona Caraveo & Pérez-Zavala, 2007; Magazine & Ramírez Sánchez, 2007; Nájera-Ramírez, 1997; Paoli, 2003; Ramírez Sánchez, 2007). Parents in many of these communities view young children's attempts to help as a sign of their readiness to learn the relevant skills, and may scaffold children's responsibilities over time to support their continued initiative and learning (Gaskins, 1999; Lancy, 2012).

Mutuality of cultural expectations for children's responsibility and support for children's autonomy may be an important cultural support for children's development of collaborative initiative. Just as parents in many Indigenous American communities value children's autonomy and voluntary involvement – "*que le nazca al niño*" (Coppens et al., 2015) – parents also expect that children attentively observe and learn to help responsibly in ongoing shared endeavors (Chavajay, 1993; Correa-

Chávez et al., 2011; Gaskins & Paradise, 2010). Family and community expectations of responsibility appear to motivate children's contributions in many US Mexican-heritage and Latino communities (Fuligni & Pedersen, 2002; Fuligni & Telzer, 2013; Fuligni, Tseng, & Lam, 1999; Telzer & Fuligni, 2009; see also Hastings et al., 2007). Many Indigenous-heritage Mexican communities expect children to be *acomodida/o* – attentive and responsive to ways they can be helpful in their families and communities (López et al., 2012).

Summary. Evidence across distinct literatures suggests that the development of collaborative initiative – a way of learning and voluntarily helping that characterizes the hypothesized cultural differences of the ‘developmental puzzle’ – may relate to both *whether* children have opportunities to take part in mature family and community endeavors, and *how* children's participation is organized and supported. This dissertation examines possible connections between children's development of initiative and the cultural ways that children are involved in everyday work at home, which has not been examined systematically between young and older children of different cultural communities.

Present Study

Two studies examined cultural patterns of children's involvement in work at home: Study 1 focused on cultural and developmental differences regarding children's reported contributions to work at home. Study 2 builds on the findings of Study 1, focusing on how mothers report involving their children in work at home and the ways that they explain their approaches.

The questions of Study 1 examine whether the possible developmental puzzle of children's prosocial helping can be confirmed with evidence of 2- to 3- and 6- to 7-year-olds' contributions in a US Mexican-heritage community and a middle-class European American community:

Are the contributions of 2- to 3-year-olds in family household work similar in each community, and at age 6 to 7 do US Mexican-heritage children contribute more extensively than middle-class European American children in work that benefits others?

Are the contributions of 2- to 3- and 6- to 7-year-olds in family household work more commonly voluntary in a US Mexican-heritage community than in a middle-class European American community?

My predictions pertain to work that holds specific benefits for other family members ('family household work') and not necessarily for chores that maintain children's personal things and spaces ('self-care chores'). Involvement in family household work, which may include but is not limited to benefits for oneself, is a broader sort of helpfulness than simply taking care of oneself (see Grusec, Goodnow, & Cohen, 1996).

Studies 1 and 2 focus on age 2-3 because an extensive body of research suggests that 12- to 30-month-old toddlers from a number of communities respond prosocially to an adult needing help in controlled laboratory tasks. At age 2-3, I predicted few cultural differences in how extensively and how voluntarily children contribute in family work that benefits others. I know of no other study examining cultural variation in toddlers' extent of helping and collaborative initiative at home.

At age 6-7, I predicted marked cultural differences in how extensively and how voluntarily children helped in family household work, and my and colleagues'

previous research provides fairly strong support for these predictions (Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015; see also Orellana, 2001, 2003 for supporting evidence in US Mexican immigrant communities and Ochs & Kremer-Sadlik, 2013 for supporting evidence in US middle-class communities).

The questions of Study 2 aim to provide explanations for this possible developmental puzzle by examining mothers' approaches to involving their children in work at home and the developmental theories that may inform mothers' practices:

Are US Mexican-heritage mothers' reported ways of involving children in work at home more inclusive of children than those of middle-class European American mothers, and do these potential differences help to explain the 'developmental puzzle'?

My predictions, drawing on ethnographic studies, are that mothers in the US Mexican-heritage community would value children's involvement and routinely find ways to include young children collaboratively in work at home. By contrast, I predicted that children's exclusion from this work – a characteristic pattern of childhood in many middle-class communities – would be most common among middle-class European American mothers. I predicted that these contrasting patterns in mothers' approaches might or might not be present at age 2-3, and would be clear at age 6-7. Study 2 also examined the rationale behind mothers' reported ways of involving children in everyday work at home.

Do mothers' developmental theories regarding children's learning and motivation in work at home align conceptually with their reported ways of involving their children?

My predictions were that mothers' developmental ethnotheories and reported assumptions about children's motivations for everyday work would align

conceptually with their approaches to involving children: Mothers who viewed children as motivated to help would support children in learning to be helpful and mothers who did not view helping out as something that could be expected of young children or a main reason that children got involved in work at home would be relatively less likely to encourage children's involvement.

To address the questions of Study 1 and Study 2, I interviewed mothers conversationally on each of these topics. The interview started with hypothetical scenarios regarding an imaginary family, to get the conversation started, and I also asked how the mother's own child helped around the house and what mothers did to involve them. The same interviews were used to address the questions of Study 1 and Study 2. Below I describe the interviews, and in the Results section I address the research questions of each study in turn.

Method

Participants and Communities

Participants were 29 US Mexican-heritage mothers and 29 middle-class European American mothers, living in California. The focus was 2- to 3-year-old children; I included 20 mothers in each community with a 2- to 3-year-old target child. A smaller sample of 6- to 7-year-old children was included as a check on whether patterns at this age resemble prior studies at middle childhood; I included 9 mothers in each community with a 6- to 7-year-old target child.

The average age of the 2- to 3-year-old children was:

2.6 years in the US Mexican-heritage community (9 girls and 11 boys), and

3.2 years in the middle-class European American community (10 girls and 10 boys).

The average age of the 6- to 7-year-old children was:

6.8 years in the US Mexican-heritage community (7 girls and 2 boys), and 7.1 years in the middle-class European American community (4 girls and 5 boys).

The household composition of participating families from each community was similar. The US Mexican-heritage families averaged 2.3 household members under 18 years old and 2.3 members 18 years old or older. The European American families averaged 2.0 household members under 18 years old and 2.0 members 18 years old or older. Most 2-3- and 6- to 7-year-olds in each community were the youngest sibling or only child.

Most US Mexican-heritage mothers were recruited at community parks in the Central Coast small city of Watsonville or at a nearby residential neighborhood for seasonal agricultural workers. Middle-class European American mothers lived near San José or Santa Cruz, and were recruited using existing contacts with local schools and community organizations.

Parents' ethnicity and level of schooling and children's age and gender were determined with conversational questions during recruitment, before scheduling the interview. Selection criteria for US Mexican-heritage families were that mothers and fathers each had less than 12 grades of schooling completed, and for middle-class

European American families that mothers and fathers each had 12 or more grades of schooling completed.

The middle-class European American selection criterion focuses on the cultural group usually referred to as middle-class, using its central defining feature: extensive schooling experience (Bronfenbrenner, McClennan, Wethington, Moen, & Ceci, 1996; Lareau, 2000). The extensive schooling experience of middle-class families relates clearly with cultural practices involved in parent-child interaction (Laosa, 1982; R. A. LeVine & LeVine, 2001; Rogoff, Correa-Chávez, & Navichoc Cotuc, 2005). In this sample, middle-class European American families all had extensive experience with formal schooling across several generations – parents averaged 16.5 grades of schooling completed and grandparents averaged 15.2 grades completed. All parents in the European American community were of Northern- or Western-European descent and were born in the US.

The US Mexican-heritage selection criterion takes special interest in families with likely experience with Indigenous American cultural practices, belonging to a cultural group common in Mexico and the US that has some historical continuity with Indigenous American cultural communities of Mexico (Bonfil Batalla, 1996). Because Indigenous heritage is often not claimed due to historical and ongoing discrimination, relatively low levels of schooling were used as a proxy, in addition to families' regional backgrounds in Mexico. Among many Mesoamerican communities, this link between level of schooling and experience with Indigenous practices has substantial empirical support (López et al., 2012; Rogoff et al., 2005;

Rogoff, Najafi, & Mejía-Arauz, 2014b). In this sample, US Mexican-heritage parents averaged 9.4 grades of schooling completed, and target children's grandparents averaged 4.1 grades completed. Parents had migrated from rural areas of Mexican states such as Michoacán (16 families), Oaxaca (4), and Jalisco (6). These regions of Mexico have large Indigenous populations and in recent decades have been 'sending' communities for agricultural workers in California (Fox & Rivera-Salgado, 2004).

The two communities are labeled *European American ESE* (Extensive Schooling Experience) and *US Mexican-heritage EIP* (Experience with Indigenous Practices) to refer to constellations of interrelated cultural practices in each community, such as schooling, languages, living arrangements, immigration history, adult occupations, and so on (Rogoff et al., 2014b). The labels are used as shorthand for such constellations of cultural practices; they are not intended to emphasize single factors such as family socioeconomic status or level of schooling for understanding family and community practices. For example, occupations are closely involved in these two constellations: The amount of parent employment was similar between the two communities, but parents' jobs differed. In the US Mexican-heritage EIP community, 48% of mothers and 90% of fathers worked fulltime. Most parents in this community worked in jobs such as agricultural harvesting and packing (16 parents), service-sector jobs such as in restaurants or delivery (9), or construction (10). In the European American ESE community, 41% of mothers and 90% of fathers worked fulltime. Most parents in this community worked in education as teachers, counselors,

or administrators (9 parents), in business sector jobs such as marketing, management, or software development (13), or in healthcare and wellness (8).

The Interview

Mothers participated in one 45- to 60-minute video recorded semi-structured conversational interview, conducted in Spanish and/or English according to the mother's preference, in a location of the mother's choosing (usually the family's home or a public park). Children did not participate in the interview. A Spanish/English bilingual female research assistant who was blind to the study's hypotheses led the interviews. I was present for all interviews (and am also Spanish/English bilingual). My role was clearly secondary in the interviews, but I participated in the warm up and contributed occasional conversational or clarification questions where needed. One of us shared the mother's ethnicity in each of the interviews.

Interviews began with a conversational warm-up and a few questions regarding family composition, languages used in the home, and parents' occupations. Then it proceeded to asking mothers about how a parent would respond to children's interest in helping in work at home, how and how much mothers' own children did at home to contribute, and mothers' developmental theories regarding children's participation in work at home.

Conversation about how mothers would respond to a child's interest in helping in work at home, 15-20 mins. First, the mother was told a hypothetical vignette about a child attempting to help with work at home that a mother was doing,

and was asked how a typical parent in the mother's community would respond. The child in the vignette reflected the age and gender of the target child. For example, mothers with a 2- or 3-year-old female target child were told the vignette below¹:

Mom is in a hurry doing the family laundry at the laundromat and 2-year-old Sara wants to help by pouring detergent into the washing machine. Sara can't reach the machine, and is likely to make a mess.

This and a second vignette (below) were carefully piloted in each community to be parallel in form at each of the two ages in the study, and to evoke familiar experiences for mothers with young children (that were not too obviously dangerous for children at that age). The vignette was followed by a set of questions, asked conversationally:

What would be a good way for this parent to respond to Sara's eagerness to help? Why in that way?
Should Sara be allowed to help? Why or why not?
How would the parent feel about Sara trying to help?
What do you think Sara would learn about helping from the parent's way of handling her eagerness to help?

Mothers immediately responded to the first vignette with examples of related experiences with their own child, and no mother contrasted how a hypothetical mother would respond with how she commonly responds to her own child. Many mothers said things like, "that happened just this morning!" Mothers also commonly reported their child's usual contributions to work at home while responding to the vignettes, which was encouraged by asking for details. When the mother finished commenting about her own child and family, the second vignette was given to her:

Mom is making a birthday cake for that afternoon, and 2-year-old Sara asks mom if she can crack the eggs to help. She has seen her mom crack eggs but hasn't ever done it herself.

The mother was asked the same follow-up questions as with the first vignette, and mothers' responses were typically briefer because these seldom differed from their responses to the follow-up questions to the first vignette.

When the mother finished discussing the second vignette, she was asked a set of questions about how she responds to her own child's attempts to help in similar situations, using questions from the following set that had not yet been addressed in her responses:

How would you respond in these situations? Does anything ever keep you from responding in these ways?
Has your child ever tried to help with something, but made a mess or created more work for you? What happened? How did you and your child feel about it?
Are there things you don't want your child to help with? What are they? Why?
Do you do something to avoid your child getting involved? Do they understand? What does s/he do?
Do you ever go and get your child when you begin to do certain types of work? Which work? Why?
If you're encouraging your child to help, what do you do?

Questions about the target child's specific work at home (which tasks and how the child got involved), 20-30 mins. After the vignettes, open-ended questions were asked about what the target child normally does to help around the house. Questions in this part of the interview built on three previous studies of Mexican children's contributions to work at home (Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015).

In a normal day, does your child help around the house? How? What does s/he do?
How did your child start to help with things like this?

The interviewer maintained lists of possible tasks a child might help with and asked follow up questions about any task the mother had not mentioned, including tasks that benefit the whole family and tasks that focus on the child's personal things and spaces

(see Appendix for full lists). (We also asked about children's contributions in child caregiving.)

