

Individualism, collectivism and conformity in nine countries: Relations with parenting and child adjustment

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This study investigated how individualism, collectivism and conformity are associated with parenting and child adjustment in 1297 families with 10-year-old children from 13 cultural groups in nine countries. With multilevel models disaggregating between- and within-culture effects, we examined between- and within-culture associations between maternal and paternal cultural values, parenting dimensions and children's adjustment. Mothers from cultures endorsing higher collectivism and fathers from cultures endorsing lower individualism engage more frequently in warm parenting behaviours. Mothers and fathers with higher-than-average collectivism in their culture reported higher parent warmth and expectations for children's family obligations. Mothers with higher-than-average collectivism in their cultures more frequently reported warm parenting and fewer externalising problems in children, whereas mothers with higher-than-average individualism in their culture reported more child adjustment problems. Mothers with higher-than-average conformity values in their culture reported more father-displays of warmth and greater mother-reported expectations for children's family obligations. Fathers with higher-than-average individualism in their culture reported setting more rules and soliciting more knowledge about their children's whereabouts. Fathers who endorsed higher-than-average conformity in their culture displayed more warmth and expectations for children's family obligations and granted them more autonomy. Being connected to an interdependent, cohesive group appears to relate to parenting and children's adjustment.

Keywords: Individualism; Collectivism; Conformity; Parenting; Child mental health.

According to Bronfenbrenner's developmental ecology theory, individuals belong to four different environments: the microsystem (the direct setting where individuals live), mesosystem (relationships between the microsystems' agents), exosystem (the indirect environment) and macrosystem (the largest and most distal environment; Bronfenbrenner, 1977; Crawford, 2020). Cultural values fall under Bronfenbrenner's macrosystem and are considered part of the core of every culture (Kagitcibasi, 1997; Varnum & Grossmann, 2017) and have drawn particular attention from scholars focusing on individualism, collectivism and conformity (Chen & West, 2008; Jetten et al., 2006; Lee et al., 2010). Individualism refers to cultures encouraging individuals to be independent, self-reliant and focused on themselves and their immediate relatives. Individualistic cultures promote values such as separation from ingroups, autonomy and personal achievement. By contrast, collectivism incentivizes individuals to be close to the groups they are a part of and to subordinate their personal goals for the good of the larger community. In collectivistic cultures, promoted values are loyalty, interdependence, cohesion and integration into extended groups (Lee et al., 2010).

Historically, individualism and collectivism were considered orthogonal concepts broadly assumed from nationality without a direct measure at the individual level (Kagitcibasi, 1997; Wong et al., 2018). Researchers have recently proposed that individualism and collectivism are not opposites but can coexist within a cultural group and a single individual, changing in different contexts and times (Lansford et al., 2021).

Cultural values as a complex phenomenon: Disaggregating between and within cultures

The coexistence of individualism and collectivism reveals a more complex vision, implying different

levels of investigation in exploring cultural values: between-group, within-group and within-person. Starting with the assumption that every individual can be thought of simultaneously as a unique person, as a member of a specific group (e.g., family), and as a part of a larger culture (Adams & Marshall, 1996), the three levels are so closely interrelated that they require researchers to adopt specific evaluation methods to consider the potential influences of individualism and collectivism at each level. These influences could differ from each other. For instance, not everyone living in a specific country should be assumed to share their country's values entirely (Leung & Cohen, 2011). Instead, different cultural values could be represented simultaneously within a group or at the individual level, and within-culture variability can always be accompanied by mean differences in individualism and collectivism across cultural groups (Deater-Deckard et al., 2018). For these reasons, cross-cultural researchers have found multi-level modelling techniques, which explore predictors of differences both between cultures and between families within cultures, to be especially useful in investigating cross-cultural phenomena (Curran & Bauer, 2011; Deater-Deckard et al., 2018; Maas & Hox, 2005). This approach has not yet been applied to studying the influences of individualism and collectivism on parenting and child adjustment as we do here.

Individualism, collectivism, conformity and parenting

Conformity also reveals the complexity of cultural values. Previous studies have highlighted how individuals tend towards conformity (Eidelman & Crandall, 2009; Horita & Takezawa, 2018) as children come to conform to their parent's values and adopt the family's specific cultural orientation (Chen & French, 2008; Kuntoro

et al., 2017). This conformity is intergenerationally transmitted when these children become parents and use the same cultural values they experienced in their childhoods to educate their children (Schofield & Abraham, 2017; Tamis-LeMonda et al., 2008).

