

Chinese Malaysian Adolescents' Social-Cognitive Reasoning Regarding Filial Piety Dilemmas

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This study examined the social-cognitive reasoning of 52 Chinese Malaysian preadolescents (9–12 years old; $M = 11.02$, $SD = 0.94$) and 68 adolescents (13–18 years old; $M = 14.76$, $SD = 1.39$) in resolving filial dilemmas within the personal and moral domain. Preadolescents deferred to parental authority, whereas adolescents endorsed filial obligation reasoning to justify compliance in the personal domain. Both appealed to filial obligation, pragmatic, or welfare and safety reasoning to justify compliance but fairness or rights reasoning to justify their noncompliance, for the moral issue. Distinctions between authoritarian and reciprocal filial piety reasoning were revealed. Findings demonstrated complex decision-making and cognitive reasoning processes among Chinese Malaysian adolescents as they negotiate their filial obligations and autonomy development.

During adolescence, individuals tend to seek greater autonomy and explore new roles (Turiel, 2002) while maintaining connectedness with their parents (Fuligni & Pedersen, 2002; Pomerantz, Qin, Wang, & Chen, 2011). Importantly, autonomous adolescents may demonstrate volitional functioning without separating from their parents as these adolescents are willing to depend on their parents for guidance and support (Ryan & Deci, 2002). A growing body of literature exists regarding conflict resolution and negotiations between adolescents and parents in China (e.g., Chen-Gaddini, 2012; Lahat, Helwig, Yang, Tan, & Liu, 2009; Smetana, Wong, Ball, & Yau, 2014; Yau & Smetana, 2003). However, adolescents' reasoning regarding such issues are less understood in other societies undergoing rapid social changes, where more traditional values of interdependence remain important but more independent-focused Western values are being incorporated, resulting in autonomous-related selves (Kagitcibasi, 2005). Among these cultures, such as Malaysia, where this study was conducted, the seemingly conflicting values of freedom and

autonomy versus conformity to social rules and absolute obedience toward parents coexist (Lee, Quek, & Chew, 2001). These values may influence adolescents' judgment and reasoning in making interpersonally and family-related decisions.

Children and adolescents have been shown to use three types of qualitatively distinct reasoning in evaluations of social actions (Nucci, 2001; Smetana, 2006, 2011; Turiel, 2002, 2006): (a) *personal justifications*, which pertain to individual jurisdiction, autonomy, self-esteem, and self-development (Killen, Lee-Kim, McGlothlin, & Stangor, 2002; Nucci, 2001); (b) *social-conventional justifications*, which concern values, norms, customs, and conventions that are arbitrary, agreed upon, and relative to specific contexts (Killen & Stangor, 2001; Smetana, 2011), and (c) *moral justifications*, which involve fairness and rights, equal treatment, and concern with others' harm or welfare; such prescriptive judgments are generalizable across contexts and independent of particular rules or authority dictates (Killen et al., 2002; Smetana, 2011). The utilization of these various forms of reasoning depends on the issue at hand, as well as the developmental stage and sociocultural context of the decision maker (Killen et al., 2002). Importantly, many issues are

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complex and require reasoning that reflects the coordination of moral concerns, social conventions, and personal choice (Gere & Helwig, 2012).

Building on the social domain model (Killen et al., 2002), this study aimed to examine the multifaceted reasoning of Chinese Malaysian preadolescents and adolescents in resolving dilemmas pertaining to issues that are culturally salient to them; specifically, we focused on the Confucian filial piety ethic for reasons described in the following sections. The overall conceptualization of this study was based on the extant literature on social-cognitive reasoning among Chinese and Western samples. However, we adopted a within-culture approach and examined social-cognitive reasoning variations among Chinese Malaysian preadolescents and adolescents. Examinations of Chinese Malaysian preadolescents' and adolescents' reasoning in resolving filial dilemmas can contribute to our developmental and cultural understanding of the decision-making process in negotiating autonomy and connectedness around topics that are relevant to their socialization experiences (Yeh, 1995).

Filial Piety Among the Chinese: Traditional and Contemporary Views

Filial piety is the most influential Confucian ethic guiding intergenerational relationships and the mutual obligations between parents and children in the Chinese culture (Ho, 2008). The traditional Chinese family is hierarchical, with fathers held in high esteem and children's obedience toward parental injunctions expected (Ho, 2008). Filial piety tenets focus on maintaining family order by promoting responsibility, interdependence, sacrifice, and family harmony (Bengtson & Putney, 2000). Despite increasing pressure to value independence and autonomy with the Westernization of modern Chinese societies (Yue & Ng, 1999), contemporary Chinese individuals still endorse the filial duties of respecting, loving, and honoring parents, as well as providing material support and eventual care to elderly parents to some degree (Laidlaw, Wang, Coelho, & Power, 2010; Mehta & Ko, 2004). Adolescents' filial piety beliefs and behaviors are related to, but distinct from the general quality of their parent-child relationship (Cheah, Bayram Özdemir, & Leung, 2012). Yeh (2003) and Yeh and Bedford (2003) proposed two types of motivation that underlie the endorsement of filial behaviors: *authoritarian filial piety* and *reciprocal filial piety*. Authoritarian filial piety entails children's suppression of their own wishes and compliance with parental wishes

because of parents' physical, financial, or social seniority. In contrast, reciprocal filial piety encompasses children's emotional and spiritual attendance to and caring for parents out of gratitude for their efforts in having raised them.

Filial piety also constitutes the core principle of the Chinese family system in the diaspora, including Malaysia (Cheah et al., 2012; Ismail, Jo-Pei, & Ibrahim, 2009). The ethnic Chinese constitute the largest minority group in Malaysia (24.6% of the Malaysian population in 2010), with the ethnic Malays being the majority (Department of Statistics, Malaysia, 2011). Chinese filiality in Malaysia has been said to be closer to their traditional Confucian origins than the current practices of many Chinese living in Mainland China due to several major factors related to the maintenance of ethnic cohesion within the Malaysian context (Thomas, 1990). For example, there are numerous private Chinese language vernacular schools whose medium of instruction is Mandarin, although the first official language is Malay, and English is taught in public schools and widely used. Importantly, religious barriers for the mostly Buddhist or Taoist Chinese to intermarry with the Malay Muslim majority exist. Moreover, Malaysian governmental policies favoring the ethnic Malays (e.g., ethnic quotas in universities and businesses and other affirmative action policies) exist to maintain political dominance and balance the economic distribution (Lee & Tan, 2000).

Thus, the strong continued Chinese cultural resilience within an Asian context despite increasing Westernization of this population of adolescents in Malaysia (Lee et al., 2001) allowed for the unique opportunity to examine how their reasoning processes reflected the potentially conflicting demands for relatedness with family and culture, and increasing autonomy. The Chinese cultural values that promote parental authority and child compliance examined thus far in the social-cognitive reasoning literature (e.g., Lahat et al., 2009; Smetana et al., 2014) are fundamentally rooted in the filial piety ethic (Ho, 2008). The current study extended this research by exploring the role of the overall filial piety construct in the socialization and development of Chinese Malaysian adolescents (Cheah et al., 2012). Specifically, we examined the types of reasoning preadolescents and adolescents make when they face dilemmas pertaining to the fulfillment of filial responsibilities. We focused on filial dilemmas surrounding the personal and moral domains, and further explored the roles of adolescents' decision, age, and gender in their reasoning within each filial dilemma.