To elicit information about how voluntarily children contributed in work at home, mothers were asked to explain how and why children typically got involved, focusing on the task that was the most prominent or regular for the child:

Why does your child participate in this? Do they participate because they want to help?
Do they independently take responsibility?
Is this assigned to the child on a regular basis? How?
Do you have a system for keeping track of their help around the house? Do you keep a chart?
And what if they don't do that work? Do they resist doing it? Refuse?
Do you sometimes have to make them do it? For example?
Do you lecture or punish them when they don't do it? What is the punishment?
Do you give them a reward or money? For example?
Do you give allowances or *domingo* to your children? Does it depend on their behavior or their work?
Are there occasions when you don't give them one? What would it take for the child to lose their allowance?

Questions related to mothers' developmental theories about children

learning to be helpful and responsible in work at home, 10-12 mins. To finish the interview, mothers were conversationally asked their general opinions on how and why children learn to be helpful and responsible in work at home. Mothers responded to these questions eagerly, having built the basis for explaining their approaches and ideas in the prior conversations.

In some families children help around the house and in others they don't. What do you think about that? Why?
What makes kids want to help in general?
What effect do you think it has on a child to be allowed or not allowed to help in instances like this? What about in the long term?
Is it important for them to help w/out being asked? Why?
[The following question provided US Mexican-heritage mothers with another way to discuss the same question, using a common Mexican concept, in Spanish (most US Mexican-heritage mothers spontaneously used this term throughout the interviews):]
Do you encourage your children to be *acomedido/a*?
How do you think children learn to be helpful and responsible?

[For mothers with a 2-3-year-old:] Do you think your child will become more or less interested in helping out around the house by the time they are 6-7 years old? Why? / What do you think will support this change?

[For mothers with a 6-7-year-old:] Do you think your child has become more or less interested in helping out around the house since they were 2-3-years-old? Why? / What do you think has contributed to this change?

Interviews concluded with additional background questions, including how much schooling the target children's parents and grandparents had completed.

Coding categories built on previous studies conducted with culturally similar communities, were derived from ethnographic examination of mothers' interview reports, and were informed by my familiarity with cultural values and practices in both the US Mexican-heritage EIP and the European American ESE community.

The coding categories and reliabilities are described in conjunction with the relevant set of results, for Study 1 and 2, below. Inter-rater reliability was calculated based on agreement between the primary interviewer and myself on 45% (26) of the interviews.

Coding and Results – Study 1: Extent and Voluntariness of Children's Help

Study 1 first reports the coding and findings regarding the *extent* of children's contributions to work at home and then reports the coding and findings regarding *how voluntarily* children were reported to make these contributions, addressing a 'developmental puzzle' of children's contributions between the two communities. These two sections examine the pattern of cultural differences within each age group (2 to 3 and 6 to 7) and they compare the pattern across the two ages, for each cultural group. The third section examines whether the same pattern appears *within* the younger age group, comparing younger and older 2- to 3-year-olds, and shows the

relation between children's voluntariness of helping and the range and complexity of their help.

For both the extent and how voluntarily children contribute, this study focuses especially on *family household work*, which is work at home that holds explicit benefits for other members of the family (and often for the child too) and commonly involves shared spaces or activities, such as clearing everyone's dinner dishes or sweeping the living room. The study also examined *self-care chores*, which pertain to the child's own things, spaces, or messes they've created such as making their bed or folding their own clothes. (Own body care such as dressing oneself or brushing teeth were not considered, although European American ESE mothers often reported these as examples of ways their 2- to 3-year-olds helped.)

We also gathered information on extent and voluntariness of sibling care, which we do not include as part of family household work, because prior studies have found that it follows a quite different pattern than other family household work (Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015). The patterns for extent and voluntariness of sibling caregiving in the present study were similar to the prior studies (see Endnote² for results). Study 2, on parents' socialization practices that might have an impact on children's help with household work, did not ask about sibling care.

Study 1, Section 1. Developmental Patterns in the Extent of Children's Contributions to Work at Home

Coding the extent of children's contributions (range/complexity). For each child, each task they were reported to be involved in was assigned a score of 0 to 3, based on the skill, complexity of involvement, and level of responsibility entailed. (The coding system was closely based on Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015). To accommodate the two ages in this study, the scale was adjusted from previous work to account for the level of complexity of the child's involvement.

Complexity level 0 indicates involvement, but with little or no contribution to the work. The child could be present and intently observing a task without making a direct contribution. For example, a child might sit on the kitchen counter to watch a parent cook, without stirring or chopping anything, or hand the parent a dishtowel.

Complexity level 1 involves simple contributions that can be done incorrectly without much going wrong. For example, a child could stir ingredients in a bowl to help a parent who is cooking a family meal.

Complexity level 2 involves contributions that might be tricky or require some advance planning and remembering a couple of steps. For example, a child could help a parent with cooking a meal by washing, drying, and putting away dishes as they are used. Simple tasks done with notable responsibility or that require extended effort were coded at this level.

Complexity level 3 involves considerable skill, coordinated responsibility with others, and often several planned steps in a sequence. The child skillfully avoids potential danger and accidents as they make the contribution. For example, a child might responsibly prepare a family meal while a parent rests.

Complexity scores for each of a child's reported contributions were summed separately for family household work and self-care chores. For example, a child could yield a total range/complexity score of 7 in family household work with reports that they clear everyone's plates after dinner and sweep the kitchen floor (each scored a 1), make a parent's bed (scored 2), and make lunch for the family (scored 3).

Findings are first reported on children's contributions in family household work (the study's focus) and then self-care chores. Inter-rater agreement was high for the range/complexity of children's contributions in family household work ($r = .87$) and self-care chores ($r = .91$).

Results: How extensive are children's contributions to family household work? The findings confirm the developmental puzzle: The extent of 2- to 3-year-old children's contributions in family household work was similar between the two cultural backgrounds, but at age 6-7 US Mexican-heritage EIP children made much more extensive contributions in work that benefits others than the European American ESE children.

The average range/complexity of 2- to 3-year-olds' reported contributions was 6.5 in the US Mexican-heritage EIP community and 5.6 in the European American ESE community (SD = 3.8 and 1.6, respectively), *n.s.* See Table 1, which includes comparison statistics. There were no gender differences.

At age 2-3, most children in both communities were helping out alongside older siblings and parents, in low-complexity parts of family household work tasks. All 2- to 3-year-olds in both communities were at least minimally involved (complexity level 0) in family household work, and all but one 2- to 3-year-old was reported to contribute with low-complexity involvement (such helping a parent with sweeping). Mid-complexity involvement (such as helping to wash family clothes) was reported for 9 US Mexican-heritage EIP children and 2 European American ESE

children. No 2- to 3-year-old child's involvement in either community was reported as high-complexity (such as preparing and cooking a meal).

The average reported contributions of US Mexican-heritage EIP children in family household work *doubled* from ages 2-3 to 6-7, a significant difference ($p < .001$, see Table 1), whereas for European American ESE children there was no significant increase from ages 2-3 to 6-7 (see Table 1). Correspondingly, US Mexican-heritage EIP 6- to 7-year-olds were, on average, reported to make nearly twice the range/complexity of contributions in family household work than European American ESE children at the same age, a significant difference ($p = .004$). There were no gender differences in the range/complexity of the 6- to 7-year-old children's contributions.

Table 1. Means (SDs) and differences in the range/complexity scores of children's contributions to work at home, between two cultural backgrounds and two ages

		US Mexican-heritage EIP		European American ESE	Results of 2 x 2 ANOVA tests
Family Household Work	2-3-year-olds	6.5 (3.8)	=	5.6 (1.6)	$F(3, 54) = 8.45, p < .001, \eta_p^2 = .320$
		*		=	
	6-7-year-olds	13.4 (6.1)	*	7.7 (5.6)	
Self-care Chores	2-3-year-olds	2.6 (1.2)	=	3.0 (1.6)	$F(3, 54) = 4.49, p = .007, \eta_p^2 = .200$
		*		*	
	6-7-year-olds	4.6 (2.4)	=	4.3 (1.8)	

Note: Simple main effects indicated within tables with * (statistically different, $p \leq .05$) or = (statistically equal, $p > .05$), Bonferroni corrected.

All 6- to 7-year-old children's involvement in family household work, in both communities, was at least low-complexity (level 1) for one task. However, mid-

complexity involvement in at least 3 family household work tasks was reported for 67% of US Mexican-heritage EIP 6- to 7-year-olds and just 22% of European American ESE 6- to 7-year-olds. High-complexity involvement (level 3) was reported for 3 US Mexican-heritage EIP 6- to 7-year-olds and just one European American ESE 6- to 7-year-old.

Results: How extensive are children's contributions to *self-care chores*?

Like in family household work, there was no significant cultural difference at age 2-3 for the extent of children's contributions in self-care chores (see Table 1). The average range/complexity score was 2.6 in the US Mexican-heritage EIP community and 3.0 in the European American ESE community for 2- to 3-year-olds' contributions in self-care chores (SD = 1.2 and 1.6, respectively), *n.s.* There were no gender differences. All 2- to 3-year-olds in both communities were at least minimally involved in self-care chores, and most of their contributions were low complexity, such as picking up toys or putting away their own folded clothes.

As expected, the 'developmental puzzle' did not characterize the pattern of children's contributions in self-care chores between communities. Unlike their family household work contributions, 6- to 7-year-olds in the European American ESE community contributed in self-care chores to a similar extent as 6- to 7-year-olds in the US Mexican-heritage EIP community (there were no significant cultural differences in self-care chores at age 6-7, see Table 1). Also, 6- to 7-year-olds were reported to make more extensive self-care chore contributions than 2- to 3-year-olds in both communities. In the European American ESE community, children's average

range/complexity scores in self-care chores increased from 3.0 to 4.0 from ages 2-3 to 6-7, $p = .044$. In the US Mexican-heritage EIP community, children's average range/complexity scores in self-care chores increased from 2.6 to 4.6 from ages 2-3 to 6-7, $p = .004$. All 6- to 7-year-old children in both communities were at least minimally involved in self-care chores and typically made a few more mid-complexity contributions (such as making their own bed) than 2- to 3-year-olds.

The next section examines how voluntarily children were reported to make these contributions. The ways that children got involved help to explain patterns of cultural and developmental differences in the extent of children's helpfulness in work at home, and suggest different cultural patterns in the organization of children's participation in work at home

Study 1, Section 2. How Voluntarily Children Contribute in Work at Home

Coding how voluntarily children contribute. To examine whether US Mexican-heritage EIP children more voluntarily helped in work at home than European American ESE children, I used 5 non-mutually exclusive codes ranging from children regularly helping with initiative to children helping under contingent assignments. Prior research with older children suggests that US Mexican-heritage EIP children would more often contribute with initiative, and European American ESE children more often with contingent assignments (Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015). The codes for helping with initiative and under contingent assignment were based on the prior research; other codes were developed

in this study to account especially for forms of involvement that mothers reported for 2- to 3-year-old children.

Child regularly helps with initiative (Cohen's $k = .81$). The child expects to help and looks for ways to contribute to work at home, doing work that needs to be done like the rest of the family. Although the child may need assistance with some parts of the work, they do not require someone else to initiate or organize their efforts. Children's help is not negotiated, punished, or rewarded and is not assigned to them. The child generates the idea, interest, and motivation to help. Parents might sometimes notify the child to assume active responsibility for something the child expects to help with – a timing notification for a shared expectation.

Parent starts, child joins in to help (Cohen's $k = .72$). The child gets involved with household work that they notice a parent or sibling has started. The child might not remember or notice that the work needs to be done otherwise, or they may enjoy doing the work alongside someone else. The parent doesn't explicitly try to get the child involved.

Parent invites or child occasionally helps (Cohen's $k = .80$). The parent does not expect the child to get involved or contribute to the work, but reports that they do some work together if the child is interested. The parent doesn't insist and there's no punishment or scolding if the child chooses not to participate. The child might also occasionally volunteer to help, for example, by mixing ingredients when a parent is preparing a favorite meal or by occasionally picking up a broom to sweep when the child is bored.

Child helps when specifically requested (Cohen's $k = .80$). Parents make specific requests that the child does something, and the child does it. The request is needed for the child to get involved and help, even if the parent regularly asks that the child do this work. The parent may require children's compliance with the request, or not.

Child helps with contingent assignments (Cohen's $k = .69$). Assigned work is contractual, whether the contract is implied or explicit. For example, a parent might have assigned folding the laundry to the child as their regular chore. The assignment is enforced with contingent incentives – rewarding or punishing a child for doing the assigned work or not. For example, the parent and the child may have an agreement that if the child cleans their room during the week they will get their full allowance or permission to use electronics.

Using these five codes, mothers reports on how voluntarily children contributed in work at home were coded in two ways: First, the coder and I coded *all of the ways* that each child was reported to contribute (not mutually exclusively). For example, a mother child could report that her child joins in to help with the socks when a parent is folding laundry and takes out the recycling when the parent asks them to do it – each way the child got involved would be noted. Second, we used mothers' responses throughout the interview to determine which one of the 5 codes characterized the *main way* that the child contributed to family household work and self-care chores (coded mutually exclusively; inter-rater agreement was high, Cohen's $k = .85$). In other words, among *all of the ways* that a mother reported the child getting involved, the *main way* best characterizes how the child made contributions.

