

# Impact of contemporary filial piety on the voluntary service behaviour of adolescents: a moderated mediation framework

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#### Abstract

A timely understanding of adolescents' voluntary service behaviour and its influencing mechanism is of great importance for promoting the sustainable development of voluntary service. This study explores the relationship between contemporary filial piety and voluntary service behaviour. A two-wave study was conducted among 339 adolescents in China to explore the mediating role of empathy and the moderating role of psychological collectivism between contemporary filial piety and voluntary service behaviour through structural equation modelling. We found that contemporary filial piety not only had a direct effect on voluntary service behaviour but also affected voluntary service behaviour through the mediating role of empathy. Psychological collectivism moderates the first half of the mediation path "contemporary filial piety→empathy→voluntary service behaviour." The results reveal the mechanism by which contemporary filial piety influences adolescents' voluntary service behaviour and provides an important reference for voluntary work.

Keywords Adolescent · Voluntary service behaviour · Contemporary filial piety · Empathy · Psychological collectivism

# Introduction

Volunteers are organized actors who voluntarily provide public service without making any profit or earning fame; thus, the scale, service effect and sustainability of voluntary work greatly affects the health condition of civil society (Musick & Wilson, 2003; Hustinx et al., 2010). Voluntary service behaviour is a kind of prosocial behaviour in which individuals voluntarily provide help to others for a long time, purposefully, and with a plan out of concern for the moral responsibility and public interests of others (Penner,

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2002). The 2021 Survey Report on the Status of Active Volunteers in China shows that the post-00s have the highest proportion of active volunteers, at 54.74%, followed by the post-90s (36.52%), which reflects the general willingness of the younger generation to participate in volunteering, showing the sense of responsibility, mission and public character of such groups (Zou & Liang, 2022). Research shows that voluntary service behaviour is positively related to adolescents' self-esteem, self-acceptance, moral development, and belief that helping others is personal responsibility and contributes to concern for social issues and future volunteering (Galen et al., 1995; Metz et al., 2003). A prospective longitudinal study found that volunteer experience inversely predicted subsequent detention and even antisocial behaviour tendencies and was associated with more prosocial attitudes and behaviours and adherence to traditional codes of conduct (Oesterle et al., 2004). Moral emotions, such as gratitude, can significantly and positively influence voluntary behaviour (Xu & Han, 2020). Filial piety emerged from the norms specific to the Confucian culture of China and has now expanded into a personality structure that represents the psychological mechanisms underlying the parent-child relationship (Bedford & Yeh, 2019). The attributes of filial piety, such as reverence, gratitude, support, and care provision to parents are similar in all cultures (Zhang et al.,

2019). Filial piety is aimed at deploying notions of social responsibility to create peace and harmony in society, as it underscores the importance of social relationships, solidarity, justice, and sincerity.

The experience and practice of filial piety have evolved in modern Chinese societies(Lum et al., 2015). Early family circumstances, such as the actual situation in terms of filial piety, play a key role in prosocial behaviour (Wang & Zheng, 2013). As times change, individuals come to value autonomy to a greater degree, and reciprocal interactions are motivated by the psychological needs of interpersonal relationships rather than hierarchical differences (Li, 2020). With the improvement in self-awareness, adolescents gradually increase their awareness of serving others and citizenship. Empathy is the ability to put oneself in another's situation and understanding their emotions and thoughts (Singer & Lamm, 2009). The empathy-altruism hypothesis suggests that a high level of empathy promotes altruistic behaviour (Darley & Batson, 1973). Empathy has been found to cause individuals to become more attentive to the feelings and needs of others, inspiring prosocial behaviours such as altruism, helping, and donating (Batson et al., 2007; Liu et al., 2023). By putting oneself in others' shoes and comparing oneself to another, individuals extend their care for their family members to other groups (especially vulnerable groups) to promote voluntary behaviour. In addition, people who live in collectivistic cultures define the self in a more interdependent way (Lee et al., 2015), and thus they are more willing to give up their personal goals to prioritize the collective goals of one of their groups, such as family, team, or an organization (Zulfiqar & Khan, 2021). As an element positioned at the individual level, psychological collectivism can reflect the level of psychological orientation of individuals to the to the concerns of the group and of others (Xiao et al., 2018). Individuals with high levels of psychological collectivism pay more attention to group goals and have a stronger sense of group identity, group norms and group responsibilities (Rurkkhum & Bartlett, 2018). Therefore, to provide references for enriching prosocial behaviour theories and to provide educational guidance for adolescent voluntary behaviours, this study takes adolescents as the research object, focusing on the influence mechanism and boundary conditions of the effect of contemporary filial piety on voluntary service behaviour.