Individualism, collectivism and conformity have been described as influencing parenting dimensions, such as parenting styles and rule setting (Knight & Sayegh, 2010; Oh et al., 2020; Wang & Tamis-LeMonda, 2003). Parents conforming to individualistic or collectivistic cultures could transmit different values related to love and affection, independence, self-esteem, rules and personal motivations (Wang & Tamis-LeMonda, 2003). Parents with individualistic cultural values are also described as less likely to adopt an authoritarian parenting style and control their children than parents conforming to collectivistic cultural values (Rudy & Grusec, 2006).

Nevertheless, as far as we know, research exploring the connection between parents' cultural values and parenting dimensions has primarily compared two or three countries (Oh et al., 2020; Takano & Sogon, 2008; Wang & Tamis-LeMonda, 2003). Studies considering several cultures are still needed to test the generalizability of connections across diverse cultural groups. Moreover, moving beyond a focus on broad parenting dimensions, studies are also needed to examine associations of individualism, collectivism and conformity with specific parenting behaviours such as warmth, control, parental monitoring and obligations. These investigations are critical given the cross-cultural links between these parenting dimensions, parents' actions and children's adjustment (Rothenberg et al., 2022).

Individualism, collectivism, conformity and child adjustment

Despite being few and comparing only two or three countries, previous studies explored the connection between cultural values and parenting dimensions (e.g., warmth, solicitation and monitoring; Lansford et al., 2021; Rudy & Grusec, 2001; Tamis-LeMonda et al., 2008) or between cultural values and children's adjustment (Pinquart, 2017; Rothenberg et al., 2020, 2022). For instance, previous literature showed that parents' individualism is linked to a vision of the child as more self-reliant and independent in social situations, whereas collectivism is connected to an idea of the child as obedient (Triandis, 1995). In addition, parents' excessive control over their children's behaviour led to higher levels of rule-breaking and aggression among children across cultures (Rothenberg et al., 2020). Finally, in cultures where both maternal and paternal indifference/neglect scores exceeded the average levels, children experienced more persistent internalising problems.

Despite past studies exploring the link between cultural values and parenting and cultural values and

children's development, connections between these two research paths are still missing, as little is known about how parents' individualism, collectivism and conformity are related to parenting dimensions and children's adjustment outcomes. Children's behavioural adjustment has been conceptualised using two key concepts: internalising (e.g., social withdrawal and depression) and externalising (e.g., aggression and lack of control). These aspects constitute risk factors for children's development throughout life (Hansen & Jordan, 2017) and are strongly influenced by parenting actions (Rothenberg et al., 2020). For this reason, studies that move beyond examining individualism, collectivism and conformity as moderators and investigate direct associations between these cultural values and child adjustment are needed.

Mothers' and Fathers' individualism, collectivism and conformity

Another aspect still understudied in the literature relates to maternal and paternal differences in cultural values. Although vast research focuses on how mothers and fathers differ in many aspects of parenting (Dufur et al., 2010; Miho & Thévenon, 2020), few studies explored maternal and paternal cultural values and their connection to parenting dimensions.

As for general differences in parenting dimensions, a recent review focused on mothers' and fathers' variations in parenting styles (i.e., different attitudes and behaviours towards the child that have been divided into authoritative, permissive, authoritarian and uninvolved categories; Kuppens & Ceulemans, 2019). The review highlighted that mothers generally adopt a more authoritative parenting style in worldwide samples (e.g., China, Indonesia, Spain, USA), being more emotionally responsive, accepting and supportive than fathers. In contrast, fathers tend to use a more authoritarian parenting style, being more restrictive and demanding (Yaffe, 2020).

As for cultural values, a recent study conducted by Lansford et al. (2021) explored the similarities and differences in predictors of individualism and collectivism between mothers and fathers. The findings revealed no significant predictors of individualism among mothers. However, the study identified associations between paternal individualism and educational levels, maternal collectivism and religious beliefs and, finally, paternal collectivism and the young age of fathers.

Current study

The current study examines the associations between maternal and paternal cultural values (individualism, collectivism and conformity) and parenting dimensions (warmth, psychological control, autonomy granting, rule setting, knowledge solicitation and family obligations),

as well as children's adjustment (internalising and externalising behaviours). Individualism and collectivism represent distinct phenomena and are not always two "endpoints" on the same spectrum (Lansford et al., 2021). Therefore, this study aims to fill a gap in the existing literature by considering simultaneous (rather than separate) associations of individualism, collectivism and conformity with parenting and child adjustment. Moreover, the current study disaggregates the effects of mothers' and fathers' cultural values on parenting and children's adjustment at between-culture as well as between-family within-culture levels. This is necessary to understand the complex ways in which individualism, collectivism and conformity are related to parenting and child adjustment across multiple levels of analysis (Deater-Deckard et al., 2018; Lansford et al., 2021; Leung & Cohen, 2011). Because few studies have investigated the links among cultural values, parenting and child development, we do not propose directional hypotheses in this study. Instead, we explore the associations of these cultural values with parenting and children's adjustment at the between- and within-culture levels.

