

Mothers', fathers' and children's perceptions of parents' expectations about children's family obligations in nine countries

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Children's family obligations involve assistance and respect that children are expected to provide to immediate and extended family members and reflect beliefs related to family life that may differ across cultural groups. Mothers, fathers and children ($N = 1432$ families) in 13 cultural groups in 9 countries (China, Colombia, Italy, Jordan, Kenya, Philippines, Sweden, Thailand and United States) reported on their expectations regarding children's family obligations and parenting attitudes and behaviours. Within families, mothers and fathers had more concordant expectations regarding children's family obligations than did parents and children. Parenting behaviours that were warmer, less neglectful and more controlling as well as parenting attitudes that were more authoritarian were related to higher expectations regarding children's family obligations between families within cultures as well as between cultures. These international findings advance understanding of children's family obligations by contextualising them both within families and across a number of diverse cultural groups in 9 countries.

Keywords: Culture; Family obligations; Parent–child relationships; Parental attitudes.

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Children's family obligations involve a "collection of values and behaviours related to children's assistance and support to and respect for their parents, siblings, and extended family" (Fuligni, 2007, p. 97). According to Weisner (2001), ethnographic research has shown that children in most societies are expected to contribute to the family by working (e.g. taking care of younger siblings, cooking and farming), and that fulfilment of obligations is essential to family well-being (and often survival). Perceptions of family obligations derive from ideas regarding families that are held in many different countries (e.g. *familism* in Mexico, Colombia and other Latin American countries, Suárez-Orozco & Suárez-Orozco, 1995; *hiya* and *utang na loob* in the Philippines, Alampay, 2014; traditional African concepts of family obligations, Baguma & Aheisibwe, 2011). Individuals' perceptions of these obligations are important because they shape the ways family members interact and because they affect psychological construals of the family. Perceptions of family obligations are a potentially meaningful way to characterise cultural values, going beyond social address models that compare groups based on ethnicity or national origin to understand what factors might underlie such group differences (Chao & Otsuki-Clutter, 2011). Given that the theoretical importance of family obligations has been advanced in diverse countries and cultural contexts, this study examines mothers', fathers' and children's perceptions of parents' expectations regarding children's family obligations in 13 cultural groups in nine countries that vary in terms of sociodemographic, psychological and contextual factors that might be related to family obligations.

In a previous cross-cultural study, a construct the authors described as family obligations (operationalised as youth attitudes towards parental authority, e.g. "Children should obey their parents") was used along with a number of other variables in cluster analyses that resulted in four clusters describing acculturative profiles of immigrant adolescents in 13 countries (Berry, Phinney, Sam, & Vedder, 2006). However, the majority of previous research has compared family obligations of different immigrant groups with nonimmigrants, particularly during adolescence. For example, Fuligni, Tseng, and Lam (1999) demonstrated that adolescents from European American backgrounds have lower expectations regarding their obligations to assist and respect family members than adolescents from Asian or Latin American backgrounds. Using a daily diary method, Telzer and Fuligni (2009) found that adolescents from Mexican immigrant families helped their families more days than did adolescents from Chinese immigrant families, who provided more days of help than did European American adolescents. A few studies in countries other than the United States suggest that family obligation perceptions are important in shaping beliefs and behaviours towards family members. In a comparison of adolescent immigrants

from the former Soviet Union in Israel with nonimmigrant Israeli adolescents, Walsh, Shulman, Bar-On, and Tsur (2006) found that the immigrant adolescents assumed more family responsibilities. Similarly, Titzmann (2012) found that immigrant adolescents in Germany provided more instrumental and emotional support in their families than did nonimmigrant German adolescents.

