Money-Helping Behavior Effects on Subjective Wellbeing Distinguished by Dissimilar Interpersonal Relations: Empirical Evidence from China

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Abstract

This study uses China Family Panel Study (CFPS) data to examine of money-helping behavior effects on helpers' subjective well-being. We group recipients based on different interpersonal relations to analyze how a helper's helping behavior affects their happiness and life satisfaction when facing recipients from dissimilar social relation groups. Additionally, we introduce a set of control variables related to subjective feelings of trust in the model to avoid endogeneity caused by individual characteristics. We also compare the regression results of happiness and life satisfaction as a robustness check. Furthermore, we evaluate socioeconomic factors such as helper income, age and education. Results demonstrate that Chinese people feel unhappier when providing financial support to strangers, friends, colleagues, and even parents, which differs from other helping behavior studies. However, giving money to children provides marked improvement of parents' subjective well-being in all socioeconomic categories. Besides, women report slightly higher scores of both happiness and life satisfaction from helping their children than men.

Keyword: interpersonal relations, money-helping behavior, subjective well-being, happiness, life satisfaction

1 Introduction

The ancient Greek philosopher Aristotle stated that the goal of life is seeking happiness according to one's own circumstances. Discussion among professionals of various fields has identified happiness as the supreme goal of human survival. Existing research elucidating happiness mainly examines people's subjective well-being, along with factors and behaviors that might affect people's subjective well-being. For example, researchers have reported that factors such as income, education level, marriage, family relations, and religion affect people's subjective well-being to a certain degree. Furthermore, some behaviors known as pro-social behaviors, especially helping and sharing, show correlation with subjective well-being. People choose whether to perform helping

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behaviors under different circumstances to improve their subjective well-being.

Economists and psychologists have long remained concerned about pro-social behavior effects on subjective well-being, especially analyzing helping behaviors such as donation and voluntary activities. They have undertaken numerous discussions of happiness in terms of various fields such as economics, materialism, altruism, and egoism. People usually help others by providing financial assistance or behavioral (time) assistance such as donations or voluntary activities. Psychologists have found that helping people in terms of money and time has different effects on the subjective well-being of helpers. Time carries more personal meaning and emotions (Reed et al. 2007; Mogilner and Aaker 2009), which compels people to devote more attention to experiential activities, thereby improving their subjective well-being. Furthermore, time-consuming activities can improve interpersonal relations (Aaker J L et al. 2011). People are willing to spend more time with others, thereby positively affecting their subjective well-being. Increasingly, studies have revealed that time-consuming pro-social behaviors can help improve individual happiness, although research assessing money-related behaviors and the relation between money and happiness has produced uncertain and inconsistent answers. From an economic perspective, the satisfaction of material needs and the increase of economic welfare are expected to improve people's subjective well-being. Therefore, the basic motivation of *Homo economicus* behavior is chasing benefits to maximize happiness. The actual situation is not so simple. The influence of money on people's happiness is affected by a person's personality, goals, motivation, social relations, and many other characteristics. Researchers tend to examine the influence of money-related behaviors on happiness from various perspectives because of this complicated relation between money and happiness. As described herein, using money-initiated helping behavior as a specific factor and using empirical data of the China Family Panel Study (CFPS) as well as econometric methods, we explore how money-related helping behavior affects people's subjective well-being.

Furthermore, earlier studies have revealed that people participate in voluntary activities not only because of the meaning of the activity itself, but also because they seek to establish new social relations (Baur V et al. 2014). Aknin, Dunn and Norton reported that people are less willing to give money to strangers than to friends or colleagues they know well. This finding demonstrates that the differences of recipients also affect helping behavior. Existing research exploring the relation between helping behavior and subjective well-being is aimed at helping strangers and disadvantaged groups. For this study, we divide recipients into different interpersonal relation groups including friends, colleagues, relatives, parents, and children. We hope to ascertain whether the effects of money-helping behavior on subjective well-being are distinguished by social groups.

2 Literature review

2.1 Helping behavior and subjective well-being

Helping behavior is a subordinate concept of pro-social behavior aimed at bringing benefits to others or promoting their well-being. Helping behavior reflects good interpersonal interaction of both donors and recipients. From a cognitive perspective, whether individuals choose to help depends on their processing of social information in the situation, including the identity recognition and their own and others' social needs (Yu 1999). The discussion of pro-social behavior in the fields of psychology and sociology emphasizes examinations of altruism, which is the purest form of pro-social behavior. According to Steinberg, altruistic behaviors are intentional and voluntary. They are aimed at improving the welfare of others with no form of external reward. However, some professionals argue that altruism might never exist. It is motivated completely by reciprocity (Pinel 2011). People help others to obtain rewards, which might be immaterial, delayed, or even completely spiritual, such as improving the happiness of the helper.

Three main theories exist in psychology about the motivation of helping behavior:

⑴ The altruism model holds that people can help others selflessly. Batson et al. proved that prosocial behaviors increase with the development of emotions. The increase in empathy promotes altruistic behavior (Batson et al. 1981; Batson 2010).

⑵ Social criteria. The criteria that affect helping behavior mainly include reciprocity criteria and responsibility criteria. Wilke and Lanzetta (1970) pointed out that people often help those people who have helped themselves before. This tendency of paying-back is a manifestation of reciprocity. Another form of this criterion is social responsibility. People are more willing to help if they feel the sense of responsibility towards society and social members (Berkowitz and Daniels 1963). Many statistics on donations from charities support this theory. In 2008, the amount of personal donations to charities in the United States was as high as 307.55 billion U.S. dollars (Giving USA Foundation 2009). From 2014 to 2015, more than 60 million Americans had volunteered for at least one organization (U.S. Bureau of Labor Statistics 2015).

⑶ The selfish model is centered on cost-benefit analysis. People are more inclined to help when they can benefit directly from the helping behavior. Individuals weighing the needs of others according to their own must decide whether to help others (Dovidio et al. 1991). People intend to provide help when the behavior does not harm their own interests. In addition, if helping others reward themselves, then people will also help. This reward is not only material, but more emotional and spiritual (Guéguen and De Gail 2003).