METHODS

Participants

Beginning in 2008, the Parenting Across Cultures project recruited children, mothers and fathers in 13 cultural groups in nine countries (China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand and the United States). Participants included 1297 children ($M = 10.67$ years, $SD = .66$, 51% girls), their mothers ($n = 1274$, $M = 39.17$ years, $SD = 6.27$) and their fathers ($n = 1164$, $M = 42.09$ years, $SD = 6.55$) during year 3 of data collection (when collectivism, individualism and conformity measures were introduced; Table S1). Families were recruited from Jinan ($n = 117$) and Shanghai ($n = 101$), China; Medellín, Colombia ($n = 100$); Naples ($n = 95$) and Rome ($n = 99$), Italy; Zarqa, Jordan ($n = 112$); Kisumu, Kenya ($n = 95$); Manila, Philippines ($n = 103$); Trollhättan/Vänern, Sweden ($n = 98$); Chiang Mai, Thailand ($n = 101$); and Durham, NC, USA ($n = 102$ White, $n = 93$ Black, $n = 81$ Latino). Participants were recruited through public and private schools to ensure sample socioeconomic diversity and representativeness. Response rates varied primarily because of differences in schools' recruiting roles. For example, after US schools agreed to participate, the PAC team was allowed to leave letters explaining the study at the school to send home with students. Families willing to participate returned the letter to the school, and the team then contacted parents directly, yielding a 24% response rate. By contrast, once Chinese schools agreed to participate, parents agreed to participate and interviews were conducted

at the schools, leading to 99% participation rates. Unfortunately, it is not possible to estimate response rates for all sites because, in some, there is no record of the number of students who were invited to participate because of the differing ways in which schools informed parents about the study (e.g., verbal announcements versus paper letters).

Most parents lived together (82%) and were biological parents (97%); nonresidential and non-biological parents also provided data. Sampling included families from each country's majority ethnic group, except in Kenya, where Luo (third largest ethnic group, 13% of the population) was sampled, and in the United States, where equal proportions of White, Black and Latino families were sampled. Socioeconomic status was sampled in proportions representative of each recruitment area. Most mothers were employed (54%) and reported a mean of 12.6 ($SD = 4.10$) years of education. Most fathers (67%) were employed and reported a mean of 12.8 ($SD = 4.09$) years of education. Table S1 reports specific cultural groups' demographic information.

Procedure

We used a rigorous procedure of independent forward- and back-translation to ensure the linguistic and conceptual equivalence of all measures across languages (Maxwell, 1996). Each translator was fluent in English and the target language. In addition to forward- and back-translating the measures, translators were asked to: (a) note places in the research instruments that do not translate well, are inappropriate for the different groups, or are culturally insensitive; (b) identify words that elicit several meanings in particular contexts; (c) make suggestions for improvements of instruments if they identify problems; and (d) indicate reasons for altering the translated versions if discrepancies are identified and alterations are deemed necessary. Site PIs (who are all native to the countries in which data are collected and on the faculty at universities in their respective countries) and the translators reviewed the identified discrepancies and unclear items. Modifications were made after the translators reached a consensus on which modification should be made to the items. A cross-site meeting of all investigators and consultants was held to discuss any ambiguities or difficulties with measures on an item-by-item basis. The cross-site meeting and ongoing email exchanges also served to maintain consistency across sites in procedures for data collection. These substantial efforts were designed to ensure that the measures were valid in all sites by focusing not just on linguistic equivalence but also on the cultural meanings that are imparted by the measures (Erkut, 2010; Peña, 2007).

Two-hour interviews were conducted at each age after parent consent and child assent in participant-chosen

locations. Parents also chose to complete measures orally or in writing; children completed interviews with an interviewer who read the question aloud, showed the child a visual depiction of the rating scale and recorded the child's response. The procedures for data collection were standardised across sites. Site coordinators all worked from the same protocol in terms of translating, back-translating and culturally adapting the measures; conducting the interviews with families; and entering and cleaning the data. Measures, unless they are copyrighted, are available on the project website: parentingacrosscultures.org.

