

ARTICLE

Filial piety and intergenerational ambivalence among mother–adult child dyads in rural China

Qiuju Guo¹, Xiang Gao^{1*}, Fei Sun² and Nan Feng³

¹Elder Service Research Center, School of Sociology, Huazhong University of Science and Technology, Wuhan, Hubei, China, ²School of Social Work, Michigan State University, East Lansing, Michigan, USA and ³Department of Sociology, Cornell University, Ithaca, New York, USA

*Corresponding author. Email: xiangxianggao@126.com

(Accepted 5 June 2019; first published online 3 July 2019)

Abstract

This study examines the relationship between filial piety (adult children's filial behaviours and attitudes as well as elderly mothers' overall evaluation of children's filial piety) and elderly mothers' reports of intergenerational ambivalence (positive feelings, negative feelings and combined ambivalence) in rural China. We analysed the data from a survey in 2016 covering 2,203 adult children and 802 elderly mothers in Sichuan Province using a two-level mixed-effects modelling analysis. The results indicate that most components of filial piety are associated with mothers' ambivalence, in that less ambivalence was reported by mothers when their adult children provided more emotional support to, had less conflict with and were evaluated as more filial by their mothers. Interestingly, mothers demonstrated greater positive feelings when their children were more filial in behaviour and attitude, but they also reported greater negative feelings and ambivalence when their children were more obedient, implying that absolute obedience to elderly parents might no longer be accepted by people. These findings may provide further understanding about the correlation between the culture of filial piety and intergenerational relationships in rural China.

Keywords: filial piety; intergenerational ambivalence; rural China

Introduction

With the decline of fertility and mortality along with the increase in life expectancy, China is ageing rapidly. Technically, adult children and their elderly parents tend to have a longer shared life time nowadays than in the past, thus intergenerational relations and other issues related to elderly persons have received growing attention (Luescher and Pillemer, 1998; Lowenstein, 2007). To explain parent–child interaction, especially intergenerational family cohesion, previous studies have developed the intergenerational solidarity theory, which refers to multi-dimensional elements including affection, association, consensus, resource sharing and strength of familism norms (Bengtson and Roberts, 1991). However, the solidarity theory

over-emphasises the positive, harmonious and consensus aspects of intergenerational relations while downplaying negative or conflicted aspects of family dynamics (Luescher and Pillemer, 1998; Park, 2014). To explain the complexity of family ties, some scholars proposed the concept of intergenerational ambivalence in the form of conflicting emotions and cognition, emphasising the co-existence of harmony and conflict in intergenerational relations (Luescher and Pillemer, 1998; Connidis and McMullin, 2002). Existing evidence reveals that parents and their adult children often have mixed feelings towards each other, suggesting that intergenerational relationships involve the ambivalence of positive and negative feelings simultaneously (Pillemer and Suitor, 2002; Birditt *et al.*, 2009, 2010).

Previous studies have devoted much research to describing the sources or outcomes of ambivalence (Willson *et al.*, 2006; Birditt *et al.*, 2010; Kiecolt *et al.*, 2011; Tighe *et al.*, 2016), but few studies have examined the relationship between traditional culture and intergenerational ambivalence in developing countries. To fill this gap in the literature, the present study examines the relationships between filial piety and intergenerational ambivalence among mother–adult child dyads in rural China using the intergenerational ambivalence theory. We focus on intergenerational ambivalence of elderly mothers and their adult children for several reasons. First, as the primary kinship keepers who maintain family relationships and promote affective interactions in the family (Leach and Braithwaite, 1996), mothers experience greater ambivalence compared to fathers (Tighe *et al.*, 2016). Second, as women’s life expectancy generally is longer compared to men’s (Le *et al.*, 2015), elderly mothers may experience a longer lifetime with adult children. Hence, a study on the intergenerational relationships between elderly mothers and adult children has conceptual and practical implications.

Literature review

Intergenerational ambivalence

The concept of intergenerational ambivalence is described as ‘contradictions in relationships between parents and adult offspring that cannot be reconciled’ (Luescher and Pillemer, 1998: 416), which emphasises mixed feelings (*i.e.* positive and negative feelings) in the same child–parent relationship (Luescher and Pillemer, 1998; Pillemer and Suitor, 2002). To examine contradictory feelings within the same relationship, the most popular measurement of ambivalence is the ‘Griffin measure’, developed by Thompson *et al.* (1995), which asked respondents to rate their positive and negative attitudes towards the other party in the relationship and creates a numeric value representing the balance between these two feelings. Most studies only focus on combined ambivalence of both positive and negative feelings simultaneously using the Griffin measure (Birditt *et al.*, 2010; Tighe *et al.*, 2016), while other studies also examine these two components separately (Willson *et al.*, 2006; Ngai, 2014).

Previous studies have proposed three aspects of parent–child relations in later life that are likely to generate ambivalence. Firstly, ambivalence is associated with dependence and autonomy. Parent’s and children’s expectations of mutual help conflict with the desire for freedom from the parent–child relationship (Luescher

and Pillemer, 1998; Pillemer and Suito, 2005). For example, elderly mothers might struggle with the choices of either helping their daughters take care of their grandchildren or becoming community volunteers (Cohler and Grunebaum, 1981). Moreover, some scholars have used employment, education and marital status to assess adult children's level of dependence and autonomy, finding that elderly parents might feel more ambivalent when their adult children are not sufficiently independent (Fingerman *et al.*, 2006; Birditt *et al.*, 2010). In addition, ambivalence is related to incompatible norms regarding intergenerational relations. These norms usually involve filial responsibility, commitment to assisting another generation, obligation to kin and reciprocity norm (George, 1986; Luescher and Pillemer, 1998). For example, based on the reciprocity norm, disabled parents may expect support from their children but they also feel guilty that they cannot reciprocate (George, 1986). Finally, ambivalence is related to solidarity factors, such as functional support, close proximity and contact, and is also accompanied by opposites, such as direct conflict and struggle for independence (George, 1986; Luescher and Pillemer, 1998). Ambivalent feelings are prevalent between abused elderly parents and their abusive children, partly because the parents are physically impaired and typically require help from the abusive children (Wolf and Pillemer, 1989).