The idea of helping behavior improving happiness can be traced back to the time of the Greek philosopher Aristotle, who believed that the goal of life is to obtain rational happiness. Studies from

different academic backgrounds have indicated that altruistic economic behaviors such as gift-giving or voluntary activities can help to increase people's subjective well-being.　More consumption of pro-social behaviors brings higher happiness to people (Dunn et al. 2014).　A study conducted by Field, Hernandez-Reif, Quintino, Schanberg, and Kuhn in 1998 to examine retired volunteers performing massage services for newborns showed that such voluntary behavior significantly reduced the anxiety level of elderly people and improved their health.

Research on the relation between helping behavior and happiness in economics mainly specifically examines the influence of charitable donations and voluntary activities on people's subjective well-being.　Numerous reports have described that individuals who participated in voluntary activities reported higher happiness and life satisfaction (Wilson 2000; Morrow-Howell et al. 2003; McMunn et al. 2009; Bekkers and Wiepking 2011; Choi and Kim 2011, and others).　Appau and Churchill studied the effects of different types of charitable activities on happiness.　The results showed that voluntary activities and charitable donations of different types to dissimilar scales have positive effects on people's subjective well-being (Appau and Churchill 2019).

2.2　Money-helping behavior

Money-helping behavior is a unique act that is different from other ways of helping behavior. Money usually refers to currency in the field of economics.　It is closely related to modern life.　The influence of money on individual behavior has attracted the attention of psychologists and economists. For example, reports have described that people who spend money on others report greater happiness.　The benefits of such prosocial spending emerge among adults around the world; they can even be found on children (Dunn et al. 2014).　However, some reports have described that recipients with a high sensitivity to indebtedness reported lower negative effects when they received autonomous help than when they received controlled help (Takebe and Murata 2017).　Existing studies of the influence of money on the psychological mechanism of helping people are divided mainly into the following four perspectives.

(1)　Self-sufficiency theory holds that people's social use of money will increase their sense of self-need and independent motivation, of showing indifference and insensitivity to other people, of believing that all individuals can solve problems on their own, and thereby providing fewer helping behaviors.　Therefore, the self-sufficiency induced by money will adversely affect relational prosocial behavior (Vohs et al. 2006; Zhou et al. 2009; Xie et al. 2012).

(2)　Mind-set theory, as presented by Liu and Aaker from Stanford University holds that individuals tend to make decisions based on a perspective of utility and benefits when they consider helping behavior together with money because a tight relation exists between money and the concept of maximum benefit (Liu and Aaker 2008).　Compared with the helping behavior of time investment, such individuals are more inclined to invest in work than in social interaction

under the consideration of money, which adversely affects relational prosocial behavior (Mogilner 2010).

⑶　Free-market value theory, holds survival of the fittest as the core concept and holds that natural elimination from competition is a common phenomenon in human society (Spencer 1860). Caruso et al. (2013) reported that individuals under the money mechanism strongly agree with free market values.　They believe that the existence of the gap separating the rich and the poor in society is unavoidable and common.　With further development of society, less altruistic and pro-social behaviors can be found in social decision-making.　Therefore, emotional and attitude effects of pro-social behaviors are more negative (Caruso et al. 2013).

⑷　Researchers investigating the theory of social cognition found that personal decision-making behavior involves three factors (Shao et al. 2008; Aquinoet al. 2009): moral identity, self-concept, and situational factors.　People communicate with others based on two modes: market mode and communal mode (Gasiorowska et al. 2016).　The former mode is based on economic exchange, by which people will exhibit fewer helping behaviors (Vohs et al. 2006; Guéguen and Jacob 2013; Mok and De Cremer 2016).　Studies have demonstrated that money will reduce the individual's helping behavior.　However, individuals in communal mode are more inclined to help others or give benefits to others without asking for rewards, thereby obtaining subjective satisfaction (Johnson and Grimm 2010).

The four theoretical mechanisms above all show that money has an adverse effect on people's decision-making of helping behavioral outcomes.　Existing empirical studies mostly consider the behavior of helping people with money (donations) and time (volunteer activities) together as helping behaviors.　To explore the influence of money-initiated helping behavior on people's subjective well-being, our study only chose helpers who provide financial support for our research samples.

2.3　Social connectedness and interpersonal relations

Social connectedness is an important representation of the sense of belonging constituting the core of interpersonal relationships.　Lee and Robbins (1998) believe that social connectedness includes not only the real self, but also subjective feelings from the intimate relationship between individuals and society. This subjective feeling includes some individual differences. Some individuals can experience an intimate relation with others, such as family, friends, peers, and even strangers, although some other individuals cannot.　Research has found that people participate in volunteer activities or organizations not only for the meaning of the activity itself, but also to seek connection with others, expressing and serving the goal of social connectedness (Baur, V. E., & Abma, T. A. 2012). Moreover, compared with strangers, people are more willing to provide financial support to their familiar friends or colleagues (Aknin et al. 2012).　Maslow's hierarchy of needs theory holds that love and belongingness are basic human needs.　People will actively seek organizations that are capable

of satisfying the sense of belonging, such as family, friends circle, and social activities to achieve subjective belongingness from the contact with others. This demonstrates that people's helping behavior reflects the value of reciprocity. Individuals hope that they can gain emotional satisfaction through helping behavior.

In general, interpersonal relations are related to helping behavior and subjective well-being. Consequently, we are confronted with these questions: Is there any regulating effect on subjective well-being from the closeness of a helper and recipient in the process of helping? Is it true that a higher level of closeness between helper and recipient is associated with a higher subjective well-being increased by the act of helping behavior? To answer these questions, our study divides recipients into five categories according to interpersonal relations and explores differences in the effects of money-helping behaviors on subjective well-being under different social relation groups. Most existing studies are devoted to discussing the behavior of helping to strangers or friends, colleagues, and classmates. We add kinship groups such as relatives, parents, and children to compare the effects of money-helping behavior on the sense of subjective well-being of helpers distinguished by dissimilar social connections in a more comprehensive manner.

3　Data and model

3.1　Data

Data used for this study were compiled from the China Family Panel Study (CFPS) of the Institute of Social Science Survey, Peking University. CFPS specifically examines the economic and non-economic welfare of Chinese residents, with widely diverse information reflecting economic activities, educational achievements, family relations and family dynamics, population migration, and health. It is a national, large-scale, multidisciplinary social follow-up survey project. The formal data collection of CFPS began in 2010. The data are collected every two years. The target sample includes nearly 15,000 families from 25 different regions of China[1]. The survey objects include all members of the sample families: around 30,000 individuals. All baseline family members and their future blood/adopted children defined by the 2010 survey will be the genetic members of CFPS and become the target of permanent tracking.

