

Cultural values, parenting, and child adjustment in China

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To examine whether parents' cultural values are related to parenting practices and children's behavioural adjustment, mothers, fathers and children ($N = 218$) from two cities in China (Jinan and Shanghai) were interviewed when children were, on average, 10 years old. Mothers and fathers reported their endorsement of cultural values (individualism, collectivism, conformity), which were used to separately predict warmth and family obligation expectations reported by each parent, as well as children's report of parental psychological control, rule setting, knowledge solicitation and perceived family obligation expectations. Cross-informant (parents and child) composites of internalising and externalising behaviours were also obtained. The results showed that maternal individualism positively predicted parents' knowledge solicitation. Parental collectivism positively predicted their own warmth and family obligation expectations. Mothers' conformity positively predicted mothers' family obligation expectations, paternal warmth and children's perception of family obligation, whereas fathers' conformity only positively predicted fathers' family obligation expectations. These effects were largely consistent across regional subsamples, although mothers in Jinan were more collectivistic than mothers in Shanghai, and parents in Shanghai adopted less psychological control and more knowledge solicitation in parenting.

Keywords: Collectivism; Individualism; Child externalising and internalising; Chinese parenting; Family obligation.

The Chinese culture has traditionally been depicted as high in collectivism, conformity and respect for authority. These cultural traits have often corresponded to a parenting style that places a significant emphasis on control and achievement, with the idea that achievement justifies the need for control (Huang & Gove, 2015; Zhu & Chang, 2019). However, recent research has begun to challenge this monolithic characterisation of Chinese culture and parenting. This evolving perspective highlights various factors contributing to changes in Chinese society, including shifts in socioeconomic conditions and evolving values (Way et al., 2013). Furthermore, it acknowledges the presence of regional variations in cultural values and parenting practices within China

(Talhelm et al., 2014). The present study is centred on the examination of cultural values, parenting approaches, and child adjustment in two distinct Chinese cities, namely Jinan and Shanghai. These cities represent diverse geographical, economic, and cultural regions within the People's Republic of China (PRC).¹ This research aims to provide a nuanced understanding of the complex interplay between culture, parenting and child development in contemporary mainland Chinese society.

Cultural values in China

Cultural values like individualism and collectivism serve as guiding heuristics for cross-cultural comparisons (e.g.,

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¹Jinan is the capital of Shandong province located in the Northern part of China (north of the Qinling–Huaihe Line, part of the “Wheat” region, Talhelm et al., 2014) with a population of 4.3 million and a per capita GDP of 15,977 USD; Shanghai is one of the four direct-administered municipalities of the PRC located in the Eastern part of China (south of the Qinling–Huaihe Line, part of the “Rice” region, Talhelm et al., 2014) with a population of 24 million and a per capita GDP of 22,560 USD (based on 2020 Chinese census).

Lansford et al., 2021) and underlie the fundamental structure of a society and its social dynamics (Triandis, 1995). The dimension of individualism–collectivism (INDCOL), which pertains to the relative importance of belonging to a social group, group objectives, and the value of autonomy, is especially pertinent in comparing Western and Eastern cultures (Triandis, 1995). Chinese societies, including Mainland China, Taiwan and Hong Kong, are often perceived as embodying collectivism to a greater extent than Western societies. However, empirical evidence frequently challenges this assumption. For instance, Chung and Mallery (1999) discovered that individuals from the United States were more collectivistic than their Chinese counterparts on six out of seven INDCOL dimensions. Other studies have revealed that Chinese participants scored higher on vertical individualism than Australian participants (Chen & Li, 2005) or participants from other countries in a four-country comparison (Sivadas et al., 2008), without displaying a stronger collectivistic orientation.

To account for such unexpected and seemingly contradictory findings, it could be argued that the conventional collectivism–individualism framework overlooks the inherent conflicts within a society between individual rights and collective interests. These conflicts give rise to individual variations in the endorsement of a society's predominant values and customs (Zhu et al., 2020). This might be especially true in highly diverse and evolving societies like mainland China (Chang, Chen, & Ji, 2011). Recent studies, for example, have reported significant regional variations in collectivism within China (Koch & Koch, 2007; Talhelm et al., 2014), although there is limited consensus on the most predictive factor for the geographical distribution of collectivism. Talhelm et al. (2014) found higher levels of collectivism in the southern rice-cultivating regions compared to the northern wheat-cultivating regions, in line with their rice theory, while others observed that the more developed coastal areas tended to be more individualistic than the inland areas (Koch & Koch, 2007). Overall, this justifies the exploration of intra-society variances in parents' individualism, collectivism and their influence on parenting attitudes and behaviours (Lansford et al., 2021).