Other characteristics, such as age, marital status, education and health also play a role in intergenerational ambivalence (Pillemer and Suito, 2002; Kiecolt *et al.*, 2011). For instance, age is a significant factor in ambivalence, *e.g.* compared with emerging adults (ages 18–25 years), young adults (ages 26–29 years) and adolescents (ages 13–17 years) report greater ambivalence to fathers (Tighe *et al.*, 2016). Unmarried children or those with lower education levels demonstrate greater ambivalence towards their parents (Pillemer and Suito, 2005; Pillemer *et al.*, 2007). Moreover, parent characteristics, such as poor health or neurotic personality, are associated with more ambivalence from children (Pillemer *et al.*, 2007; Kiecolt *et al.*, 2011).

However, most previous studies have utilised the intergenerational ambivalence theory to unravel the complex family bonds in developed countries, such as the United States of America (USA), Germany and Japan (Pillemer and Suito, 2002; Traphagan, 2010; Prinzen, 2012), while largely ignoring intergenerational ambivalence in developing countries. Thus, little is known regarding the relationship between filial piety and intergenerational ambivalence. Different from other countries, intergenerational relations in China are deeply influenced by Confucian culture, which emphasises filial piety and family cohesion. Thus, this study considers cultural context in explaining intergenerational ambivalence in rural China, a traditional society that is undergoing modernisation and social transformation including cultural changes related to filial piety.

Filial piety in rural China

As a core virtue in Confucianism, filial piety is the guiding principle in Chinese society that specifies children's behaviours towards their parents (Chow, 2001; Cheng and Chan, 2006). Filial piety involves practising filial respect of and care for parents (Khalaila, 2010; Khalaila and Litwin, 2011) and exemplifies both attitudes and behaviours (Luo and Zhan, 2012). It covers a wide range of filial

attributes, including love, respect, obedience and loyalty, which are demonstrated by providing sufficient financial, physical and emotional support to elderly parents, maintaining contact or living with parents, as well as showing respect and obedience to parents, honouring or promoting family prestige, continuing the family line, *etc.* (Ho, 1994; Cheng and Chan, 2006; Luo and Zhan, 2012). Further, Sung (1995) suggests that these multiple indicators include both behavioural and emotional components. Filial piety always involves both children and their parents (Hanson *et al.*, 1983; Cicirelli, 1993). Some studies have focused on the behaviours or attitudes that adult children use to reflect their value of filial piety, such as taking care of elderly parents, showing respect, and providing room and financial support (Ho, 1994; Sung, 1998; Ng *et al.*, 2000). Other studies have reported parents' perceptions of their adult children's filial piety regarding care and respect (Lee *et al.*, 1994; Lee and Hong-Kin, 2005; Cheng and Chan, 2006; Luo and Zhan, 2012). For example, Luo and Zhan (2012) described normative solidarity as filial piety, which referred to elderly parents' evaluation of their adult children's filial piety.

In light of the previous literature, this study considers filial piety from the perspective of elderly mothers and from two aspects. The first aspect includes children's specific filial behaviours and attitudes as reported by their elderly mothers, including financial support, daily care, pleasing, contact, obedience, respect and living distance. The majority of elderly parents in rural China still receive a substantial amount of financial, instrumental and emotional support from their children (Pei and Pillai, 1999; Lei, 2013), and elderly parents co-reside with children in some regions (Xie and Zhu, 2006). Adult children who migrate still maintain frequent contact with their parents in rural areas (Luo and Zhan, 2012). The other aspect involves normative solidarity and elderly parents' filial expectations, which are also treated as filial piety (Luo and Zhan, 2012). To specify, for this study, this indicator of filial piety refers to elderly mothers' overall evaluation of their children's specific filial behaviours and attitudes, *i.e.* how they evaluate their children's degree of filial piety. According to the theory of intergenerational solidarity, rating the strength of filial piety is a common way to measure the normative solidarity (Bengtson and Roberts, 1991). In China, the universal term for filial piety (*xiao*) is used to evaluate a personal trait or attribute, which also implies traditional cultural expectations and parents' filial expectations (Luo and Zhan, 2012). If elderly parents have higher evaluations of adult children's filial piety, this may signify that their children's filial behaviours and attitudes are in accordance with traditional culture and parents' filial expectations.

Implications of filial piety for intergenerational ambivalence

Few studies have focused on the correlation between filial piety and intergenerational ambivalence, but many have involved the relationship between intergenerational solidarity and intergenerational ambivalence (Birditt *et al.*, 2009, 2010). Some components of solidarity and filial behaviours overlap when comparing intergenerational solidarity with filial piety. Similar to intergenerational solidarity, which is a known contributor to ambivalence, filial piety may also generate ambivalence. According to the model of intergenerational solidarity (Bengtson and Roberts, 1991), financial support, emotional support and daily care are aspects of

functional solidarity, and living distance between generations is part of structural solidarity, contact is part of associational solidarity and the rating of strength of filial piety is a component of normative solidarity. Most components of solidarity are consistent with the characteristics of filial piety. However, solidarity emphasises mutual reciprocity between generations, while filial piety focuses on the support from children to parents. Many studies have analysed the relationship between downward support (from parents to children) and ambivalence (Pillemer and Suito, 2002; Pillemer *et al.*, 2007; Birditt *et al.*, 2010) as a reflection of children's independence, which is significantly related to parental ambivalence (Birditt *et al.*, 2010). However, far fewer studies have analysed the relationship between upward support (from children to parents) and ambivalence (Willson *et al.*, 2006; Pei and Cong, 2016).