We first examined concordance among family members in perceptions of parents' expectations regarding children's family obligations. Conceptually, the issue of concordance in expectations is important because it can help elucidate whether perceptions regarding family obligations are more pervasive within a cultural group (which would be supported by a high degree of concordance among different family members) or are more specific to individual-level factors (which would be supported by a low degree of concordance among different family members). Parents in immigrant and nonimmigrant American families place greater emphasis on family obligations than do children (Fuligni et al., 1999; Phinney, Ong, & Madden, 2000). Phinney et al. (2000) found more disagreements regarding family obligations between immigrant parents and children when the children were born in the United States than when the children were born in the parents' country of origin. This study addresses a gap in this previous research of perceptions of family obligations among immigrant families: Within nonimmigrant families in different countries, how concordant are expectations regarding children's family obligations between mothers and fathers and between parents and children.

Surprisingly, few previous studies have examined which parenting attitudes and behaviours predict expectations regarding children's family obligations. More traditional or authoritarian beliefs appear to be related to expectations regarding filial piety and perhaps, by extension, to expectations regarding children's family obligations (see Park, Kim, Chiang, & Ju, 2010). Children with higher quality relationships with their parents might feel more obligated to provide assistance and respect to family members, but this hypothesis has yet to be tested in a diverse international sample. Nevertheless, research from single countries is suggestive. For example, more positive family relationships in China are linked with more family obligations (Fuligni & Zhang, 2004). Our multilevel design enabled us to test to what extent variance in expectations regarding children's family obligations was accounted for by differences in parenting attitudes and behaviours within families, between families within cultures and between cultures.

This study was guided by two primary research questions. First, to what extent do mothers, fathers and children concur in their perceptions of parents' expectations regarding children's family obligations? We hypothesise significant concordance among family members but more concordance between mothers and

fathers than between parents and children because generational differences in expectations regarding family obligations have been reported in previous research. Second, are parents' behaviours and attitudes in other domains related to perceptions of parents' expectations regarding children's family obligations? We hypothesise that parent-child relationships characterised by more warmth and less hostility, rejection and neglect will predict higher expectations regarding family obligations and that more authoritarian and controlling parents will have children who profess more family obligations.

METHOD

Families were recruited through letters sent home by schools serving socioeconomically diverse populations in each site. Participants included 1432 families with a target child ranging in age from 7 to 10 years ($M = 8.28$, $SD = .65$; 51% girls) at the time of recruitment. Families were drawn from Jinan, China ($n = 120$), Shanghai, China ($n = 122$), Medellín, Colombia ($n = 108$), Naples, Italy ($n = 100$), Rome, Italy ($n = 109$), Zarqa, Jordan ($n = 114$), Kisumu, Kenya ($n = 100$), Manila, Philippines ($n = 120$), Trollhättan/Vänersborg, Sweden ($n = 103$), Chiang Mai, Thailand ($n = 120$), and Durham, NC, United States ($n = 112$ European Americans, $n = 104$ African Americans, $n = 100$ Hispanic Americans). The purpose of recruiting families from these particular countries was to create an international sample that would be diverse with respect to a number of sociodemographic and psychological characteristics and that would be more generalizable to a wider range of the world's populations than is typical in most research. At the time of recruitment, mothers' average age was 36.93 ($SD = 6.27$) and fathers' average age was 39.96 ($SD = 6.52$). Mothers, on average, had completed 12.67 years of school ($SD = 4.13$) and fathers had completed 12.85 years ($SD = 4.13$). Most parents (82%) were married, and nonresidential parents were able to provide data. Nearly all were biological parents, with 4% being grandparents, stepparents or other adults. To make each country's sample as representative as possible of the city from which it was drawn, families of students from private and public schools were sampled in the approximate proportion to which they were represented in the population of the city. Furthermore, children were sampled from schools serving high-, middle- and low-income families in the approximate proportion to which these income groups were represented in the local population. Sampling focused on including families from the majority ethnic group at each site; the exceptions were in Kenya where we sampled the Luo ethnic group (3rd largest, 13% of population) and in the United States, where we sampled self-identified European American, African American and Hispanic families. Child age and gender did not vary across sites, but there were site differences

in parents' education and marital status and number of children in the household; these demographic variables were controlled in analyses. Data for this study included measures administered during the year of recruitment (2008–2009) and 2 years after initial recruitment, at which time 91% of the original sample provided data. These participants did not differ from the original sample with respect to child gender or parents' marital status or education.