In addition to values related to individual autonomy and group belonging, another culturally significant value in Chinese society is conformity. Previous research has generally supported the notion that individuals from Chinese cultures exhibit higher levels of conformity to authorities, majority opinions, and social norms compared to their Western counterparts (Guo et al., 2005; Zhang & Thomas, 1994; as reviewed by Chang, Mak, et al., 2011). Chinese parents also place emphasis on conformity and compliance as part of facilitating social learning, a principle deeply embedded in Chinese education systems (Zhu & Chang, 2019). Therefore, it is pertinent to separately explore parents' conformity values, as they

may stem from distinct societal conditions and parenting objectives compared to collectivist and individualist values.

It is crucial to note that China's rapid transformation from a poor agricultural society to a moderate-income industrial nation within a few decades has likely contributed to reduced emphases on collectivism and conformity in parenting, especially in affluent coastal cities (Chang, Chen, & Ji, 2011; Luo et al., 2013). There is evidence suggesting that many Chinese parents are increasingly adopting parenting practices that promote autonomy and individuality, aligning their approach with the changing social landscape (Luo et al., 2013; Way et al., 2013). To account for regional variations and individual disparities in parenting and child development within China, this study utilised samples from two distinct geographical regions to investigate individual-level traits of individualism, collectivism and conformity in relation to parenting and child social development.

Parenting in China

Chinese parents are frequently depicted as strict and perceived as exerting rigid control over their children, which is often attributed to China's Confucian cultural heritage (Huang & Gove, 2015). In line with this perception, research has indicated that Chinese (including immigrant Chinese) parents tend to display less affection, employ more restrictive or psychologically controlling methods, and grant less autonomy compared to Caucasian–American parents (e.g., Chao & Tseng, 2002; Luo et al., 2013). Notably, parental involvement in children's learning in China is more closely linked to psychological control and less associated with autonomy support when compared to the United States (Chao & Tseng, 2002). Helwig et al. (2014) observed that psychological control techniques, such as shaming and love withdrawal, were perceived as more common among Chinese children, particularly those from rural areas, than among Canadian children. Recent multinational studies have also reported that Chinese parents, particularly those from Shanghai, tend to exhibit lower levels of warmth compared to parents from other cultures (Deater-Deckard et al., 2011; Lansford et al., 2018; Skinner et al., 2022). However, these studies have also indicated that Chinese parents tend to be relatively relaxed in terms of behavioural control (e.g., Rothenberg et al., 2020), and Chinese children report experiencing less psychological control from their parents (Lansford et al., 2018). Nonetheless, few studies have explored whether parents' varying adherence to collectivistic and conformity-oriented cultural values can account for these divergent findings.

Another culturally significant aspect of parenting is the concept of family obligation. Traditional Chinese parenting places significant emphasis on instilling filial piety

and family obligation in children (Chao & Tseng, 2002). The collectivist tradition of filial piety naturally gives rise to high expectations regarding family obligations and interdependence within Chinese families (Chao & Tseng, 2002). In line with this cultural perspective, adolescents from Chinese backgrounds tend to place greater importance on family obligations and providing assistance compared to their European counterparts (Hardway & Fuligni, 2006). However, contemporary parenting practices in mainland China exhibit low levels of open solicitation and communication (e.g., Lansford et al., 2018) and a high prevalence of covert monitoring by parents. These observations suggest a potential conflict between children's growing awareness of individual rights and autonomy and the traditionally tight and hierarchical family structure (Chao & Tseng, 2002). Consequently, it becomes intriguing and crucial to explore the relationship between family obligation and collectivist cultural values in contemporary mainland Chinese families by examining the perspectives of both parents and the child.