Measures

Parent individualism and collectivism

Mothers and fathers completed a measure of individualism and collectivism adapted from Singelis et al. (1995), Tam et al. (2003) and Triandis (1995). Parents rated the importance of different values related to autonomy and belonging to a social group. They were asked whether they 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree* or 4 = *strongly agree* with each of 16 statements, 8 reflecting individualism and 8 reflecting collectivism (e.g., "I'd rather depend on myself than others"; "To me, pleasure is spending time with others."). Items were averaged to create an individualism scale score (α s = .70 and .71 for mothers and fathers, respectively) and a collectivism scale score (α s = .65 and .70 for mothers and fathers, respectively).

Parent conformity values

Mothers and fathers rated an item that Schwartz et al. (2001) developed: "I believe that people should do what they're told. I think people should always follow rules, even when no one is watching." Parents responded using a 6-point scale (1 = *not like me at all* to 6 = *very much like me*).

Parent warmth

Mothers and fathers completed the Parental Acceptance-Rejection/Control Questionnaire-Short Form, a measure used in over 60 cultures worldwide with excellent score reliability, convergent and discriminant validity and measurement invariance (Lansford et al., 2018; Rohner, 2005). Children also provided separate ratings about their mothers' and fathers' warmth. Eight items captured parental warmth (e.g., "parents say nice things to child"). Behaviour frequency was rated on a modified 4-point scale (1 = *almost never* to 4 = *every day*). We averaged mothers' and children's ratings of mothers' warmth and fathers' and children's

ratings of fathers' warmth to create composite measures of *mother warmth scores* (α = .85) and *father warmth scores* (α = .85).

Parent psychological control and autonomy granting

Children reported on their parents' psychological control and autonomy granting (Barber, 1996; Barber et al., 1994). For psychological control, children rated seven items (e.g., "My parents act cold and unfriendly if I do something they don't like") on a 4-point scale (1 = *strongly disagree* to 4 = *strongly agree*). Ratings were averaged to create a composite *psychological control* scale (α = .64), with higher numbers indicating more psychological control. For autonomy granting, children rated four items (e.g., "My parents keep pushing me to think independently"). Items were rated on a 4-point scale (1 = *strongly disagree* to 4 = *strongly agree*) and averaged to create a composite *autonomy granting* scale (α = .62), with higher numbers indicating more autonomy granting.

Parent rules/limit-setting and knowledge solicitation

Parent rules/limit-setting and knowledge solicitation were assessed by subscales of the 10-item parental monitoring scale derived from Conger et al. (1994) and Steinberg et al. (1992). This measure has demonstrated adequate psychometric properties with this sample (Lansford et al., 2018). To measure parent rules/limit-setting, children answered five questions capturing the frequency with which parents impose limits on their child's activities on a 0 = *never* to 3 = *always* scale. To measure parent knowledge solicitation, children answered five questions that examined the extent to which parents tried to find out about their children's activities and whom their children spent time on a 0 = *I do not try*, 1 = *I try a little* and 2 = *I try a lot* scale. Items were averaged to create composite scale scores for parent *rules/limit setting* (α = .80) and parent *knowledge solicitation* (α = .74). Higher scores indicated more parental rules/limit-setting and knowledge solicitation.

Parent family obligation expectations

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 (i.e., parents, grandparents, older siblings) in the family (e.g., "Please rate how important it is to you that your child treat you 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 daily (e.g., "Please rate how often your child is expected to help out around the house"; 1 = *almost never* to 5 = *almost always*). These 18 items were averaged to create a composite scale score for each reporter ($\alpha = .83, .84$ and $.86$ for child, mother and father reports, respectively).

Child internalising and externalising behaviours

Parents and children, respectively, completed the Child Behaviour Checklist (CBCL) and Youth Self-Report (YSR; Achenbach, 1991) by indicating whether each behaviour was 0 = *not true*, 1 = *somewhat or sometimes true* or 2 = *very true or often true*. The Achenbach measures have been translated into over 100 languages (Achenbach System of Empirically Based Assessment, 2016). The *Internalising Behaviour* scale summed the responses from 31 items (for parents) or 29 items (for children) including loneliness, sadness and anxiety. The *Externalising Behaviour* scale was created by summing the responses from 33 items (for parents) or 30 items (for children) including disobedience, tantrums and bullying. We created cross-informant composites by averaging all available reporters' scores for *internalising* ($\alpha = .90$) and *externalising* ($\alpha = .91$) behaviours.