Procedures and measures

Measures were administered in the predominant language at each site, following forward- and back-translation and meetings to resolve any item-by-item ambiguities in linguistic or semantic content. Translators were fluent in English and the target language. In addition to translating the measures, translators were asked to note and suggest improvements to items that did not translate well, were inappropriate for the participants, were culturally insensitive, or elicited multiple meanings. Site coordinators and the translators reviewed the discrepant items and made appropriate modifications.

Interviews lasted 1.5–2 hours at each time point and were conducted in participants' homes, schools or at other locations chosen by the participants. Procedures were approved by local Institutional Review Boards at universities in each participating country; mothers and fathers provided written consent and were interviewed separately to ensure privacy. Parents were given the option of having the questionnaires administered orally (with rating scales provided as visual aids) or completing written questionnaires. Children completed the measures orally. Depending on the site, families either were given modest financial compensation for their participation or entered into prize drawings, or modest financial contributions were made to children's schools.

Modernity of attitudes

In the initial project year, parents completed the Parental Modernity Inventory (Schaefer & Edgerton, 1985), capturing where parents' childrearing attitudes fall on an authoritarian/progressive continuum. Parents described their level of agreement with different statements about childrearing and education using a 4-point scale (1 = *strongly disagree* to 4 = *strongly agree*). Progressive attitudes were captured by eight statements, such as whether children have the right to their own opinions even when they disagree with adults. Authoritarian attitudes were captured by 22 items, such as whether children's complete obedience is most important. A *Modernity of Attitudes* scale was constructed by subtracting the mean across the authoritarian items (mothers' $\alpha = .88$, fathers' $\alpha = .88$) from the mean across

the progressive items (mothers' $\alpha = .58$, fathers' $\alpha = .56$). Previous research has demonstrated the validity of this measure in the sample used in this study (Bornstein, Putnick, & Lansford, 2011).

Parental warmth, hostility, rejection, control and neglect

Two years after the initial assessment, parents and children completed the Parental Acceptance–Rejection/Control Questionnaire-Short Form (Rohner, 2005). Respondents rated items on a modified scale: 1 = *never or almost never*, 2 = *once a month*, 3 = *once a week* or 4 = *every day*. Children completed the measure twice, once for each parent. The items are divided into parental behaviour categories, and within each category items are averaged to create five scales: *Parental Warmth, Hostility, Rejection, Control* and *Neglect*. The eight *Warmth* items capture behaviours, such as letting the child know she/he is loved (α for mother = .83, for father = .83, for mother reported by child = .81, for father reported by child = .84). The six *Hostility* items include behaviours, such as punishing severely when angry (α for mother = .71, for father = .66, for mother reported by child = .72, for father reported by child = .70). The four *Rejection* items describe behaviours, such as resenting the child (α for mother = .59, for father = .44, for mother reported by child = .62, for father reported by child = .61). The five *Control* items include behaviours, such as insisting on complete obedience (α for mother = .54, for father = .52, for mother reported by child = .47, for father reported by child = .51). The six *Neglect* items describe behaviours, such as forgetting things important to the child (α for mother = .61, for father = .66, for mother reported by child = .65, for father reported by child = .67). Previous research has demonstrated the validity of this measure in the present sample (Putnick et al., in press). Although alphas for some of the subscales are low in this study, the measure's use is justified by considerable evidence regarding its reliability with a large number of cultural groups in many languages (see Khaleque & Rohner, 2002, for a review and meta-analysis of 51 studies in 8 countries).