Results: How voluntarily do children contribute in *family household work*? As expected, at both ages, more US Mexican-heritage EIP children regularly helped with initiative in family household work than European American ESE children, whose involvement was more often contingently assigned (see Table 2, Figure 1 and Figure 2).

2- to 3-year-old children. Regularly helping with initiative was the *main way* that 30% of US Mexican-heritage EIP children but none of the European American ESE children contributed in family household work, a significant difference, $p = .009$ Barnard's Exact Test³ (BET), $h = 1.16^4$. Among *all ways* that mothers reported children getting involved, 85% of US Mexican-heritage EIP children regularly helped with initiative, which was reported for only 45% of European American ESE

children, $p = .008$ BET, $h = .88$. These US Mexican-heritage EIP mothers described children's contributions as rooted in children's autonomous desire to help the family.

European American ESE mothers' reports suggest the beginnings of using contingent assignments with their 2- to 3-year-olds, a practice that was common in middle-class families for 8- to 10-year-olds in several studies (e.g., Coppens et al., 2015). As expected, contingent assignment was one among *all ways* reported for 45% of European American ESE 2- to 3-year-olds but none of the US Mexican-heritage EIP children, a significant difference, $p = .001$ BET, $h = 1.47$. This practice may begin to communicate to middle-class children how parents expect them to be involved in work that benefits others. However, no mother in either community reported contingent assignments as the *main way* that 2- to 3-year-olds were involved, which is not surprising at age 2-3.

Interestingly, joining in with family household work when a parent or older sibling had started the task was the *most common* main way that 2- to 3-year-olds were reported to help, in both communities (60% of US Mexican-heritage EIP children and 70% of European American ESE children, *n.s.*). Across both communities and in equally high proportions, 2- to 3-year-old children appear to be drawn in by the social and/or productive aspects of work that is happening around them. This form of involvement may be a developmental seedling of some children's later collaborative initiative in helping the family.

6- to 7-year-old children. How voluntarily children were involved diverged between the two cultural backgrounds at age 6-7, from joining in to help in family

household work that others had started, which was prominent at age 2-3. Among US Mexican-heritage EIP children, involvement moved to regularly helping with initiative, whereas among European American ESE children, involvement moved to being involved under contingent assignments and requests (see Table 2).

By age 6-7, 78% of US Mexican-heritage EIP mothers reported regular initiative as the *main way* that children contributed to work that benefits others, and only 11% of European American ESE mothers did so, $p = .003$ BET, $h = 1.49$. Among *all ways* that 6- to 7-year-olds were reported to help with family household work, 89% of US Mexican-heritage EIP mothers reported children regularly helping with initiative, which was the case for only 33% of European American ESE children, $p = .010$ BET, $h = 1.24$.

Contingent assignment was the *most common* main way that European American ESE mothers (44%) involved 6- to 7-year-old children in family household work, and no US Mexican-heritage EIP mothers reported contingent assignments, a difference trending toward significance at $p = .020$, $h = 1.45$. Contingent assignment was reported by 67% of European American ESE mothers as one of *all ways* that 6- to 7-year-olds contributed, and was reported by only 11% of US Mexican-heritage EIP mothers, $p = .006$ BET, $h = 1.24$.

Specific requests were also commonly used by European American ESE mothers to get 6- to 7-year-olds involved in family household work: 67% of European American ESE mothers and just 22% of US Mexican-heritage EIP mothers reported specific requests as one among *all ways* that children helped, a difference trending

toward significance at $p = .038$ BET, $h = 0.94$. (This difference in specific requests was not significant as the *main way* that mothers reported; 33% versus 22%, respectively). Frequent reports by European American ESE mothers of using specific requests to involve children suggests they may hold minimal expectations for children helping voluntarily in work that benefits others (a tentative suggestion given marginal significance in tests of cultural differences in mothers' use of specific requests).

Table 2. Cultural differences in the percent of mothers reporting specific forms of voluntariness in how children contribute in work at home

	% of 20 mothers with a 2- to 3-year-old				% of 9 mothers with a 6- to 7-year-old			
	Main Way Child is Involved		All Reported Ways Child is Involved		Main Way Child is Involved		All Reported Ways Child is Involved	
	US Mexican-heritage EIP	European American ESE	US Mexican-heritage EIP	European American ESE	US Mexican-heritage EIP	European American ESE	US Mexican-heritage EIP	European American ESE
Family Household Work								
Child regularly helps with initiative	30 *	0	85 *	45	78 *	11	89 *	33
Parent starts, child joins in to help	60	70	85	80	0	11	33	22
Parent invites or child occasionally helps	10	25	35	70 +	0	0	22	78 +
Child helps when specifically requested	0	5	10	45 +	22	33	22	67 +
Child helps with contingent assignments	0	0	0	45 **	0	44 +	11	67 *
Self-care Chores								
Child regularly helps with initiative	55 **	5	60 **	15	78 *	11	78 *	11
Parent starts, child joins in to help	5	0	20 +	0	0	0	0	0
Parent invites or child occasionally helps	5	5	15	25	0	0	0	0
Child helps when specifically requested	30	35	50	50	22	22	33	33
Child helps with contingent assignments	5	55 **	30	70 *	0	67 *	22	67 +

Note Bonferroni-corrected statistical significance levels: ** $p \leq .002$ * $p \leq .01$ + $.01 < p \leq .05$

Results: How voluntarily do children contribute in *self-care chores*? In

self-care chores, the pattern – US Mexican-heritage EIP children regularly helping with initiative versus European American ESE children helping under contingent assignments – showed even more striking contrast than in family household work, at both ages (see Table 2).

2- to 3-year-old children. At age 2-3, 55% of US Mexican-heritage EIP mothers reported that regularly helping with initiative was children's *main way* of contributing in self-care chores, which was the case for just 5% of European American ESE mothers, $p < .001$ BET, $h = 1.22$ (see Table 2). Similarly, 60% of US Mexican-heritage EIP mothers reported initiative as one among *all ways* that their 2- to 3-year-old contributed, which was only reported by 15% of European American ESE mothers, $p = .002$ BET, $h = 0.98$. The predominance of US Mexican-heritage EIP 2- to 3-year-old children's initiative may be clearer in self-care chores than in family household work because children find it easier to start and accomplish these simpler tasks on their own.

By contrast, in the European American ESE community the predominance of contingent assignments may be clearer in self-care chores than in family household work because these mothers may focus children's helpfulness on being individually responsible for children's own things and spaces, not on helping others. At age 2-3, 55% of European American ESE mothers reported that children's *main way* of getting involved in self-care chores was under contingent assignment, which was the case for just 5% of US Mexican-heritage EIP mothers, $p < .001$ BET, $h = 1.22$. Among *all ways* that mothers reported 2- to 3-year-olds involved in self-care chores, 70% of European American ESE mothers reported contingent assignments, which was reported by only 30% of US Mexican-heritage EIP mothers, $p < .001$ BET, $h = 0.82$.

About one third of mothers in each community reported specific requests as the *main way* that 2- to 3-year-olds helped in self-care chores (30% in the US

Mexican-heritage EIP community and 35% in the European American ESE community, *n.s.*). Half of mothers in each community reported specifically requesting their 2- to 3-year-olds' help as one among *all ways* that the child was involved, usually for children to pick up their toys.

6- to 7-year-old children. The same clear cultural contrast between initiative and contingent assignments characterized how voluntarily 6- to 7-year-olds were involved in self-care chores: More 6- to 7-year-olds in the US Mexican-heritage EIP community (78% versus 11%) were reported to regularly help with initiative, and more 6- to 7-year-olds in the European American ESE (67% versus 0%) were involved based on contingent assignments. For brevity, I refer readers to Table 2 for findings among 6- to 7-year-olds in self-care chores.

Study 1, Section 3. Patterns of Possible Association Among Children's Age, and How Extensively and How Voluntarily Children Contribute in Work at Home

Based on suggestions in developmental research that age 2-3 may be a pivotal time in children's prosocial development, I also examined whether there were indications of the cultural divergence described by the 'developmental puzzle' *within* the sample of 2- to 3-year-olds in each community.

My findings suggest that US Mexican-heritage EIP children expand the range of tasks in which they make contributions and the complexity of their engagement in work that benefits others across childhood, between ages 2 and 3. US Mexican-heritage EIP children's age and the range/complexity of their contributions to family

household work were positively correlated *within* the age 2-3 group, $r = .632, p = .001$, as well as across ages 2-3 and 6-7, $r = .688, p < .001$ (see Figure 1).

Additionally, learning to help with collaborative initiative may be related to US Mexican-heritage EIP children making broader and more complex contributions in work that benefits others from early to middle childhood. Although not tested statistically, Figure 1 suggests that the youngest of these children begin to help in relatively small ways by joining in with others in tasks that are already started, but soon regularly and responsibly take initiative to help with work that benefits others. Longitudinal data are needed to test this possibility.

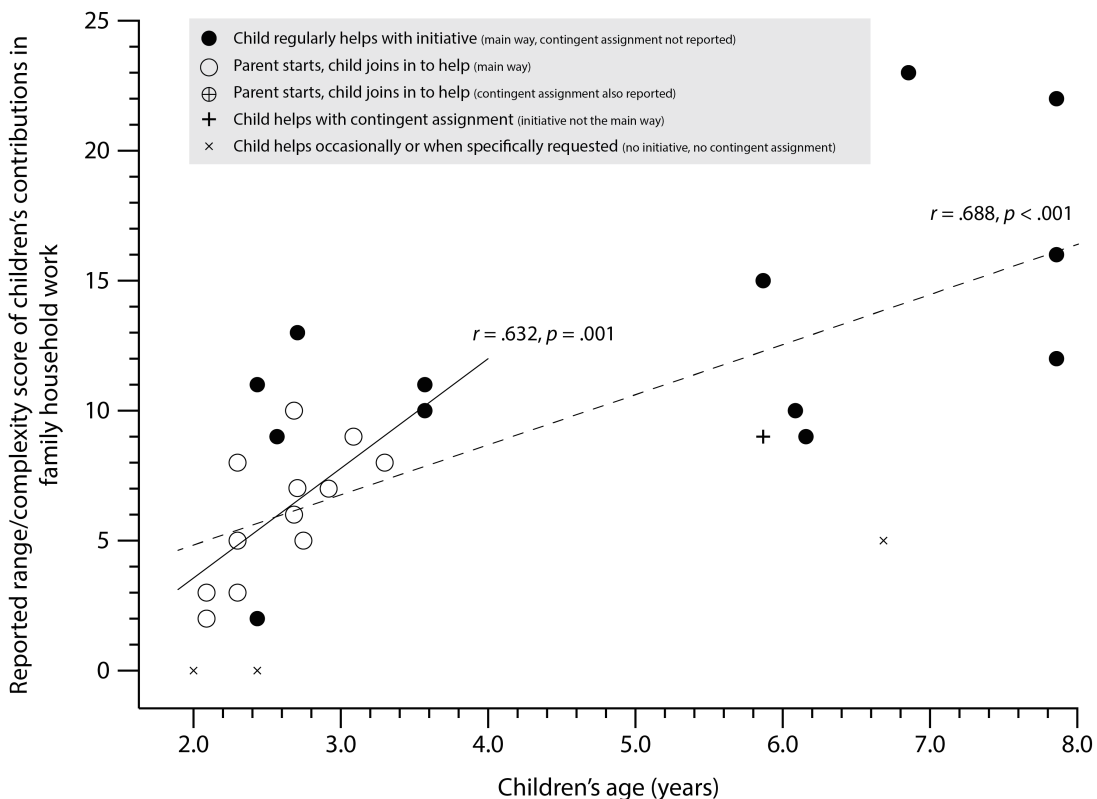


Figure 1. Scatterplot correlating US Mexican-heritage EIP children's age with the reported range/complexity scores of children's contributions in family household work, and showing relations with how voluntarily children were involved

In striking contrast, findings in the European American ESE community suggest, if anything, that 3-year-olds contribute *less* extensively than 2-year-olds in family household work, a negative correlation trending toward significance, $r = -.344$, $p = .069$ (see Figure 2). This possible narrowing of children’s helpfulness has some support in prior work. Hay and Cook (2007) suggest that from toddlerhood to early childhood, middle-class children become increasingly selective and “rule governed” as they learn how they are expected to be helpful. Across ages 2-3 and 6-7, there was no correlation between European American ESE children’s age and the extent of their contributions in family household work (see Figure 2).