Social-Cognitive Reasoning Regarding Personal and Moral Issues

Personal Domain

According to the social domain theory, issues in the personal domain pertain to social actions that concern the private aspects of one's life and primarily influence the individual instead of others or the social structure. These actions are not directly related to social regulation or moral concern (Nucci, 2001; Smetana, 2011). Research on reasoning and decision making has reported that children and adolescents in Western cultures consider issues in the personal domain, including choice of friends, recreational activity, and appearance, as subject to individual preference and choice, and outside of the legitimate jurisdiction of adults, judgment of authority, or social regulation (Nucci, 1996; Nucci, Killen, & Smetana, 1996). Likewise, Chinese children and adolescents in both modern and traditional societies consider personal issues to be under the individual's jurisdiction, emphasizing personal choice and individual rights to justify their opposition to parental authority (e.g., Helwig, Yang, Tan, Liu, & Shao, 2011; Smetana et al., 2014; Yau & Smetana, 2003).

Research has also shown that the endorsement of individual choice versus deference to authority varies by the context and decision being considered (Helwig, 2005). Specifically, studies in both Western and Chinese samples revealed that adolescents primarily endorsed authority-based procedures for curriculum decisions due to their concerns about having limited knowledge and competence in making school curriculum decisions (Bregman & Killen, 1999; Helwig, Arnold, Tan, & Boyd, 2003; Helwig & Kim, 1999). However, both children and adolescents rejected adult authority in decisions regarding school-based recreational activities, preferring instead to grant children the autonomy to choose.

Together, these findings suggest that Chinese children and adolescents might emphasize authority-based reasoning to explain their compliance with adults' opinions over personal issues like school curriculum decisions. However, the concepts of individual freedom, personal choice, and autonomy might become more salient when they justify their preference for personal matters such as selecting recreational activities. These differences reflect Chinese children's and adolescents' attempts to balance their own desires and the demands of authority figures while considering the topic at hand. Nevertheless, no study has examined how Chinese Malaysian preadolescents and adolescents reason

about making an autonomous choice or complying with their parents' request over issues in the personal domain. Thus, in this study, we presented a dilemma pertaining to the *selection of an extracurricular activity*. Participants were asked whether the protagonist should pursue his/her own interest and join the basketball club or follow the wishes of parents to join the Malay language club (the national language of the country) when selecting an extracurricular activity; these preadolescents and adolescents were also asked to provide a reason for their decision.

Moral Domain

Issues in the moral domain include social interactions that concern the rights or well-being of others; the propriety of these interactions is defined by implicit or explicit societal norms (Nucci, 2001; Turiel, 2002). Children and adolescents in Western cultures have been shown to simultaneously consider the issues of justice and fairness, the possibility of negative consequence for others, and the welfare and safety of others when reasoning about their decision to prioritize justice (e.g., being fair to everyone) over interpersonal relationship concerns (e.g., favoritism toward a close friend; Smetana, Killen, & Turiel, 1991).

Despite a growing body of research on Chinese adolescents' decision making and reasoning involving interpersonal relationships (Yau & Smetana, 1996, 2003), family obligations (Fulgini, Tseng, & Lam, 1999; Lahat et al., 2009), and parent-child conflicts (Chen-Gaddini, 2012), there is limited research examining how Chinese preadolescents and adolescents make decisions in resolving disputes with their parents over moral-related filial issues and how they justify their decisions. Thus, in this study, we presented a moral dilemma situated within a filial piety context pertaining to the child's *obedience to her or his father after the father breaks his promise to the child*. Specifically, Chinese Malaysian preadolescents and adolescents were asked whether the protagonist should refuse or agree to his or her father's request to give up the protagonist's savings for his or her father's gambling debt. They were also asked to provide a reason for their decision. This filial dilemma centered on issues related to fairness over the father's broken promise and the child's right to keep his or her earned money. Interdependence and mutual obligation between parents and children are core virtues endorsed by the filial piety ethic (Ho, 2008). Parents are expected to sacrifice time and money for their children as an

investment in their future and also to internalize feelings of veneration and indebtedness in their children. These feelings of indebtedness in children are believed to motivate children to repay their parents' sacrifice and investments by helping and supporting them (Bengtson & Putney, 2000; Cheah et al., 2012; Mehta & Ko, 2004). Thus, this dilemma was designed to examine whether children would fulfill their filial duty to help and support their parents during times of need despite the broken promise (Yeh & Yang, 1989).

Age and Gender Effects in Social-Cognitive Reasoning

To better understand within-culture variations in Chinese Malaysian preadolescents' and adolescents' social-cognitive reasoning regarding their solutions to the two types of filial dilemmas, we also considered age differences in their decisions and reasoning. Older Chinese adolescents were more likely than their younger counterparts to appeal to individual rights, autonomy, and personal choice in their reasoning regarding personal issues such as food or recreation preferences (Helwig et al., 2011). With age, Chinese adolescents were also more likely to appeal to personal jurisdiction to justify conflicts with their parents over choice of activities (Yau & Smetana, 2003). However, older Chinese and non-Chinese children were more likely than younger children to consider issues of knowledge and competence when reasoning about authority-based versus autonomy-granting procedures when making decisions for school curricula (Helwig, 1997; Helwig & Kim, 1999; Helwig et al., 2003). Moreover, older children and adolescents were more consistent than their younger counterparts in considering both fairness-welfare and interpersonal relationships when resolving moral and interpersonal conflicts (Smetana et al., 1991).

Developmental differences in Chinese children's endorsement of certain aspects of the filial piety ethic have also been proposed. Adolescents have been found to report a greater sense of obligation to repay their parents with age (Fuligni & Pedersen, 2002), indicating an increasing internalization of reciprocal filial understanding. However, ours was the first study to examine whether the use of filial obligation-related reasoning differed across ages when resolving filial dilemmas in the personal and moral domains. We also investigated the distinction between children's compliance with parental request due to obedience versus an understanding of interpersonal familial relationships based on affection and gratitude.

Regarding gender differences in adolescents' social-cognitive reasoning, Chinese men were more likely than their female counterparts to consider the issue of knowledge when reasoning about compliance with parental authority in making decisions for the family (Helwig et al., 2003). Nevertheless, other studies have revealed nonsignificant differences in the social-cognitive reasoning of male versus female adolescents (Bregman & Killen, 1999; Lahat et al., 2009; Smetana et al., 1991). With regard to gender roles pertaining to the filial piety ethic, contemporary Chinese sons and daughters are expected to fulfill their filial obligations to both parents (Zhan & Montgomery, 2003), and no gender differences were found in the filial beliefs, emotions, and behaviors of Chinese Malaysian adolescents (Cheah et al., 2012). However, gender-specific expectations for daughters and sons to fulfill certain filial roles and responsibilities may still be present; thus, gender differences were explored in this study.

Aims and Hypotheses

In sum, we investigated the social-cognitive reasoning of Chinese Malaysian preadolescents and adolescents across two filial dilemmas. Both filial dilemmas presented instances when the parent and the protagonist had different goals, and the protagonist's obedience was being questioned. Specifically, the first dilemma pertained to the selection of the type of extracurricular activity, which may allow more room for children to assert their autonomy. In contrast, the second dilemma portrayed a father breaking his promise to his child, and pulled for children's filial loyalty and responsibility toward their parents, an area that has been less explored. Examining both a personal and a moral filial dilemma allowed for better understanding of Chinese Malaysian preadolescents' and adolescents' multifaceted reasoning reflecting their simultaneous concern with individual autonomy and rights, and the maintenance of traditional hierarchical relationships and social obligations (Helwig et al., 2003).