Covariates

Child gender and parent education (number of years of education obtained by the mother and father) were included as covariates.

Analytic plan

To evaluate study questions, multilevel modelling using restricted maximum likelihood estimation procedures was conducted via the PROC MIXED procedure in SAS 9.4 (SAS Institute Inc, 2015). Following steps recommended by Bauer and Curran (2021), two separate multilevel models were run to evaluate associations between maternal and paternal cultural values, their parenting dimensions and children's adjustment for each of the 11 dependent variables: one model included as predictors the fixed effects of mothers' reports of their individualism, collectivism and conformity (as well as child gender and mother education) and participants' countries as random intercept, and one included the fixed effects of fathers' report on these same predictors (as well as child gender and father education) and participants' countries as random intercept. Following expert recommendations (Curran & Bauer, 2011), independent variables (i.e., individualism,

collectivism and conformity) were *grand-mean centred* to predict the between-culture associations with each dependent variable and were *person-mean centred* to predict within-culture, person-specific associations with each dependent variable.

Missing data

A total of 20.66% ($n = 268$) of the families in the study were missing data on at least one study measure. Those with versus without missing data had significantly lower mother individualism scores, and significantly higher mother and father warmth, rules/limit-setting, knowledge solicitation and child-reported family obligation scores as well as child internalising problems than those with complete data, but did not significantly differ on other study variables (see Missing Data section of Supplemental Materials for more detail). Given these findings, we handled missing data in two ways. First, we wanted to account for the possibility that those participants who had missing data on any variable were systematically different from those who had complete data on all variables. Therefore, we created a dichotomous variable for each participant that indicated (0 = participant had no missing data, 1 = participant had missing data). We then included this variable in each of our individualism, collectivism and conformity models as a covariate, to ensure that any significant results emerged even after we accounted for systematic differences between participants with and without missing data. Second, in any particular model, we listwise deleted participants with missing data on the variables used in that particular model. For instance, in the model investigating the associations between mother individualism/collectivism/conformity and maternal warmth, if participants were missing data on mother individualism, collectivism or conformity they were listwise deleted. Additionally, in that model, the dichotomous missing data indicator (i.e., 0 = participant had not missing data, 1 = participant had missing data) was also controlled for. This ensured that significant associations between mother individualism, collectivism and conformity on the one hand, and mother warmth on the other, were adjusted for systematic differences between participants with and without missing data on other variables not included in that mother model (e.g., participants missing father collectivism, individualism, etc. who were nevertheless included in the mother model because they had not missing data on mother variables).

RESULTS

Descriptive statistics for all study measures are shown in Table 1, and correlations among study measures are depicted in Table S2.

TABLE 1
Means and standard deviations for study variables

Study variable	M or %	SD
Mother individualism	2.72	.45
Mother collectivism	3.29	.34
Mother conformity	4.34	1.28
Mother education	12.66	4.10
Father individualism	2.78	.44
Father collectivism	3.25	.36
Father conformity	4.39	1.22
Father education	12.82	4.09
Mother warmth	3.59	.40
Father warmth	3.49	.45
Parent psychological control	2.39	.54
Parent autonomy granting	3.09	.62
Rules/Limit-setting	1.53	.80
Knowledge solicitation	1.39	.50
Mother family obligations	3.87	.53
Father family obligations	3.84	.55
Child family obligations	3.89	.58
Child internalising	9.33	5.28
Child externalising	8.81	5.41
Child gender	51.04% Girls	NA
% Of families with missing data	20.66%	NA

Establishing baseline models

Preliminary multilevel models with no predictors revealed that 13%–40% of variability in dependent variables was attributable to between-culture differences, whereas 60%–80% of variance in parenting and child adjustment was attributable to within-culture, individual-level differences. The significant variation in each dependent variable at the within-culture level supports our strategy of disaggregating measures of collectivism, individualism and conformity to explore both their between- and within-culture associations with parenting behaviours and child adjustment.

Individualism

Between-culture associations

In cultural groups with higher father-endorsed individualism, mothers ($p = .04$) and fathers ($p = .02$) engaged in less frequent warm parenting (Table 2). No other significant between-culture associations with individualism emerged.

Within-culture associations

Mothers who endorsed higher individualism than average in their culture reported higher expectations for their children's family obligations ($p = .02$) and had children who reportedly experienced more externalising ($p < .01$) and internalising ($p < .01$) behaviour (Table 2). Fathers who endorsed higher individualism than average in their

culture had children who reported that their parents more frequently set rules and limits for them ($p = .02$) and more frequently solicited knowledge about their activities ($p = .02$; Table 2). No other significant within-culture associations with individualism emerged.