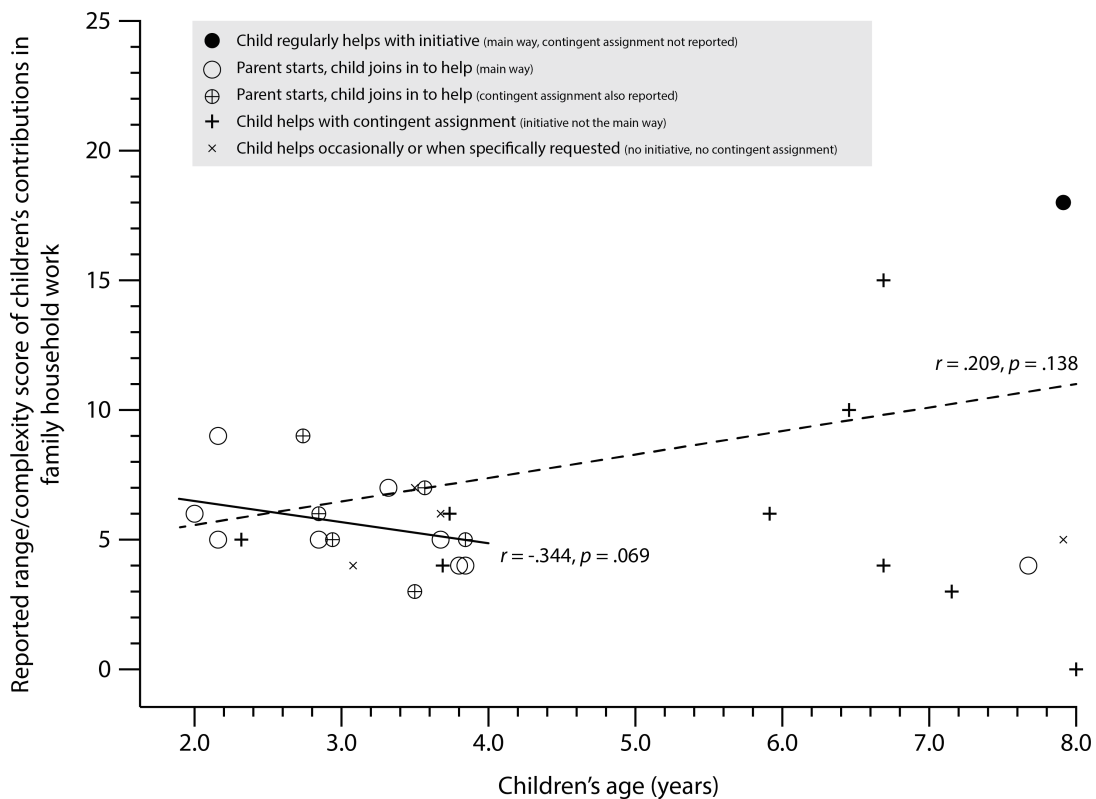


Figure 2. Scatterplot correlating European American ESE children’s age with the reported range/complexity scores of children’s contributions in family household work, and showing relations with how voluntarily children were involved

Among European American ESE children, joining in to help in work that benefits others (common among 2- to 3-year-olds) may shift toward helping with contingent assignments in year 3, with no indication of a positive association between this possible developmental shift and the extent of children’s helpfulness in family household work (see Figure 2).

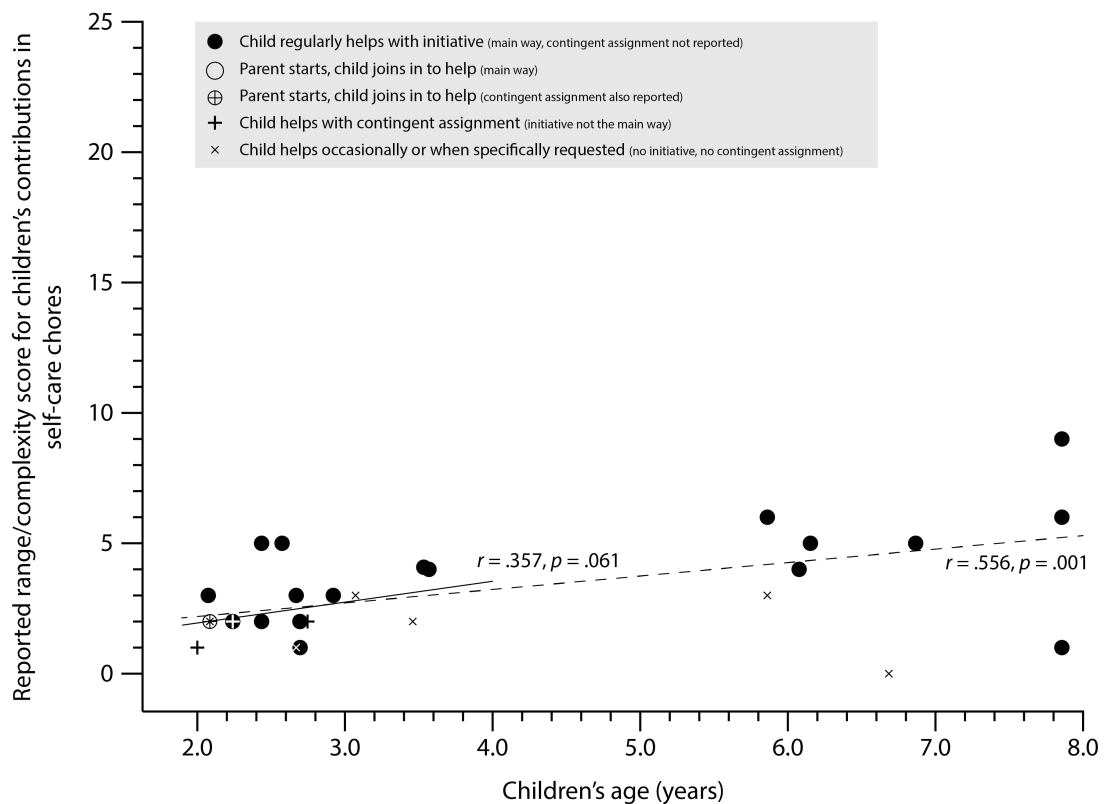


Figure 3. Scatterplot correlating US Mexican-heritage EIP children’s age with the reported range/complexity scores of children’s contributions in self-care chores, and showing relations with how voluntarily children were involved

In self-care chores, unlike in family household work, the discrepancy in range/complexity did not seem to exist, but the cultural contrast in voluntariness was strong. Findings showed a positive correlation between children’s age and the extent

of their contributions in both communities from age 2-3 to 6-7, and a trend toward significance within age 2-3 in each community (see Figure 3 and Figure 4). As in prior sections, the most striking cultural differences regarding children’s contributions to self-care chores at both ages were how consistently US Mexican-heritage EIP children were reported to help with collaborative initiative in versus how consistently European American ESE children were involved based on contingent assignments.

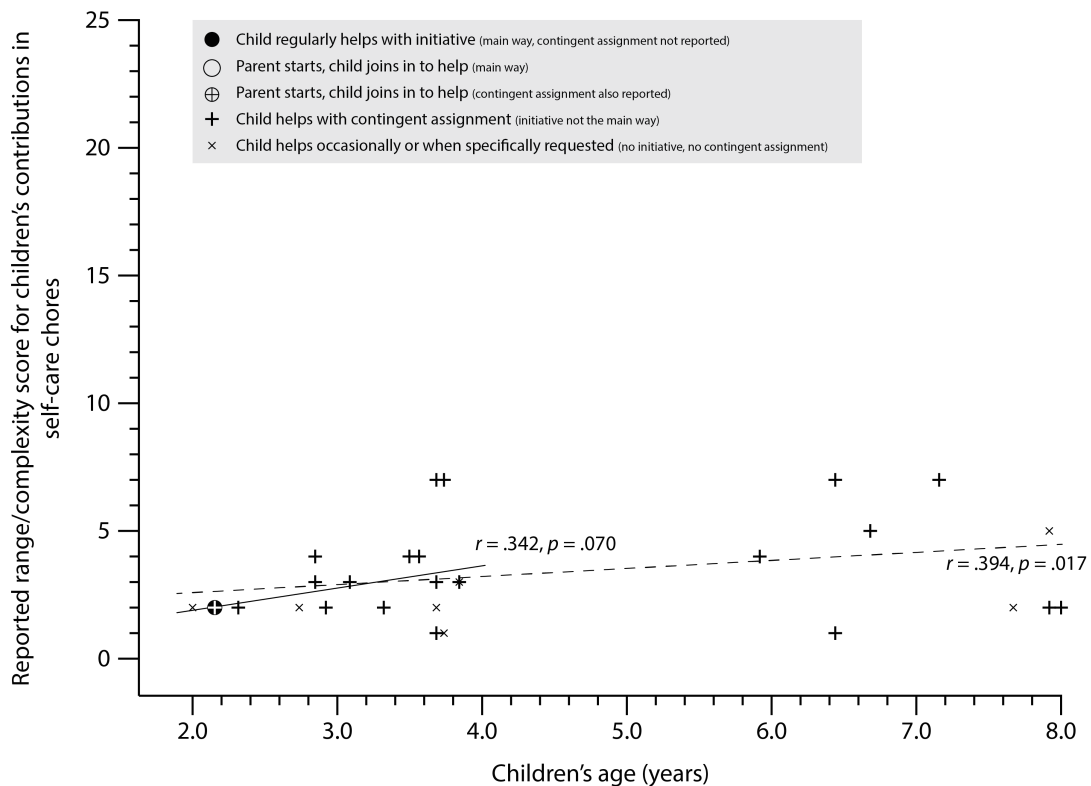


Figure 4. Scatterplot correlating European American ESE children’s age with the reported range/complexity scores of children’s contributions in self-care chores, and showing relations with how voluntarily children were involved

Summary of Study 1

Study 1 confirms the existence of the ‘developmental puzzle’ that I noted based on bringing together separate literatures: The Mexican-heritage EIP and

European American ESE toddlers helped others in their families to a similar extent and level of complexity. At age 6-7, many middle-class European American children helped relatively little, and no more than 2- to 3-year-olds in their community, whereas 6- to 7-year-olds in the US Mexican-heritage EIP community made extensive and complex contributions to work that benefited others.

Nearly all children in both communities were interested in helping in family household work at age 2-3, voluntarily joining in to help with work that others were doing. However, the way that older children got involved shifted to either helping with initiative (the predominant pattern among US Mexican-heritage EIP children) or to being involved under contingent assignments (the predominant pattern among European American ESE children). Interestingly, this contrasting pattern was also found at age 2-3 between the two cultural backgrounds, suggesting an early developmental emergence of the voluntariness patterns that characterized the 6- to 7-year-olds' reported involvement.

Why do children from these two backgrounds diverge in their prosocial helping? The findings of Study 1 suggest two possibilities: First, there may be an interesting link between helping with initiative and extensive, complex engagement in family household work. In both communities, the children who were reported to help under their own initiative made the most extensive/complex contributions to family household work. Second, as suggested earlier, it is possible that joining in to help others may be an early way of getting involved in work at home that *can*, under some circumstances, transition into children helping autonomously, with collaborative

initiative. Whether or not children's development builds on this apparent early interest in helping may relate to the ways that parents support or attempt to compel children's involvement in everyday work at home.

Coding and Results – Study 2:

Mothers' Roles and Rationales in Children's Work at Home

The questions of Study 2 build on the background provided by Study 1. Study 2 examines the ways that mothers report involving children in work at home, which may help to explain cultural differences in children's contributions. Family and community support for children's involvement in work that benefits others, including how parents respond to children's attempts to help and the opportunities they provide for children's participation, may play an important role in whether this early interest in helping continues to expand into middle childhood.

The first section of Study 2 reports mothers' ways of involving their children in work at home, and the second section examines mothers' developmental theories regarding children's learning and motivation in work at home, providing indications of the rationale behind mothers' approaches. Each section starts with information on coding categories relevant to the section, followed by results.

Study 2, Section 1. Mothers' Reported Roles in Their Children's Work at Home

Overall, predictions were that more US Mexican-heritage EIP mothers would include children collaboratively in shared work at home, whereas more European American ESE mothers would distance children's involvement from the activities of others. European American ESE mothers were predicted to avoid involving children

in work at home or substitute a non-productive activity for the child (especially at age 2-3), or to control children's involvement in the work (especially at age 6-7).

Coding mothers' overarching approaches to involving children in work at home. Mothers' overarching approaches to involving children in work at home were coded in three mutually exclusive categories, with high inter-rater agreement (Cohen's $k = .87$). Coding categories were derived from ethnographic examination of mothers' interview responses and built theoretically from prior work. See sections below and Table 3 for examples of mothers' explanations of their overall approaches.

Collaborative involvement in shared work. The mother and child contribute together, sharing goals in a mutual endeavor. They may work on related tasks at different times, but are jointly committed to, for example, keeping things tidy. Mothers' guidance in doing the task well can be part of the process, and everyone collaborates toward shared productive purposes.

The mother *avoids child involvement or substitutes a non-productive activity.* Mothers try to do work without children present or send the child away to non-work activities. Mothers may focus the child on an activity that resembles what the mother is doing or uses the same space or materials, but has different goals and thus mother and child are doing different activities.

Controlled involvement in 'adult work', by either assigning chores with contingencies or by controlling each step of child's involvement, such as the timing or which parts of tasks children take part in.

Results: At age 2-3, what are mothers' overarching approaches to involving children in work at home? Nearly all US Mexican-heritage EIP mothers (90%) reported encouraging *children's collaborative involvement in shared work*, building on children's interest in taking part and helping children to find ways to contribute (see shaded grey areas of Table 3). These mothers reported contributing together with children, with skill-appropriate but not separate roles for adults and

children. Only 10% of the European American ESE mothers reported such collaborative inclusion, a significant difference, $p < .0001$ BET, $h = 1.85$.