This study had four specific aims. First, we investigated whether Chinese Malaysian preadolescents and adolescents' decisions (i.e., affirming parents' vs. their own interest) varied when resolving a filial dilemma in the personal versus moral domain. Second, we explored the type of reasoning they provided when resolving a filial dilemma in the personal versus moral domain. Third, we compared Chinese Malaysian preadolescents' and adolescents' reasoning across the decisions that they made in

resolving each dilemma (in terms of affirming the parents' vs. their own interest). Finally, we examined whether age and gender played a role in their decision within each dilemma and in their reasoning across and within the dilemmas.

Although no studies have examined the social-cognitive reasoning of Chinese Malaysian preadolescents and adolescents, we generated our hypotheses based on previous findings on related topics conducted in Western and Chinese adolescent samples. Overall, participants were expected to apply multifaceted reasoning to justify their decisions in both filial dilemmas. We first expected that the decision and reasoning of Chinese Malaysian preadolescents and adolescents would be responsive to the specific dilemma being considered. Specifically, we predicted that more participants would report that the protagonist should follow his or her own interests (i.e., join the basketball club) than follow the parents' request (i.e., join the Malay language club) in the selection of an extracurricular activity and justify this decision predominantly by referencing their individual preference and interests.

In contrast, given the emphasis on mutual obligations and repayment in the filial piety ethic, we expected that more preadolescents and adolescents would decide that the protagonist should affirm the parent's interest (i.e., give money to his/her father to pay for the father's gambling debt) rather than follow his or her own interest (i.e., keep the money for his/her own use) in the breaking promise dilemma. Participants were expected to cite more parent-focused reasoning (especially filial piety reasoning) in justifying their decision to give money to the father in this dilemma. In contrast, participants were expected to adopt moral reasoning (specifically pertaining to fairness and rights) to justify their decision for why the protagonist should defy his or her father's request.

We also expected to find age differences in Chinese Malaysian preadolescents versus adolescents' reasons for their decisions within each dilemma. In selecting an extracurricular activity, adolescents were expected to be more likely than preadolescents to endorse reasoning based on their own personal choice rather than their parent's authority due to an increasing focus on autonomy in making decisions regarding recreational activities. We also expected that adolescents would be more likely to apply filial obligation/indebtedness reasoning than preadolescents. Finally, due to the lack of consistent gender-related patterns of findings identified in previous research, no specific hypotheses were proposed regarding the role of gender in the decision

making and reasoning of Chinese Malaysian preadolescents and adolescents. All other examinations of interactions between decision, age, and gender were exploratory.

Method

Participants

Fifty-two Chinese preadolescents (9–12 years old; $M = 11.02$, $SD = 0.94$; 44.23% female) and 68 adolescents (13–18 years old; $M = 14.76$, $SD = 1.39$; 52.94% female) residing in Kuala Lumpur, the capital of Malaysia, were recruited from after-school programs. The preadolescents attended primary school, whereas the adolescents attended secondary school. All participants were ethnically Chinese, with both parents of Chinese descent. Their native language was Chinese, but Malay is the national language, and English is the official second language in Malaysia. Seventy percent of the participants spoke primarily in Chinese (Mandarin, Cantonese, Hakka, Hokkien, or Teochew dialects) with their family members, 24% spoke some Chinese and some English/Malay, and 6% spoke only English or Malay at home. Most participants identified as Buddhist (81%), followed by Christian (15%), Muslim (8%), and other (3.4%). About half (45.1%) of the participants were firstborn. All participants were from two-parent middle-class families. About half of the fathers (51.6%) and a quarter of the mothers (23.7%) held professional occupations. All demographic information was self-reported by the participants.

Procedure

Permission was first obtained from the directors of after-school centers. Then, packets of questionnaires, including a brief description of the study, the informed consent form, a demographics measure, and two vignettes with open-ended questions, were distributed to the participating adolescents. Assent and parental consent were obtained from all participants prior to completing the questionnaires at the centers. Participants could choose to complete the questionnaires in English or Chinese. These data were collected between September 2010 and March 2011.

Measures

Measures that were originally available in English were first translated to Chinese and then back translated to English by bilingual graduate

students. Similarly, the Chinese measures were first translated to English and then back translated to Chinese. All discrepancies were resolved through consensus among the translators. Finally, the measures (four in each language) were piloted with eight participants (four male and four female) who were interviewed about the measures to establish comprehension and to further ensure the appropriateness of the vignettes and language for Chinese Malaysian children and adolescents.

Vignettes of Filial Dilemma

We modified two filial dilemmas developed by Yeh and Yang (1989) in their cognitive-structural analysis of Chinese filial piety in order to make them relevant for the age of our participants and the Malaysian cultural context. One dilemma involved selecting an extracurricular activity, and another involved obedience in response to the father breaking his promise to his child (Appendix). Each dilemma was followed by two questions, *What do you think [name of the protagonist in the story] should do?* and *Why do you think so?* Participants were asked to respond to the first question by choosing to acquiesce to the parent or follow their own opinion. Responses to the question "why" were open-ended and coded as described next. The gender of the protagonist in the vignettes was matched with the gender of the participant to control for possible gender bias in their reasoning. The presentation of the vignettes was counterbalanced.

Coding of Decision Made and Social-Cognitive Reasoning

Participants' decisions regarding what the protagonists should do were coded dichotomously as (a) affirming the protagonist's interest or (b) affirming the parent's interest. Participants' open-ended justifications were coded into six possible categories, guided by social-cognitive reasoning research (e.g., Bregman & Killen, 1999; Killen & Stangor, 2001; Killen et al., 2002; Smetana et al., 1991). In order to distinguish between authoritarian and reciprocal filial piety reasoning (Yeh & Bedford, 2004), we coded for whether the participants complied because they submitted to their parents' authority (*Authority and Authority Expectations*) or because they had internalized an understanding of a commitment toward and repayment of their parents' caregiving (*Filial Obligation or Indebtedness*). The *Personal Choice and Autonomy* category

corresponded to participants' reasons related to the importance of autonomy, individual choice, and desires. The *Pragmatic Reasoning* category pertained to participants' justifications reflecting a practical approach in resolving the dilemma sensibly and realistically. The *Welfare and Safety* category corresponded to participants' reasoning pertaining to acts that negatively affect another's physical or psychological well-being. Finally, the *Fairness or Rights* category pertained to participants' appeal to maintaining fairness or issues of justice (see Table 1 for sample responses).

Participants' responses were coded into more than one reasoning category when applicable. Specifically, 12% of the current sample provided two justifications in their responses for the activity dilemma, whereas 20% provided two justifications and 2% provided three justifications for the breaking promise dilemma. Thus, similar to previous studies (e.g., Helwig, 2006; Helwig et al., 2003; Horn, 2006; Killen & Stangor, 2001), proportion scores were calculated for each reasoning category within each dilemma. This approach allowed us to control for the different number of justifications given for each dilemma.

Assessment of Reliability

The open-ended responses written in Chinese were first translated into English using the translation and back translation method recommended by Pena (2007) and then coded to conceal the language of the participants' responses during coding to minimize bias. All the data were coded and reviewed by the first and second authors. Kappa calculated on 20% of the data was .91, and consensus was reached through discussion.