In terms of specific filial behaviours and attitudes, previous studies have found that children living with parents can reduce parental ambivalence in the USA (Kiecolt *et al.*, 2011), while other studies have found that living distance is not related to mothers' ambivalence in the USA (Pillemer and Suito, 2002; Willson *et al.*, 2006). Some US studies have found that emotional support from adult children does not significantly affect parental ambivalence (Willson *et al.*, 2006; Kiecolt *et al.*, 2011). Additionally, children's daily care has been found to be significantly related to mothers' combined ambivalence and positive feelings, but not related to mothers' negative feelings (Willson *et al.*, 2006). Frequent contact with elderly parents can reduce Mexican-American elderly parents' ambivalence, but financial support to parents does not significantly affect ambivalence (Pei and Cong, 2016). These above studies are focused on Western countries, and the same filial behaviours and attitudes may not be valid in China, because traditional Chinese culture has stronger emphasis on filial piety.

Furthermore, the relationship between the overall evaluation by elderly mothers of their adult children's filial piety and intergenerational ambivalence remains unclear. Indicators of elderly mothers' overall evaluation of their adult children's filial piety involve normative solidarity and filial expectations, and ambivalence theory states that incompatible norms can easily lead to ambivalence. Previous studies have found that parents always hold higher filial expectations than young people do (Harwood *et al.*, 2001; Luo and Zhan, 2012), which could lead to inconsistency between parents' filial expectations and the perceived filial piety of children, resulting in ambivalence. A study in Hong Kong has found that children who value filial piety (*xiao*) do not generate ambivalence in their parents, but rather more positive feelings and increased maintenance of intergenerational relationship with their parents (Ngai, 2014). Additionally, if elderly mothers evaluate their children filial (*xiao*), there is need to determine whether it will increase mothers' positive feeling without generating their ambivalence to children.

Thus, the present study aims to examine, from the perspective of elderly mothers, the relationship between components of filial piety (children's filial behaviours and attitudes as well as elderly mothers' overall evaluation of children's filial piety) and the ambivalence of elderly mothers towards their adult children (including positive feelings, negative feelings and combined ambivalence).

Methods

Data and sample

A community-based and cross-sectional survey was conducted in rural areas in four towns in S County (a pseudonym) of Sichuan Province in China between January and February 2016. The survey was administered by the School of Sociology at Huazhong University of Science and Technology. This particular county was selected for the study because population ageing in this community was much higher than the national average. By the end of 2014, 15.5 per cent of the population of China was aged ≥ 60 years, while the proportion in S County was 19.75 per cent. The high proportion of those aged 60 or older was due to two specific reasons: first, before the one-child policy was abolished in 2015 in China, compared with other provinces, Sichuan Province implemented a stricter one-child policy due to its larger population base; second, population out-migration from Sichuan, including S County, was common, and the out-migration of large proportions of the labour force exacerbated the process of population ageing in such areas. For example, S County had approximately 1.5 million residents, including half a million rural–urban migrants who worked outside this area. The proportion of out-migration population in S County was about 33 per cent, while according to the 2016 report on the development of China's floating population, the migration population was approximately 247 million by the end of 2015, accounting for 18 per cent of the total population in China.

We used combined multi-stage systematic sampling for the survey. In the first stage, we randomly selected four towns from the four cardinal directions (north, south, east and west), which were divided by local government according to economic status. In the second stage, we selected ten villages from each town using isometric sampling based on the geographical location. In the third stage, we extracted three village groups (the lowest administrative unit determined by the government) from each village according to isometric sampling and based on geographical location. In the last stage, we selected ten participants among each village group aged ≥ 60 years with at least one child aged ≥ 20 years to take the survey. If the elderly parent was widowed, we selected them as our participant, and if both of the elderly couple were alive, we only selected the women, resulting in a larger proportion of elderly women in our survey. Our sampling gave preference to elderly women due to their relatively weak position yet important family kinship keepers in rural areas. Elderly rural women are more likely than elderly men to have a higher poverty and illiteracy rate, higher widowhood rate, and lower social and family status (Zhang, 2009). Therefore, over-sampling women could shed light on the intergenerational ambivalence experienced by mothers in rural China and serve to empower elderly women in the family.

In our survey, we investigated 120 village groups from 40 villages in total, and the sample consists of 1,104 respondents (24.28% male, 75.72% female). A small percentage of participants (about 2.5%) refused to be surveyed, and there were a few vacant village groups (about ten village groups, most located in remote rural areas) due to population migration. We recruited 40 college students from a local town to conduct face-to-face structured interviews using local dialects. The average interview took approximately one hour. Participants provided demographic

information about themselves and all of their children. As stated previously, we focused on elderly mothers. Excluding missing data, the sample consists of 802 female respondents with 2,203 adult children in the analysis. Participants had an average of 2.82 (standard deviation = 1.19) adult children aged >20 years (range 1–8). Approximately 80 per cent of elderly mothers ranged in age from 60 to 80 years, and nearly 70 per cent of children were aged between 36 and 50 years.