Table 3. Percent of mothers reporting three mutually exclusive overarching ways they involve their children in work at home (bold, shaded grey), and their non-mutually exclusive explanations within each way

	% of 20 mothers with a 2-3-year-old		% of 9 mothers with a 6-7-year-old	
	US Mexican-heritage EIP	European American ESE	US Mexican-heritage EIP	European American ESE
Collaborative Involvement in Shared Work	90 ***	10	89 **	22
Explanations:				
Parent and child contribute together; it's normal and expected	80 ***	10	78 *	11
Parent and child contribute together; it's valued for children learning to contribute	80 ***	5	67 +	11
Parent helps the child to help (with instruction, demo, or matching their eagerness to an appropriate part of the task)	80 ***	5	67 *	0
Parent encourages the child's initiative by emphasizing autonomy, not insisting on or obligating children's help	60 ***	5	56	11
Parent encourages the child's initiative by providing <i>consejos</i> about being responsible and/or <i>acomodado</i>	60 ***	0	33	22
Avoids Child Involvement or Substitutes a Non-Productive Activity	5	60 ***	0	33
Explanations:				
Parent avoids the child getting involved, only working when the child is not present or directing the child to do unrelated activities, e.g., "go play"	5	50 *	0	33
Parent substitutes 'mock work' that doesn't contribute, but aims for children to feel as if they are helping	0	40 *	0	0
Parent substitutes 'enrichment' activities that don't contribute to the work, such as scholastic lessons, preschool-like activities, or discovery play	5	40	0	22
Controlled involvement in 'Adult Work,' by assigning chores with contingencies or controlling each step of child's involvement	5	30	11	44

Note Bonferroni-corrected α levels for:
 Mothers' reported 3 distinct mutually exclusive ways (bold, shaded grey): + .017 < $p \leq .033$ * $p \leq .017$ ** $p \leq .003$ *** $p \leq .0003$
 Mothers' reported non-mutually exclusive explanations of main ways: + .006 < $p \leq .01$ * $p \leq .006$ ** $p \leq .001$ *** $p \leq .0001$

In contrast, 60% of European American ESE mothers reported actively *avoiding their 2- to 3-year-old's involvement in work or substituting a non-productive activity for the child*, which was significantly more than the 5% of US Mexican-heritage EIP mothers who reported such avoidance, $p < .001$ BET, $h = 1.57$. Mothers

reporting avoidance gave varied explanations and reasons for this approach, such as concerns about doing work efficiently and frustration with children's limited skills (reported in more detail below).

Some mothers in both communities also reported involving their 2- to 3-year-old children with *controlled involvement in 'adult work'*, assigning chores with contingencies to get children involved or controlling each step of children's involvement to delimit how children were allowed to participate in the adults' work (30% of European American ESE mothers and 5% of US Mexican-heritage EIP mothers, *n.s.*). Mothers' explanations are briefly described below.

Mothers explain their overarching approaches to involving their 2- to 3-year-old children in work at home. The next subsections present mothers' explanations for either collaborating with children or avoiding their involvement in productive aspects of the work. Coding of the type of explanation was based on ethnographic examination of mothers' responses (inter-rater agreement statistics are given below). Most mothers gave several types of explanations. Table 3 lists all types of explanations with frequencies and significance.

Explanations of collaborative involvement in shared work. Mothers' explanations of their collaborative engagement in work with children included five inter-related, but separately coded, aspects: two related to the parent and child contributing together, one related to parents helping children to help, and two related to parents encouraging children's initiative. Throughout, more US Mexican-heritage

EIP mothers gave these explanations than European American ESE mothers (see Table 3).

Explanation: The mother and child contribute together; it's normal and expected (Cohen's $k = .75$). Mothers reported children's involvement in work as normal and not a particular burden, and did nothing out of the ordinary to involve children in work at home because children were ordinarily involved. Mothers expected children to help in ways that are appropriate given the child's level of skill, and also expected messes or taking a bit more time to do the task with children. Mothers reported involving children in ways designed to prevent children from learning to dislike working.

More US Mexican-heritage EIP mothers (80%) explained that it's normal and expected that 2- to 3-year-old children are productively involved in family work, compared with 10% of European American ESE mothers, $p < .0001$ BET, $h = 1.57$. These mothers did not describe children's involvement as something that requires special plans or needs to be "dealt with" or planned around. They commonly described work at home as an opportunity to "*convivir*" – to grow closer by spending family time together. Relatedly, 7 mothers reported that children's involvement is mutually enjoyable for the mother and child.

Explanation: The mother and child contribute together; it's valued for children learning to contribute (Cohen's $k = .57$). Mothers reported that children's involvement in work at home accomplishes the goal of children learning to help and be helpful, which mothers valued and prioritized when organizing how work gets

done around the house. In these mother's reports, children's access to involvement supports children in learning to be helpful.

More US Mexican-heritage EIP mothers of 2- to 3-year-olds (80%) explained that mothers and children contributing together is important for children learning to contribute, compared with 5% of European American ESE mothers, $p < .0001$ BET, $h = 1.76$. One US Mexican-heritage EIP mother explained that she would feel good about a child's interest in helping:

'Bueno, mi hijo quiere enseñarse.' Quiere, no sé, ya entrar a la familia como de, 'Vamos a hacerlo para nosotros mismos.' Como es algo bien. Yo siento que me sentiría bien porque ya esos niños quieren entrar al círculo de 'Vamos a hacerlo todos juntos.' Yo pienso que [me sentiría] bien.

'OK, my child wants to learn.' [The child] wants to, I don't know, begin to become part of the family, like 'We're going to do it for ourselves.' Like it's something good. I think I would feel good because these children already want to be part of the circle that, 'We're all going to do it together.' I think [I'd feel] good.

For many of these mothers, inefficiencies that arose when their 2- to 3-year-old child was involved in work at home did not compromise their support of children's opportunities to learn. For example, one US Mexican-heritage EIP mother rejected the idea that a 2- to 3-year-old's interest in helping would be frustrating, in her response to a question stemming from the first scenario:

Entrevistadora: ¿En su opinión, como se sentiría el pariente sobre el deseo de ayudar de Sara?

Madre: Yo pienso que le debería de ayudar.

Entrevistadora: Y se sentiría...

Madre: [interpone] ¿Frustrada? No.

Entrevistadora: ¿No?

Madre: No. Yo pienso que estuviera mejor para que [la niña] aprenda a hacer, pues, las cosas diferentes.

Interviewer: In your opinion, how would the parent feel about Sara's desire to help?

Mother: I think the child should help her.

Interviewer: And the parent would feel...

Mother: [interjects] Frustrated? No.

Interviewer: No?

Mother: No. I think it would be better [for her to help] so that the child learns to do, well, the different things.

Mothers valued 2- to 3-year-olds' interest in getting involved and helping with household work as an important developmental process rooted in children's meaningful incorporation in mature productive endeavors. Ensuring children's open access to the work was an important aspect of their approach. For example, a US Mexican-heritage EIP mother reported how her 2- to 3-year-old got started helping with the laundry:

Madre: Pues, de principio la llevaba y poco a poco pues va ella mirando cómo a veces pongo el jabón, ¿verdad? O echando la ropa. Y es ahí cuando se motiva. Ahí ve y quiere hacerlo.

Entrevistadora: Porque está ahí con Ud.

Madre: Sí, porque está ahí conmigo.

Entrevistadora: ¿Y cómo? ¿Se motiva a ayudar o se motiva a estar ahí con Ud.?

Madre: No, se motiva a ayudar.

Mother: Well, at first I brought her along and little by little she was watching how I sometimes add the soap, you know? Or, adding the clothes. And it's there that she gets motivated. She sees and wants to do it.

Interviewer: Because she's there with you.

Mother: Yes, because she's there with me.

Interviewer: But how? She gets motivated to help or gets motivated to be there with you?

Mother: No, she gets motivated to help.

*Explanation: The mother **helps the child to help** (Cohen's $k = .76$). The mother reported aiming to improve, not control, the child's participation – guiding children in how best to be helpful, in doing work correctly, or preventing danger. Mothers provided instruction, demonstration, or changed how or when an activity is done to match the child's interest in helping in an appropriate part of the task.*

More US Mexican-heritage EIP mothers (80%) reported helping their 2- to 3-year-old to help in work at home, compared with 5% of European American ESE mothers, $p < .0001$ BET, $h = 1.76$. These mothers reported prioritizing the

improvement of 2- to 3-year-old children's contributions in shared endeavors with instructions on how to do things correctly and safely, whether verbal or through demonstration, or by matching children's capabilities, skills, and interests to an appropriate part of the productive activity.

Explanation: The mother encourages the child's initiative by emphasizing autonomy, not insisting on or obligating children's help (Cohen's $k = .91$). To support children being helpful, some mothers reported that obliging or insisting on their involvement was regarded as inappropriate. They objected to rigid rules about who does what for organizing work at home. Children's participation was flexible, and mothers explained that it is important for children to help voluntarily.

More US Mexican-heritage EIP mothers (60%) explained that it is important to encourage a 2- to 3-year-olds' initiative by emphasizing autonomy, not insisting on or obligating children's help in work at home, compared with 5% of European American ESE mothers, $p < .001$ BET, $h = 1.32$. These mothers viewed autonomy-supportive approaches as essential to young children's developing prosocial orientation – children's interest in getting involved in work was regarded as an important indicator of both children's desire to collaborate and their readiness to learn. A few mothers reported that children helping with “*mala ganas*” (contributing reluctantly, or half-heartedly) is undesirable, and likely a consequence of obligating children's contributions. Another US Mexican-heritage EIP mother responded,

Los [niños] que ayudan, muy bien. Y los que no, pues también porque no podemos obligarlos a que ayuden. Enseñarlos, pienso, desde pequeños. Enseñarlos, y ya después depende de ellos.

The [children] that help, very well. And those that don't, also [the same], because we can't oblige them to help. Teach them, I think, starting when they're young. Teach them and after that it depends on them.

Relatedly, one US Mexican-heritage EIP mother reported that requesting her 2- to 3-year-old's help, aside from possibly being inappropriate, simply didn't work. Her child was interested in contributing to joint efforts, and she engaged along with him.

Madre (speaking in Spanish and English): Ahorita, si le digo 'recoge tus juguetes' he won't do it on his own. Like, I have to kind of help him and then he'll participate too.

Mother: Right now, if I tell him 'pick up your toys' he won't do it on his own. Like, I have to kind of help him and then he'll participate too.

*Explanation: The mother encourages the child's initiative by **providing consejos about being responsible and/or acomedido** (Cohen's $k = .59$). Mothers reported communicating to children that children's involvement is valued. This was during or outside of actually getting the work done.*

Sixty percent of US Mexican-heritage EIP mothers reported encouraging the 2- to 3-year-old children's initiative by providing *consejos* about being responsible and/or *acomedido*. No European American ESE mothers reported encouraging children in the importance of collaboration in this way, $p < .0001$ BET, $h = 1.77$. Mothers who reported using these guiding conversations connected them to a collaborative approach with children, where parents and children work together in shared endeavors – this feature distinguished *consejos* about sharing family responsibilities from conversations that were more like scolds, which some European American ESE mothers used to control and manage children's involvement in work at home. Several mothers described *consejos* that emphasized both children's autonomy to help or not along with family expectations that everyone helps, e.g., “*Todos en la*

casa tenemos que colaborar con algo.” [“Everyone in the house, we all have to collaborate in some way.]

Explanations of avoiding child involvement or substituting a non-productive activity. Mothers provided three types of explanations of their approaches to preventing children from making meaningful contributions to mature work endeavors. (See Table 3 for frequencies and significance.)

Explanation: The mother directly avoids the child getting involved (Cohen’s $k = .87$). Mothers reported intentionally doing work at times when the child cannot take part (such as when children are sleeping) or directing children away from involvement in work, for other reasons than safety (e.g., “go play”).

Fifty percent of European American ESE mothers explained avoiding their 2- to 3-year-old child getting involved in work at home, compared with just 5% of US Mexican-heritage EIP mothers, $p = .002$ BET, $h = 1.12$. Some mothers reported a ‘divide and conquer’ approach, where one parent entertains the child so the other parent can get chores done without children attempting to take part. A few European American ESE mothers reported avoiding their child’s involvement because they valued the solitude. Many mothers that avoided their child’s involvement in work at home had reasons based in concerns about “efficiency.” For example, one European American ESE mother reported:

I usually do major cleaning after the kids have gone to bed, because they’re not in the way. Plus, I would rather spend my kids’ awake time being a mom and playing, and not cleaning.

Related assumptions that parents' quality time with children involves playing and not working and that 'being a kid' should be more about playing than helping may also be entailed in approaches that avoid children's involvement in work.

Many European American ESE mothers (55%) reported that time pressure⁵ to "get everything done" or "fit everything in" meant often choosing to exclude their 2- to 3-year-old child from work at home, even if children were interested to help, compared with only 10% of US Mexican-heritage EIP mothers, a significant difference, $p = .002$ BET, $h = 1.03$. Some mothers expressed dissatisfaction with the outcomes of this approach and "wish[ed] they could include children," but didn't see an alternative to avoiding children's involvement. (Also at age 6-7, time pressure was a reason to avoid children's involvement for 44% of European American ESE mothers and no US Mexican-heritage EIP mothers, $p = .020$ BET, $h = 1.45$.) One European American ESE mother of a 2-year-old reported:

I like the idea of them being part of the family and contributing. Um, it's interesting because I think I had more ideas of that before I had him, or maybe when he was a baby. You know, I carried him everywhere. I just wore him, and so he did everything with me. I had more of this vision of him being more involved with everything. Now, the reality is that sometimes... it is just kind of easier if he plays and I do something.