Results

Preliminary Analyses

A series of preliminary analyses was conducted to examine the effect of potential confounding variables (i.e., number of sibling, birth order, language of preference) on participants' decisions and reasoning. None of these demographic variables was correlated with the outcomes variables. Moreover, independent-samples *t*-tests showed that the type of decision chosen and the category of reasoning applied were not significantly different between participants who responded in English versus Chinese. Finally, paired-samples *t*-tests showed that the number of codes applied to categorize participants'

Table 1
Social-Cognitive Reasoning Category Examples

Reasoning category	Examples for the activity dilemma	
	Pursue the protagonist's own interest	Follow the parents' wishes
Authority	N/A	"Because he must obey his parents."
Family obligation	"His parents will be disappointed that he did not choose the course they wanted, but when he gets good grades, they will be very proud of him."	"I think he should do this because we need to respect our parents' opinion. Even though it's something we would like to do, we still need to listen to our parents' opinions, because our parents are doing this for our own good so that in the future we can become someone who contributes to society."
Personal choice	"Because extracurricular activities should be chosen by the students and not decided by the parents. Extracurricular activities are based on the interests of the students."	N/A
Pragmatic	"Because playing basketball is good for his health."	"She should do that [choose the Malay language club] because she could improve her Malay language."
	Examples for the breaking promise dilemma	
	Refuse to give the protagonist's savings to father	Give up the protagonist's savings for the father
Authority	N/A	"His father asks him to do that so he must do it."
Family obligation	"Advice and reason with his father and let him think about what he did."	"It doesn't matter what mistake her father made, he is still her father. The father work hard to raise his child. Being a good child, she should repay her father."
Pragmatic	N/A	"[She] should give the money to her father first, because he needs it more. She can always buy the [computer] later."
Welfare and safety	N/A	"So that his father's life will not be endangered."
Fairness or rights	"The father should accept the consequences of losing money because of his behavior and not ask the son to give up his own savings."	N/A

reasoning did not significantly vary by the order of the two vignettes.

Decisions Across Dilemmas

We used the McNemar test to examine whether participants' decisions varied when resolving a filial dilemma in the personal versus moral domain. Results showed that participants differed in their decision based on the specific dilemma being considered, McNemar $\chi^2(1, N = 108) = 21.02, p < .001$. Consistent with our expectation, in the *choosing an extracurricular activity dilemma*, participants were more likely to decide that the protagonist should pursue his/her own interest and join the basketball club (57%) over the parents' choice of the Malay language club. Also supporting our hypothesis, in the *obedience in response to father breaking promise dilemma*, participants were more likely to report that the protagonist should give money to his/her father

to pay for the father's gambling debt (75%) than to keep the money for his/her own use.

Decisions Within Each Dilemma

A logistic regression analysis was conducted to examine the role of age, gender, and their interactions in the decision outcome within each filial dilemma. In the *choosing an extracurricular activity dilemma*, significant main effects were found for both age and gender on the type of decision participants made. Specifically, adolescents (65%) were more likely than preadolescents (42%) to pursue their own interest, $\beta = 1.66, SE = .57, Wald \chi^2(1, N = 116) = 8.52, p = .004, Exp(B) = 5.25$, and girls (65%) were more likely than boys (47%) to pursue their own interest, $\beta = 1.41, SE = .60, Wald \chi^2(1, N = 116) = 5.57, p = .02, Exp(B) = 4.08$. In the *father breaking promise dilemma*, there were no significant main effects of age and gender. Also, no

significant interaction effect of age and gender was found for these two dilemmas.

Social-Cognitive Reasoning Across Two Dilemmas

To examine whether participants' social-cognitive reasoning varied between the two filial dilemmas, we performed a 2 (age) \times 2 (gender) \times 2 (filial dilemma) repeated-measures multivariate analysis of variance (MANOVA). The types of filial dilemmas were examined as the within-subject factor, and participant's age and gender were the between-subject factors. Participants' social-cognitive reasoning significantly varied by the type of filial dilemma, Pillai's Trace $F(5, 104) = 45.33, p < .001, \eta^2 = .685$. Univariate tests revealed that participants were more likely to apply authority or personal choice reasoning in the *activity dilemma* than the *breaking promise dilemma*, $F(1, 108) = 12.91, p < .001, \eta^2 = .107$ and $F(1, 108) = 77.03, p < .001, \eta^2 = .416$, respectively. In contrast, they were more likely to apply filial obligation, welfare and safety, or fairness or rights reasoning in the *breaking promise dilemma* than in the *activity dilemma*, $F(1, 108) = 13.35, p < .001, \eta^2 = .110$, $F(1, 108) = 22.87, p < .001, \eta^2 = .175$, and $F(1, 108) = 35.61, p < .001, \eta^2 = .248$, respectively.

Also, significant main effects were found for age on the authority, $F(1, 108) = 15.10, p < .001, \eta^2 = .123$; personal choice, $F(1, 108) = 15.12, p < .001, \eta^2 = .123$; and pragmatic, $F(1, 108) = 13.75, p < .001, \eta^2 = .113$, reasoning categories. Regardless of their decisions, preadolescents were more likely than adolescents to cite authority and pragmatic reasoning, whereas adolescents were more likely than

preadolescents to cite personal choice reasoning in both dilemmas. Moreover, our results yielded a significant Dilemma \times Age interaction such that Chinese Malaysian preadolescents and adolescents applied the social-cognitive reasoning categories differently across the two filial dilemmas, Pillai's Trace $F(5, 104) = 7.14, p < .001, \eta^2 = .255$. Univariate test showed that preadolescents were more likely to apply authority or pragmatic reasoning in the *activity dilemma* than the *breaking promise dilemma*, $F(1, 50) = 10.28, p < .01, \eta^2 = .171$ and $F(1, 50) = 5.17, p < .05, \eta^2 = .094$, respectively. However, preadolescents were more likely to apply filial obligation in the *breaking promise dilemma* than the *activity dilemma*, $F(1, 50) = 24.77, p < .001, \eta^2 = .331$.

Social-Cognitive Reasoning Within Each Dilemma

To examine whether participants' social-cognitive reasoning varied based on the decision they made, their age, and gender within each dilemma, we conducted a 2 (decision) \times 2 (age) \times 2 (gender) MANOVA on the proportion of the reasoning categories for each dilemma. Post hoc tests of simple effects were conducted using one-way univariate ANOVA as all three independent variables were dichotomous in nature. Descriptive statistics of the proportion of social-cognitive reasoning categories for each dilemma are presented in Table 2.