Child adjustment in China

Research conducted using Chinese samples (e.g., studies by Rothenberg et al., 2020; Skinner et al., 2022) has often identified relationships between key aspects of parenting and child behavioural adjustment that mirror findings in other cultures. For example, findings have consistently shown that parental emotional support and authoritative parenting act as protective factors against both internalising (such as anxiety or depression) and externalising (such as aggression or conduct issues) problems (e.g., Rothenberg et al., 2020). Conversely, factors like psychological control (although not behavioural control) and negative interactions between parents and children tend to have adverse effects (Chen et al., 2011). However, it is crucial to recognise that variations in child adjustment both within and across cultures cannot be exclusively attributed to universally applicable parenting dimensions. Understanding these variations requires looking through the lens of culturally relevant parenting (as proposed by Savina et al., 2012) and considering the motivations behind parenting practices that are culturally specific (like fostering academic competitiveness, as highlighted by Zhu & Chang, 2019).

For instance, in a study involving immigrant Chinese families, it was revealed that interactions between parents and children within Chinese cultural contexts could predict child adjustment. Interestingly, mothers appeared to exert more influence in public domains, while fathers had a more significant impact in private domains (Costigan & Dokis, 2006). This suggests that parenting roles can be influenced by cultural contexts. Moreover, the emphasis placed by Chinese parents on conformity to external standards, rather than a focus on individual needs,

could contribute to the development of self-regulation in children. Consequently, Chinese children have been found to exhibit fewer internalising and externalising behavioural problems during middle childhood compared to children from other cultural backgrounds (Rothenberg et al., 2020). While externalising problems tend to rise in prevalence between ages 8 and 14 in other cultures, Chinese children have shown a consistent decline in externalising issues during the same developmental period (Rothenberg et al., 2020). However, it is noteworthy that Chinese children tend to score highest in anxiety in a comparison involving four countries (Savina et al., 2012). Yet, it is important to underline that these studies did not directly investigate how parental cultural values contribute to these distinctive patterns, leaving this aspect open for further exploration and understanding.

The present study

The current research examined whether mothers' and fathers' individualism, collectivism, and conformity significantly predict parenting behaviours and externalising and internalising problems during middle childhood. We tested the following hypotheses:

- H1. Parents' individualism should be associated with increased bi-parental warmth, rules/limit-setting, and knowledge solicitation.
- H2. Parents' collectivism should be associated with increased warmth and family obligation expectations for both parents and children.
- H3. Parents' conformity should be associated with increased psychological control and family obligation expectations for both parents.
- H4. Parents in Jinan, compared with parents in Shanghai, should endorse collectivistic and conformity values and exhibit relevant parenting (e.g., more psychological control and less knowledge solicitation) to a greater degree.

METHODS

Participants

Participants in the Chinese segment of the Parenting Across Cultures Study were enlisted from two distinct regions within the PRC, Jinan and Shanghai. Shanghai, located along the coast, stands as a representative coastal city, while Jinan typifies an inland city. Geographically, Shanghai is situated in the rice-producing southern region of mainland China, whereas Jinan is nestled in the northern region, celebrated for its wheat cultivation. The province of Shandong, where Jinan serves as

the provincial capital, is renowned for its traditional values, deeply influenced by Confucian principles, owing in part to its association with Confucius, who was born, taught, and formulated his philosophy here over two millennia ago. Economically, Shanghai has long held the mantle as China's most prosperous and advanced city (e.g., average annual income per capita 79,610 RMB in Shanghai and 46,725 RMB in Jinan [National Bureau of Statistics of China, 2022]), while many inland cities, including Jinan, have lagged behind in economic development. To recruit children and their parents, schools representing approximately different income strata within each city were selected. Consent and assent letters were distributed to parents through their children, and these letters, once signed by the parents, were returned by the children and collected by our research team. Children ($n = 218$; 117 from Jinan and 101 from Shanghai; 52% girls) were 10.21 years old ($SD = .38$), on average, at the time of data collection. Their mothers ($n = 217$) and fathers ($n = 215$) also participated. Almost all parents were married (99.5%) and biological parents (99.5%). Participants were recruited to be socioeconomically representative of Jinan and Shanghai.

Procedure

Measures were administered in Chinese following forward- and back-translation from the English language originals and methodological validation to ensure the conceptual equivalence of the instruments (Erkut, 2010). Interviews and questionnaire sessions were conducted at participant-chosen locations, which were either the children's schools or their homes. Parents chose whether to complete measures orally or in writing; children completed interviews orally with an interviewer who read the question aloud, showed the child a visual depiction of the rating scale, and recorded the child's response.