By contrast, many US Mexican-heritage EIP mothers reported enjoyment in sharing work with children, passing time together while getting things done, even though they reported that young children's participation in work at home often slows things down until children learn how to do things well.

In the interest of efficiency, 2 European American ESE mothers (and no US Mexican-heritage EIP mothers) reported submitting to the child's involvement, because saying no to their 2- to 3-year-old might result in a struggle or tantrum or

because it helps to keep the child occupied and supervised. No US Mexican-heritage EIP mother reported this explanation. One European American ESE mother reported,

You're in a hurry and you just want to do it, like, 'Get your shoes on, get your shoes on, get your shoes on. Hurry up!', right? But it just, most of the time, doesn't work out very well, so I think at this point I'm at the point where like, if she wants to help it's good. And actually sometimes I'll try to get her to help because it will keep her busier instead of actually like trying to [pauses], I don't know. Instead of disrupting what I'm doing, she's like, it's a project that she can do. And, you know, it might not help as much as like an adult doing it, but it keeps her busy and gives her something to do.

Explanation: The mother substitutes 'mock work' that doesn't contribute

(Cohen's $k = 1.0$). Forty percent of European American ESE mothers reported using 'mock work' as an attempt to distract their 2- to 3-year-old child from trying to contribute while responding positively to the child's interest in helping, to have children think they are helping without actually allowing their involvement. The distraction strategy was to 'trick' children into believing that what they're asked or given to do was a real contribution. No US Mexican-heritage EIP mothers reported this approach, a significant difference, $p = .002$ BET, $h = 1.37$. Below are examples of 'mock work' from three European American ESE mothers:

Oh, she loves to sweep but I usually um, I sweep an area and then I move somewhere else and I go, 'Oh, Jessica do you want to help me sweep?' and then I have her go back to the area that I've already done. Otherwise, you know how kids sweep, like [in frustration] 'gah, ugh!'

I've multiple times, if the kids want to help me cook and I'm cooking, I will give them the same ingredients in a separate bowl and just let them make a huge mess. I don't care. And I actually do the [cooking].

I was putting away clothes the other day and she wanted to fold them all. So I kind of gave her a pile and she made different piles and, you know, made a total mess. But I knew it was only going to take a minute to scoop 'em up and do it again. But it gave me the time to do the stuff that I needed. So, I kind of give her projects that I think she'll feel like she's helping, but that I can kind of do my own thing.

Explanation: The mother substitutes ‘enrichment’ activities that don’t contribute to the work (Cohen’s $k = .78$). Mothers described organizing ‘educational’ or ‘exploration’ activities, which they regarded as more valuable for the child than contributing to work at home. They reported focusing the child on counting, labeling shapes, measuring, estimating weight, practicing memory, learning new vocabulary, and so on, or allowed the child to playfully ‘explore’ work spaces and materials without mothers being interested in the child making a contribution. This approach is distinct from making productive work enjoyable (e.g., by putting on music), which other mothers reported as part of a collaborative approach.

Forty percent of European American ESE mothers described substituting ‘enrichment’ activities that don’t contribute, in response to the child’s interest in helping. Just 1 US Mexican-heritage EIP mother reported this approach with her 2- to 3-year-old, *n.s.*

Mothers who used this approach repurposed or subordinated productive aspects of work at home in service of child-specialized activities that they felt were more valuable for their 2- to 3-year-old. For example, one European American ESE mother described how she narrates the visual details of folding a bed sheet, teaching the child geometric concepts and emphasizing sensorimotor exploration. Another European American ESE mother made a special weekly effort to bake muffins with her child to “make it more educational throughout the day,” but did not involve the child in cooking daily meals. This mother explicitly connected her approach with Waldorf and Montessori educational philosophies throughout the interview, which

she valued. Some mothers reported pausing their work to allow children to momentarily take over the materials to play, explaining that children were not trying to contribute, and mothers did not report encouraging them to do so. For example, one mother reported letting her 2- to 3-year-old “splash around with the water” for a few minutes at times when she washes dishes.

Explanations of controlled involvement in ‘adult work’. One of the three overarching approaches that mothers reported at age 2-3 was *controlled involvement in ‘adult work’*. I did not expect much of this at this early age. As reported above, differences between the communities were not significant, although 30% of European American ESE mothers and only 5% of US Mexican-heritage EIP mothers reported this approach. Two ways of controlling children’s involvement were common.

Some mothers described using assignments to make rules about doing chores explicit for children, and to be able to enforce children’s compliance. Ten percent of European American ESE mothers and 5% of US Mexican-heritage EIP mothers reported *controlling the child’s involvement by assigning chores with contingencies* (Cohen’s $k = .78$), which permitted the child’s involvement in only approved tasks. Some European American ESE mothers reported children’s contributions in terms of chores that mothers “have” them do, reflecting a paradigm of assigned work that may not allow for children’s initiative or their ability to make autonomous decisions to help (a suggestion with support in prior work, Coppens et al., 2015).

Twenty percent of European American ESE mothers and no US Mexican-heritage EIP mothers reported *keeping step-by-step control of the child’s involvement*

in work at home (Cohen's $k = .62$). This was sometimes to dampen the mother's own frustration with their 2- to 3-year-old child's interest in getting involved, or to control how a task was done. A European American ESE mother described how she controls her children's participation in cleaning up spilled food such that the work becomes an individualized endeavor for the child:

Next to the dinner table we have a taped-out square and if *they* spill food during dinner they have to sweep everything into the square, which kind of helps them to get it all there and then you [gestures] with the dustpan... It's, '*you* made the mess; *you have to* clean it up.' [Italics added to reflect mother's vocal emphasis.]

By arranging for work at home to be divided into individualized efforts and responsibilities, mothers may preclude children's opportunities for collaboration in mature work endeavors – 'let's clean up after dinner' becomes 'clean up your mess'.

At age 6-7: An exploratory analysis of how mothers involve children in work at home. Reports regarding mothers' ways of involving 6- to 7-year-olds were secondary in this study – they were primarily included to check the range/complexity and voluntariness of their contributions. The few families that were recruited were sufficient for the analyses of Study 1, but were a small group for the analyses of Study 2. Hence, I report here cultural differences only in the three overarching approaches to involving children, mentioning only briefly the explanations given. See Table 3 for frequencies and significance.

At age 6-7, most US Mexican-heritage EIP mothers (89%) reported children's *collaborative involvement in shared work*, which was rare among European American ESE mothers (22%), a significant difference, $p = .003$ BET, $h = 1.49$. The US Mexican-heritage EIP mothers of children ages 6-7 usually reported that this is

normal and expected, valued for children learning to contribute, and supported by assisting the children in being able to help.

At age 6-7, most European American ESE mothers reported either avoiding or controlling their child's participation in work at home. Thirty-three percent reported that they *avoid the child's involvement or substitute a non-productive activity* (such as an enrichment or discovery activity) when their 6- to 7-year-old attempted to get involved, which was reported by no US Mexican-heritage EIP mother with a 6- to 7-year-old, *n.s.* Another 44% of European American ESE mothers with a 6- to 7-year-old reported *controlling children's involvement in 'adult work'*, which was reported by just 1 US Mexican-heritage EIP mother, *n.s.*

The next section examines mothers' developmental theories regarding children's learning and motivation in work at home. These theories may inform the ways that mothers choose to approach children's involvement in work, and may also help to explain cultural differences in children's contributions.

Study 2, Section 2. Mothers' Developmental Theories Regarding Children's Motivations to Help, and Relations with Their Approaches to Children's Helpfulness

Findings in this section report clear cultural differences in mothers' assumptions and developmental theories about what can be expected of children in help around the house, whether children are actually motivated to help when they get involved, and what parents' roles are in supporting children's helpfulness. Most US Mexican-heritage EIP mothers thought that children's voluntary help can be expected

– children were thought to be motivated to help with shared work and parents role is to support this interest, not needing to ‘instill’ this sense of responsibility. By contrast, most European American ESE mothers thought that children can’t be expected to contribute voluntarily, and that children wouldn’t want to – parent intervention was regarded as necessary to direct children toward responsible and helpful dispositions in work at home.

Mothers’ values regarding children helping voluntarily. Toward the end of the interview, mothers were asked, “Is it important for children to help without being asked?” (Coding was yes/no, Cohen’s $k = .81$).

Most US Mexican-heritage EIP mothers began responding to the question before its asking was complete, and their views were unequivocal: 95% of these mothers with a 2- to 3-year-old and 89% with a 6- to 7-year-old stated that for children to help without being asked, take initiative to help and be *acomodida/o*, was fundamental to what they valued and expected of their child’s development. They reported that helping without being asked is central to valued forms of children’s learning, socializes children to collaborative family work, and helps children develop a desire to contribute to the family with purpose. Just 20% of European American ESE mothers with a 2- to 3-year-old and 33% with a 6- to 7-year-old held similar views, significant differences, $p < .0001$ BET, $h = 1.76$ and $p = .020$ BET, $h = 1.24$, respectively.

It is revealing that many European American ESE mothers were initially puzzled by this question. Many hesitated in responding, some laughed incredulously,

and others hemmed and hawed about whether they care if children help without being asked. Nearly all of these mothers stated that helping without being asked is an unrealistic expectation that might be possible when children are older and have formed or been trained in responsible habits. One European American ESE mother of a 2- to 3-year-old responded,

Not at this age. That would be miraculous. It has happened, and I was like, 'Oh my gosh! You cleaned that up, that's amazing!'... At 3, I'm not really expecting it. Don't they have like an immature prefrontal cortex or something, and they cannot plan ahead. I don't know.

What are children interested to do when they attempt to get involved with work at home? Mothers' views on what children are interested or motivated to do when they attempt to get involved with work at home were coded in three non-mutually exclusive categories, based on ethnographic examination of mothers' interview responses:

Sharing work (Cohen's $k = .54$). Children get involved in work at home to help collaboratively and productively, to make contributions with others in shared endeavors. Children want to be a productive part of what others are also working to accomplish.

Personal fulfillment in work (Cohen's $k = .62$). Children are drawn to work by what they personally get out of it, such as a sense of accomplishment in figuring things out or skills gained. Children want to be competent and feel confident when they get something done.

It's not about the work (Cohen's $k = .77$). Children get involved for reasons unrelated to making work contributions. Helping with the work isn't important, or possibly even appreciated by children. Children may just want to spend time with the parent, regardless of what they are doing. Children might also "just want to play," not recognizing that work is going on or not being interested. Mothers might also link children's motivations to receiving rewards and praise or avoiding punishments and scolds.

Coding was non-mutually exclusive because some mothers reported children having different kinds of motivations for different household tasks. Mothers' reports for 2- to 3-year-olds are included below, and Figure 5 shows findings for both ages. Mothers' reports were nearly identical at ages 2-3 and 6-7.

Most US Mexican-heritage EIP mothers (85%) claimed that 2- to 3-year-old *children want to contribute with others in shared work* at home when they get involved; only 25% of European American ESE mothers did, a significant difference, $p < .0001$ BET, $h = 1.30$. For the US Mexican-heritage EIP mothers, working together — where the social and productive aspects of the child's collaborative activity are inseparable in children's motivation to take part — is a key motivation for children. They commonly referred to children's desire to *enseñarse* (to teach one's self) to make family contributions with *empeño* or *ganas* (to work wholeheartedly), and that a parent's role was to support children in this endeavor. One US Mexican-heritage EIP mother stressed that her 2- to 3-year-old intends to help, even if what he does is not that helpful:

A veces agarra el trapeador y se pone a trapear él. Yo sé que no está limpiando... pero está limpiando, él está ayudando. O pone los juguetes en su lugar aunque no los acomoda como debería, pero está ayudando.

Sometimes [the child] takes the mop and he gets to mopping. I know he's not cleaning... but he is cleaning, he is helping. Or, he puts the toys away in their place even though he doesn't arrange them as he should, but he's helping.

The mothers often expressed these assumptions about children's motivation to help in work at home implicitly when describing children's participation. For example, many US Mexican-heritage EIP mothers reported children's participation in work at home

as helping (e.g., “When I’m in the kitchen and my child comes in to help me...”), which was seldom the case for European American ESE mothers.

Three quarters of mothers in each community assumed that 2- to 3-year-old *children are motivated by personal fulfillment* when they attempt to help in work at home, *n.s.* For example, about two-thirds of these mothers in each community reported that 2- to 3-year-olds derive personal satisfaction in figuring out how to accomplish work tasks or how to work the materials to get things done. Three of these mothers in each community reported that 2- to 3-year-olds like to help in order to feel responsible.

The majority of European American ESE mothers (70%) also claimed that 2- to 3-year-old *children’s motivation to take part in some work at home is not about the work at all*, which was the case for only 25% of US Mexican-heritage EIP mothers, $p = .002$ BET, $h = 0.94$. Some mothers reported that children want to spend time with their parents, regardless of ongoing work. For others, children get involved in work at home simply to play, with little awareness that work is happening or little interest in helping. Other European American ESE mothers connected children’s motivation to take part in work with receiving rewards or avoiding punishments.

Does motivating children to be helpful and responsible in work at home require adult intervention, because helping with initiative is not natural for children? Inter-rater agreement on this coding was high (Coding was yes/no, Cohen’s $k = .81$). The idea of ‘helping children to help’ was central to US Mexican-heritage EIP mothers’ assumptions about a parent’s role in guiding children’s

helpfulness, whereas most European American ESE mothers assumed that parents had a necessary responsibility for motivating children to help in work at home.