Measures

Ambivalence

We used an indirect approach to assess both positive and negative perceptions of the mother–children relationship to generate ambivalence scores for each child (Fingerman *et al.*, 2006; Birditt *et al.*, 2010). For the positive component, we summed responses to two items: ‘How much does this child love and care for you?’ and ‘How much does this child understand you?’ For the negative component, we summed two questions: ‘How much does the child criticise you?’ and ‘How much does the child make demands on you?’ (Birditt *et al.*, 2010). Items were rated on a five-point scale from 1 = not at all to 5 = a great deal. In line with previous studies (Willson *et al.*, 2006; Birditt *et al.*, 2010), we calculated indirect ambivalence scores using the Griffin measure formula (Thompson *et al.*, 1995): $[(\text{positive} + \text{negative})/2 - |\text{positive} - \text{negative}|]$. Higher scores indicated greater ambivalence. For the positive and negative feelings, we summed responses to two items consistent with a previous study (Willson *et al.*, 2006).

Filial piety

One component of filial piety assessed specific filial behaviours and attitudes of adult children. Filial behaviours and attitudes were measured by seven items derived from the published literature (Gallois *et al.*, 1997; Cheng and Chan, 2006), including financial support, daily care, pleasing, contact, obedience, respect and living distance. The financial support and daily care (*i.e.* cleaning, washing or cooking) domains were divided into two categories: 1 = support and 0 = no support. We replaced pleasing mothers with emotional support (Mangen *et al.*, 1988); participants were asked the question, ‘Taking everything into consideration, how close do you feel to (this child)? How much do you feel that (this child) would be willing to listen when you need to talk about your worries and problems? Overall, how well do you and (this child) get along with each other?’ An answer of ‘Not at all close/not at all/not well’ was scored 1, ‘somewhat close/somewhat/somewhat well’ was scored 2 and ‘very close/very much/very well’ was scored 3. The aggregated score of the three items was used, with the higher score indicating more emotional support provided to mothers. Contact frequency was rated as 1 = irregularly, 2 = several times a year, 3 = once a week, 4 = several times a week, 5 = once a week and 6 = everyday. Obedience was measured by responses to the question, ‘To what extent would this child take your advice into consideration on important affairs such as marriage or migration?’, and items were rated from 1 = never taken to 5 = all taken. We used conflict frequency rather than level of respect as less conflict represents more respect or more filial piety to mothers. Participants were asked if they had any conflicts, strains or disagreements with the child in the past three months, which was

scored as 1 = a great deal to 5 = not at all. We measured how close each child lived away from their mothers on a six-point Likert scale by living in 1 = other provinces, 2 = other cities but in Sichuan Province, 3 = another county in the city, 4 = county, 5 = town and 6 = the same village. Higher scores indicate closer proximity. The second component is the overall evaluation by elderly mothers of their children's specific filial behaviours and attitudes. Participants were asked to appraise each child's filial degree (*xiao*) from 1 = very unfilial to 5 = very filial. Control variables include (a) indicators reflecting the independence levels of children (Birditt *et al.*, 2010), such as marital status (1 = married, 0 = divorced/separated/unmarried), employment status (1 = non-agricultural, 0 = agricultural) and educational level (years of schooling); and (b) variables representing the content of solidarity, such as financial support and instrumental support from mothers to children over the past year (1 = support, 0 = no support). Instrumental support refers to whether the children received support with household work from their mothers, such as washing clothes, cleaning the house or cooking meals. Demographic variables include mothers' marital status (1 = married, 0 = widowed/divorce), education level (1 = educated, 0 = illiterate), number of living children, income (log), self-rated health (1 = excellent, 5 = very poor) and age, as well as the children's gender (1 = daughter, 0 = son) and age.

Analytic strategy

Because most participants had more than one child, the 2,203 children who were the units of analysis were nested within the 802 elderly mothers who were interviewed. A two-level mixed model with random intercept was used to examine the effects of filial piety on ambivalence. The models include two levels: higher-level participant characteristics (*e.g.* age, income and number of living children) and lower-level child characteristics (*e.g.* filial behaviours, education level and gender). A two-level hierarchical linear model was evaluated separately for positive feelings, negative feelings and combined ambivalence. In addition to filial piety variables, models also include characteristics of both elderly mothers (*e.g.* education, number of living children, income and self-rated health) and adult children (*e.g.* gender, marital status, occupation and education level). A *p*-value of 0.01 or less is used to indicate statistical significance throughout the paper.

Results

Descriptive results

Table 1 presents the adult children's and elderly mothers' characteristics for the analytic sample. The elderly mothers reported higher positive than negative feelings towards their children, leading to a moderate-level combined ambivalence score. Approximately 85 per cent of children provided financial support for their mothers, and mothers reported high emotional support and low levels of conflict with their children. The percentage of children providing daily care to mothers was low, as a number of adult children migrated to cities for work and the distance was not conducive to daily care. Different from the traditional form of filial piety emphasising