The CFPS questionnaire includes four parts: community questionnaire, family questionnaire, adult questionnaire, and children questionnaire. The family questionnaire is answered by the core members of the respective families. The data which are used come from the family questionnaire and adult questionnaire of CFPS 2018. We combined questionnaires of these two types, taking the

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1 ）Five provinces are chosen for initial oversampling (1600 families in each) so that regional comparisons can be made. The remainder of the CFPS sample (8000 families) is drawn from the other provinces so as to make the overall CFPS sample representative of the country through weighting (except for remote areas, as noted later).

core members of each household as our research sample to obtain complete information. After excluding respondents who gave replies with missing values, we obtained 9,168 responses from different families, ranging in age of 16-93 years old. Including 4,610 women (50.28%) and 4558 men (49.72%), the percentages of men and women are roughly equal.

3.2 Model

To examine the effects of money-helping behavior on subjective wellbeing among different interpersonal relations, we estimate the following equation (**i** indexes the individuals).

$$WB_i = \alpha_0 + \alpha_1 X_{ri} + \sum_n \beta_n Z_{n,i} + \sum_j \gamma_j U_{j,i} + \varepsilon_i$$

Therein, WB_i is the measure of subjective well-being. To check the robustness, we use two measures of subjective wellbeing by self-rating scales: Are you happy (scored 0-10, where 0 represents "completely unhappy" and 10 represents "completely happy")? Are you satisfied with your life (scored 1-5, where 1 represents "completely unsatisfied" and 5 represents "completely satisfied")? X_{ri} is a dummy variable that measures whether the individual has money-helping behavior on people from different interpersonal relations. **r** indicates five dissimilar groups: strangers, friends and colleagues, relatives, parents, and children. $Z_{n,i}$ is a group of variables that control personal characteristics, including age, gender, marital status, education level, income and employment status. As described in Chapter 2, the decision-making process of money helping behavior is highly influenced by subjective personality, especially by people's attitude toward others. For this reason, we input $U_{j,i}$ as a part of control variables to our model. $U_{j,i}$ is a set of variables that control personal subjective attitudes on trusting with self-rating scales, including five dimensions of measurements: Do you think people are accommodating or selfish? Do you agree that most people are trustworthy? How much do you trust your parents/ neighbors/ strangers? Responses to these five questions are all given as 0-10, where 0 represents "completely distrusted" and 10 represents "completely trusted".

Fig. 1 below shows the educational level of all respondents. We divide education into five groups to balance the ratio of each part. The largest share is that of junior high school, meaning that people took 7-9 years of full-time study at school. Fig. 2 presents a summary of marriage status. As we considered, remarriage can severely affect parents' attitude toward the relationship of family members and thereby change their helping behavior. Therefore, we only retain those married adults who stay in their first marriage to control omitted bias, which means that all the married respondents are on their first marriage. Over 80% of the respondents were married.

Figs. 3-5 give statistics of subjective control variables. From Fig. 3 above, one can see generally that more people agree that people are accommodating. These people have a higher level of empathy, which makes them more willing to help. Fig. 4 asks about the sense of trust. The
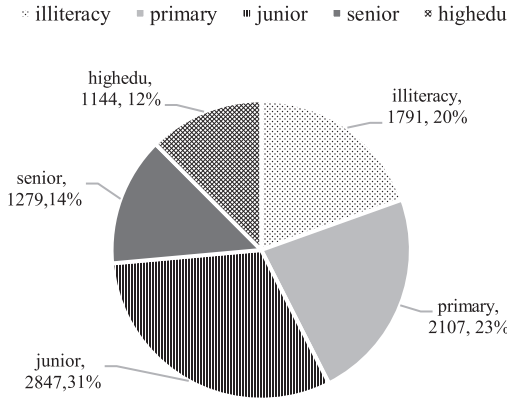
illiteracy　primary　junior　senior　highedu　　　single　married　cohabit　divorced　widowed

highedu,
1144, 12%

illiteracy,
1791, 20%

senior,
1279,14%

primary,
2107, 23%

junior,
2847,31%

Fig. 1 Educational status

divorced,
280, 3%

widowed,
605, 7%

cohabit,
46,0%
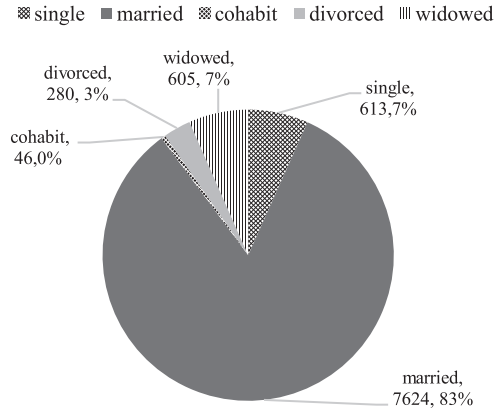
single,
613,7%

married,
7624, 83%

Fig. 2 Marital status

numbers of people who are willing to trust others are not very different from the numbers of people who do not trust others.　When we restrict the target to different interpersonal groups, the answers become discrepant.　Fig. 5 below displays the trusting levels of parents, neighbors, and strangers. Around 73% people responded with 10 for trust of parents, meaning that they completely trust their lineal ancestors.　However, only 0.6% of people completely trust strangers.　Furthermore, nearly 40% of the respondents scored 0 on trusting strangers.　More than 87% of people's scores of trusting neighbors were higher than 5.　Considering that individuals have such vast differences in their feelings of trust, we think that it is necessary to include these elements into the model of our research.