Family obligations

Also 2 years after the initial assessment, mothers, fathers and children completed the respect for family and current assistance scales of the family obligations measure developed by Fuligni et al. (1999). The measure includes seven items assessing views about the importance of respecting the authority of elders in the family, including parents, grandparents and older siblings (e.g. Please rate how important it is to you that your child treat you with great respect/Please rate how important it is to

TABLE 1
Descriptive statistics for expectations regarding children's family obligations

	<i>M (SD), n, [α]</i>		
	<i>Father</i>	<i>Mother</i>	<i>Child</i>
China–Jinan	3.62 (0.40) <i>n</i> = 117 [0.83]	3.70 (0.41) <i>n</i> = 117 [0.82]	3.66 (0.52) <i>n</i> = 117 [0.80]
China–Shanghai	3.61 (0.55) <i>n</i> = 98 [0.87]	3.69 (0.51) <i>n</i> = 100 [0.87]	3.65 (0.60) <i>n</i> = 101 [0.84]
Colombia	4.35 (0.43) <i>n</i> = 95 [0.82]	4.28 (0.36) <i>n</i> = 100 [0.61]	4.25 (0.47) <i>n</i> = 100 [0.77]
Italy–Naples	3.98 (0.50) <i>n</i> = 83 [0.85]	4.04 (0.48) <i>n</i> = 95 [0.81]	4.12 (0.49) <i>n</i> = 95 [0.83]
Italy–Rome	3.71 (0.43) <i>n</i> = 69 [0.78]	3.89 (0.41) <i>n</i> = 99 [0.75]	3.95 (0.47) <i>n</i> = 99 [0.82]
Jordan	4.18 (0.46) <i>n</i> = 109 [0.81]	4.23 (0.40) <i>n</i> = 112 [0.78]	4.17 (0.47) <i>n</i> = 112 [0.81]
Kenya	3.69 (0.54) ⁺ <i>n</i> = 94 [0.80]	3.66 (0.56) ⁺ <i>n</i> = 95 [0.81]	3.35 (0.52) ⁺ <i>n</i> = 95 [0.76]
Philippines	3.95 (0.50) <i>n</i> = 79 [0.87]	4.10 (0.51) <i>n</i> = 100 [0.87]	3.99 (0.58) <i>n</i> = 103 [0.85]
Sweden	3.29 (0.42) <i>n</i> = 72 [0.81]	3.26 (0.41) <i>n</i> = 95 [0.82]	3.46 (0.51) <i>n</i> = 98 [0.81]
Thailand	3.98 (0.48) <i>n</i> = 81 [0.85]	4.01 (0.42) <i>n</i> = 100 [0.83]	3.89 (0.53) <i>n</i> = 101 [0.72]
US–African American	3.80 (0.46) ⁺ <i>n</i> = 51 [0.81]	3.87 (0.49) ⁺ <i>n</i> = 94 [0.80]	4.14 (0.47) ⁺ <i>n</i> = 93 [0.80]
US–European American	3.46 (0.46) ⁺ <i>n</i> = 71 [0.79]	3.47 (0.43) ⁺ <i>n</i> = 101 [0.81]	3.90 (0.47) ⁺ <i>n</i> = 99 [0.81]
US–Hispanic	4.14 (0.44) <i>n</i> = 60 [0.85]	4.07 (0.44) <i>n</i> = 78 [0.72]	4.08 (0.56) <i>n</i> = 80 [0.84]

⁺Parent mean is statistically different from mean among children within culture based on repeated measure analysis of variance (ANOVA) model.

your parents that you treat them with great respect; 1 = *not important* to 5 = *very important*) and 11 items assessing parents' expectations and children's perceptions of their parents' expectations regarding how often children should help and spend time with the family on a daily basis (e.g. Please rate how often your child is expected to help out around the house/Please rate how often your parents expect you to help out around the house; 1 = *almost never* to 5 = *almost always*). These 18 items were averaged to create a composite scale for each reporter (see Table 1 for descriptive statistics and reliability).