# **Theory and hypotheses**

## Contemporary filial piety and Voluntary Service Behaviour

Studies have shown that over time, filial piety has becomes less understood in terms of authority but has had shown a relatively continuous and stable association with reciprocity (Chen, 2019). Filial piety needs to be measured beyond its behavioural components of responsibility, sacrifice, and repayment, to include the emotional components of affection, harmony, and respect (Sung, 1995). One cannot successfully pursue the ethical life outside of fulfilling certain familial and social obligations (Ivanhoe, 2000; Hu, 2017). In the process of filial piety behaviour changing from compulsory to voluntary, individuals have positive emotional experiences, sublimating loving one's parents into loving all people. Filial piety is born of love and is gradually built on the basis of selfless service and the exchange of support (Sharma & Kemp, 2012). The higher the level of filial piety, the higher their achievement motivation, self-efficacy and risk-taking tendency (Lily et al., 2022). According to Dong et al. (2013), filial piety beliefs are positively correlated with the prosocial behaviours of college students, and the higher the levels of individuals piety concept, the more prosocial behaviours they show. Social identity theory holds that group identity is the process by which individuals define themselves and eventually come to belong to a certain group (Tajfel & Turner, 1986). In a positive atmosphere of filial piety, individuals see the family as a group and consider themselves to be a part of the family. To fulfil the need of social comparison, individuals consciously belong to a certain group, cooperate with others in that group, actively offer help to other group members, and tend to exhibit more prosocial behaviours in general (Zou, 2020). Voluntary behaviour is an important form of prosocial behaviour. Driven by filial piety, young people tend to develop positive developmental psychological qualities and pay more attention to their responsibilities and obligations (Fuligni et al., 1999). Continuously influenced by this equal mode, adolescents may have better perspective taking, higher openness and a stronger tendency toward common human decency (Yeh, 2006; Leung et al., 2010; Bedford & Yeh, 2019). Therefore, they actively build good relationships with people in need of help and practice voluntary behaviours to achieve the goal of expressing values and gaining knowledge or self-development. Based on this, this study puts forward the following hypothesis:

**Hypothesis 1** *Contemporary filial piety has a positive effect on voluntary service behaviour.* 

#### Mediating role of Empathy

Since filial piety is no longer seen as an authoritative duty (Chow, 2006; Chow & Lum, 2008), interdependent relationships and mutual support are seen as the new norms reinforcing the concept of filial piety (Ho et al., 2013). Empathy involves observers putting themselves into what they perceive (Zheng, 2015). The meanings of empathy and transference are relatively close in Chinese. Filial piety involves being able to consider others' possible needs from their standpoint and establishing a stable emotional bond through compassionate understanding and action. When individuals are grateful, it is easy for them to understand and accept those who need help by putting themselves in their shoes. Studies have shown that adolescents' empathy has a significant positive correlation with prosocial behaviour (Li, 1990; Zou, 2020). The empathy- altruism hypothesis states that empathy drives altruism. Empathy for disadvantaged groups through social comparison can inspire the prosocial behaviour of individuals (Wang & Wang, 2020). Individuals with a high degree of empathy can experience more positive emotions and stimulate the positive effect of state gratitude, thereby promoting prosocial behaviours, altruistic behaviours and helping behaviours (Titchene, 1909). Empathy, as a motivation for other-oriented behaviour, should be expected to promote more voluntary behaviours to increase the well-being of others. In this context, the following hypothesis was developed.