Moreover, Figs. 6 and 7 present summaries of two dependent variables.　The average score of the question "are you happy" is 7.3/10 in CFPS data, of the question "are you satisfied with your life" is 3.9/ 5.　According to the World Happiness Report 2018, the weighted arithmetic index of the reported 128

Accommodating　Selfish　　　　　　　　Confidential　Vigilant

Selfish,
2984, 33%

Accommodating,
6184, 67%

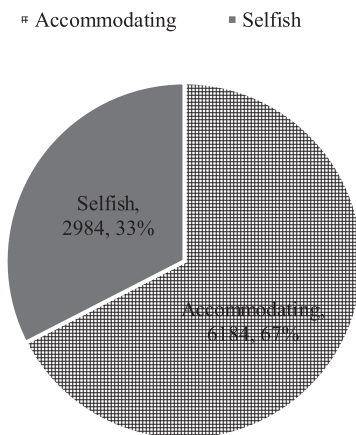Vigilant,
4239, 46%

Confidential,
4929, 54%

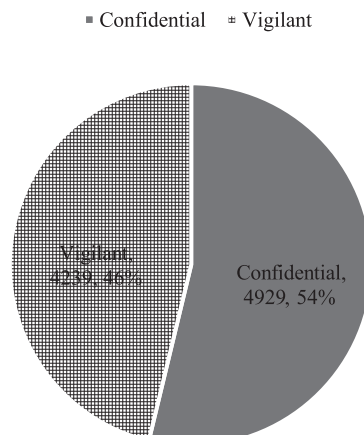Fig. 3 Do you think people are accommodating or selfish　　Fig. 4 Do you think people are confidential or vigilant
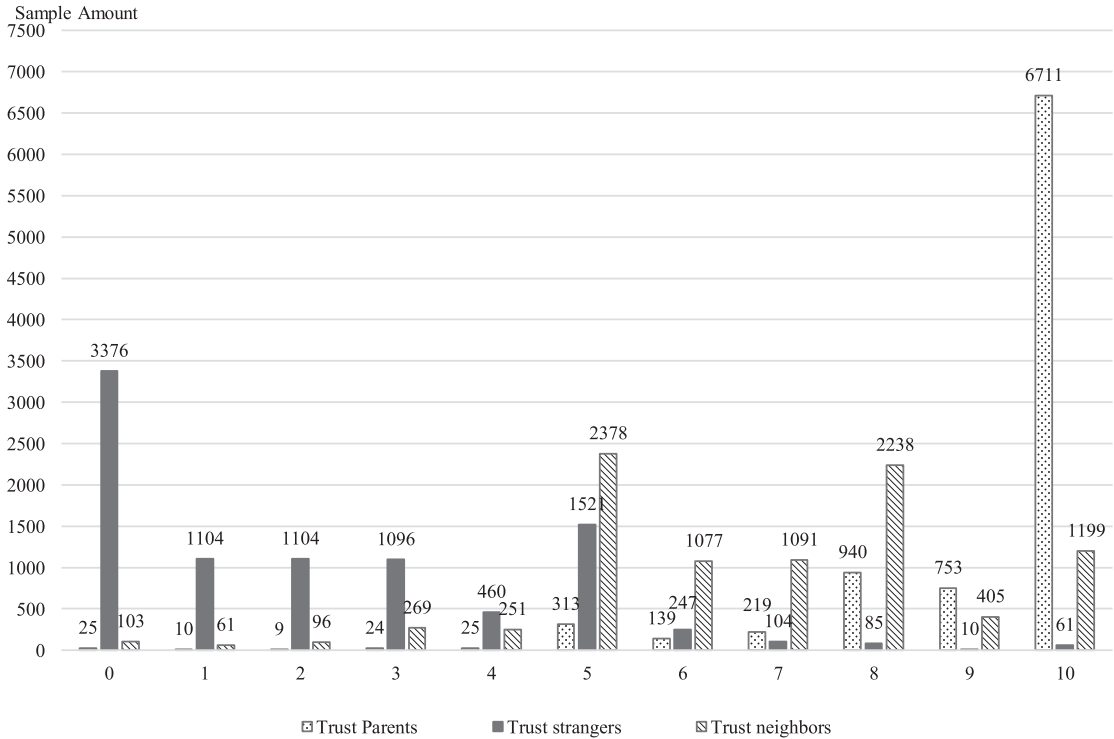
Fig. 5 How do you trust your parents/neighbors/strangers

countries is 5.1/10, the score of China is around 5.2/10 (Sachs, J. D. et al. 2018). Apparently, the result of our data is slightly different from the report. The score from the World Happiness Report is a composite index including six variables.[2] However, the variable we use is only built by one subjective scale. We checked the same variable of CFPS of 2016 and 2014: the result appears to be quite stable. These two dependent variables can reflect the subjective well-being of our research objects effectively.

4　Empirical results

We divide the helpers into six groups based on their academic background. Table 1 presents the behavior of money-helping from individuals under different educational levels. Generally, people with high educational backgrounds are more willing to provide financial support or to donate to strangers, friends, relatives, and parents. It might be true because higher educated people have higher income. They have extra money to help. However, highly educated people seldom choose to

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2) Six variables from the World Happiness Report used to calculate the happiness index are income, healthy life expectancy, social support, freedom, trust, and generosity.
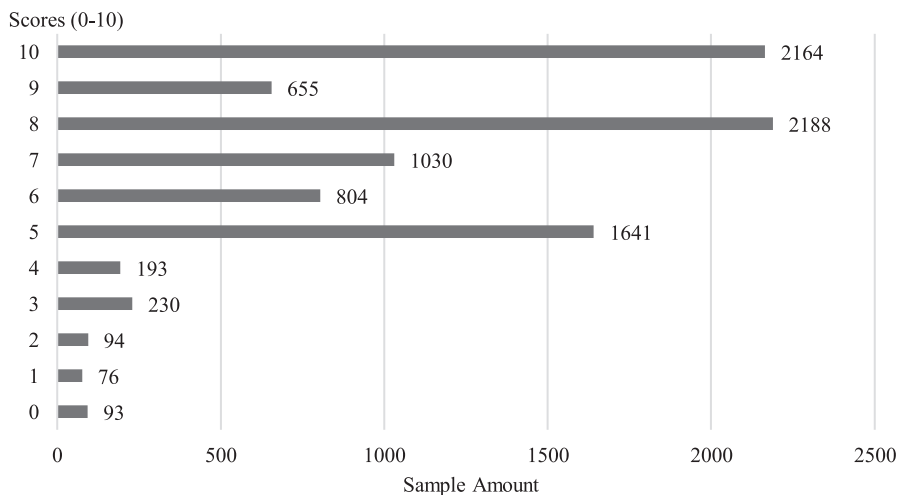
Scores (0-10)

Score	Sample Amount
10	2164
9	655
8	2188
7	1030
6	804
5	1641
4	193
3	230
2	94
1	76
0	93

Sample Amount

Fig. 6 Are you happy?