TABLE 2
Correlations between reporters' expectations regarding children's family obligations

	Correlation (<i>p</i> value) between		
	Father and mother	Father and child	Mother and child
China–Jinan	0.15 (0.11) <i>n</i> = 117	0.16 (0.09) <i>n</i> = 117	0.28 (<0.01) <i>n</i> = 117
China–Shanghai	0.33 (<0.01) <i>n</i> = 97	0.11 (0.26) <i>n</i> = 98	0.10 (0.33) <i>n</i> = 100
Colombia	0.19 (0.07) <i>n</i> = 95	0.04 (0.68) <i>n</i> = 95	0.02 (0.83) <i>n</i> = 100
Italy–Naples	0.38 (<0.01) <i>n</i> = 83	0.22 (0.04) <i>n</i> = 83	0.17 (0.1) <i>n</i> = 95
Italy–Rome	0.22 (0.06) <i>n</i> = 69	0.12 (0.33) <i>n</i> = 69	0.19 (0.07) <i>n</i> = 99
Jordan	0.56 (<0.01) <i>n</i> = 109	0.45 (<0.01) <i>n</i> = 109	0.47 (<0.01) <i>n</i> = 112
Kenya	0.27 (0.01) <i>n</i> = 94	0.10 (0.35) <i>n</i> = 94	–0.01 (0.94) <i>n</i> = 95
Philippines	0.13 (0.25) <i>n</i> = 76	0.30 (0.01) <i>n</i> = 79	0.08 (0.45) <i>n</i> = 100
Sweden	0.39 (<0.01) <i>n</i> = 71	0.25 (0.03) <i>n</i> = 72	0.14 (0.18) <i>n</i> = 95
Thailand	0.24 (0.03) <i>n</i> = 80	0.04 (0.75) <i>n</i> = 81	0.24 (0.02) <i>n</i> = 100
US–African American	0.35 (0.01) <i>n</i> = 51	0.20 (0.16) <i>n</i> = 50	0.20 (0.05) <i>n</i> = 93
US–European American	0.25 (0.03) <i>n</i> = 71	0.18 (0.13) <i>n</i> = 71	0.15 (0.14) <i>n</i> = 99
US–Hispanic	0.17 (0.21) <i>n</i> = 58	–0.06 (0.67) <i>n</i> = 60	0.03 (0.81) <i>n</i> = 77

RESULTS

Concurrence within families in expectations regarding children's family obligations

Our first research question asked to what extent mothers, fathers and children concur in their expectations regarding children's family obligations. As shown in Table 2, in 8 of the 13 cultures, the correlations between fathers' and mothers' expectations were significant and ranged from .24 to .56, with an average across all 13 culture correlations of .32. In 4 of the 13 cultures, the correlations between fathers' and children's expectations were

significant and ranged from .22 to .45, with a .19 average across all 13 cultures. In 4 of the 13 cultures, the correlations between mothers' and children's expectations were significant and ranged from .20 to .47, with a .17 average correlation. The culture level correlations were transformed into Fisher *z* scores prior to averaging and then the average was transformed back into a correlation to address the fact that correlations are not on an interval scale.

The concurrence between family members was also measured by standardised coefficients from full information maximum likelihood models estimating the relation between expectations for each pair of family members controlling for child gender and age, household income, parents' education and number of children in the family. The relations were similar after controlling for family characteristics (.46 for father and mother; .27 for father and child and .26 for mother and child, all *ps* < .01). The parent and child relation did not vary by child gender, as demonstrated by a nonsignificant interaction between gender and children's expectations. When random cultural group intercepts were included, the magnitude of the relations between the family members decreased but remained statistically significant (.31 for father and mother; .16 for father and child and .14 for mother and child, all *ps* < .01).

Differences in mean expectations between reporters within each culture were assessed within a repeated-measure analysis of variance (ANOVA). The main effects of reporter, culture and the interactions between reporter and culture were statistically significant, but the differences in reporter means were only significant within 5 of the 13 cultures (Kenya, Philippines, Sweden, African Americans in the United States and European Americans in United States). However, after using Tukey–Kramer corrections for multiple comparisons, only six pairwise comparisons between reporters within culture were statistically significant. Among respondents in Kenya, the mean for children's expectations was significantly lower than the means for mothers' and fathers' expectations; among African Americans and European Americans in the United States, the mean for children's expectations was significantly higher than the means for mothers' and fathers' expectations (see Table 1).