Measures

Parent individualism and collectivism

Mothers and fathers completed a measure of individualism and collectivism adapted from Singelis et al. (1995) and Triandis (1995). Parents rated the importance of different values related to their autonomy and belonging to a social group. Parents 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. Examples of individualist items included "I'd rather depend on myself than others" and "My personal identity, independent of others, is very important to me." Examples of collectivist items included "It is my duty to take care of my family, even when I have to sacrifice what I want" and "To

me, pleasure is spending time with others." Items were averaged to create an individualism scale ($\alpha = .71$ and $.70$ for mothers and fathers, respectively) and a collectivism scale ($\alpha = .74$ and $.77$ for mothers and fathers, respectively).

Parent conformity values

Mothers and fathers each rated an item developed by Schwartz et al. (2001): "I believe that people should do what they're told. I think people should follow rules at all times, 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 with excellent established reliability, convergent and discriminant validity, and measurement invariance that has been used in over 60 cultures worldwide and has been used successfully with Chinese families by our own and other research teams (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 averaged fathers' and children's ratings of fathers' warmth to create composite measures of *mother warmth* ($\alpha = .81$) and *father warmth* ($\alpha = .78$).

Parent psychological control

Children reported on their parents' psychological control (Barber, 1996; Barber et al., 1994). Children rated 7 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 ($\alpha = .62$), with higher numbers indicating more psychological control.

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 the work of Conger et al. (1994) and Steinberg et al. (1992). This measure has demonstrated adequate psychometric properties in past studies examining both the entire Parenting Across Cultures sample and Chinese families in particular (Lansford

et al., 2018). To measure parent rules/limit-setting, children answered 5 questions that captured 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 they spend time with on a 0 = *I do not try*, 1 = *I try a little*, 2 = *I try a lot* scale. Both parent rules/limit-setting and parent knowledge solicitation were assessed by asking about the same five child activities (e.g., with whom the child spends time, how the child spends his/her free time, how the child spends his/her money, where the child goes right after school, and the type of homework the child receives). Items were averaged to create composite scales for parent *rules/limit setting* ($\alpha = .74$) and parent *knowledge solicitation* ($\alpha = .71$). 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 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 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 ($\alpha = .82, .85$, and $.84$ for child, mother, and father reports, respectively).

Child internalising and externalising behaviours

Parents and children, respectively, completed the Child Behavior Checklist (CBCL) and Youth Self-Report (YSR; Achenbach, 1991). Parents and children indicated 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 at least 100 languages and have been used with at least 100 cultural groups. The *Internalizing Behavior* scale was generated by summing the responses from 31 items (for

parents) or 29 items (for children) including behaviours and emotions such as loneliness, self-consciousness, nervousness, sadness, feeling worthless, anxiety, withdrawn behaviour and physical problems without medical causes. The *Externalizing Behavior* scale was created by summing the responses from 33 items (for parents) or 30 items (for children) including behaviours such as lying, truancy, vandalism, bullying, disobedience, tantrums, sudden mood change and physical violence. We created cross-informant composites by averaging all available reporters' scores for *internalising* ($\alpha = .87$) and *externalising* ($\alpha = .85$) behaviours.

Covariates

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

Analytic plan

Analyses proceeded in three steps. First, we tested for mean differences in study variables for Jinan compared to Shanghai. Second, we examined bivariate correlations between the cultural value variables and the parenting and child adjustment variables. Third, we conducted multiple regressions predicting each of the parenting and child adjustment variables from the three cultural value variables (i.e., individualism, collectivism and conformity), separately for mothers and fathers, controlling for child gender and parent education (mother education in the models with mothers' cultural values and father education in the models with fathers' cultural values). In initial regression models, we centred the predictor variables and created interaction terms between each centred predictor and the city (Jinan or Shanghai) to test whether associations between cultural values and parenting and child adjustment differed for Jinan compared to Shanghai. Except when preliminary regressions showed a significant interaction with city, the regressions reported below reflect findings from the full Chinese sample.

RESULTS

Descriptive statistics for all variables are shown in Table 1.

Mean differences between Jinan and Shanghai

As shown in Table 1, *t*-tests revealed significant mean differences between Jinan and Shanghai on 3 of the 16 variables. Mothers in Jinan reported higher collectivism than did mothers in Shanghai. Parental psychological control was higher in Jinan than in Shanghai. Parental knowledge solicitation was lower in Jinan than in Shanghai.