**Hypothesis 2** *Empathy mediates the relationship between contemporary filial piety and voluntary service behaviour.* 

#### The moderating role of psychological collectivism

As an important reflection of individual self-concept, psychological collectivists are more willing to act in groups and share material or nonmaterial resources with others (Love & Dustin, 2014). They generally believe that prosocial behaviour is everyone's duty, prefer to use harmony to define interpersonal relationships (Jackson et al., 2006), and take helping others as a matter of course. Due to modernization and social change, the younger generation's adherence to traditional filial commitments has changed (Ikels, 2004). Individuals with high psychological collectivism often have inter- dependent self-concepts and easily feel closely related to certain situations and others (Wagner, 1995). The collective provides a natural place, and it is easy for individuals to realize role substitution to strengthen the emotional connection among members and consider the feelings and interests of others in decision-making and actions. Collectivists value group interest and group agreement and thereby have a high level of acceptance of group norms and interdependence (Rurkkhum & Bartlett, 2018), and they are thus more likely to value those attitudes and behaviours that are shaped by the social groups from which they derive (Zulfigar & Khan, 2021). A high individualist orientation leads to decision-making that is based on individual needs and wants rather than on the needs of the social group (Xiao et al., 2018). People with low psychological collectivism regard themselves as the basic unit of survival, do not rely on external forces and have less effective connection and interaction with the outside world. Intergroup interaction affects empathy, and collectivism tendency has a positive predictive effect on it (Van Dyne et al., 2000). Based on this, this paper proposes the following hypotheses.

**Hypothesis 3** *Psychological collectivism positively moderates the relationship between contemporary filial piety and empathy.* 

**Hypothesis 4** *Psychological collectivism moderates the relationship by which contemporary filial piety affects empathy; that is, there exists a moderated mediating effect.* 

#### Methods

## **Participants**

This study was a two-wave design conducted in 7 schools, including 2 high schools, 2 junior high schools and 3 universities in the Yangtze River Delta of China from May through July 2022. The Handy sampling method was adopted. Questionnaires were distributed by school administrators anonymously with reserved student numbers. At the first timepoint, 450 students were surveyed on their contemporary filial piety and psychological collectivism (T1), and the response rate was 92.89%. Two months later, the students who completed the first survey were investigated for their empathy and voluntary service behaviour (T2). A total of 339 valid questionnaires were recovered, resulting in a 81.10% response rate. Among them, there were 163 boys (48.08%), 176 girls (51.92%), 164 college students (48.38%), 137 high school students (40.41%), and 38 junior high school students (11.21%); the average age was  $18.10 \pm 2.37$  years old.

### Tools

The scales used in this study are mature scales developed by domestic and foreign scholars and verified to have high reliability and validity. All scales use a 5-point Likert scale, with 1–5 representing "completely agree" to "completely disagree".

#### **Contemporary filial piety scale**

The contemporary filial piety scale developed by Lum et al. (2015) was used, with a total of 10 items, such as "being grateful for parents' nurturing kindness". Confirmatory factor analysis was performed on the scale, and the indicators fit well, with  $\chi^2/df=3.95$ , RMSEA=0.09, SRMR=0.05, CFI=0.93, TFI=0.90, and Cronbach's alpha was 0.90, indicating good reliability and validity.

#### Voluntary service behaviour scale

The measurement items were adapted from the research of Rodell and Lynch (2015) and included a total of 16 items, such as "I always try to do the right thing". The scale was subjected to confirmatory factor analysis, and the indicators fit well, with  $\chi^2/df=3.13$ , RMSEA=0.08, SRMR=0.04, CFI=0.94, TFI=0.93, and Cronbach's alpha was 0.84, indicating good reliability and validity.

# **Empathy Scale**

The measurement items were reduced from Davis's scale (Tian & Robertson, 2019). A total of 10 items are included, such as "To better understand others, I sometimes try to see things from their perspectives". Confirmatory factor analysis was performed on the scale, and the indicators fit well, with  $\chi 2/df = 3.78$ , RMSEA=0.09, SRMR=0.05, CFI=0.94, TFI=0.90, and Cronbach's alpha was 0.80, indicating good reliability and validity.