Scores (1-5)

Score	Sample Amount
5	3254
4	2902
3	2445
2	361
1	206

Sample Amount
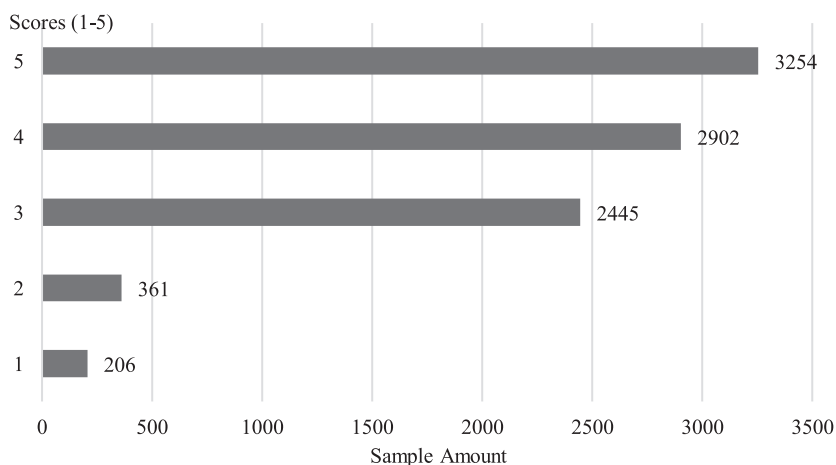
Fig. 7 Are you satisfied with your life?

provide monetary support to their children (4%). Longitudinally, people are more likely to help their parents or children than to help other recipient groups (over 20%). We assess only money-helping behavior of parents or children who do not live together with the helpers.

Compared to people of other countries, Chinese people value a family inheritance more highly. Family support is still the main form of pension in Chinese society. "Bring up sons to support parents in their old age" has a profound cultural background in China. Family pensions based on the value of blood relations are an unavoidable choice for the pension model under this concept (Yu 2011). In Table 1, the proportion of individuals providing financial support to their parents is the highest among five interpersonal relation groups (26%), which proves the opinion above.

Table 1. Effects of academic background on money-helping behaviors

	Illiteracy	Primary	Junior	Senior	Bachelor	Master and PhD	Total
Total	1791	2182	2930	1319	933	13	9168
Donate to strangers	185	301	582	320	399	8	1795
	10.33%	13.79%	19.86%	24.26%	42.77%	61.54%	19.58%
Help friends and colleagues	104	177	307	166	186	2	942
	5.81%	8.11%	10.48%	12.59%	19.94%	15.38%	10.27%
Help relatives	95	196	326	190	175	4	986
	5.30%	8.98%	11.13%	14.40%	18.76%	30.77%	10.75%
Help parents	269	518	916	391	359	4	2457
	15.02%	23.74%	31.26%	29.64%	38.48%	30.77%	26.80%
Help children	808	647	506	232	39	0	2232
	45.11%	29.65%	17.27%	17.59%	4.18%	0.00%	24.35%

Figs. 8 and 9 show the effects of employment status and income level on the decision of providing money-helping behavior. We present percentages of people who choose to help as well as the 95% confidence intervals in both tables. Of employed individuals, 31% provide monetary support to their parents. The percentage of helping parents is still the highest among five interpersonal groups, which supports our perspective above. Of retired individuals, 48% help their children with money, which is the highest percentage of this scale. A possible explanation is that in China, the phenomenon of raising children across generations is widespread. Young and middle-aged laborers in many families choose to go to work, entrust their young children to grandparents at home, and provide them with regular financial support. Related studies demonstrate that more than 40% of Chinese families are currently in intergenerational support mode (Chun 2007). This special family model can explain the two higher ratios in Fig. 8. Of unemployed people, 27% have donated to others, which is even higher than the figure for employed people. However, this result might be biased according to the 95% CI of the unemployed group in Fig. 8.