TABLE 1
Descriptive statistics and tests of mean differences between Jinan and Shanghai

Study variable	Jinan		Shanghai		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Mother individualism	2.90	.35	2.92	.39	−.36
Mother collectivism	3.28	.31	3.18	.34	2.10*
Mother conformity	4.31	1.10	4.16	1.19	.92
Father individualism	2.86	.33	2.93	.38	−1.40
Father collectivism	3.20	.34	3.21	.36	−.32
Father conformity	4.33	1.20	4.13	1.25	1.23
Mother warmth	3.25	.39	3.27	.41	−.28
Father warmth	3.19	.36	3.20	.47	−.32
Parent psychological control	2.18	.47	1.96	.54	3.21**
Rules/limit-setting	.86	.65	.84	.71	.21
Knowledge solicitation	.77	.49	.91	.55	−1.92*
Mother family obligations	3.70	.41	3.69	.51	.16
Father family obligations	3.62	.40	3.61	.55	.11
Child family obligations	3.66	.52	3.65	.60	.05
Child internalising	6.41	3.56	6.79	5.26	−.62
Child externalising	6.75	3.15	6.43	4.29	.62

* $p < .05$. ** $p < .01$.

Mothers' cultural values

Bivariate correlations are shown in Table 2. As shown, mothers' individualism was positively correlated with more parental knowledge solicitation and with mothers' higher expectations regarding children's family obligations. Mothers' higher collectivism was correlated with more maternal warmth, mothers' higher expectations regarding children's family obligations, and children's perceptions of their parents as having higher expectations regarding children's family obligations. Mothers' higher conformity values were correlated with more paternal warmth and children's perceptions of their parents as having higher expectations regarding children's family obligations.

Results from the regression analyses are shown in Table 3. Preliminary regressions showed only two

significant interactions between mothers' cultural values and city (Jinan vs. Shanghai) in the prediction of parenting and child adjustment. These significant interactions are noted in Table 3, but with these exceptions, the tabled results are for models without the interaction terms. Mothers' higher individualism was associated with more knowledge solicitation after taking into account the other cultural values, child gender and mothers' education (a significant individualism by city interaction predicted paternal warmth; mothers' individualism was associated with paternal warmth in opposite directions in Jinan and Shanghai but not significant in either). Mothers' higher collectivism was associated with more maternal warmth, more paternal warmth (but only in Shanghai, not Jinan), higher maternal expectations regarding children's family obligations, and higher child perceptions of their parents' expectations regarding children's family obligations, even after taking into account the other cultural values, child gender and mothers' education. Mothers' higher conformity values were associated with more paternal warmth, higher maternal expectations regarding children's family obligations, and higher child perceptions of their parents' expectations regarding children's family obligations, taking into account the other cultural values, child gender and mothers' education. In significant regression models, maternal warmth was higher for girls than boys, rules/limit-setting and knowledge solicitation were lower for girls than boys, and girls had lower externalising behaviour scores. Higher maternal education was associated with more maternal and paternal warmth.

Fathers' cultural values

As shown in the correlations depicted in Table 2, fathers' individualism was positively correlated with more maternal warmth and fathers' higher expectations regarding children's family obligations. Fathers' higher collectivism was correlated with more parental warmth and fathers'

TABLE 2
Bivariate correlations

Parenting or child adjustment variable	Mother			Father		
	Individualism	Collectivism	Conformity	Individualism	Collectivism	Conformity
Mother warmth	.10	.16*	.01	.14*	−.01	−.02
Father warmth	−.01	.07	.14*	.05	.20**	.08
Parent psychological control	.01	.11	.05	.03	.02	−.03
Rules/limit-setting	.12	.09	−.06	.09	.05	−.04
Knowledge solicitation	.16*	.04	.04	.09	.06	.09
Mother family obligations	.22**	.39***	.10	.08	.10	.05
Father family obligations	−.03	.08	−.03	.14*	.48***	.29***
Child family obligations	.03	.17*	.14*	−.01	.10	.10
Child internalising	.10	.01	.05	−.04	−.08	−.06
Child externalising	.06	.00	.02	−.02	−.01	.00

* $p < .05$. ** $p < .01$. *** $p < .001$.