#### Psychological collectivism scale

The Psychological Collectivism Scale developed by Ng and Lucianetti (2015) was used, and appropriate modifications were made according to the actual situation of college students. The scale includes a total of 8 items, such as "I prefer to work alone rather than in a team". Confirmatory factor analysis showed that the scale's indicators fit well, with  $\chi 2/df=3.56$ , RMSEA=0.09, SRMR=0.04, CFI=0.96, TFI=0.94, and Cronbach's alpha was 0.89, indicating good reliability and validity.

#### **Procedure and Data Analysis**

The current study was ethically approved by Capital Normal University, China. After obtaining permission, the participants were approached in their classrooms. They were briefed about the study and their ethical rights. They were instructed to approach the researcher in case of any ambiguity while completing the questionnaires. Then, the participants were presented with the questionnaire and were provided the instructions from completing the questionnaire. The participants completed the questionnaire in 10–15 min. In the end, the participants were thanked for their participation.

This study used SPSS 24.0 and Mplus 8.3 to conduct a systematic analysis to explore the influence mechanism of contemporary filial piety on adolescents' voluntary service behaviour. The main analysis methods include reliability analysis, confirmatory factor analysis(CFA), descriptive statistics, correlation analysis and structural equation modelling. To test whether there was common method bias, the commonly used Harman single-factor test was used to test for common method bias, and factor analysis was performed on all items. It was found that there were 8 factors with characteristic roots greater than 1, and the maximum factor explained variance was 32.56% < 40% (critical value), which means that there was no obvious common method bias effect in the research data (Xiong et al., 2012). The testing tool for the mediating effect and moderated mediating effect is the SPSS plug-in PROCESS compiled by Hayes, and the methods suggested by Baron and Kenny (1987) and Wen and Ye (2014) were adopted.

## **Analysis and results**

#### **Descriptive and correlation analysis**

After calculation, the scores are as follows: contemporary filial piety (mean = 3.94, SD = 0.46), empathy (mean = 3.80, SD = 0.36), psychological collectivism (mean = 3.48, SD = 0.88), and voluntary service behaviour (mean = 2.99, SD = 0.40). The correlation analysis of the four variables shows that there is a significant positive correlation between each pair (p < 0.01). This provides the preconditions for proving hypothesis 1 and hypothesis 2. Means, standard deviations, and correlations of the variables are given in Table 1.

#### **Mediation effect test**

The PROCESS macro Model 4 (Hayes, 2015) was used to analyse mediation paths, as indicated by the unstandardized

 Table 1 Mean, standard deviation and correlation of variables

Variable	Mean	SD	1	2	3	4	5	6	7
1 Sex	1.52	0.50	1						
2 Age	18.10	2.37	-0.02	1					
3 Identities	1.63	0.68	$0.24^{**}$	0.05	1				
4 Contemporary filial piety	3.94	0.46	-0.12*	-0.03	-0.08	1			
5 Empathy	3.80	0.36	-0.06	-0.02	0.06	$0.25^{**}$	1		
6 Psychological collectivism	3.48	0.88	-0.14*	-0.01	-0.06	$0.58^{**}$	$0.28^{**}$	1	
7 Voluntary service behaviour	2.99	0.40	-0.11	0.02	0.03	0.41**	$0.39^{**}$	$0.67^{**}$	

Note: N = 339. Sex was coded 1 = male, 2 = female. Identities were coded 1 = college students, 2 = high school students, 3 = junior high school students

p < 0.05, p < 0.01

Table 2 Direct and Mediation Analysis

Variables	b	SE	t	R-sq	Bootstrap 95% CI	
Direct and Total Effects					LL(95%CI)	UL(95%CI)
Contemporary filial piety→Voluntary service behaviour	0.35**	0.04	8.19	0.17		
Contemporary filial piety→Empathy	$0.20^{**}$	0.04	4.77	0.06		
Contemporary filial piety $\rightarrow$ Empathy $\rightarrow$	$0.08^{**}$	0.02				
Voluntary service behaviour					0.04	0.12