In Fig. 9, the income is shown as divided into four groups by 25%. The percentages of people with money-helping behavior all increase when the income level increases among four of the five groups; it only decreases in the children group from 37% to 18% although the total percentage of providing financial support to children is still the second highest of all the interpersonal groups, which means that parents with lower incomes are more willing to help their children with money. With the 95% confidence interval of each group, significant difference among income classes is apparent. Researchers have found that low-income parents are more inclined to adopt the intergenerational model of raising a family, which means that they are more likely to work in metropolises away from home. Zhou (2020) reports that the income level is negatively related to the time parents spend with
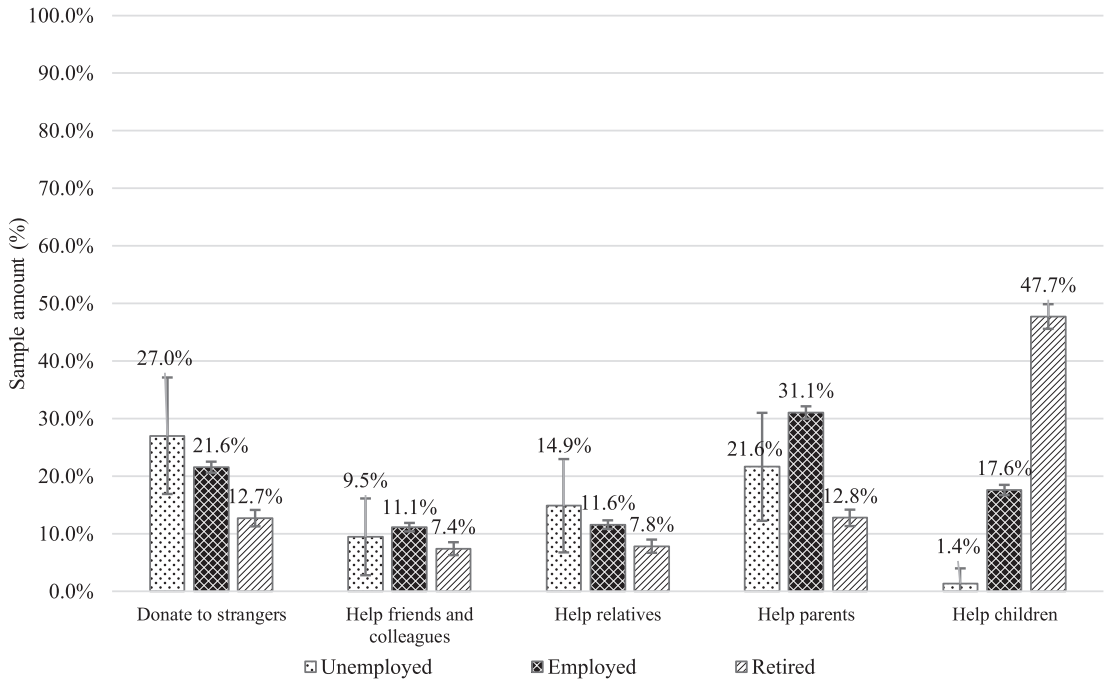
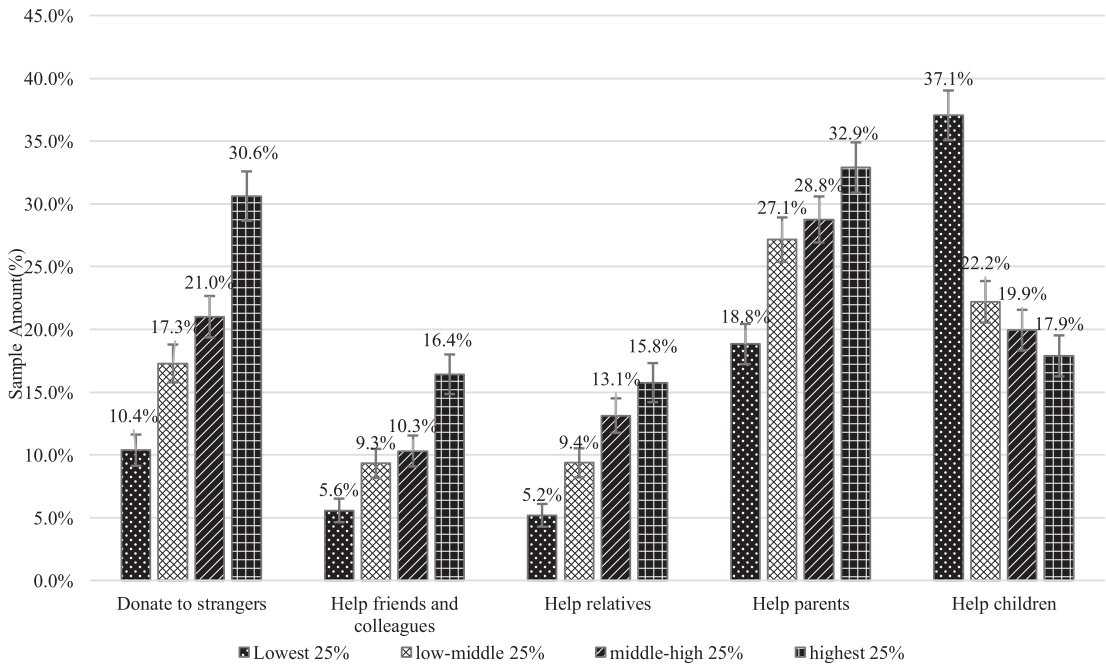Fig. 8 Impact of employment status on money-helping behaviors

Fig. 9 Impact of income on money-helping behaviors

their children as they grow up, which might be an explanation of our results.

Table 2 shows OLS regression results classified by gender. Researchers found that a positive correlation exists between donations and subjective well-being, whereas our results show an opposite result. When treating "donation to strangers" as an explanatory variable, the coefficients of the two explained variables are all negative under different genders. Although not all results are significant, it is clear that providing financial help to strangers will reduce women's life satisfaction by around 11.6 %. This result remains consistent over interpersonal relation group of friends and colleagues. Providing financial help to friends and colleagues reduced women's life satisfaction by 8.8%. When the recipients are from the relative group, men experienced an increase in subjective well-being of around 10%. This coefficient becomes significantly negative again when the recipient are parents of the helpers, which shows that giving money to parents reduces men's life satisfaction by around 11%. The clearest result in Table 2 is the effect of money-helping behavior to children on subjective well-being. Providing financial support to children leads to huge improvement of the subjective well-being of parents. Helping behavior significantly increases parents' subjective scores on happiness by 50%, and the scores on life satisfaction by 10%.

We divide the OLS regression by education level of the helpers into five groups in Table 3.[3] The

Table 2. Regression results of money-helping behavior to different interpersonal relations on subjective well-being sorted by gender

	Are you happy?		Are you satisfied with your life?	
	Female	Male	Female	Male
Help strangers	−0.034	−0.127	−0.116***	−0.056
	(0.080)	(0.082)	(0.036)	(0.038)
Help friends	−0.161	−0.159	−0.088*	0.020
	(0.107)	(0.099)	(0.048)	(0.046)
Help relatives	0.030	0.107	−0.029	0.094**
	(0.100)	(0.102)	(0.045)	(0.048)
Help parents	0.079	−0.011	0.003	−0.110***
	(0.074)	(0.074)	(0.033)	(0.034)
Help children	0.555***	0.490***	0.102**	0.100**
	(0.113)	(0.101)	(0.051)	(0.047)
…	…	…	…	…
Control Var.	Yes	Yes	Yes	Yes
Observations	4610	4558	4610	4558

*Note: Five explanatory variables of helping behavior are dummies; the regressions of control variables are abridged. Standard errors are in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$*

results are roughly the same as those in Table 2.　Providing financial help to strangers still exhibits an adverse effect on the subjective well-being of helpers at all educational levels.　Coefficients of the two explained variables are more significant among people with high educational background. Money-helping behavior of strangers gives a 30% decrease in the happiness of high-educated people. People with helping behavior for friends and colleagues respectively report a 43% lower score of happiness and a 12% lower score of life satisfaction.　Most results of providing financial assistance to parents are still negative, but it is noteworthy that the subjective feedback of helpers with junior education level (7-9 years of full-time educated) on providing financial support to parents is positive, which is 15.8% higher than those who do not support their parents with money.　Finally, the group that provides financial help to children still shows the most significant positive result, which varies according to the level of education.　Among them, helpers who have received high level education have the greatest increase in subjective well-being: 80% higher on happiness and 53% higher on life satisfaction.