In the *activity dilemma*, participants' social-cognitive reasoning varied significantly by their decision, Pillai's Trace $F(3, 105) = 81.61, p < .001, \eta^2 = .700$. Univariate tests revealed significant main effects of decision on the authority, $F(1, 107) = 22.56,$

Table 2
Descriptive Statistics of the Proportion of Social-Cognitive Reasoning Categories

	N	Authority M (SD)	Filial obligation M (SD)	Personal choice M (SD)	Pragmatic M (SD)	Welfare and safety M (SD)	Fairness or rights M (SD)
Activity dilemma							
Decision: Pursue the protagonist's own interest							
Preadolescents	22	.00 (.00)	.00 (.00)	.57 (.47)	.43 (.47)	.00 (.00)	.00 (.00)
Adolescents	43	.00 (.00)	.03 (.17)	.83 (.34)	.14 (.31)	.00 (.00)	.00 (.00)
Decision: Follow the parents' wishes							
Preadolescents	30	.40 (.48)	.23 (.41)	.00 (.00)	.37 (.45)	.00 (.00)	.00 (.00)
Adolescents	20	.10 (.31)	.73 (.41)	.05 (.15)	.13 (.32)	.00 (.00)	.00 (.00)
Breaking promise dilemma							
Decision: Refuse to give the protagonist's savings to father							
Preadolescents	9	.11 (.33)	.17 (.35)	.00 (.00)	.00 (.00)	.00 (.00)	.72 (.44)
Adolescents	15	.00 (.00)	.00 (.00)	.10 (.21)	.00 (.00)	.00 (.00)	.90 (.21)
Decision: Give up the protagonist's savings for the father							
Preadolescents	41	.02 (.16)	.53 (.46)	.02 (.16)	.27 (.43)	.11 (.28)	.04 (.17)
Adolescents	42	.00 (.00)	.48 (.44)	.02 (.11)	.19 (.37)	.28 (.41)	.02 (.09)

$p < .001$, $\eta^2 = .174$; filial obligation, $F(1, 107) = 60.22$, $p < .001$, $\eta^2 = .360$; and personal choice, $F(1, 107) = 138.35$, $p < .001$, $\eta^2 = .564$, reasoning categories. Participants were most likely to apply authority or filial obligation reasoning to justify their decision to follow their parents' advice. In contrast, they were most likely to apply personal choice reasoning to justify their decision to pursue their own interest. Participants' social-cognitive reasoning also varied significantly by their age, Pillai's Trace $F(3, 105) = 9.71$, $p < .001$, $\eta^2 = .217$. Univariate tests revealed significant main effects of age on authority, $F(1, 107) = 8.72$, $p < .01$, $\eta^2 = .075$; filial obligation, $F(1, 107) = 20.26$, $p < .001$, $\eta^2 = .159$; personal choice, $F(1, 107) = 5.42$, $p = .02$, $\eta^2 = .048$; and pragmatic, $F(1, 107) = 9.976$, $p < .01$, $\eta^2 = .085$, reasoning categories. Preadolescents were more likely to apply authority or pragmatic reasoning, whereas adolescents were more likely to apply filial obligation or personal choice reasoning. There was a significant main effect of gender on the pragmatic reasoning categories, $F(1, 107) = 4.88$, $p < .05$, $\eta^2 = .044$. Girls were more likely than boys to apply pragmatic reasoning. Moreover, a significant Dilemma \times Age interaction was found, such that preadolescents and adolescents applied the social-cognitive reasoning categories differently across their decision, Pillai's Trace $F(3, 105) = 5.77$, $p < .01$, $\eta^2 = .142$. Univariate tests showed that the main effects for the authority and filial obligation reasoning categories were qualified by significant Decision \times Age interactions, $F(1, 107) = 8.72$, $p < .01$, $\eta^2 = .075$; and $F(1, 107) = 14.96$, $p < .001$, $\eta^2 = .123$, respectively. Further examination of the interactions revealed that when reasoning about their decision to follow their parents' advice, preadolescents applied *authority* reasoning more frequently than adolescents, $F(1, 107) = 6.10$, $p < .05$, $\eta^2 = .113$, and adolescents applied *filial obligation* reasoning more frequently than preadolescents, $F(1, 107) = 17.18$, $p < .001$, $\eta^2 = .264$. However, such differences were not observed when justifying their decision to pursue their own interest.

In the *breaking promise dilemma*, participants' social-cognitive reasoning varied significantly by their decision, Pillai's Trace $F(5, 95) = 69.57$, $p < .001$, $\eta^2 = .785$. Univariate tests revealed significant main effects of decision on filial obligation, $F(1, 99) = 17.87$, $p < .001$, $\eta^2 = .153$; pragmatic, $F(1, 99) = 6.85$, $p < .05$, $\eta^2 = .065$; welfare and safety, $F(1, 99) = 6.39$, $p < .05$, $\eta^2 = .061$; and fairness or rights, $F(1, 99) = 296.11$, $p < .001$, $\eta^2 = .749$, reasoning categories. Participants were more likely to apply filial obligation, pragmatic, or welfare and

safety reasoning over fairness or rights reasoning to justify their decision to give money to their fathers. In contrast, they were most likely to apply fairness or rights reasoning to justify their decision to refuse money to their fathers.

A significant Dilemma \times Age interaction was found, such that preadolescents and adolescents applied social-cognitive reasoning differently across their decision, Pillai's Trace $F(5, 95) = 2.48$, $p < .04$, $\eta^2 = .116$. Univariate test showed that the main effect for the fairness or rights reasoning category was qualified by a significant Decision \times Age interaction, $F(1, 99) = 8.81$, $p < .05$, $\eta^2 = .046$. To justify refusing to give money to the father, adolescents were more likely than preadolescents to cite fairness or rights reasoning, $F(1, 99) = 5.39$, $p < .01$. Moreover, there was a significant Age \times Gender interaction, such that preadolescents and adolescents applied the social-cognitive reasoning differently across genders, Pillai's Trace $F(5, 95) = 2.71$, $p < .03$, $\eta^2 = .125$. Univariate tests showed that the main effect for the fairness or rights reasoning category was qualified by a significant Age \times Gender interaction, $F(1, 99) = 11.43$, $p < .01$, $\eta^2 = .103$. Among boys, adolescents were more likely than preadolescents to cite fairness or rights reasoning, $F(1, 99) = 24.39$, $p < .001$. Furthermore, all significant two-way interactions involving fairness or rights reasoning discussed earlier were further qualified by a significant three-way Decision \times Gender \times Age interaction, $F(1, 99) = 8.19$, $p < .01$, $\eta^2 = .076$. Post hoc tests comparing fairness or rights reasoning between adolescents and preadolescents within gender at each decision revealed that, to justify refusing to give money to the father, only male adolescents were more likely than male preadolescents to apply fairness or rights reasoning, $F(1, 99) = 17.55$, $p < .001$.

Discussion

Overall, our findings revealed complexity in Chinese Malaysian preadolescents' and adolescents' reasoning regarding issues pertaining to the filial piety ethic, which has been depicted as setting fundamental rules governing the hierarchical parent-child relationship in Chinese cultures (Ho, 2008). Importantly, we found that participants' decisions varied across the type of dilemma (i.e., personal vs. moral) being considered. Moreover, participants' age and gender mattered in relation to both the decision made and the reasoning used to justify the decision within each type of dilemma.

Decisions and Reasoning Across Personal and Moral Domains

Supporting our expectations, the majority of Chinese Malaysian preadolescents and adolescents *decided* to pursue their own interest in the personal domain but adhere to their parent's request in the moral domain. In line with previous findings (e.g., Bregman & Killen, 1999; Helwig & Kim, 1999; Smetana, Campione-Barr, & Daddis, 2004), these results demonstrated that the content of the dilemma mattered in decision making even for filial relationship-based issues with in a traditionally interdependent culture.

Our findings also revealed that participants' decisions for the extracurricular activity dilemma varied by their age and gender, perhaps reflecting more room for decision-making autonomy and variation in the personal versus moral domain (Wray-Lake, Crouter, & McHale, 2010). Regarding age, Chinese Malaysian adolescents were more likely than preadolescents to pursue their own interest in choosing an extracurricular activity, consistent with previous longitudinal studies showing that adolescents increasingly make more autonomous and independent decisions (Smetana et al., 2004; Wray-Lake et al., 2010). Together, these findings suggest the cross-cultural significance of this developmental progression.