Collectivism

Between-culture associations

In cultural groups with higher mother-endorsed collectivism, mothers ($p = .04$) and fathers ($p = .02$) engaged in more frequent warm parenting (Table 2). No other significant between-culture associations with collectivism emerged.

Within-culture associations

Mothers who endorsed higher collectivism than average in their culture had families with more frequent mother- ($p < .01$) and father-displays ($p < .01$) of warmth, greater mother-reported ($p < .01$), father-reported ($p < .01$) and child-reported ($p < .01$) expectations for children's family obligations and had children who reportedly experienced fewer externalising behaviours ($p = .03$; Table 2). Fathers who endorsed higher collectivism than average in their culture had families with more frequent father-displays of warmth ($p < .01$) and greater mother-reported ($p < .01$), father-reported ($p < .01$) and child-reported ($p = .03$) expectations for children's family obligations (Table 2). No other significant within-culture associations with collectivism emerged.

Conformity

Between-culture associations

No significant between-culture associations with conformity emerged (Table 2).

Within-culture associations

Mothers who endorsed higher conformity than average in their culture had families with more father-displays of warmth ($p = .03$) and greater mother-reported expectations for children's family obligations ($p < .01$; Table 2). Fathers who endorsed higher conformity than average for their culture had families with more father-displays of warmth ($p < .01$), more frequent parent autonomy granting ($p = .03$), and greater father-reported expectations for children's family obligations ($p < .01$; Table 2). No other significant within-culture associations with conformity emerged.

TABLE 2
Multilevel models predicting parenting and child adjustment from parents' cultural values

Parenting or child adjustment variable	Mother cultural values multilevel models						Father cultural values multilevel models					
	Between-culture effects			Within-culture effects			Between-culture effects			Within-culture effects		
	Individualism	Collectivism	Conformity	Individualism	Collectivism	Conformity	Individualism	Collectivism	Conformity	Individualism	Collectivism	Conformity
Mother warmth	-.05 (.03)	1.76 (.70)*	.08 (.21)	.03 (.02)	.16 (.03)*	.01 (.01)	-.89 (.36)*	1.46 (.92)	.26 (.21)	.04 (.03)	.00 (.03)	.01 (.01)
Father warmth	-.58 (.31)	1.92 (.63)*	.09 (.19)	.00 (.02)	.08 (.03)*	.02 (.01)*	-.97 (.33)*	1.67 (.85)	.29 (.20)	.01 (.02)	.21 (.03)*	.03 (.01)*
Parent psychological control	.08 (.42)	.06 (.86)	.22 (.26)	.03 (.04)	.05 (.04)	.00 (.01)	.31 (.42)	.03 (1.08)	.18 (.24)	.00 (.04)	-.02 (.05)	-.01 (.01)
Parent autonomy granting	.55 (.44)	1.44 (.91)	-.49 (.28)	-.02 (.04)	.05 (.05)	.01 (.01)	-.06 (.56)	.54 (1.42)	-.12 (.33)	.03 (.05)	.06 (.05)	.03 (.02)*
Rules/Limit-setting	-.30 (.72)	.11 (1.50)	.56 (.45)	.10 (.05)	.07 (.06)	-.02 (.02)	.15 (.72)	.66 (1.84)	.39 (.43)	.13 (.06)*	.10 (.06)	.01 (.02)
Knowledge solicitation	-.69 (.47)	.60 (.97)	.26 (.29)	.06 (.03)	.00 (.04)	.00 (.01)	-.64 (.48)	.73 (1.23)	.22 (.29)	.08 (.03)*	.00 (.04)	.02 (.01)
Mother family obligations	.79 (.38)	1.43 (.79)	-.11 (.24)	.07 (.03)*	.38 (.04)*	.04 (.01)*	.66 (.35)	1.42 (.89)	.04 (.21)	.02 (.04)	.14 (.04)*	.02 (.01)
Father family obligations	-.04 (.04)	.54 (.38)	1.51 (.78)	-.01 (.04)	.17 (.05)*	-.01 (.01)	.47 (.33)	1.33 (.84)	.08 (.20)	.04 (.04)	.49 (.04)*	.06 (.01)*
Child family obligations	.44 (.44)	1.91 (.90)	-.07 (.27)	-.02 (.04)	.16 (.05)*	.01 (.01)	.11 (.45)	1.62 (1.15)	.17 (.27)	.01 (.04)	.11 (.05)*	.00 (.01)
Child internalising	3.35 (4.21)	10.33 (8.71)	-1.25 (2.62)	1.09 (.36)*	-.26 (.44)	.00 (.11)	2.96 (4.52)	8.14 (11.55)	-.39 (2.67)	.02 (.36)	-.50 (.41)	-.17 (.12)
Child externalising	2.83 (3.54)	2.59 (7.34)	1.08 (2.21)	1.58 (.38)*	-.97 (.46)*	.05 (.12)	3.72 (3.82)	.16 (9.77)	1.61 (2.26)	.31 (.38)	-.35 (.44)	-.06 (.13)