Table 1. Descriptive characteristics of mothers and their adult children

	Mean (SD) or %	Coding/range
Mothers (N = 802):		
Participant characteristics:		
Financial support to children	16.08	0 (no support), 1 (support)
Instrumental support to children	12.34	0 (no support), 1 (support)
Married	58.98	0 (widowed/divorced), 1 (married)
Educated	31.92	0 (illiterate), 1 (educated)
Number of children	2.82 (1.19)	1–8
Income (ln + 1)	5.23 (3.70)	0–11.29
Self-rated health	3.08 (1.05)	1–5
Age (years)	71.17 (7.73)	60–95
Adult children (N = 2,203):		
Ambivalence:		
Positive feelings	7.64 (1.79)	2–10
Negative feelings	3.41 (1.41)	2–10
Griffin measure	1.17 (2.29)	–2–8
Filial piety:		
Financial support	85.97	0 (no support), 1 (support)
Daily care	19.29	0 (no support), 1 (support)
Emotional support	7.48 (1.45)	3–9
Contact frequency	3.30 (1.62)	1–6
Obedience	2.41 (1.19)	1–5
Conflict frequency	4.39 (0.86)	1–5
Living distance	3.59 (1.96)	1–6
Children's filial degree	3.94 (0.97)	1–5
Children's characteristics:		
Daughter	44.71	0 (son), 1 (daughter)
Age (years)	45.69 (7.86)	20–80
Married	87.93	0 (divorced/separated/unmarried), 1 (married)
Non-agricultural occupation	75.76	0 (agricultural), 1 (non-agricultural)
Education (years of schooling)	7.04 (2.90)	0–16

Note: SD: standard deviation.

absolute obedience, our results revealed a moderate degree of children's obedience to their mothers. When adult children were faced with important decision-making affairs, scoring from 1 'never taken mothers' advice' to 5 'taken all advice', the

average score was 2.41, which means that adult children partly took their mothers' advice, and absolute obedience has no longer been practised by children in modern society. Moreover, the living distance between mothers and children has expanded, and the rural–urban out-migration has led to a decrease in daily care support provided to elderly mothers. In the overall evaluation of filial piety, mothers on average highly appraised their children's filial piety, from 1 'very unfilial' to 5 'very filial', and the average score was 3.94, indicating that although some elements of filial piety changed in rural China, such as absolute obedience no longer being accepted by children, reduced proportion of families living together and less frequent care to mothers, some aspects of filial piety remained the same, *e.g.* the majority of children still provided financial support and emotional support for their elderly mothers.

Multi-level regression analysis

Table 2 presents the results of the multi-level linear regression analysis. For the children's filial behaviours and attitudes in the positive feelings model, mothers reported increased positive feelings when their children provided more financial support, more emotional support and less conflict. The model of negative feelings has revealed that more emotional support and less conflict from adult children were associated with fewer negative feelings from the mothers, but more obedience from the children was related to higher levels of negative feelings from the mothers. After integrating the positive and negative feelings, the model of combined ambivalence, similar to the results of the negative feeling model, has revealed that elderly mothers reported lower ambivalence when children provided more emotional support and less conflict. The more obedience children showed to their mothers was associated with greater ambivalence. Regarding children's filial degree, the higher level of children's filial piety was significantly related to higher levels of positive feelings and lower levels of negative feelings of elderly mothers, and children's higher filial degree was related to elderly mothers' lower ambivalence. When the mothers identified their children as more filial, it showed that their children's behaviours and attitudes met their filial expectations, and that the norms between generations were compatible, resulting in less ambivalence for elderly mothers.

Ambivalence also varied according to the mothers' and children's characteristics. Those elderly mothers who were married or had lower income typically reported higher levels of positive feelings. Participants also reported greater positive feelings towards their younger adult children. From the model of negative feelings, participants reported more negative feelings when they provided financial support to their adult children. In the combined ambivalence model, those elderly mothers with a higher income were associated with greater ambivalence.

Discussion

The ambivalence theory suggests that parents experience mixed feelings due to incompatible norms and solidarity with their adult children (Luescher and Pillemer, 1998; Pillemer and Suitor, 2002). In relation to China, norms and solidarity can be merged into filial piety. The present study has examined the relationship

Table 2. Multi-level models examining the role of filial piety on ambivalence

	Positives		Negatives		Ambivalence	
	<i>B</i>	SE	<i>B</i>	SE	<i>B</i>	SE
Fixed effects:						
Intercept	1.157	0.654	7.452**	0.570	8.442**	0.901
Filial piety:						
Filial behaviours and attitudes:						
Financial support	0.207*	0.072	0.014	0.063	-0.032	0.095
Daily care	0.166	0.069	0.116	0.060	0.092	0.092
Emotional support	0.400**	0.024	-0.107**	0.021	-0.263**	0.032
Contact frequency	0.042	0.017	0.017	0.015	-0.012	0.023
Obedience	0.062	0.029	0.121**	0.025	0.127**	0.039
Conflict frequency	0.173**	0.037	-0.465**	0.032	-0.577**	0.049
Living distance	-0.000	0.013	0.006	0.011	0.003	0.017
Overall evaluation of filial piety:						
Children's filial degree	0.574**	0.033	-0.191**	0.029	-0.420**	0.044
Participant characteristics:						
Financial support to children	-0.039	0.091	0.235*	0.079	0.263	0.122
Instrumental support to children	0.090	0.082	-0.143	0.072	-0.232	0.109
Married (Ref. Widowed/divorced)	0.306*	0.112	-0.023	0.097	-0.216	0.155
Educated (Ref. Illiterate)	0.158	0.106	-0.161	0.092	-0.223	0.147
Number of children	0.009	0.044	-0.033	0.039	-0.046	0.062
Income (ln + 1)	-0.041*	0.014	0.030*	0.012	0.055*	0.019
Self-rated health	-0.005	0.046	0.052	0.040	0.097	0.064
Age (years)	0.005	0.008	-0.013	0.007	-0.024	0.012
Children's characteristics:						
Daughter (Ref. Son)	0.015	0.038	-0.058	0.033	-0.081	0.049
Age (years)	-0.010*	0.004	0.002	0.003	0.007	0.005
Married (Ref. Divorced/separated/unmarried)	0.010	0.063	-0.007	0.054	0.071	0.082
Non-agricultural occupation (Ref. Agricultural)	-0.035	0.056	0.025	0.049	0.086	0.074
Education	-0.004	0.009	-0.009	0.007	-0.023	0.011

(Continued)

Table 2. (Continued.)