Fully 95% of US Mexican-heritage EIP mothers reported that 2- to 3-year-old children's motivation to help is "born within them" ("*le nace ayudar*"), and getting children motivated to help would not be spurred by adults' inducements. Many of these mothers strongly emphasized the importance of children's autonomy in learning to make prosocial contributions to the family. Just 35% of European American ESE mothers shared these views, a significant difference, $p < .0001$ BET, $h = 1.42$.

In contrast, 65% of European American ESE mothers held the view that adults *do* need to motivate children's helpfulness in work at home. Fifty percent of European American ESE mothers stated that 2- to 3-year-old's helpfulness results from them gradually "internalizing" or "getting used to" doing work that is initially uninteresting or onerous to them. Forty percent of stated that young children help initially in strict imitation of what parents are doing, and that "helping" isn't really something that a 2- to 3-year-old can understand or be motivated to do. Further, 40% of European American ESE mothers held the view that *no one* wants to help with household work, much less young children, and parental insistence and reinforcement is necessary to convince children to help.

At age 6-7, the patterns of cultural differences in mothers' reported assumptions and developmental theories were nearly identical.

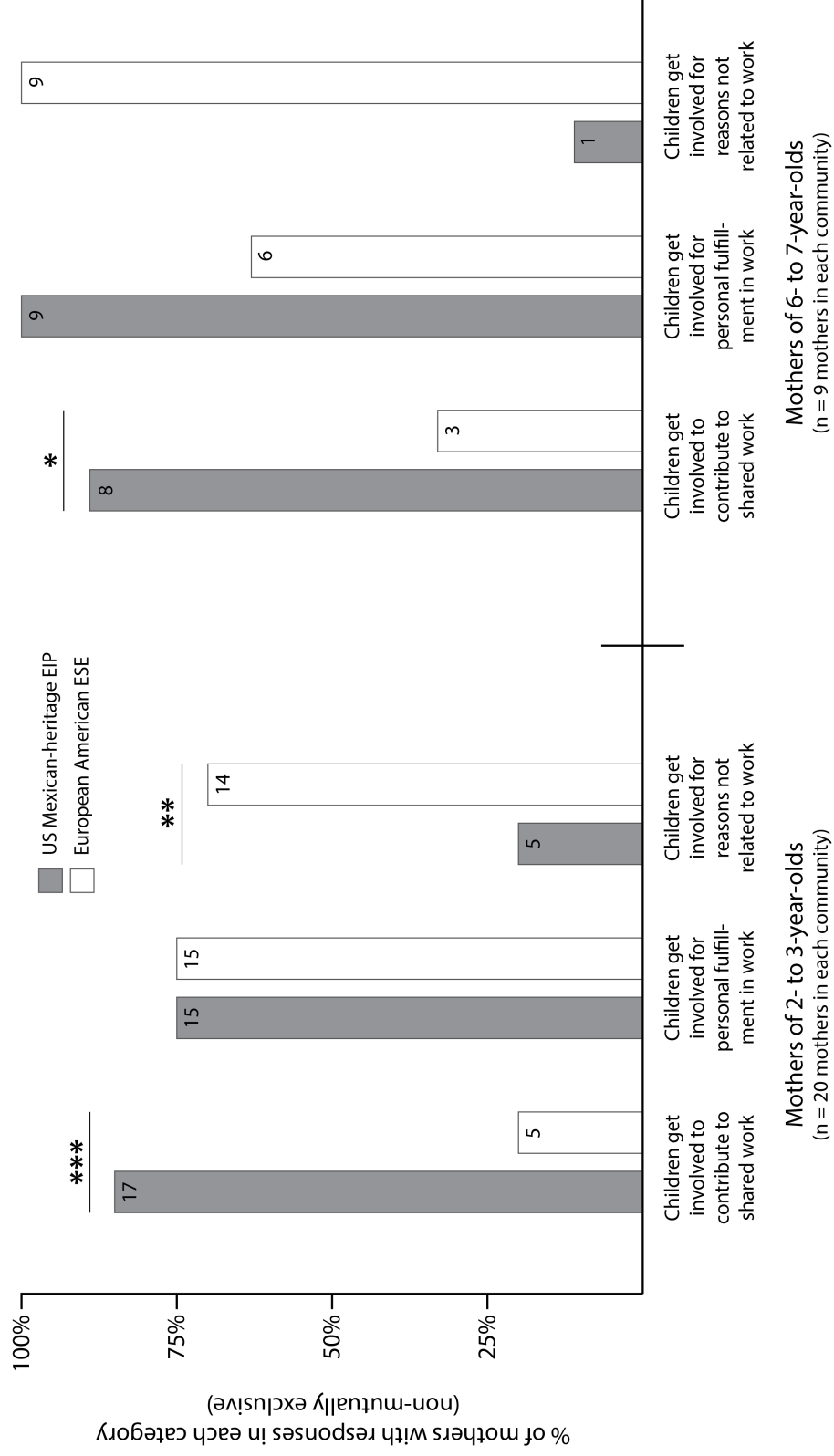


Figure 5. Percent of mothers reporting different (non-mutually exclusive) reasons that children get involved in work at home
 Bonferroni-corrected statistical significance levels: *** $p \leq .0003$ ** $p \leq .003$ * $p \leq .017$ + $p \leq .033$

Summary of Study 2

The findings of Study 2 suggest a tight relation between the ways that mothers involve their children in work at home and their developmental theories regarding children's learning and motivation to help.

US Mexican-heritage EIP mothers placed clear importance on children being involved and helping without being asked in household work that benefits others. These mothers stated that they support children's attempts to share work by involving children collaboratively, facilitating their access to the work to help children to contribute and avoiding attempts to control children's participation.

US Mexican-heritage EIP mothers' reports of continuous support of children's collaborative involvement in shared work at home at ages 2-3 and 6-7 aligns with the findings of Study 1 that most US Mexican-heritage EIP children at both ages were reported to regularly help with initiative in work that benefits others and to contribute in a broader and more complex range of work at home than children who were involved less voluntarily.

By contrast, many European American ESE mothers claimed that it was unrealistic to expect children to help without being asked and that children aren't particularly interested in helping. Relatedly, these European American ESE mothers described avoiding 2- to 3-year-olds' involvement in work at home all together. At age 6-7, some of these mothers reported making attempts to control and motivate 6- to 7-year-olds' involvement.

Discussion

The findings of these two studies confirm a ‘developmental puzzle’ of children’s prosocial helping at ages 2-3 and 6-7 across two cultural communities, and suggest that mothers’ approaches to involving their children can help to explain why that puzzle exists. As suggested by prior work, 2- to 3-year-old children were, on average, reported to make a similar range and complexity of contributions to work that benefits others. However, within this age range US Mexican-heritage EIP children seemed to expand the extent of their helping toward older ages whereas, if anything, European American ESE children at the older end of this age range may have been helping more selectively (see also Hay & Cook, 2007). The clear cultural differences at age 6-7 between these two communities in the extent of children’s helping in work that benefits others may begin to emerge before age 3.

It is interesting to note that these cultural differences in the extent/complexity of children’s helping were only present with regard to family household work (i.e., work that involved and held specific benefits for both children and other family members), where US Mexican-heritage EIP children were much more involved than European American ESE children. In self-care chores, the extent of children’s contributions (but not how voluntarily children were reported to contribute) were nearly identical in both communities.

There were also similarities between 2- to 3-year-olds and 6- to 7-year-olds within each community regarding how voluntarily children helped in work at home. At age 6-7, US Mexican-heritage EIP children contributed extensively with

collaborative initiative in work that benefits others and European American ESE children were often involved under contingent assignments. These cultural differences in the voluntariness of children's help seemed to emerge at age 2-3, and were apparent in both family household work and self-care chores.

The voluntariness of children's involvement and helpfulness in work at home may be developmentally consequential. In Study 1, at age 2-3, children in both communities were interested to take part in ongoing work, and did so voluntarily by joining in with others, yet very few European American ESE 6- to 7-year-olds regularly helped with initiative. In previous work among middle-class European American children, *assignment* of self-care chores was negatively correlated with mothers' observations of young children's concern for others (Grusec, Goodnow, & Cohen, 1996). When children did not contribute with initiative (i.e., helping was assigned or requested) there was no correlation between children's involvement in family household work and the frequency of their prosocial behaviors.

Mothers' reported ways of involving their children in work at home provided evidence for why the 'developmental puzzle' of children's prosocial helping may exist. Mothers in the US Mexican-heritage EIP community – whose children regularly helped with initiative at both ages – provided 2- to 3-year-old children with access to mature work endeavors and helped their children to find ways to be helpful. These mothers expected children to be involved in everyday work, and reported being attentive to signs of children's interest in learning to help the family. This approach may have expanded US Mexican-heritage EIP children's skills and responsibilities in

everyday work, as well as possibly supporting children's development of collaborative initiative.

Collaborative approaches to involving children in shared family and community endeavors are common throughout Indigenous American communities (Paradise & Rogoff, 2009). Evidence from these communities is described by a theoretical model of organizing children's learning in family and community, called *Learning by Observing and Pitching-In* or *LOPI* (Rogoff, 2014). This way of supporting children's learning relates children's incorporation in mature endeavors and children's collaborative initiative to several important developmental practices, such as children's keen attention and skill in observational learning (Correa-Chávez et al., 2011), skills in collaborative and flexible planning (Alcalá, 2014; Chavajay & Rogoff, 2002), as well as autonomous motivation and self-regulation in learning (Coppens et al., 2014a; Ruvalcaba et al., n.d.) and skill in learning via multiple modes including nonverbal and verbal coordination with others (Lorente Fernández, 2006; Paradise, 1994), and others (Coppens, Silva, Ruvalcaba, Alcalá, López, et al., 2014b).

What explains the developmental shift in European American children's involvement and helpfulness in work that benefits others? Two summary explanations for the European American ESE pattern in the 'developmental puzzle' have support in the present study. First, there may be an association between contingently assigning children's help with family household work and children's minimal contributions, relative to approaches that encourage children's autonomy and responsible initiative in shared endeavors. This study and three previous studies have

demonstrated that when 6- to 10-year-old middle-class Mexican children's involvement in family household work was organized with contractual requests and assignments, their contributions were fewer and less complex overall when compared to Indigenous-heritage Mexican children who contributed collaboratively under their own initiative (Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015; see also Grusec et al., 1996).

Second, European American ESE mothers may convey low expectations for children's voluntary involvement in family household work at both ages (see also Ochs & Kremer-Sadlik, 2013). Whether intended or not, when parents contingently assign self-care chores to children and avoid/redirect children's involvement in family household work, this may communicate the expectation that children primarily attend to 'their own work' and secondarily, or not at all, in work that benefits others, and may also relate to children's minimal initiative.

Rheingold's (1982) decades-old speculation that middle-class parents' concerns about efficiency may undermine their children's opportunities to learn to help may explain European American ESE mothers' reports of avoiding their 2- to 3-year-olds' involvement in work altogether. These mothers either found it too difficult or inefficient to involve children in work at home, or regarded children's participation in other activities as more valuable to the child.

European American ESE mothers' desire to complete everyday household work quickly and efficiently, such that children's involvement was precluded, could also relate to a cultural orientation that divides time used to get work done from

“quality time” or “family time” that involves parents and children in mutual leisure or enrichment endeavors (see Kremer-Sadlik et al., 2008). For middle-class parents, this divided time orientation can involve stress or dissatisfaction in efforts to “fit everything in” (see also Harkness et al., 2011).

To the extent that European American ESE children’s work at home corresponds with mothers’ ways of involving them (i.e., both specific requests and contingent assignments may be ways of *controlling* children’s involvement), the suggestion of a developmental shift in the European American ESE community from *avoiding* children’s involvement (at age 2-3) to *controlling* children’s involvement (at age 6-7) may have support. The predominant way that European American ESE mothers involve children in work at home may shift from avoiding or otherwise precluding 2- to 3-year-olds’ involvement (reported by 60% of European American ESE mothers) to controlling 6- to 7-year-olds’ involvement through contingent chore assignments (reported by 44% of European American ESE mothers). This discontinuous pattern fits with previous studies in culturally similar communities (see Coppens et al., 2015; Rheingold, 1982). Moreover, recall that 77% of European American ESE mothers with a 6- to 7-year-old reported their children mainly helping with family household work that was either specifically requested or contingently assigned, which was the case for 89% of mothers in this community regarding self-care chores (see Table 2).

Whether or not children are involved in work at home under contingent obligations may be an important additional piece of evidence for understanding the

paradigms of guidance of each cultural community in the study, and may relate to children's motivations to help. A secondary analysis examined *noncontingent* ways of encouraging or appreciating children's contributions to work at home, such as *domingos* (Cohen's $k = 1.0$). These are occasional acts of appreciation or kindness that stem from children's integration as contributors in family and community endeavors. For example, appreciation of a child's collaboration helpfulness might be acknowledged by including the child's favorite meal in the family's dinner plans for the week – the favorite dinner is not a reward, but rather reflects children's integration in household activities, including the shared benefits that come with being involved and contributing. It is notable that 55% of US Mexican-heritage EIP mothers reported using noncontingent *domingos* with their 2- to 3-year-olds (and 78% with their 6- to 7-year-olds). No European American ESE mother reported using this or related practices noncontingently, at either age. Coppens and Alcalá (in press) found that in many Mexican-heritage communities, noncontingent *domingos* may relate to children's mutual and long-term commitment to shared family goals and their initiative in helping others. Considerable evidence supports the association between children's initiative and autonomy-supportive approaches that avoid contingent control (Ryan & Deci, 2000).