Table 3. Regression results of money-helping behavior to different interpersonal relations on subjective well-being sorted by academic background

	Are you happy?					Are you satisfied with your life?				
	Illiteracy	Primary	Junior	Senior	High-edu	Illiteracy	Primary	Junior	Senior	High-edu
Help strangers	0.220	−0.104	−0.034	−0.185	−0.299***	−0.160*	−0.141**	−0.038	−0.136**	−0.127**
	(0.190)	(0.140)	(0.092)	(0.117)	(0.107)	(0.082)	(0.063)	(0.044)	(0.057)	(0.050)
Help friends	−0.012	−0.177	−0.002	−0.203	−0.436***	−0.012	0.079	−0.051	−0.087	−0.120**
	(0.245)	(0.177)	(0.120)	(0.150)	(0.130)	(0.106)	(0.080)	(0.057)	(0.073)	(0.061)
Help relatives	0.076	0.108	−0.023	0.155	0.092	−0.034	−0.023	0.020	0.011	0.008
	(0.257)	(0.169)	(0.116)	(0.142)	(0.134)	(0.111)	(0.076)	(0.055)	(0.069)	(0.063)
Help parents	−0.310*	0.053	0.158**	−0.070	−0.117	−0.063	−0.124**	−0.058	−0.134**	−0.070
	(0.164)	(0.115)	(0.080)	(0.111)	(0.109)	(0.071)	(0.052)	(0.038)	(0.054)	(0.051)
Help children	0.421***	0.531***	0.191*	0.264*	0.809***	0.129**	0.218***	0.160***	0.245***	0.532***
	(0.125)	(0.115)	(0.103)	(0.140)	(0.304)	(0.054)	(0.052)	(0.049)	(0.068)	(0.142)
…	…	…	…	…	…	…	…	…	…	…
Control Var.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1791	2182	2930	1319	946	1791	2182	2930	1319	946

*Note: The five explanatory variables of helping behavior are dummy.　The academic group "high-edu" contains individuals with bachelor or higher degree; The regressions of control variables are abridged.　Standard errors are in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$*

3）We provide regression results sorted by educational level and gender in Appendixes 1 and 2 to show the gender differences of Table 3.

In Table 4,[4)] we divide individuals into four groups according to income level. Samples in the top 25% income group still report negative effects of money-helping behavior to strangers for subjective well-being. These people also show a 26.4% lower score of happiness when they choose to provide monetary support to their friends and colleagues. Furthermore, people in the lowest 25% income group feel less happy when they give money to their parents. Yet again, the results of "help children" group are still significantly positive. People with lower incomes report higher improvement of subjective well-being when they financially help their children who do not live together with them.

In summary, the results of OLS regression when classified according to different elements are generally the same. For robustness, two explained variables also provide similar results. Unlike earlier research, our results on the effect of providing financial help to strangers on happiness are negative for respondents of different genders, education backgrounds, and income levels. The consequences of the group that provided financial help to friends, colleagues, and relatives are not

Table 4. Regression results of money-helping behavior to different interpersonal relations on subjective well-being sorted by income level

	Are you happy?				Are you satisfied with your life?			
	Lowest 25%	Low-middle 25%	Middle-high 25%	Highest 25%	Lowest 25%	Low-middle 25%	Middle-high 25%	Highest 25%
Help strangers	−0.084	−0.065	−0.089	−0.259***	−0.109**	−0.069	−0.152**	−0.133***
	(0.101)	(0.117)	(0.164)	(0.087)	(0.048)	(0.053)	(0.073)	(0.042)
Help friends	−0.162	−0.242	−0.055	−0.264**	−0.048	−0.067	0.075	−0.078
	(0.133)	(0.150)	(0.218)	(0.106)	(0.063)	(0.068)	(0.097)	(0.051)
Help relatives	0.050	−0.054	−0.197	0.161	−0.035	−0.063	−0.003	0.077
	(0.120)	(0.150)	(0.225)	(0.109)	(0.057)	(0.068)	(0.100)	(0.052)
Help parents	−0.153*	0.066	0.127	−0.087	−0.133***	−0.062	−0.112*	−0.050
	(0.091)	(0.100)	(0.130)	(0.087)	(0.043)	(0.045)	(0.058)	(0.042)
Help children	0.566***	0.332***	0.525***	0.249*	0.268***	0.147***	0.197***	0.127**
	(0.114)	(0.111)	(0.114)	(0.128)	(0.054)	(0.050)	(0.051)	(0.061)
…	…	…	…	…	…	…	…	…
Control Var.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2294	2424	2337	2113	2294	2424	2337	2113

*Note: The five explanatory variables of helping behavior are dummies; the regressions of control variables are abridged. Standard errors are in parentheses; *** p＜0.01, ** p＜0.05, * p＜0.1*

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4) We provide regression results sorted by income level and gender in Appendix 2 and 3 to show the gender differences of Table 4.

significant, but the few significant coefficients are still negative.　Among all three tables, the group that provides financial support to children shows the most clear and stable result, which indicates that the behavior of financial assistance to children can greatly enhance the subjective well-being of parents in terms of both happiness and life satisfaction.

5　Conclusion and Discussion

This paper presents an attempt to explore the relation between money-helping behavior and subjective well-being by studying 9168 respondents from various regions of China, as reported by CFPS.　We divided the recipients into five groups according to their different interpersonal relationships: parents, children, relatives, strangers, friends and colleagues.　After controlling for personal characteristics, subjective opinions related to trust, gender, educational attainment, and income, it is apparent that, when facing recipients from different interpersonal groups, money-helping behavior has different effects on helper's subjective well-being.

Results show that effects of money-helping behavior on helper's subjective well-being are negative, which differs from conclusions reported in earlier studies.　Donations to strangers decrease women's life satisfaction by around 11%.　Although other categories yielded results that are not significant, the respective coefficients are still negative.　Providing help to friends and colleagues also had a 9% negative effect on women's life satisfaction.　Individuals with a bachelor's or higher academic degree report more significantly adverse effects on subjective well-being when they provide financial help to strangers, friends, and colleagues.　This result is persistent among high-income people.　Results generally indicate that when people provide financial help to non-relative recipients, their own subjective well-being decreases. This decrease might be true because donation behavior is sometimes not caused by a person's subjective willingness but is instead caused by a collective behavior of conformity.　In China, students sometimes participate in collective donations initiated by the school.　The recipients of such activities might be children in poverty-stricken areas or classmates who are having financial difficulties.　The school encourages everyone to donate by offering commendations, rewards, and other incentives.　The purpose is to cultivate the compassion of students as well as helping people with their difficulties.　Under these circumstances, the donation behavior can be only slightly regarded as an individual's subjective desire.　In other words, people under such circumstances donate not because they are kind or altruistic, but because they are "compelled" by collective behaviors.　They do not want to be regarded as "unsocial" or "selfish" among the members of the organization.　For this reason, the influence of donation behavior on the individual's subjective well-being is negative. Insufficient discussion has been made of such involuntary donation in existing studies.　We can neither prove nor disprove this view.