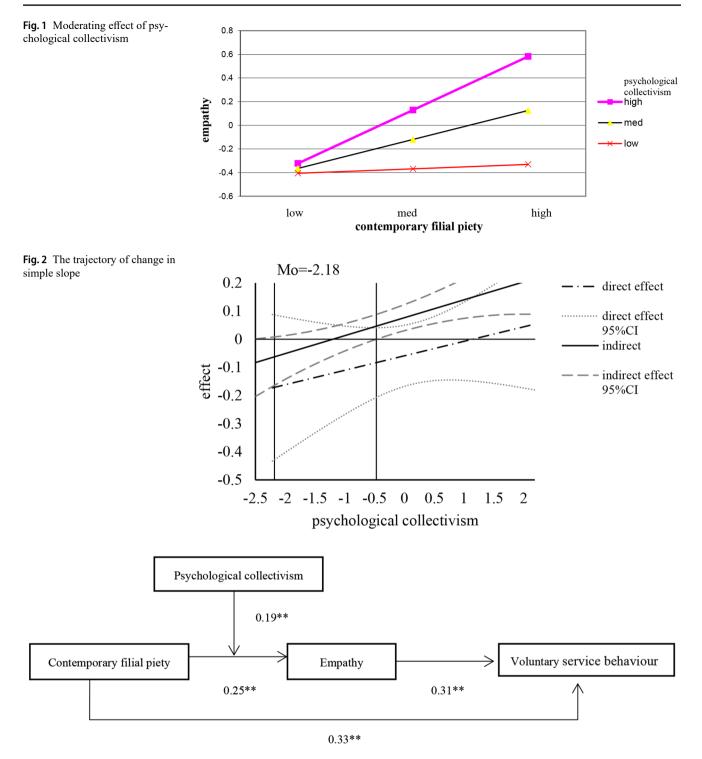
Notes: Model 4 (mediators) in the PROCESS macro. Bootstrap resample=5000, b is a nonstandard regression coefficient, and SE is Standard Error, t is t statistics, R-sq is R square explained, and CI is a confidence interval. \*\*p < 0.01

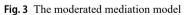
regression coefficients in Table 2. Contemporary filial piety significantly and positively predicts voluntary service behaviour (b=0.35, p<0.01); thus, H1 is confirmed. In addition, contemporary filial piety significantly and positively predicts empathy (b=0.20, p<0.01). We used a parametric bootstrap procedure with 20,000 Monte Carlo replications to estimate a confidence interval (CI) around the indirect effects (Preacher et al., 2010). The bootstrapped indirect effect of contemporary filial piety on voluntary service behaviour through empathy was 0.08 with a confidence interval of 95%, and did not contain zero (b = 0.08, SE = 0.02, 95% CI = [0.04, 0.12]). Empathy was significantly and positively associated with voluntary service behaviour after controlling contemporary filial piety. Thus, our hypothesis 2, which argues that empathy mediates the relationship between contemporary filial piety and voluntary service behaviour, was supported. These results are consistent with our hypothesis that the positive effect of contemporary filial piety on voluntary service behaviour is mediated by empathy, as shown in Table 2. And the mediation effect accounts for 18.86% of the total effect.

## Moderated mediation analysis

Moderated mediation refers to the direction and the strength of mediation effects are dependent on another moderator variable. In the study, Hypothesis 2 is based on the fact that the impact of contemporary filial piety on voluntary service behaviour through empathy is dependent on adolescents' level of psychological collectivism. To understand how the intervening effect of empathy is moderated, we examined whether the strength of the relationship between contemporary filial piety and voluntary service behaviour, mediated through empathy, is significantly different when adolescents possess different levels of psychological collectivism. In order to test it, PROCESS macro model 7 was used, with 5000 bootstrap samples for bias adjustment and to obtain 95% confidence intervals (Hayes, 2015). Taking the recommendations of Preacher et al. (2010) into account, the bootstrapped conditional indirect effects of organizational identity were operationalized at three different levels: one standard deviation below the mean, the mean, and one standard deviation above the mean. We found that contemporary filial piety has a statistically significant positive impact on voluntary service behaviour at 1 SD below the mean (indirect effect = 0.013, 95% CI [-0.040, 0.054]), at the mean level (indirect effect=0.076, 95% CI [0.030, 0.122]), and at 1 SD above level (indirect effect = 0.140, 95% CI [0.070, 0.214]). Since one of these confidence intervals contains zero and the other does not, it suggests that psychological collectivism should have a moderating effect on the first half of this mediating pathway; thus, H3 is justified. In addition, the judgement index obtained from PROCESS was 0.06 (95% CI [0.027, 0.107]), indicating that the moderated mediation effect was significant; thus, result fully supports H4. As depicted in Fig. 1, the positive effect of contemporary filial piety on empathy is higher for adolescents with higher psychological collectivism.