Advancing Theories of Children's Prosocial Development and Motivation with Cultural Research

Taken together, the findings of these two studies suggest that several aspects of current theories of children's prosocial development and motivation may benefit

from extension or reformulation to describe how children's helpfulness is supported in a range of cultural communities.

Expanding theories to include multiple cultural ways and the contexts of children's everyday lives. Expanding beyond the field's current methodological emphasis on children's prosocial helping in laboratory-based research to include varied cultural contexts can open new questions and may help to refine conceptual distinctions.

In many children's everyday lives, taking initiative to help involves children being physically present when work is happening *and* having opportunities to take part in mature aspects of the work. Although there is considerable cultural variation regarding whether children are physically present for work in their families and communities (Rogoff, 2003), this is obviously a required feature of laboratory tasks. However, it may be possible to more explicitly and more precisely involve children in laboratory-based opportunities for helping that do or do not include opportunities to collaborate with adults and take on mature roles in productive activities (for instructive examples see Chavajay & Rogoff, 2002; de Haan, 1999; López & Rogoff, in preparation). This approach would allow researchers to examine children's keen attention and perspective-taking, and their dynamic, complex social-cognitive understanding of what would be a helpful contribution to work-in-progress (see Coppens et al., 2014b; Rogoff, 2014).

It may be difficult to distinguish an implicit request for a child's help and the child taking initiative to help in laboratory-based research, where demand

characteristics may be particularly suggestive to children. Thus the category of ‘voluntary’ helping, if not described with adequate precision, may be incommensurate across different studies. When *helping with requests* and *helping with initiative* were distinguished in this study, children between the US Mexican-heritage EIP community and the European American ESE community differed strikingly in how voluntarily they were reported to help at home (see also Alcalá et al., 2014; Coppens et al., 2014a; and Coppens et al., 2015).

Does ‘altruistic’ helping mainly describe children’s involvement in divided work? In collaborative ways of organizing shared work, children’s ‘instrumental’ help may be inseparable from contributions that demonstrate concern for others, and ‘altruistic’ helping may be of little conceptual relevance (see especially Mejía-Arauz, Correa-Chávez, & Keyser, in press). Findings in the US Mexican-heritage EIP community suggest a *unity* of children’s prosocial motivations, whereas developmental research commonly distinguishes between instrumental, empathic, and altruistic helping (e.g., Dunfield & Kuhlmeier, 2013; Svetlova et al., 2010). US Mexican-heritage EIP mothers described everyday work at home as shared with children, where family members worked together toward common goals and were mutually responsible and helpful in accomplishing productive tasks.

Especially with respect to ‘altruistic helping,’ these supposedly distinct prosocial motivations may more accurately describe widespread middle-class cultural ways of organizing family and community work where ‘my work’ and ‘your work’ are rigidly differentiated, and where implicit cultural assumptions regarding, for

example, ‘ownership’ of responsibilities and ‘fairness’ in being asked to help across these boundaries help to inscribe who is responsible for and expected to help with what (Coppens et al., 2015; Goodnow, 2000).

Children’s prosocial motivation as an outcome of their integration in shared productive endeavors. Theoretical attempts to discern the prior, ‘underlying’ motivations that ‘drive’ young children to help others may contribute to conceptual distinctions in the theorized reasons that children help, especially insofar as young children are assumed to understand little about the social or interpersonal aspects of helping. This emphasis on children’s prior cognitive intentions is part of a widely accepted definition of children’s prosocial behavior – voluntary actions *intended* to benefit others (Eisenberg, Spinrad, & Knafo-Noam, 2015).

In emerging developmental phenomena such as prosocial helping, children may be learning as much about the outcomes of their actions as they are about how to take part in the cultural activities that achieve those outcomes. That is, when children participate in shared work with others they may be both learning how to help and, inseparably, appropriating helpful motives that are a part and parcel to competent participation in the activity. As newcomers, children’s voluntary entry into productive everyday activities (which, in this study, mothers of both cultural backgrounds commonly reported for their 2- to 3-year-olds) may be variably motivated, depending on their nascent understanding of the activity. Thus, the support that children receive in learning to be helpful may be crucial for transforming or deepening their motivation to engage helpfully and contribute productively.

It may be useful to view children's motivations to help as *outcomes* of the quality of their participation in everyday work, noting especially the shared motives of the cultural activities in which children are participating (Hedegaard, Edwards, & Fler, 2012; Leont'ev, 1978; Paradise, 2005; Roth, 2011; Vygotsky, 1978). The emphasis in this view is on children's participation in cultural activities (Rogoff, 2003), and the development of that participation into helpful contributions, rather than a focus on children's desires to be helpful. This shift toward emphasizing children's emerging understanding of their actions as helpful to others could unite the study of socialization processes and individual child development in promising ways, such as by revealing that children's integration in mature aspects of work at home may be crucial for the development of collaborative initiative.

Variability Within Each Cultural Group: A Comment on Expanding Cultural Repertoires and Learning New Ways

A sociocultural emphasis on how children's participation in everyday work at home is organized gives expanded meaning to variation *within* the cultural groups in this study and others. Within group variation, thus, becomes both a matter of individual (child/mother) variation and an indication that families within the cultural groups may be involving children in different ways. This variability suggests that cultural practices, rather than being static traits of groups of people that determine ways of life, can be open to reworking and reconsideration, even though family and community ways of life carry strong historical/conventional pull. Parents can choose

to do what makes sense to them, can learn new ways, and can adapt (Gutiérrez & Rogoff, 2003).

The most helpful and voluntarily collaborative child in the European American ESE community was an ‘outlier’ in the sample from her cultural group: This 7-year-old was reported to regularly help with initiative in family household work, contributing more than any other European American ESE child at that age, and was the only child in the European American ESE cohort group to make high-complexity contributions (see the extreme upper right data point in Figure 2). Yet, this child was reported to be involved in family work in ways that were archetypical of US Mexican-heritage EIP mothers’ approaches. This family was deeply collaborative, with high expectations for children’s helpfulness and a supportive work-together ethos that undergirded how everyday tasks were carried out and accomplished.

Several guiding ideas were central to how this European American ESE mother supported her child’s collaborative involvement in everyday work, which were also shared by many US Mexican-heritage EIP mothers. This mother stressed that her child was capable of making helpful contributions to the family, and the child’s involvement was framed as help:

I can’t imagine... it’s almost insulting, like ‘you can’t help in the family because you’re not capable?’ Well, that’s not a really good message to send your kid.... I think it really does a disservice to the kid, and also it makes them feel worthless.... It sends a message.

Working together and contributing with shared responsibilities was fundamental to how members of this family understood their relation to each other, where parents

and children collaborate together and parents are resources for children in learning how to contribute in work that benefits others:

I think [being excluded from making contributions] might be confusing. [Being included] also is good training because the world doesn't just happen, you are a participating member of society and it seems like no better way to start than seeing it in your family. You make a tangible difference. Your contribution is needed and is helpful, and it also makes you have an identity of 'I am part...'. That's our definition of family – You help, and participate, and contribute.

This mother also reported a strong rejection of imposed contingencies used to motivate family members' contributions or the assignment of chores (her children were not contingently assigned chores), combined with high expectations for children's helpfulness and consideration of others:

That's our joke in the family, we don't earn things. Like, we read a book that said 'Mommy earned a necklace today because she did the laundry.' It's like, [puts head in hands] ugh!... [children] are participating members of the family and they are expected to do things... There's not if-then statements.

Children's help was reported in the context of mutual family endeavors, where family members help each other accomplish shared goals, rather than helping other family members with 'their own' work. After stating that children should be expected to help without being asked, this mother explained that children can learn to be caring citizens in the world through learning to share work collaboratively at home, especially when distinctions between what's 'my' and 'your' job or responsibility become blurred in the joint pursuit of shared goals:

It seems like there's a gradual shift towards outside bigger world, 'I do things altruistically because,' [pauses] it's not even altruism because it's your family and you do things because you care about your family. But ultimately, you hope people will be altruistic to some extent, will do something just because it makes the world go 'round. But first, it's because it helps.

In summary, the kinds of collaborative approaches to involving children in everyday work at home that may support children's development of initiative involve: (a) a view that children want to and are capable of helping out, even as they are learning requisite skills; (b) efforts by parents and community members to ensure that children have real, meaningful access to mature aspects of everyday work; and (c) a rejection of contingent or contractual ways of involving children, (d) especially insofar as these contingencies divide up expectations of responsibility and undermine children's opportunities to work together with others in pursuit of shared goals.

Children's *collaborative initiative*, an impressive form of learning and helping in everyday activities, seems to build on the interests that young children in many cultural communities have in taking part in the world around them and sharing work with others. The present studies suggest that this initiative may continue to expand when children have ongoing opportunities to take part, help out, and pitch in as valued collaborators in endeavors of value to their families and communities.

Footnotes

¹ Vignettes used with mothers of 6- to 7-year-olds described attempts to help in a more complex part of the activity. The two vignettes used with mothers of 6- to 7-year-olds were:

Mom is in a hurry doing the family laundry at the laundromat and 6-year-old Sara/Lucas offers to do the family's laundry by her/himself. The child often goes along to the laundromat, but has never done it independently before.

Mom is making a birthday cake for that afternoon. Six-year-old Sara/Lucas asks if s/he can help and wants to flip the cakes out of the pan once they are taken out of the oven.

² In this and previous studies, findings followed a different pattern for child caregiving than for other work at home, and mothers viewed it as a special case of children's involvement. For example, mothers never used child caregiving examples to illustrate their views on children's involvement in work at home in general.

The *range/complexity* and *how voluntarily* children contributed in child caregiving were coded and analyzed using identical procedures as with family household work and self-care chores, and inter-rater agreement was high in all categories.

At age 2-3, the average reported range/complexity scores for children's contributions to child caregiving were 3.1 in the US Mexican-heritage EIP community and 2.0 in the European American ESE community (SD = 2.5 and 1.5, respectively), *n.s.* Eight children in the US Mexican-heritage EIP community and 9 in the European American ESE community were not involved at all in child caregiving. Among those children involved, all US Mexican-heritage EIP children and 82% of European American ESE children made at least low-complexity contributions, and 50% of US Mexican-heritage EIP children and 27% of European American ESE children made mid-complexity contributions (e.g., giving a child a prepared bottle). No 2- to 3-year-old in either community made high-complexity child caregiving contributions. There were no gender differences in the range/complexity of 2- to 3-year-olds' contributions to child caregiving.

At age 6-7, the average reported range/complexity scores for children's contributions to child caregiving were 5.5 in the US Mexican-heritage EIP community and 3.0 in the European American ESE community (SD = 2.9 and 0.8, respectively), *n.s.* Three children in the US Mexican-heritage EIP community and 5 in the European American ESE community were not involved at all in child caregiving. Although there were no cultural differences in average range/complexity scores at this age, only US Mexican-heritage EIP children were reported to make high-complexity contributions to child caregiving. There were no gender differences.

This pattern regarding how voluntarily children contribute to child caregiving was similar to previous studies in Mexico (e.g., Alcalá et al., 2014; Coppens et al., 2014a; Coppens et al., 2015). Nearly all children in both communities and at both ages, when they were involved, regularly took initiative to care for a younger sibling

or child. In both communities, mothers reported sometimes requesting (e.g., “Can you bring me the bottle?”) and never contingently assigning children’s help.

³ Barnard’s Exact Test is more powerful and appropriate than Fisher’s Exact Test for inferring associations in a 2x2 unconditional table, especially where cell frequency minimums are not satisfied for a Chi-square test (Barnard, 1945). Debate on the differences in merit between Fisher’s and Barnard’s exact tests is long-standing (Mehta & Hilton, 1993).

⁴ Cohen’s *h* (Cohen, 1988) is an effect size statistic measuring the magnitude the difference between two proportions, using nominal data. Guidelines for interpretation are similar to Cohen’s *d*: .20 is a small effect, .50 is a medium effect, and .80 is a large effect.

⁵ Also coded were mothers’ reports that time pressure to do work efficiently means that mothers avoid the child’s involvement in work at home. Inter-rater agreement was high (Cohen’s *k* = .74).

Appendix

Lists of family household work, self-care chores, and child caregiving tasks used to ask mothers about children's contributions. Each mother was asked about each item during the interview.

Family household work

Set/clear table, Wash family dishes, Sweep kitchen/living room, Fold/hang family clothes, Take out trash, Rake leaves, Care for household plants, Wash family's clothes, Mop/dust house, Care for family pet, Vacuum living room, Cook for family, Clean bathroom, Iron family's clothes, Run errands to a store, Mow lawn, Wash car

Self-care chores

Put away own clothes/toys, Clear their own plate, Sweep their own room, Make their own bed, Wash their own clothes, Mop/dust their own room, Care for personal pet, Get things ready for school, Vacuum their own room, Iron their own clothes

Child caregiving

Hold/play with child, Teach child to walk, Prevent danger (alert adult, intervene), Feed a younger child, Supervise without an adult, Change diaper/help dress, Bathe younger child, Put to bed, Can punish a younger child, Cooks for a younger child, Supervise homework

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