Interestingly, Chinese Malaysian girls were more likely than boys to pursue their own interest with regard to selecting an extracurricular activity. In societies where gender inequality is more pronounced, girls are more likely than boys to criticize and resist the traditional expectations that are perceived to conflict with their desire for autonomy and self-determination (Turiel, 2002; Zhang, Zheng, & Wang, 2003). Indeed, Mainland Chinese female adolescents were more likely than their male counterparts to support freedom, personal choice, and autonomy in decision making (Lahat et al., 2009).

The results also supported our expectations that participants' *reasoning* would vary across the personal and moral domains. Both Chinese Malaysian preadolescents and adolescents mainly cited personal choice reasoning in the extracurricular activity dilemma *and* fairness/rights or welfare and safety reasoning only in the breaking promise dilemma, supporting the notion that the selection of an extracurricular activity is more likely to be considered within the personal purview of an individual. In contrast, the moral nature of the breaking promise dilemma was highlighted by participants' use of reasoning that pertained to maintaining fairness

or the rights for the protagonist or ensuring the welfare and safety of the father. Interestingly, the participants cited welfare or safety reasoning only to justify their compliance, whereas they cited fairness or rights reasoning only to justify their non-compliance to their fathers' request.

Age variations in *reasoning* that differed depending on the content of the dilemma were also revealed. Chinese Malaysian preadolescents were more likely to cite pragmatic reasoning in resolving the personal versus the moral issue. Preadolescents might perceive choosing an extracurricular activity as being more directly related to their daily life and resolve the issue using a practical approach. Alternatively, this finding could be due to the content of the dilemma where both choices (i.e., learning basketball or the country's official language) could be perceived as having practical benefits. Preadolescents were also more likely to adhere to parental authority to justify their decisions in the extracurricular over the breaking promise dilemma. In contrast, Chinese Malaysian adolescents shied away from strict obedience to authority regardless of the domain and were unlikely to cite authority reasoning in either dilemma. Moreover, adolescents were equally likely to cite filial obligation to justify their decisions in both domains, suggesting that these adolescents had internalized a more stable sense of family obligation and indebtedness than their younger counterparts.

Reasoning Within the Extracurricular Activity

Overall, both preadolescents and adolescents who reported that the protagonist should select the extracurricular activity that he or she wanted were more likely to justify their decision with reasoning that referred to the significance of personal choice (e.g., "Because extracurricular activities should be based on the interests of the students"). Nevertheless, adolescents were more likely than preadolescents to pursue their own interest and cite personal choice reasoning to justify the decision. Thus, similar to their Mainland Chinese counterparts, the greater focus on autonomy among Chinese Malaysian adolescents with increasing age was reflected in both their decision and their accompanying reasoning, especially with regard to personal prerogatives (Helwig et al., 2011; Lahat et al., 2009).

Additional important age differences were revealed. To justify following their parents' advice, Chinese Malaysian preadolescents were more likely to report that the protagonist should obey the parental request simply because of parents' status as

adults and as authorities (e.g., “She should obey her parent’s orders.”). In contrast, their older counterparts cited reasons that pertained to giving strong consideration to their parents’ opinions and feelings in order to repay their parents for raising them (e.g., “He should do this because we need to make our parents proud because of their sacrifices for us.”). Although the decision to acquiesce to the parent appears consistent with the traditional depiction of obedient Chinese children, the age distinction in the reasoning used is significant. Specifically, preadolescent children’s authority reasoning reflected the authoritarian aspect of filial piety, which emphasizes adherence to parental authority. In contrast, adolescents’ filial obligation reasoning reflected the reciprocal aspect of filial piety, which focuses on maintaining close, harmonious parent–child relationships based on gratitude and repayment (Yeh, 2003; Yeh & Bedford, 2003). These findings suggest that Chinese Malaysian adolescents may internalize greater reciprocal filial understanding with increasing age.

The present study contributes to the current literature by documenting age differences in the distinction between the authoritarian and reciprocal aspects of filial piety. Children’s perceptions of parental investment and sacrifices in caring for them and emotions of gratitude toward parents for their nurturance are positively associated with strengthened parent–child relationships and children’s endorsement of filial duties to respect and support their parents (Cheah et al., 2012). Thus, even though fulfilling the parents’ request appears to counter the child’s wishes, unlike authority reasoning that accentuates hierarchy and submission, filial obligation reasoning for adhering to parents’ requests may mirror the child’s internalized value of reciprocal filial behaviors.

Reasoning About Father Breaking Promise

Although the father broke his promise to the protagonist, a majority of these Chinese Malaysian preadolescents and adolescents reported that the protagonist should comply with his or her father’s request. The largest proportion of the accompanying reasoning reflected an internalized commitment toward parents and repayment of parents’ caregiving. Interestingly, the age difference in authoritarian versus reciprocal filial piety identified in the personal domain dilemma was not replicated in this dilemma. Instead, both younger and older participants equally cited reasons related to the issue of family obligation and indebtedness.

In addition, some participants focused on how the father’s life might be endangered if he did not pay off the debt and cited reasons expressing concern for the father’s welfare or safety. Moreover, several participants adopted a pragmatic approach toward resolving the issue when complying with the father; they reasoned that the protagonist should address the more immediate need to repay the debt and that he or she could earn back the money later. These three different types of reasoning revealed that their conceptualization of this moral issue was multifaceted, as expected. Importantly, although more participants reported complying with the parental request than not, they did not cite parental authority as a reason for doing so, unlike with the extracurricular activity dilemma. The complexity of this particular filial dilemma likely overshadowed the mere authority or seniority of the parent.

However, those who reported that the protagonist should keep his or her money primarily referenced fairness or rights reasoning to justify their decision (e.g., “Because this is Yee Ming’s [the protagonist’s] painstakingly hard-earned money. It is not fair to Yee Ming if the father takes his money.”). Male adolescents cited fairness or rights reasoning *more* frequently than their preadolescent counterparts, with no age difference found among females. Thus, girls who did not comply with the father’s request appeared to have internalized the moral norm against unfairness and expressed disapproval of the father’s breaking promise at an earlier age than their male counterparts. Such behaviors may be considered even more unacceptable for girls than boys in a male dominant society, mirroring our previous finding that girls were more likely than males to appeal to individual rights in the personal issue.

Limitations and Future Directions

Several limitations of this study require attention. First, we focused on reasoning using hypothetical examples, but the participants’ responses might not correspond well to their actual behaviors. Also, the use of only one scenario for each issue limited our ability to capture breadth and consistency in these adolescents’ responses. Moreover, we used questionnaires to examine reasoning, similar to some previous research (Horn, 2006; Killen et al., 2013). This approach, however, does not allow for more extensive probing to further clarify and determine the domain conceptualization of the various issues. Participants’ responses might also have been

influenced by a social desirability bias, although they were assured confidentiality. Thus, future research would benefit from the use of semistructured interviews of multiple scenarios for each type of issue to reveal more complex responses from participants.

In the current sample, gender was not equally represented among preadolescents and adolescents, and the age range for the adolescent group was fairly broad. Thus, future research should include equal numbers of both genders and examine possible age differences among 13- to 18-year-old adolescents. In addition, these dilemmas did not purely capture only personal and moral issues (particularly the breaking promise dilemma), which may have resulted in more complex responses. Moreover, there was little variability in participants' decisions and justifications in the breaking promise dilemma, resulting in a small number of responses in some of the reasoning categories. Thus, these findings should be interpreted cautiously.