Note: Models control for child gender, whether the family was missing data on any outcome variable, and parent education (between- and within-culture levels). Numbers outside the parentheses indicate the point estimates for each parameter. Numbers in parentheses indicate the standard errors of these parameter estimates. Bold values indicate parameters that are significant at $p < .05$. * $p < .05$.

DISCUSSION

This study examined how cultural values of collectivism, individualism and conformity were associated with parenting and children's adjustment between and within cultures in mothers and fathers when children were 10 years old, on average. The choice of differentiating the effects of maternal and paternal cultural values on parenting behaviours and children's adjustment, both at the between-culture level and within-culture at the between-family level, is essential for comprehending the intricate relations among individualism, collectivism, conformity, parenting practices and child adjustment across multiple levels of analysis (Deater-Deckard et al., 2018; Leung & Cohen, 2011).

Overall, our findings showed that individualism was associated with low levels of parental warmth as well as more child internalising and externalising behaviours, more family obligations, more rules and limit setting and more knowledge solicitation. Collectivism was related to high parental warmth and family obligations, being associated with low child externalising behaviours. Finally, conformity was linked to high warmth, parental autonomy granting and family obligations.

In cultural groups with higher father-endorsed individualism and lower mother-endorsed collectivism, mothers and fathers presented lower levels of parental warmth. Similarly, at the within-culture level, mothers and fathers who reported endorsing lower levels of collectivism and conformity than their cultural average also reported experiencing lower levels of parental warmth. These results seem counterintuitive to previous studies describing collectivist cultures as more focused on obedience from children and inhibition of the expression of their own needs (Lee et al., 2010). However, previous literature highlighted how collectivistic cultures encourage individuals to be part of larger groups characterised by cohesion and interdependency (Bartucz et al., 2022; Lee et al., 2010). Cohesion and interdependency can be built when individuals experience a sense of warmth and emotional closeness in the groups they belong to (e.g., family). Within the family, cohesion contributes to creating positive relationships among family members and is related to parents' actions towards the child (Chen & West, 2008). Parental warmth and feelings of cohesion within the family are connected, as parental warmth creates a safe environment for the child to feel a sense of belonging (Khaleque, 2013).

This "social cohesion/connection" explanation (i.e., the idea that collectivism and conformity promote family cohesion and closeness) also aligns with many of the family obligations findings that emerged. Mothers and fathers who reported higher-than-average-for-their culture levels of collectivism also had families where mothers, fathers and children reported having higher expectations

for children's family obligations, consistent with other cross-culture investigations (Oh et al., 2020).

The results revealed that mothers with higher levels of individualism than average in their culture also reported higher expectations of children's family obligations, which initially contradicts a "social cohesion/connection" explanation. However, existing literature emphasises that, in individualistic societies, individuals focus on goal attainment and success for themselves *and their immediate relatives and the nuclear family* (Bartucz et al., 2022; Liefbroer & Mulder, 2006). As individualistic cultures encourage individuals to rely on their immediate relatives and nuclear family (Bartucz et al., 2022), family obligations could play a role in strengthening relationships among immediate family members. Considering the critical emphasis on the development of immediate family ties for both individualistic and collectivistic individuals and these results, it seems that cultural values of individualism, collectivism and conformity are associated with family obligations. These cross-cutting positive associations across all three cultural values strengthen the idea of parents being simultaneously individualistic and collectivistic rather than adopting their country's overall individualism or collectivism (Lansford et al., 2021; Tamis-LeMonda et al., 2008; Wang & Tamis-LeMonda, 2003). Indeed, although historically, individualism and collectivism were broadly assumed from nationality without a direct measure at the individual level (Kagitcibasi, 1997; Wong et al., 2018), researchers now propose a theoretical model where cultural values coexist within a cultural group and individuals (Lansford et al., 2021).