TABLE 3
Regressions predicting parenting and child adjustment from parents' cultural values

Parenting or child adjustment variable	Mother cultural values				Father cultural values			
	Individualism	Collectivism	Conformity	F	Individualism	Collectivism	Conformity	F
Mother warmth	.06 (.08)	.18* (.09)	.00 (.02)	5.06***	.13 (.09)	-.07 (.09)	.04 (.02)	2.44*
Father warmth	-.13 (.08)	.09 (.09)	.17* (.02)	2.97** ^a	-.01 (.09)	.19* (.08)	.04 (.02)	2.31*
Parent psychological control	-.04 (.11)	.14 (.13)	.04 (.03)	.95	.02 (.12)	-.01 (.12)	-.07 (.03)	1.30
Knowledge solicitation	.16* (.11)	.01 (.12)	.06 (.03)	4.95***	.09 (.11)	-.02 (.11)	.08 (.03)	3.84**
Rules/limit-setting	.08 (.14)	.11 (.16)	-.04 (.04)	5.38***	.11 (.14)	.00 (.14)	-.08 (.04)	5.15***
Mother family obligations	.01 (.09)	.36*** (.10)	.13* (.03)	7.96***	.07 (.10)	.12 (.10)	.06 (.03)	1.87
Father family obligations	-.10 (.10)	.12 (.11)	-.03 (.03)	.98	.01 (.09)	.45*** (.09)	.27*** (.02)	12.09*** ^b
Child family obligations	-.06 (.12)	.20** (.13)	.14* (.03)	2.97*	-.05 (.12)	.10 (.12)	.11 (.03)	.99
Child internalising	.16 (.92)	-.04 (1.04)	.03 (.27)	1.97	-.02 (.93)	-.07 (.92)	-.04 (.24)	1.16
Child externalising	.09 (.76)	-.02 (.85)	.02 (.22)	4.40***	.00 (.77)	-.02 (.76)	.00 (.20)	2.99*

Note. Values presented are standardised betas with standard errors in parentheses. Models control for child gender and parent education. ^aThe model included a significant individualism \times city interaction ($\beta = -.17$, $SE = .03$, $p < .05$) and a significant collectivism \times city interaction ($\beta = .21$, $SE = .03$, $p < .01$). ^bThe model included a significant conformity values \times city interaction ($\beta = .13$, $SE = .03$, $p < .05$). * $p < .05$. ** $p < .01$. *** $p < .001$.

higher expectations regarding children's family obligations. Fathers' higher conformity values were correlated with fathers' higher expectations regarding children's family obligations.

Preliminary regressions showed one significant interaction between fathers' cultural values and city (Jinan vs. Shanghai) in the prediction of parenting and child adjustment. This significant interaction is noted in Table 3, but with this exception, the tabled results are for models without the interaction terms. As shown in Table 3, fathers' individualism was not associated with any of the parenting or child adjustment variables after taking into account collectivism, conformity values, child gender, and fathers' education. Fathers' higher collectivism was associated with higher paternal warmth and fathers' higher expectations regarding children's family obligations. Fathers' higher conformity values were associated with fathers' higher expectations regarding children's family obligations (significantly more strongly in Shanghai than in Jinan) after taking into account the other cultural values, child gender and fathers' education. In significant regression models, parents engaged in less rule/limit-setting and knowledge solicitation with daughters than sons, and girls had fewer externalising behaviours than boys. Fathers' higher education was associated with more maternal warmth and more knowledge solicitation.

DISCUSSION

The current research examined the effects of parents' cultural values on parenting behaviours and behavioural adjustment problems among Chinese children in middle childhood. Overall, we found that mothers' cultural values predicted more variance in parenting and children's externalising behaviours than those of fathers, except in fathers' family obligation expectation after controlling for

the covariates. The cultural value effects are largely concentrated in parental warmth and family obligation expectations, with the cultural values of each parent exerting greater effects on their own parenting than their partner's parenting in most cases. Specifically, maternal individualism positively predicted parents' knowledge solicitation. However, this is the only effect we found that supports Hypothesis H1. Maternal (paternal) collectivism positively predicted maternal (paternal) warmth and family obligation expectations, supporting Hypothesis H2. We found somewhat different effects of conformity values for mothers and fathers in directions that are largely consistent with Hypothesis H3. Whereas mothers' endorsement of conformity positively predicted not only mothers' family obligation expectations but also paternal warmth and children's perception of family obligation, fathers' conformity only positively predicted fathers' family obligation expectations. However, our data did not support an association between conformity and parental psychological control or associations between cultural values and rule setting or child adjustment. Although in most cases regional differences did not moderate the cultural effects on parenting, some regional differences between Jinan and Shanghai are noteworthy: whereas mothers in Jinan were more collectivistic than mothers in Shanghai, parents in Shanghai adopted less psychological control and more knowledge solicitation in parenting. Moreover, mothers' collectivism predicted paternal warmth only in Shanghai but not in Jinan, and paternal conformity was a stronger predictor of paternal expectations of family obligations in Shanghai than in Jinan.