Another interesting future direction might be to compare Malaysian adolescents' responses regarding mothers versus fathers in facing various dilemmas, further shedding light on gender norms in authoritarian versus reciprocal filial piety. Furthermore, our within-culture examination of the social-cognitive reasoning of Chinese Malaysian adolescents did not allow for direct comparisons between Chinese Malaysian and other cultures. Future studies should compare Chinese Malaysians with other cultural groups (e.g., their Western counterparts who live in a society in which a more autonomous self is presumed to be valued, or a majority ethnic Chinese context) in order to further distinguish between specific cultural and developmental processes in social-cognitive reasoning. Finally, we asked participants to decide whether the protagonist should fulfill the parental request or his or her own desire and did not allow for the possibility of compromises between parents and the protagonist. Research on parent-child conflicts has shown that adolescents and young adults in Taiwan might compromise by working together with their parents toward a solution (Yeh, 1995; Yeh & Bedford, 2003), whereas adolescents in Mainland China and Hong Kong tended to give in to their parents in order to resolve their conflicts (Yau & Smetana, 2003). Future studies should explore the reasoning children may apply during such processes.

Despite these limitations, our findings illustrate how the simultaneous consideration of social domains of reasoning, age-related trends toward increasing autonomy for certain types of issues, gender role socialization, and the cultural setting

can inform our understanding of reasoning regarding the balance between personal jurisdiction and filial piety demands. Several theoretical approaches have argued that diverse concerns with both autonomy (personal choice) and interdependence (e.g., following group norms or social duties) coexist and that individuals may prioritize each of these concerns in ways that vary according to the complex interplay between these issues within specific situations and across contexts (Raef, 2006). Indeed, our findings indicate that Chinese Malaysian individuals maintain conceptions of individual freedom and personal autonomy that are used to place limits on the jurisdiction of authorities. The coexistence of a variety of concerns in individuals' thinking was also revealed and provided further evidence that calls into question dichotomous characterizations of cultures and individuals as either "individualistic" and concerned mainly or exclusively with individual rights and autonomy, or "collectivistic" and oriented toward obedience to authority, fixed social duties, and the prioritization of the group over the individual (Kagiticbasi, 2005).

References

- Bengtson, V. L., & Putney, N. (2000). Who will care for tomorrow's elderly? Consequences of population aging east and west. In V. L. Bengtson, K.-D. Kim, G. C. Myers, & K.-S. Eun (Eds.), *Aging in the east and west: Families, states, and the elderly* (pp.263–286). New York, NY: Springer.
- Bregman, G., & Killen, M. (1999). Adolescents' and young adults' reasoning about career choice and the role of parental influence. *Journal of Research on Adolescence, 9*, 253–275. doi:10.1207/s15327795jra0903_2
- Cheah, C. S. L., Bayram Özdemir, S., & Leung, C. Y. Y. (2012). Predicting the filial behaviors of Chinese-Malaysian adolescents from perceived parental investments, filial emotions, and parental warmth and support. *Journal of Adolescence, 35*, 628–637. doi:10.1016/j.adolescence.2011.07.001
- Chen-Gaddini, M. (2012). Chinese mothers and adolescents' views of authority and autonomy: A study of parent-adolescent conflict in urban and rural China. *Child Development, 83*, 1846–1852. doi:10.1111/j.1467-8624.2012.01823.x
- Department of Statistics, Malaysia. (2011). *Population distribution and basic demographic characteristic report 2010*. Retrieved from https://www.statistics.gov.my/index.php?r=column/cthemByCat&cat=117&bul_id=MDMxdHZjWTK1SjFzTzNkRXYzcVZjd09&menu_id=L0pheU43NWJwRWVSZklWdzQ4TlhUUT09
- Fuligni, A. J., & Pedersen, S. (2002). Family obligation and the transition to young adulthood. *Developmental Psychology, 38*, 856–868. doi:10.1037/0012-1649.38.5.856

- Fulgini, A. J., Tseng, V., & Lam, M. (1999). Attitudes toward family obligations among American adolescents with Asian, Latin American, and European backgrounds. *Child Development, 70*, 1030–1044. doi:10.1111/1467-8624.00075
- Gere, J., & Helwig, C. C. (2012). Young adults' attitudes and reasoning about gender roles in the family context. *Psychology of Women Quarterly, 36*, 301–313. doi:10.1177/0361684312444272
- Helwig, C. C. (1997). The role of agent and social context in judgments of freedom of speech and religion. *Child Development, 68*, 484–495. doi:10.1111/j.1467-8624.1997.tb01953.x
- Helwig, C. C. (2005). Culture and the construction of concepts of personal autonomy and democratic decision-making. In J. E. Jacobs & P. A. Klaczynski (Eds.), *The development of judgment and decision making in children and adolescents* (pp. 181–212). Mahwah, NJ: Erlbaum.
- Helwig, C. C. (2006). The development of personal autonomy throughout cultures. *Cognitive Development, 21*, 458–473. doi:10.1016/j.cogdev.2006.06.009
- Helwig, C. C., Arnold, M. L., Tan, D., & Boyd, D. (2003). Chinese adolescents' reasoning about democratic and authority-based decision making in peer, family, and school contexts. *Child Development, 74*, 783–800. doi:10.1111/1467-8624.00568
- Helwig, C. C., & Kim, K. (1999). Children's evaluations of decision-making procedures in peer, family, and school contexts. *Child Development, 70*, 502–512. doi:10.1111/1467-8624.00036
- Helwig, C. C., Yang, S., Tan, D., Liu, C., & Shao, T. (2011). Urban and rural Chinese adolescents' judgments and reasoning about personal and group jurisdiction. *Child Development, 82*, 701–716. doi:10.1111/j.1467-8624.2010.01531.x
- Ho, D. Y. F. (2008). Chinese patterns of socialization: A critical review. In M. H. Bond (Ed.), *The psychology of the Chinese people* (pp. 1–37). Hong Kong: The Chinese University Press.
- Horn, S. S. (2006). Group status, group bias, and adolescents' reasoning about the treatment of others in school contexts. *International Journal of Behavioral Development, 30*, 208–218. doi:10.1177/0165025406066721
- Ismail, N., Jo-Pei, T., & Ibrahim, R. (2009). The relationship between parental belief on filial piety and child psychosocial adjustment among Malay families. *Pertanika Journal of Social Science and Humanities, 17*, 215–224.
- Kagitcibasi, C. (2005). Autonomy and relatedness in cultural context: Implications for self and family. *Journal of Cross-Cultural Psychology, 36*, 403–422. doi:10.1177/0022022105275959
- Killen, M., Lee-Kim, J., McGlothlin, H., & Stangor, C. (2002). How children and adolescents evaluate gender and racial exclusion. *Monographs of the Society for Research in Child Development, 67*(4, Serial No. 271), vii. doi:10.1111/1540-5834.00218
- Killen, M., Rutland, A., Abrams, D., Mulvey, K. L., & Hitti, A. (2013). Development of intra- and intergroup judgments in the context of moral and social-conventional norms. *Child Development, 84*, 1063–1080. doi:10.1111/cdev.12011
- Killen, M., & Stangor, C. (2001). Children's reasoning about social inclusion and exclusion in gender and race peer group contexts. *Child Development, 72*, 174–186. doi:10.1111/1467-8624.00272
- Lahat, A., Helwig, C. C., Yang, S., Tan, D., & Liu, C. (2009). Mainland Chinese adolescents' judgments and reasoning about self-determination and nurturance rights. *Social Development, 18*, 690–710. doi:10.1111/j.1467-9507.2008.00507.x
- Laidlaw, K., Wang, D. H., Coelho, C., & Power, M. (2010). Attitudes to ageing and expectations for filial piety across Chinese and British cultures: A pilot exploratory evaluation. *Aging & Mental Health, 14*, 283–292. doi:10.1080/13607860903483060
- Lee, K. H., Quek, A. H., & Chew, S. B. (Eds.). (2001). *Education and work: The state of transition*. Kuala Lumpur, Malaysia: University of Malaya Press.
- Lee, K. H., & Tan, C. B. (Eds.). (2000). *The Chinese in Malaysia*. Shah Alam, Malaysia: Oxford University Press.
- Mehta, K. K., & Ko, H. (2004). Filial piety revisited in the context of modernizing Asian societies. *Geriatrics & Gerontology International, 4*, 77–78. doi:10.1111/j.1447-0594.2004.00157.x
- Nucci, L. P. (1996). Morality and the personal sphere of actions. In E. S. Reed, E. Turiel, & T. Brown (Eds.), *Values and knowledge* (pp. 41–60). Mahwah, NJ: Erlbaum.
- Nucci, L. P. (2001). *Education in the moral domain*. Cambridge, UK: Cambridge University Press.
- Nucci, L. P., Killen, M., & Smetana, J. G. (1996). Autonomy and the personal: Negotiation and social reciprocity and adult-child social exchanges. In M. Killen (Ed.), *Children's autonomy, social competence, and interactions with adults and other children: Exploring connections and consequences. New directions for child development* (pp. 7–23). San Francisco, CA: Jossey-Bass.
- Pena, E. D. (2007). Lost in translation: Methodological considerations in cross-cultural research. *Child Development, 78*, 1255–1264. doi:10.1111/j.1467-8624.2007.01064.x
- Pomerantz, E. M., Qin, L., Wang, Q., & Chen, H. (2011). Changes in early adolescents' sense of responsibility to their parents in the United States and China: Implications for academic functioning. *Child Development, 82*, 1136–1151. doi:10.1111/j.1467-8624.2011.01588.x
- Raeff, C. (2006). Multiple and inseparable: Conceptualizing the development of independence and interdependence. *Human Development, 49*, 96–121. doi:10.1159/000091336
- Ryan, R. M., & Deci, E. L. (2002). Overview of self-determination theory: An organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3–33). Rochester, NY: University of Rochester Press.
- Smetana, J. G. (2006). Social domain theory: Consistencies and variation in children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 119–154). Mahwah, NJ: Erlbaum.