	Positives		Negatives		Ambivalence	
	<i>B</i>	SE	<i>B</i>	SE	<i>B</i>	SE
Random effects:						
Intercept	1.583	0.090	1.202	0.069	3.083	0.177
Residual	0.469	0.018	0.356	0.014	0.805	0.031
Log likelihood	−3,197.530		−2,893.447		−3,838.215	
Wald χ^2	1,414.26		504.00		592.67	
Probability > χ^2	0.000		0.000		0.000	

Notes: Mothers: N = 802; mother–child pairs: N = 2,203. SE: standard error. Ref.: reference category. Significance levels: * $p < 0.01$, ** $p < 0.001$.

between filial piety and intergenerational ambivalence. Our results have shown that adult children's filial behaviours and attitudes were partly related to positive and negative feelings as well as combined ambivalence, but the strength and direction of the correlation were different.

We found that financial support is only related to elderly mothers' positive feelings, rather than negative feelings and combined ambivalence. This is consistent with a prior study which also found financial support from children was unrelated to elderly parents' ambivalence (Pei and Cong, 2016). Unlike Western countries where most elderly persons receive an adequate pension, the Chinese rural elderly population does not receive sufficient pension support to meet their needs (Tao, 2017). Thus, financial support from children to parents is expected in rural China, and many rural elderly parents rely on their children's financial support for daily needs (Pei and Pillai, 1999). Our findings concur that providing financial support to parents can be beneficial to intergenerational relations (Cong and Silverstein, 2008; Kirchengast and Haslinger, 2015; Chen and Jordan, 2016).

Different from Western literature, which reports no relationship between children's emotional support and elderly mothers' ambivalence (Willson *et al.*, 2006; Kiecolt *et al.*, 2011), this study showed that greater emotional support from children was associated with increased positive feelings and decreased negative feelings of Chinese rural elderly mothers, and was associated with a lower score of combined ambivalence. Emotional support can better promote the psychological wellbeing of elderly parents than financial support and daily care in China (Wang, 2017), because emotional support reduces the loneliness and depression of elderly parents and increases their overall quality of life (Zhang and Du, 2015; Wang, 2017). Thus, more emotional support reduces ambivalence and negative feelings, which is in agreement with previous studies.

Contradictory to some findings in Western countries, which have shown daily care, contact frequency and living distance were related to parental ambivalence (Willson *et al.*, 2006; Birditt *et al.*, 2010; Kiecolt *et al.*, 2011), this study indicated these three components of filial piety were not associated with elderly mothers' feelings of ambivalence. These results may be explained by the target place of our

study, Sichuan, which is a province with a large out-migration population. As mentioned by prior research, the geographical distance between generations might block the delivery of daily care and contact from children (Zhang and Du, 2015), and our sample also revealed such results. The separation between adult children and elderly mothers due to geographical distance may make the daily care and connection more appreciated, rather than leading to ambivalence in elderly mothers.

This study also has shown that elderly mothers reported greater positive feelings and fewer negative feelings, as well as fewer feelings of combined ambivalence, when elderly mothers had less conflict with children and appraised their children as more filial. Fewer conflicts between generations suggest compatible values, which is beneficial to intergenerational relationship quality. Not surprisingly, more conflicts are related to more negative feelings and a decline in overall relationship quality (Clarke *et al.*, 1999; Gaalen and Dykstra, 2006). The overall evaluation by mothers of adult children's filial piety is a concept similar to normative solidarity (Luo and Zhan, 2012), and a mother who evaluates her children as more filial recognises her children's filial behaviours and attitudes, which is associated with less ambivalence. These findings suggest that compatible values and norms between generations are essential to reduce intergenerational ambivalence.


Unlike other filial behaviours and attitudes, obedience is positively correlated both with negative feelings and combined ambivalence. As a previous study revealed, there is no absolute obedience from children as it had been in the past, because the younger generation has achieved greater financial independence (Lee and Hong-Kin, 2005), and most young people may no longer embrace obedience to parents as a way of demonstrating filial piety (Ng *et al.*, 2000; Lee and Hong-Kin, 2005). If the mothers know their children's compliance behaviours do not reflect their true thoughts, it can result in negative feelings as well as combined ambivalence in mothers. Another possible reason is that if adult children always follow the advice of their mothers on important decisions, this may indicate an overall lack of independence in daily life. Prior studies suggest that parents feel more ambivalent about children when there is intergenerational dependence (Fingerman *et al.*, 2006; Birditt *et al.*, 2010).

Limitations

A few limitations should be noted. First, because our sampling methods over-sampled women, our results might be limited in their generalisability. Second, focusing on ambivalent relations from mothers' perspectives might lead to some bias in the results, because a previous study has found a larger gap in ambivalence between elderly mothers and children, and parents' negative sentiments and ambivalence towards the relationship were lower compared to those of their children (Willson *et al.*, 2006). Thus, further study could include ambivalence from both mothers' and children's perspectives, which would more accurately depict the relationship between filial piety and intergenerational ambivalence. Third, this study covered most aspects of filial piety but lacked a measurement for respect, so that we used a reversed score for conflict frequency as a substitute. In addition, this study could not establish causality between filial piety and intergenerational ambivalence using cross-sectional data.