The current findings showed that cultural values did not shape all aspects of parenting as expected from the traditional characterisation of Chinese culture and parenting. Contrary to the impression of parents from collectivistic cultures (including China) expressing low warmth towards children in cross-cultural comparisons

(e.g., Lansford et al., 2018; Skinner et al., 2022), collectivism was found to be positively associated with both maternal and paternal warmth in China. This, however, is not incompatible with the culturally specific function of parental warmth in China (Zhu & Chang, 2019), as emotional support and intimacy may serve as the glue of parent–child relationships, encouraging active endorsement of family duties and facilitating willing acceptance of parental restrictions and demands. In support of this view, studies on Chinese parents generally showed that they hold parenting beliefs and goals that are warmth-oriented rather than control-oriented (Lu & Chang, 2013). Whereas this may indicate a relatively recent value shift towards individualism due to the socio-economic changes in China as some suggest (e.g., Luo et al., 2013), we cannot rule out the possibility that both collectivism and individualism encourage parental warmth, albeit in somewhat different ways. China's drastic societal changes (e.g., the enactment and abolishment of the one-child policy; Lu & Chang, 2013) may also alter family obligation expectations. However, our findings suggest that these changes probably do not attenuate the association between conformity values and family obligation expectations. Further, mothers' (but not fathers') endorsement of conformity values also predicted children's perception of family obligations in a way consistent with traditional family role division (with mothers playing a greater role in children's socialisation).

Finally, we found very limited evidence of regional factors moderating the cultural effects on parenting, despite some important regional differences in both values and parenting. It is possible that regional differences in cultural norms might reduce individual-level variations without altering the association between cultural values and parenting practices (Smetana, 2017). Other than assuming distal cultural influences, it is also possible that uneven distribution of educational resources (more concentrated in highly developed regions like Shanghai) and pressure of academic competition (more intense in less developed regions like Jinan; Zhu & Chang, 2019) might better explain the heightened reliance on psychological control and lack of egalitarian parent monitoring (knowledge solicitation) in Jinan than in Shanghai.

The current results should be interpreted with caution due to several limitations. The relatively small regional sample makes it premature to generalise the current findings to the entire Chinese society. The comparison between Jinan and Shanghai might also fall short of representing regional variations within China in part because residents of both cities may have come from other parts of China and may even have had overseas experience. In future research, longitudinal or cross-sectional studies across multiple developmental periods using a nationally representative sample are needed to provide a more decisive assessment of the relationship between cultural values and parenting. As another potential research direction,

using a domain-specific approach (e.g., assessing parental responses to issues in specific domains rather than general evaluations) might further our understanding of the effects of cultural values on parenting (Smetana, 2017), as the enculturation effects on parenting might manifest most strongly in culturally emphasised domains (e.g., learning and academic achievement in China; Zhu & Chang, 2019).

To conclude, by examining cultural values at the individual level, the current research draws attention to the often-neglected role of within-culture variations in cultural values on parenting (Lansford et al., 2018, 2021). Our finding indicates that individual-level cultural values' effects do not necessarily correspond to the cultural stereotype: Chinese parents' collectivism predicted greater parental warmth, but not psychological control and rule setting, whereas endorsement of individualism did not seem to undermine family obligation expectations (the opposite trend was true based on bivariate correlations). Additionally, whereas the current study found no significant effect of cultural values on child adjustment, this does not rule out possible indirect effects of cultural values through other factors. Attempts to promote youth adjustment (e.g., parent-coaching intervention programmes targeting left-behind children in rural areas in China; Chang & Lu, 2018) are likely to be more successful with better awareness of within-culture variations (at individual or regional levels) in cultural values and beliefs vis-a-vis the best practices of protecting and nurturing children.

ETHICAL STATEMENT

The interview content, procedures, and questionnaire content were approved by the Institutional Review Board of the respective universities and complied with the 1964 Helsinki Declaration on ethical standards and its later amendments. Informed consent was obtained from all individual adult participants included in the study; assent was obtained from children.

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