Considering that the pick-a-point method cannot properly account for the continuous process of moderating





effects (Hayes, 2015), this study used the Johnson-Neyman method to calculate the 95% confidence band and the value of the significant field and graphically shows the conditional indirect effect of the moderator variable under different values. When the value of psychological collectivism is greater than -0.61 (original score of 2.94) or less than

-2.18 (original score of 1.55), the effect of contemporary filial piety through empathy is significant for voluntary service behaviour, as shown in Fig. 2. The results show that psychological collectivism moderates the first half of the mediation path "filial piety→empathy→voluntary service behaviour," as presented in Fig. 3.

## Discussion

Voluntary service behaviour reflects the progress of social civilization. The Chinese 14th Five-Year Plan for National Economic and Social Development has included "widely carrying out voluntary service and caring actions" as important content under the category of "continuously improving the civilized quality of citizens". This study focuses on the youth group, with empathy as the medium and psychological collectivism as the moderator, exploring the mechanism between contemporary filial piety and the tendency to exhibit voluntary service behaviour. The data analysis reveals that contemporary filial piety has a significant positive predictive effect on the voluntary service behaviour of adolescents, and the path of "contemporary filial piety  $\rightarrow$  empathy  $\rightarrow$  voluntary service behaviour"; that psychological collectivism, as an important variable regulating this path, opens the "black box" of the influence of contemporary filial piety on adolescents' voluntary service behaviour; and that contemporary filial piety can play an indirect role through empathy and ultimately promote adolescents' voluntary service behaviour. At the same time, after excluding the interference of empathy and psychological collectivism, contemporary filial piety still has a significant positive predictive effect on voluntary service behaviour. A possible explanation is that in the altruistic-self-interested voluntary motivation model, volunteers do not distinguish between the types of personal motivation, and both exist simultaneously (Sun, 2012). Both motivational function theory and need hierarchy theory explain specific modes of behaviour from the perspective of psychological needs satisfaction. As the level of involvement increases, volunteers' altruistic motivations will transition from exogenous to endogenous (Jing, 2010). The sense of responsibility in the contemporary concept of filial piety, as the traditional motivation for voluntary behaviour, can stimulate young people's rolelearning motivation, enhance their ability to empathize, and generate their psychological requirement of gratitude and return, thereby prompting young people to develop stronger voluntary service behaviour. Therefore, it is necessary to strengthen the shaping of the self-concept of young people, actively build a good environment for filial piety and respect for relatives, and perform well in transforming and enabling the inheritance of traditional Chinese filial piety in the new era so that voluntary service behaviour gradually becomes a social norm and moral belief recognized by mainstream values. It is important to increase individuals' voluntary motivation through a systematic and scientific approach.