Conclusions

This study has shown that the ambivalence theory is applicable in explaining the complex intergenerational relationship in rural China, and characteristics of filial piety overlap with intergenerational solidarity as a source of ambivalence. In this study, some aspects of filial piety were associated with elderly mothers' ambivalence, while most aspects of children's more filial behaviours and attitudes contributed to mothers' positive feelings. Though the intergenerational relationship in rural China continues to change with urbanisation and population mobility, our study confirms that maintaining the tradition of filial piety can still benefit intergenerational relations. This study may add to our knowledge regarding the association between filial piety and ambivalence in rural China. Future studies might consider more research about the local context of culture.

Author ORCIDs.  Qiuju Guo, 0000-0001-8868-4395.

Acknowledgements. The authors wish to thank all those who kindly volunteered to participate in the study.

Author contributions. The manuscript was written through contributions of all authors. QG designed the study, analysed the data and wrote each section in the paper. XG contributed to statistical analyses and the methods section. FS contributed to the introduction, and the results and discussion sections. NF contributed to the literature review section. All authors have given approval to the final version of the article.

Financial support. This work was supported by the National Social Science Foundation of China (15CRK003).

Conflict of interest. The authors declare no conflicts of interest.

Ethical standards. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. All the participants were voluntary and informed consent was obtained from all participants in the study.

References

- Bengtson VL and Roberts REL** (1991) Intergenerational solidarity in aging families: an example of formal theory construction. *Journal of Marriage & Family* **53**, 856–870.
- Birditt KS, Fingerman KL and Zarit SH** (2010) Adult children's problems and successes: implications for intergenerational ambivalence. *Journals of Gerontology: Psychological Sciences and Social Sciences* **65B**, 145–153.
- Birditt KS, Miller LM, Fingerman KL and Lefkowitz ES** (2009) Tensions in the parent and adult child relationship: links to solidarity and ambivalence. *Psychology & Aging* **24**, 287–295.
- Chen J and Jordan LP** (2016) Intergenerational support and life satisfaction of young-, old- and oldest-old adults in China. *Aging & Mental Health* **22**, 412–420.
- Cheng ST and Chan AC** (2006) Filial piety and psychological well-being in well older Chinese. *Journals of Gerontology: Psychological Sciences and Social Sciences* **61B**, 262–269.
- Chow NWS** (2001) The practice of filial piety among the Chinese in Hong Kong. In Chi I, Chappel NL and Lubben J (eds), *Elderly Chinese in Pacific Rim Countries: Social Support and Integration*. Hong Kong: Hong Kong University Press, pp. 126–136.
- Cicirelli VG** (1993) Attachment and obligation as daughters' motives for caregiving behavior and subsequent effect on subjective burden. *Psychology & Aging* **8**, 144–155.
- Clarke EJ, Preston M, Raksin J and Bengtson VL** (1999) Types of conflicts and tensions between older parents and adult children. *The Gerontologist* **39**, 261–270.

- Cohler BJ and Grunebaum H** (1981) *Mothers, Grandmothers, and Daughters. Personality and Childcare in Three-generation Families*. New York, NY: Wiley.
- Cong Z and Silverstein M** (2008) Intergenerational support and depression among elders in rural China: do daughters-in-law matter? *Journal of Marriage & Family* **70**, 599–612.
- Connidis IA and McMullin JA** (2002) Sociological ambivalence and family ties: a critical perspective. *Journal of Marriage & Family* **64**, 558–567.
- Fingerman KL, Chen PC, Hay E, Cichy KE and Lefkowitz ES** (2006) Ambivalent reactions in the parent and offspring relationship. *Journals of Gerontology: Psychological Sciences and Social Sciences* **61B**, 152–160.
- Gaalen RIV and Dykstra PA** (2006) Solidarity and conflict between adult children and parents: a latent class analysis. *Journal of Marriage & Family* **68**, 947–960.
- Gallois C, Giles H, Ota H, Pierson H, Ng S and Lim TS and Harwood J** (1997) Intergenerational communication across the Pacific Rim: the impact of filial piety. *Journal of Cross-cultural Gerontology* **11**, 1–11.
- George LK** (1986) Caregiver burden: conflict between norms of reciprocity and solidarity. In Pillemer KA and Wolf RS (eds), *Elder Abuse: Conflict in the Family*. Dover, MA: Auburn House, pp. 67–92.
- Hanson SL, Sauer WJ and Seelbach WC** (1983) Racial and cohort variations in filial responsibility norms. *The Gerontologist* **23**, 626–631.
- Harwood J, Giles H, McCann RM, Cai D, Somera LP, Ng SH and Noels K** (2001) Older adults' trait ratings of three age-groups around the Pacific Rim. *Journal of Cross-cultural Gerontology* **16**, 157–171.
- Ho DY** (1994) Filial piety, authoritarian moralism, and cognitive conservatism in Chinese societies. *Genetic Social & General Psychology Monographs* **120**, 349–365.
- Khalaila R** (2010) Development and evaluation of the Arabic filial piety scale. *Research on Social Work Practice* **20**, 356–367.
- Khalaila R and Litwin H** (2011) Does filial piety decrease depression among family caregivers? *Aging & Mental Health* **15**, 679–686.
- Kiecolt KJ, Blieszner R and Savla J** (2011) Long-term influences of intergenerational ambivalence on mid-life parents' psychological well-being. *Journal of Marriage & Family* **73**, 369–382.
- Kirchengast S and Haslinger B** (2015) Intergenerational contacts influence health related quality of life (HRQL) and subjective well being among Austrian elderly. *Collegium Antropologicum* **39**, 551–556.
- Le Y, Ren J, Shen J, Li T and Zhang CF** (2015) The changing gender differences in life expectancy in Chinese cities 2005–2010. *PLOS ONE* **10**, e0123320.
- Leach MS and Braithwaite DO** (1996) A binding tie: supportive communication of family kin-keepers. *Journal of Applied Communication Research* **24**, 200–216.
- Lee GR, Netzer JK and Coward RT** (1994) Filial responsibility expectations and patterns of intergenerational assistance. *Journal of Marriage & Family* **56**, 559–565.
- Lee KM and Hong-Kin K** (2005) Differences in expectations and patterns of informal support for older persons in Hong Kong: modification to filial piety. *Ageing International* **30**, 188–206.
- Lei L** (2013) Sons, daughters, and intergenerational support in China. *Chinese Sociological Review* **45**, 26–52.
- Lowenstein A** (2007) Solidarity–conflict and ambivalence: testing two conceptual frameworks and their impact on quality of life for older family members. *Journals of Gerontology: Psychological Sciences and Social Sciences* **62B**, S100–S107.
- Luescher K and Pillemer K** (1998) Intergenerational ambivalence: a new approach to the study of parent–child relations in later life. *Journal of Marriage & Family* **60**, 413–425.
- Luo B and Zhan H** (2012) Filial piety and functional support: understanding intergenerational solidarity among families with migrated children in rural China. *Ageing International* **37**, 69–92.
- Mangen DJ, Bengtson VL and Landry Jr PH** (1988) *Measurement of Intergenerational Relations*. Beverly Hills, CA: Sage.
- Ng SH, Loong CSF, Liu JH and Weatherall A** (2000) Will the young support the old? An individual- and family-level study of filial obligations in two New Zealand cultures. *Asian Journal of Social Psychology* **3**, 163–182.
- Ngai SW** (2014) *Experiences of Adult Children with Intergenerational Ambivalence in a Chinese Society: Sources and Management* (Doctoral dissertation). The Hong Kong Polytechnic University, Hong Kong, China.