Parents' attitudes and behaviours in relation to children's family obligations

Our second research question asked whether parents' attitudes and behaviours in other domains are related to children's expectations regarding family obligations. Because mothers, fathers and a child from each family completed the measures, we examined this question within a multilevel framework: family members (*n* = 3) nested within

families ($n = 1432$) nested within cultures ($n = 13$). The child-reported scales for mothers' and fathers' behaviour were averaged to create a single scale for each parental behaviour. Within this framework, we evaluated three relations for each parental behaviour. Within a family, do family members who perceive higher levels of parental warmth, for example, report higher levels of familial obligations for children relative to the family average? Within a cultural group, do families who report higher levels of parental warmth than the cultural average report higher levels of familial obligations on average? Finally, are between-culture differences in parental behaviour, such as parental warmth, associated with higher familial obligation expectations?

We initially examined the variance of expectations at the family and culture levels. The intraclass correlation, the proportion of variance between families, was .36 with cultural variation accounting for 64% of that between-family variance. These substantial variations between families and among cultures justified the use of a three-level model.

We estimated a full information maximum likelihood multilevel model [described in Equation (1)] with random intercepts for family and culture using SAS PROC MIXED (where p = family member, f = family, and c = cultural group). The model also included indicators for reporter (child was the omitted category) and controls for child gender, child age, parental education, family income and number of children in the family (denoted X). To parse the within-family, between-families and between-cultures impacts of parental behaviour on expectations for children's family obligations, predictors for each level were constructed: the family member's deviation from the mean across all family members (capturing the within-family effect, denoted WF), the family's deviation from the mean across families within their culture (capturing the between-family effect within culture, denoted BF) and the culture's deviation from the grand mean (capturing the between-culture effect, denoted BC ; Hoffman & Stawski, 2009). *Modernity of Parental Attitudes* was only reported by parents; consequently, the within- and between-family effects could not be calculated. To avoid potential multicollinearity problems, the scores for mothers and fathers were averaged (denoted Z). Using SAS ESTIMATE statements, we assessed whether fixed effects across levels were statistically different (i.e. the between-family within-culture vs. the between-culture effects of *Parental Warmth*; Hoffman & Stawski, 2009).

$$Y_{pfc} = \gamma_{000} + \gamma_{100}WF_{pfc} + \gamma_{200}X_{pfc} + \gamma_{010}BF_{fc} + \gamma_{020}Z_{fc} + \gamma_{001}BC_c + v_{00c} + u_{0fc} + e_{pfc} \quad (1)$$

Table 3 provides the model results. At each level, the relations between family obligation expectations and both parental warmth and control were significant and

positive. Family members who reported higher parental warmth as well as those who reported higher control than the family average also reported higher family obligation expectations (Warmth: $Est = 0.317$, $p < .001$; Control: $Est = 0.094$, $p < .001$). The between-family effects indicate that, within culture, families with higher than average parental warmth and higher than average control reported higher expectations regarding the child's family obligations (Warmth: $Est = 0.282$, $p < .001$; Control: $Est = 0.127$, $p < .001$). Finally, the between-culture effects indicate that cultures with higher than average parental warmth and cultures with higher than average control reported higher expectations (Warmth: $Est = 1.694$, $p = .002$; Control: $Est = 0.376$, $p = .044$). For warmth, the between-family and between-culture effects were significantly different ($p = .008$), meaning that the increase in expectations in cultures with higher average warmth is larger than the increase in expectations in families with higher average warmth relative to other families within the cultural group. However, the within- and between-family effects of warmth were not statistically different ($p = .483$) indicating that the increase in expectations associated with a family member reporting higher parental warmth is similar to the increase in expectations associated with a family reporting higher warmth. For control, the between-family effect was not statistically different from the within-family ($p = .402$) or the between-culture effects ($p = .165$). These nonsignificant comparisons indicate that the increase in expectations is similar for individuals reporting higher control than other family members, families reporting higher control than other families within a culture, and cultures reporting higher control relative to the average across all cultures. Given the limited level 3 sample size ($n = 13$), however, the effect size for any cultural effects to be detected needed to be larger than would have been necessary if we had included more cultural groups.