Empathy partially mediates the relationship between contemporary filial piety and adolescents' voluntary service behaviour, which verifies the bridge effect of individuals' psychological transposition and empathy on contemporary filial piety and voluntary service behaviour. That is, contemporary filial piety can indirectly influence the tendency to exhibit voluntary service behaviour through empathy. The empathy-altruism hypothesis has demonstrated that pure altruism is based on empathy. The close relationship between empathy and prosocial behaviour has also been demonstrated (Wang & Wang, 2020). This study supports this view in the field of volunteering and, to a certain extent, expands and enriches the research results in this field. The contemporary concept of filial piety stems from the role interactions of family members, and Chinese families fit a more typical feedback model (Fei, 1983), which contains the value basis and ethical basis of action. Through family communication, members take care of others' independent needs and emotional expressions and form a sense of role and responsibility, which provides an important prerequisite for implementing voluntary behaviours that meet social expectations. Therefore, it is necessary to actively guide young people to face up to the action value of volunteering, feeling their own sense of responsibility and mission and stimulating goodwill through empathy, heart-to-heart communication, reaching out to difficult groups, establishing diversified channels for the implementation of pro-social behaviour, and improving behavioural results feedback mechanisms, which lay a solid foundation for the successful implementation of voluntary service behaviour.

According to the data analysis, psychological collectivism positively moderates the path of "contemporary filial piety  $\rightarrow$  empathy  $\rightarrow$  voluntary service behaviour"; that is, the higher the psychological collectivism is, the greater the influence of contemporary filial piety on the tendency to exhibit voluntary service behaviour through empathy, and vice versa. According to Geert Hofstede's cultural dimension, China is a highly collectivistic country. Individuals with high collectivism tend to emphasize that they are part of the inner group and are loyal to the inner group, attaching importance to the benign interaction between individuals and the creation of a harmonious atmosphere within the collective and the positive contribution to the collective (Zhong et al., 2016). Adolescence is a critical stage in the development of self-concept, which indicates a continuous construction progressing from the individual self to the relational self and finally to the collective self. Individuals with low psychological collectivism tend to be more selffocused, less considerate of the situations of others, and less willing to actively participate in social interactions. This result also illustrates the situational effects of focusing on the self in the collective and collectivism tendency on pro-social behaviour in China. Therefore, it is necessary to enhance the collective consciousness of young people, guide young people to develop themselves in the collective, conduct good interactions in a harmonious collective atmosphere, establish a collective spirit, feel the care and warmth of members through collective activities, carry out heart-warming projects in various forms, and enhance their mutual respect and love abilities to form a strong atmosphere conducive to enhancing the motivation of voluntary service.

#### Limitations

The present research also has several limitations. First, our data were unavoidably gathered from a single source and through self-reporting, which may cause the results of this study to be susceptible to single-source bias (Williams & O'Boyle Jr, 2008). Nonetheless, single source bias, as a common method bias, is less likely to be a concern for the interaction effect. Therefore, future studies can collect multisource data to retest our model. Second, considering the effects of filial piety over time, although the data were collected at two stages, it would be better to measure empathy and voluntary service behaviour at two different times rather than at the same time. Thus, follow-up research should consider data collection at more time points, to better verify this mechanism. Third, this study selects psychological collectivism only as an individual moderator variable. In specific practices, there may also be situational characteristics, such as the influence of interaction style and peer pressure (Clary & Snyder, 1999), as well as the effects of volunteer trust and volunteer flaws (Rodell & Lynch, 2015). Therefore, in the future, a multilayer dynamic formation mechanism of voluntary service behaviour should be built to explore more influencing factors of voluntary service behaviour to provide a useful reference for voluntary service management and better stimulate and guide adolescents' voluntary service behaviour.

# Conclusion

The purpose of this study is to examine the impact of contemporary filial piety on adolescents' voluntary service behaviour through the indirect effect of empathy and for whom this impact is stronger. We found evidence that contemporary filial piety has a significant positive influence on voluntary service behaviour, and this influence is mediated by empathy. Moreover, this indirect effect is greater for individuals with higher levels of psychological collectivism. Taking the results into consideration, the study results emphasize the positive impact of contemporary filial piety on voluntary service behaviour through empathy and provide further evidence about the significance of psychological collectivism in terms of intensifying the beneficial effects of relational needs and moral responsibility. Funding This work was supported by the Philosophy and Social Science Planning Project of Anhui Province (Grant No. AHS-KY2021D48).

**Data availability** The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

#### **Declarations**

**Conflict of interest** The authors declare that they have no competing interests.

Informed consent Informed consent was obtained from all participants in the study.

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