However, the results related to the behavior of providing financial help to children are markedly

unified.　Financial support to children produces significant and positive effects on parents' subjective well-being in terms of both happiness and life satisfaction under all different socioeconomic factors, among which, women report slightly higher scores of both happiness and life satisfaction from helping their children than men.　Highly educated parents who give money to their children report an 80% higher score of happiness, which is the highest among all groups.　In contrast, although parents of all income levels can gain improvement of their subjective well-being from the money-helping behavior to their children, low-income parents can feel happier.　This might be true because low-income people are more traditional in their attitudes about family affairs.　They believe that supporting their parents and children is their duty and responsibility.　Providing financial support to children can better satisfy their needs for strengthening family bonds, thereby enhancing their subjective well-being.

Appendix

Appendix 1. Regression results of money-helping behavior to different interpersonal relations on subjective well-being (Are you happy?) sorted by educational level and gender

Are you happy?	Female （n＝4610）					Male （n＝4558）				
	Illiteracy	Primary	Junior	Senior	High-edu	Illiteracy	Primary	Junior	Senior	High-edu
Help strangers	0.259	−0.181	−0.05	−0.01	−0.271*	0.097	−0.057	0.009	−0.324*	−0.309*
Help friends	−0.002	−0.058	−0.115	−0.212	−0.352*	0.016	−0.275	0.123	−0.214	−0.451**
Help relatives	−0.405	0.135	−0.067	0.081	0.2	1.097**	0.062	−0.016	0.213	−0.075
Help parents	−0.287	0.043	0.293*	−0.085	−0.165	−0.39*	0.081	0.072	−0.032	−0.051
Help children	0.564**	0.649**	0.179	0.583**	0.839*	0.309*	0.482**	0.199	0.098	0.549
…	…	…	…	…	…	…	…	…	…	…
Control Var.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1052	1021	1435	610	492	739	1161	1495	709	454

Note: The five explanatory variables of helping behavior are dummies; the regressions of control variables are abridged. Standard errors are in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Appendix 2. Regression results of money-helping behavior to different interpersonal relations on subjective well-being (Are you satisfied with your life?) sorted by educational level and gender

Are you satisfied with your life?	Female ($n=4610$)					Male ($n=4558$)				
	Illiteracy	Primary	Junior	Senior	High-edu	Illiteracy	Primary	Junior	Senior	High-edu
Help strangers	−0.192*	−0.224**	−0.06	−0.032	−0.128*	−0.078	−0.07	0.011	−0.216**	−0.134*
Help friends	−0.023	0.124	−0.194**	−0.059	−0.198**	−0.02	0.047	0.079	−0.139	−0.062
Help relatives	−0.128	−0.161	−0.007	−0.015	0.028	0.19	0.132	0.043	0.019	0.007
Help parents	−0.007	−0.07	0.055	−0.059	−0.089	−0.131	−0.172**	−0.148**	−0.19**	−0.062
Help children	0.165**	0.206**	0.078	0.19**	0.531**	0.04	0.235**	0.178**	0.287**	0.638**
…	…	…	…	…	…	…	…	…	…	…
Control Var.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1052	1021	1435	610	492	739	1161	1495	709	454

Note: The five explanatory variables of helping behavior are dummies; the regressions of control variables are abridged. Standard errors are in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Appendix 3. Regression results of money-helping behavior to different interpersonal relations on subjective well-being (Are you happy?) sorted by income level and gender

Are you happy?	Female ($n=4610$)				Male ($n=4558$)			
	Lowest 25%	Low-middle 25%	Middle-high 25%	Highest 25%	Lowest 25%	Low-middle 25%	Middle-high 25%	Highest 25%
Help strangers	−0.0001	−0.038	−0.012	−0.263**	−0.177	−0.016	−0.159	−0.215*
Help friends	−0.011	−0.122	−0.121	−0.336**	−0.025	−0.372*	−0.188	−0.191
Help relatives	−0.443	0.009	−0.095	0.215	0.046	−0.111	0.186	0.059
Help parents	0.436**	0.043	−0.134	−0.155	−0.164	0.15	−0.169	−0.006
Help children	0.707***	0.446**	0.646***	0.276	0.461**	0.238	0.542**	0.283
…	…	…	…	…	…	…	…	…
Control Var.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1093	1268	1208	1041	1201	1156	1129	1072

Note: The five explanatory variables of helping behavior are dummies; the regressions of control variables are abridged. Standard errors are in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Appendix 4. Regression results of money-helping behavior to different interpersonal relations on subjective well-being (Are you satisfied with your life?) sorted by income level and gender

Are you satisfied with your life?	Female ($n=4610$)				Male ($n=4558$)			
	Lowest 25%	Low-middle 25%	Middle-high 25%	Highest 25%	Lowest 25%	Low-middle 25%	Middle-high 25%	Highest 25%
Help strangers	−0.209*	−0.058	−0.186**	−0.263**	−0.094	−0.034	−0.03	−0.127**
Help friends	0.062	−0.119	−0.106	−0.141*	0.099	−0.016	0.009	−0.044
Help relatives	−0.195	−0.03	−0.091	0.032	0.255*	−0.063	0.03	0.121
Help parents	0.036	−0.038	−0.096	0.053	−0.242**	−0.051	−0.155**	−0.135**
Help children	0.26**	0.05	0.233**	0.061	0.124*	0.161**	0.339***	0.184*
…	…	…	…	…	…	…	…	…
Control Var.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1093	1268	1208	1041	1201	1156	1129	1072

*Note: The five explanatory variables of helping behavior are dummies; the regressions of control variables are abridged. Standard errors are in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.1$*

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