At each level, the relation between family obligations and parental neglect was negative. Family members who reported higher parental neglect than the family average reported lower family obligation expectations ($Est = -0.088$, $p = .003$). The between-family effect indicates that, within a culture, families with higher than average parental neglect reported lower average expectations regarding the child's family obligations ($Est = -0.159$, $p < .001$). Finally, the between-culture effect indicates that cultures with higher average parental neglect reported lower expectations regarding the child's family obligations ($Est = -1.300$, $p = .045$). The between-culture effect was significantly larger than the between-family effect ($p = .074$), but the between-family effect was not statistically different from the within-family effect ($p = .192$).

For both parental hostility and rejection, the within- and between-family effects were not significant; in contrast, the between-culture effects were

TABLE 3

Multilevel model results assessing within-family, between-family within culture and between-culture effects of parental behaviour on family obligation expectations

	<i>Est</i>	SE	<i>Pr</i> > <i>t</i>
Intercept	4.421	0.197	<.0001
Indicator for father as reporter	-0.009	0.018	0.632
Indicator for mother as reporter	-0.038	0.018	0.037
Child's gender-male	0.003	0.019	0.862
Child's age	-0.042	0.018	0.018
Family income	-0.004	0.004	0.372
Parental education	-0.006	0.003	0.086
Number of children in the family	0.023	0.008	0.006
Warmth			
Within-family	0.317	0.028	<.0001
Between-family within culture	0.282	0.042	<.0001
Between-culture	1.694	0.438	0.002
Control			
Within-family	0.094	0.022	<.0001
Between-family within culture	0.127	0.033	0.000
Between-culture	0.376	0.168	0.044
Neglect			
Within-family	-0.088	0.029	0.003
Between-family within culture	-0.159	0.046	0.001
Between-culture	-1.300	0.582	0.045
Hostility			
Within-family	0.035	0.034	0.296
Between-family within culture	0.012	0.053	0.816
Between-culture	2.398	0.735	0.007
Rejection			
Within-family	-0.030	0.035	0.389
Between-family within culture	-0.045	0.056	0.425
Between-culture	0.741	0.331	0.045
Modernity of attitudes (average across parents)	-0.107	0.026	<.0001
<i>Differences between effect across levels</i>			
Warmth			
"Within-family" versus "between-family within culture"	-0.035	0.051	0.483
"Between-family within culture" versus "between-culture"	1.412	0.439	0.008
Control			
"Within-family" versus "between-family within culture"	0.033	0.039	0.402
"Between-family within culture" versus "between-culture"	0.249	0.170	0.165
Neglect			
"Within-family" versus "between-family within culture"	-0.071	0.054	0.192
"Between-family within culture" versus "between-culture"	-1.141	0.584	0.074
Hostility			
"Within-family" versus "between-family within culture"	-0.023	0.063	0.718
"Between-family within culture" versus "between-culture"	2.386	0.737	0.007
Rejection			
"Within-family" versus "between-family within culture"	-0.015	0.066	0.821
"Between-family within culture" versus "between-culture"	0.786	0.336	0.036

significant—indicating that cultures with higher parental hostility and cultures with higher parental rejection reported higher expectations regarding the child's family obligations (Hostility: *Est.* = 2.398, *p* = .007; Rejection: *Est.* = .741, *p* = .045). These effects were statistically different from the nonsignificant between-family effects (*ps* = .007 and .036, respectively). Finally, more progressive parenting beliefs were associated with lower expectations regarding the child's family obligations 2 years later (*Est.* = -0.107, *p* < .001).

DISCUSSION

From this study of family obligations in 13 cultural groups in nine countries, we draw two primary conclusions. First, within families, mothers', fathers' and children's expectations regarding children's family obligations are moderately correlated, with higher correlations between mothers' and fathers' expectations than between parents' and children's expectations. Second, differences in expectations regarding children's family obligations

are related to parenting beliefs and behaviours between families within cultures as well as between cultures.