- Smetana, J. G. (2011). *Adolescents, families, and social development: How teens construct their words*. West Sussex, UK: Wiley-Blackwell.
- Smetana, J. G., Campione-Barr, N., & Daddis, C. (2004). Longitudinal development of family decision making: Defining healthy behavioral autonomy for middle-class African American adolescents. *Child Development, 75*, 1418–1434. doi:10.1111/j.1467-8624.2004.00749.x
- Smetana, J. G., Killen, M., & Turiel, E. (1991). Children's reasoning about interpersonal and moral conflicts. *Child Development, 62*, 629–644. doi:10.2307/1131136
- Smetana, J. G., Wong, M., Ball, C., & Yau, J. (2014). American and Chinese children's evaluations of personal domain events and resistance to parental authority. *Child Development, 85*, 626–642. doi:10.1111/cdev.12140
- Thomas, E. (1990). Filial piety, social change and Singapore youth. *Journal of Moral Education, 19*, 192–205. doi:10.1080/0305724900190305
- Turiel, E. (2002). *The culture of morality: Social development, context, and conflict*. Cambridge, UK: Cambridge University Press.
- Turiel, E. (2006). The development of morality. In N. Eisenberg (Ed.) & W. Damon (Series Ed.), *Handbook of child psychology, Vol. 3: Social emotional, and personality development* (6th ed., pp. 789–857). New York, NY: Wiley.
- Wray-Lake, L., Crouter, A. C., & McHale, S. M. (2010). Developmental patterns in decision-making autonomy across middle childhood and adolescence: European American parents perspectives. *Child Development, 81*, 636–651. doi:10.1111/j.1467-8624.2009.01420.x
- Yau, J., & Smetana, J. G. (1996). Adolescent-parent conflict among Chinese adolescents in Hong Kong. *Child Development, 67*, 1262–1275. doi:10.2307/1131891
- Yau, J., & Smetana, J. G. (2003). Adolescent-parent conflict in Hong Kong and Shenzhen: A comparison of youth in two cultural contexts. *International Journal of Behavioral Development, 27*, 201–211. doi:10.1080/01650250244000209
- Yeh, K. H. (1995). Solution types in filial dilemmas and their various correlates [in Chinese]. *Bulletin of the Institute of Ethnology Academia Sinica, 79*, 87–118.
- Yeh, K. H. (2003). The beneficial and harmful effects of filial piety: An integrative analysis. In K.-S. Yang, K.-K. Hwang, P. B. Pedersen, & I. Daibo (Eds.), *Progress in Asian social psychology: Conceptual and empirical contributions* (pp. 67–82). Portsmouth, NH: Greenwood.
- Yeh, K. H., & Bedford, O. (2003). A test of the dual filial piety model. *Asian Journal of Social Psychology, 6*, 215–228. doi:10.1046/j.1467-839X.2003.00122.x
- Yeh, K., & Bedford, O. (2004). Filial belief and parent-child conflict. *International Journal of Psychology, 39*, 132–144. doi:10.1080/00207590344000312
- Yeh, K. H., & Yang, K. S. (1989). A cognitive-structural analysis of Chinese filial piety: Concepts and assessment. *Bulletin of the Institute of Ethnology Academia Sinica, 65*, 131–169. (in Chinese)
- Yue, X., & Ng, S. H. (1999). Filial obligations and expectations in China: Current views from young and old people in Beijing. *Asian Journal of Social Psychology, 2*, 215–226. doi:10.1111/1467-839X.00035
- Zhan, H. J., & Montgomery, R. V. (2003). Gender and elder care in China: The influence of filial piety and structural constraints. *Gender & Society, 17*, 209–229. doi:10.1177/0891243202250734
- Zhang, X., Zheng, X., & Wang, L. (2003). Comparative research on individual modernity of adolescents between town and countryside in China. *Asian Journal of Social Psychology, 6*, 61–73. doi:10.1111/1467-839X.t01-1-00010

Appendix

Selecting an Extracurricular Activity Dilemma

Teacher asked Siew Lan and her classmates to decide which extracurricular activity they are taking this year. They are allowed to join only one club. Siew Lan's interest is in basketball. She wanted to join basketball club. However, her parents wanted her to join the Malay Language club. The parents said it was more useful to learn the Malay language than to play basketball.

1. What do you think Siew Lan should do?
 - A. Join the basketball club
 - B. Join the Malay Language club
 - C. Other (please state):
2. Why do you think she should do that?

Obedience in Response to Father's Breaking Promise Dilemma

Yee Meng wanted to have a computer. His father told him that he can have one if he manages to earn enough money for it by himself. Yee Meng worked after school. After 1 year, he finally earned enough money to buy the computer. However, his father lost money gambling and was not able to pay the debt. He asked Yee Meng to give him all the money.

1. What do you think Yee Meng should do?
 - A. Refuse to give his money to his father
 - B. Give his money to his father
 - C. Other (please state):
2. Why do you think he should do that?