Fathers with higher individualism than average in their culture were likely to set rules and limits for children and solicited knowledge about their children's activities. These findings are consistent with previous studies reporting that fathers, regardless of their cultural values, tend to adopt a more authoritarian parenting style, establishing more rules and control than mothers (Yaffe, 2020). If the overall tendency of fathers to adopt a more authoritarian parenting style than mothers is well documented, previous studies highlighted that an authoritarian parenting style is more frequent in collectivistic cultures, whereas people in individualistic cultures adopt authoritative parenting styles, being warm, firm and accepting of their children's needs for psychological autonomy (Pinquart & Kauser, 2018). The key to connecting fathers' tendency to adopt an authoritarian parenting style and the overall use of this style in collectivistic cultures lies in knowledge solicitation. Indeed, the current findings align with conceptualizations of individualism as emphasising self-reliance and independence, promoting autonomy (Lee et al., 2010). In the service of promoting autonomy in their children, fathers with higher levels of individualism may need to set rules and limits around child activities

that take place outside of their care and solicit knowledge about such activities that fathers with lower levels of individualism may not find necessary (because such autonomous child activity is not encouraged or engaged in as much).

Our results also showed that mothers who endorsed higher individualism than average in their culture had children who experienced higher internalising and externalising behavioural problems. In contrast, mothers who endorsed higher collectivism than average in their culture had children who experienced lower externalising behavioural problems. These results accord with previous studies highlighting that psychological problems are less prevalent in collectivistic cultures, perhaps because individuals receive greater social support from, and connection to, their belonging groups in such cultures, which protects against mental health difficulties (Bartucz et al., 2022). Indeed, collectivism promotes a strong attachment to others, providing emotional support and helping the child feel connected to peers and individuals in the community. These aspects could be protective factors during a child's development (Le & Strockdale, 2005). However, the current study expands on these findings by demonstrating this connection at the individual level within cultural groups (as opposed to between-country comparisons) and in children (as opposed to adults).

Finally, fathers with higher conformity than average in their culture reported more frequent parent autonomy granting, meaning that parents with high conformity values tend to encourage their children's expression and participation in family decision-making. These results seem counterintuitive as previous studies showed that parents with more cultural conformity tend to control their children and grant them less autonomy (Lee et al., 2010; Rudy & Grusec, 2006). Nevertheless, parental autonomy granting is characterised by promoting independence (encouraging children to make decisions and solve problems for themselves) and promoting volitional functioning (fostering children to behave following their interests) (Soenens et al., 2007). The promotion of volitional functioning has been found across both individualistic and collectivistic cultures, but promoting independence is more present in individualistic cultures (Benito-Gomez et al., 2020). As the current study's findings do not align with previous literature and did not consider all the different facets of parental autonomy granting, we encourage future studies on this topic.

The findings advance knowledge regarding connections among cultural values, parenting and child adjustment. Novel study strengths include considering simultaneous associations of individualism, collectivism and conformity with parenting and child adjustment, including mothers and fathers, and disaggregation of within- and between-culture effects. However, the study has some limitations that should be acknowledged. First,

the samples were not nationally representative, so they do not represent the entire population of the countries included in the study. The response rates in each site differed, in large part because of different role that schools had in recruitment in each site. For these reasons, caution should be exercised when attempting to apply the current study's findings to entire populations from the countries and to generalise beyond the specific cultures included in the current research. In addition, the samples from some sites may have been more representative of the local community than others. Second, although the current study is part of a larger longitudinal project, data pertaining to the specific research questions were collected only at one point in time, so it is not possible to explore associations of cultural values with parenting and child mental health across child development. Third, this research solely relies on self-report survey data, without using observational measures or in-depth interviews. Participants may then have been limited in their abilities to express their cultural values, and researchers may have lost some information about parenting actions and children's behaviours. Fourth, data were correlational, so they do not permit drawing causal conclusions.

Nevertheless, the results suggest three main conclusions contributing to the existing literature. First, simultaneous associations hold between individualism, collectivism and conformity with parenting and child adjustment at both the between- and within-culture levels. Second, many positive associations between collectivism and warm parenting, family obligations and child mental health, and some negative associations between individualism, warm parenting and child mental health may indicate that being connected to an interdependent, cohesive group influences parenting and children's adjustment. Third, parents can be driven by different cultural values in similar parenting behaviours and when shaping similar family environments, as evidenced by positive within-culture associations between each cultural value and expectations regarding children's family obligations.

COMPLIANCE WITH ETHICAL STANDARDS

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee at the universities involved and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

INFORMED CONSENT

Informed consent was obtained from all individual adult participants included in the study; assent was obtained from children.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Data S1 Supporting Information.

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