- Park SM** (2014) Theory of intergenerational ambivalence: is it the perfect new lens for studying intergenerational relationships? *Journal of Population Ageing* 7, 323–334.
- Pei X and Pillai VK** (1999) Old age support in China: the role of the state and the family. *International Journal of Aging and Human Development* 49, 197–212.
- Pei YL and Cong Z** (2016) Intergenerational ambivalence among Mexican American families. *Journal of Family Studies* 25, 1–14.
- Pillemer K and Suitoer JJ** (2002) Explaining mothers' ambivalence toward their adult children. *Journal of Marriage & Family* 64, 602–613.
- Pillemer K and Suitoer JJ** (2005) Ambivalence in intergenerational relationship over the life-course. In Silverstien M, Giarruso R and Bengtson VL (eds), *Intergenerational Relations Across Time and Place*. New York, NY: Springer, pp. 1–28.
- Pillemer K, Suitoer JJ, Mock SE, Sabir M, Pardo TB and Sechrist J** (2007) Capturing the complexity of intergenerational relations: exploring ambivalence within later-life families. *Journal of Social Issues* 63, 775–791.
- Prinzen K** (2012) Intergenerational ambivalence: new perspectives on intergenerational relationships in the German welfare state. *Ageing & Society* 34, 428–451.
- Sung K** (1995) Measures and dimensions of filial piety in Korea. *The Gerontologist* 35, 240–247.
- Sung KT** (1998) An exploration of actions of filial piety. *Journal of Aging Studies* 12, 369–386.
- Tao J** (2017) Can China's new rural social pension insurance adequately protect the elderly in times of population ageing? *Journal of Asian Public Policy* 10, 158–166.
- Thompson MM, Zanna MP and Griffin DW** (1995) Let's not be indifferent about (attitudinal) ambivalence. In Petty RE and Krosnick JA (eds), *Attitude Strength: Antecedents and Consequences*. Mahwah, NJ: Erlbaum, pp. 361–386.
- Tighe LA, Birditt KS and Antonucci TC** (2016) Intergenerational ambivalence in adolescence and early adulthood: implications for depressive symptoms over time. *Developmental Psychology* 52, 824–834.
- Traphagan WJ** (2010) Intergenerational ambivalence, power, and perceptions of elder suicide in rural Japan. *Journal of Intergenerational Relationships* 8, 21–37.
- Wang P** (2017) A longitudinal effect of intergenerational support on psychological well-being of rural elderly. *Humanities and Social Sciences* 5, 121–129.
- Willson AE, Shuey KM, Elder GH and Wickrama KAS** (2006) Ambivalence in mother–adult child relations: a dyadic analysis. *Social Psychology Quarterly* 69, 235–252.
- Wolf RS and Pillemer KA** (1989) *Helping Elderly Victims: The Reality of Elder Abuse*. New York, NY: Columbia University Press.
- Xie Y and Zhu H** (2006) *Do Sons or Daughters Give More Money to Parents? Gender and Intergenerational Support in Contemporary Urban China* (Research Report 06-607). Population Studies Center. Available online at <https://www.psc.isr.umich.edu/pubs/abs/4189> [Accessed 15 June 2019].
- Zhang W and Du P** (2015) The intergenerational support and psychological well-being of the elderly in mainland of China. In Cheng ST, Chi I, Fung HH, Li LW and Woo J (eds), *Successful Aging – Asian Perspectives*. Dordrecht, The Netherlands: Springer, pp. 165–178.
- Zhang KT** (2009) *The Status of Female Elderly Population in China*. Beijing: China Social Sciences Press. (In Chinese)