With respect to correlations between expectations regarding family obligations held by mothers, fathers and children, it makes sense that mothers and fathers have more similar expectations than do parents and children. One explanation for the greater similarity between mothers and fathers lies in generational differences in expectations regarding family obligations reported in previous research (Fuligni et al., 1999; Phinney et al., 2000). An additional explanation could be that through assortative mating, women and men with similar attitudes and expectations form relationships with one another (Luo & Klohnen, 2005), and they continue to shape each other's attitudes and expectations once in these relationships.

We found both between-family and between-culture effects for warmth, control and neglect in relation to expectations regarding children's family obligations. For hostility and rejection, we found only between-culture effects. A consistent finding across constructs and across levels of analysis was that parents' attitudes and behaviours that would bring more cohesion to the family were associated with mothers', fathers' and children's perceptions regarding parents' expectations for their children's family obligations. Thus, one mechanism that could account for associations of parents' attitudes and behaviours with expectations regarding children's family obligations would be via a tightening of family ties. Perhaps because parental warmth facilitates parents' socialisation attempts (Darling & Steinberg, 1993), to the extent that parents value familial obligations, being warm would facilitate this expectation in their children. Likewise, parents' and children's expectations regarding more family expectations also would be facilitated by a relationship context that is more emotionally and behaviourally interconnected. A sizable proportion of the variance in expectations regarding children's family obligations was accounted for by differences between cultural groups. A direction for future research will be to detail mechanisms that might account for these between-culture differences. For example, children may be expected to provide more support to families in lower than in higher income countries and in more collectivist than in more individualist countries.

These findings should be considered in light of the study's limitations. First, by including 13 cultural groups in nine countries, our sample was more diverse than the vast majority of samples in previous research on family obligations; however, our samples were not nationally representative and should not be taken to reflect entire populations. Second, the children in our sample were in middle childhood, younger than the primarily adolescent samples in previous research (a strength in terms of contributing new knowledge about younger children's family obligations); the findings should be considered

within this developmental timeframe. Parents and children are likely to have different expectations regarding family obligations for younger children than for adolescents, and expectations regarding family obligations may increase with age (Fuligni & Pedersen, 2002). Third, although we were able to examine within-family differences in expectations regarding family obligations among mothers, fathers and children and between-family and between-culture differences in relation to parents' beliefs and behaviours, other within-group comparisons would be fruitful to pursue in the future (e.g. between families in urban vs. rural areas). Fourth, we did not explicitly test for measurement invariance given arguments that standard tests may be too restrictive, particularly, when attempting to establish invariance across 13 cultural groups (e.g. Borsboom, 2006; Marsh et al., 2009). Finally, our measure of family obligations did not encompass all possible types of obligations, some of which may differ across countries. Similarly, our measure asked about obligations to spend time with different family members, but in a country like Sweden where many children live at a distance from their relatives, spending time with them may not be as logistically possible as in a country like the Philippines where many relatives live in close geographical proximity or in the same household. Family obligations also co-occur with other types of obligations. In some families, parents may prefer that their children fulfill obligations related to homework and extracurricular activities while parents take care of household obligations. An important direction for future research will be qualitative studies that enable families to discuss the dynamics of family obligations in their particular context.

Expectations regarding family obligations are a potentially important factor in unpacking "culture," which is often handled by comparing groups without attention to underlying values. Indeed, family obligations have been found to cluster with other important individual and family characteristics to shape acculturative profiles of adolescents in several countries (Berry et al., 2006). Because the majority of previous family obligations research was conducted in the United States, this study contributes to the literature by advancing understanding of mothers', fathers' and children's expectations regarding children's family obligations in a diverse set of countries. Across countries, we found concordance among family members' expectations, with stronger correlations between parents than between parents and children. In addition, the results indicate that both between-culture and between-family (within culture) differences in parenting behaviours are associated with differences in children's family obligations.

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