

Family Size and Children Development How Does the Number of Children Affect the Growth of Chinese College Students

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ABSTRACT

This study aims to investigate the relationship between the development of college students and their family situations including family size, parental expectation, socioeconomic status, and gender stereotype in China. It is a survey-based study with 55 participants (24 female and 31 male) who randomly selected from different provinces in China. The survey contains 23 questionnaires from the perspectives of parent expectation on children graduation level, major selection, self report peer relationship, family relationship. The findings revealed that parental expectation, socioeconomic status, gender stereotype do not significantly associate with family size. It is suggested that parents expect more frequently from children with siblings. It is also suggested that parents investment equally share by neglect the numbers of children. Furthermore, participants report gender stereotypes are less likely to occur regardless of sibling size.

Keywords: *Sibship size, Chinese college students, Parental expectation, Gender stereotype, Socioeconomics status(SES)*

1. INTRODUCTION

A series of policies aiming to boost the birth rate suggests that China is becoming an aging society. Third-child policy advocates that a couple can have up to three children. However, family size seems as extended problem. Government policy and job changed indirectly force parents and their children to migrate to different province in China, and therefore it has impact on Children's development with resource inequality distribution and psychological pressure from parent's workplace [1]. Parents' intention of number of children in a family has long been a tradition. Families have expectation on the numbers of children, especially how much they care about neighborhood's perspective in specific regional culture continually affect the family's decision on family size. This can explain by people are giving value to their culture is that children will take care of parents and elder in a family.

Researchers are dedicated to determining the optimal number of children in a family since the number of children affects not only child's individual development but also family well-being [2]. A Family with one child or multiple children shows different conditions. For instance, a single child has an advantage in better academic

achievement by receiving large proportion of resource distribution compared to children with siblings [3]. Positive and indirect parental expectation on single child also brings positive effect on child's learning motivation corresponding to higher and more stable test score[14, 15]. Small size family tends to increase the quality of parental resources psychologically and materially [4]. On the other hand, children with siblings have opportunity to enhance their ability of social interaction through communication, problem-solving, and conflicts [5]. In a safe and healthy environment, children with siblings learn how to interact with peer through playing games and sports in the home environment and later expand this ability to their social networks at school. However, children with siblings easy to get jealous [6].

Besides the sole number of children, previous research also covers a wide range of topics including gender stereotypes, social-economic status, regional variation, family goal, government policy, culture. Gender stereotype among one and multiple children in a family show that females show a more severe impact on mental health (autism) and other social limitations as well [10]. Family resources is associated with social-economic status especially the changing of birth control policy indirectly

related to economic growth [11]. Yet many of these studies did not properly measure children psychological symptoms occurs and the combinations with Chinese parental expectation in Asian culture [13]. For instance, male and female being treat distinctly on subject course achievement [8]. Even though data have shown male and female among Chinese people have different kinds of external and internal psychological problems, it still varies by family, social experiences, and intensity of parental expectation may lead to unexpected outcome.

This paper will explore one child and children with siblings develop in different learning outcome due to different sociocultural environment, parents expectations, gender stereotype, and even peer interaction. How family culture and family size continue has impact on student's future life experience. Chinese college students within Chinese culture background and the transition from adolescence to adulthood life-time development. Therefore, this study will elaborate the connections between family and individual development (from childhood to adulthood) by surveying on Chinese college students.

2. LITERATURE REVIEW

2.1. Parental Expectation and Sibling Size

The level of parental expectation is closely related to the size of siblings, which has a significant impact on academic performance [4]. Parents in small size families are more likely to provide adequate resources such as cultural activities (dance or sport) that help children develop a wider range of abilities. Singletons receive a higher percentage of parents' attention; parents also invest more time and energy in singletons, ensuring that children feel safe and stable environments to develop their personal achievement at school [20]. Children's quality, parental encouragement, and the home environment all interact and influence each other. However, large families' children receive fewer benefits than children from smaller families because of a home environment with parental resources. In one sense, children with more siblings have less time with their parents along with less encouragement and motivation, which results in poor performance [19]. Nevertheless, children with many siblings have an advantage when it comes to verbal learning and emotional understanding [20]. In early and later adulthood, children with siblings may be able to develop language comprehension skills, which help them not only understand others' emotions but also expand their social networks with stable friendships. Additionally, the study indicates that parents' decision on the number of children is associated with their future contributions (educational and occupational achievements) [17]. When parents make the decision to increase family size, the opportunity to share resources materially (computers, books, toys) increases [4]. Moreover, parents' decision-making affects children's ed-

ucation level continuously. Increasing family size and decreasing resources lead to some consequences such as children with difficult financial support from parents, therefore, they are unable to attend college or quit school [18].

2.2. Gender difference and gender stereotype

Children's gender tends to affect their development in large families. Families with both singletons and multiple children, males and females, were selected according to their subject courses. There is a gender stereotype on male and female children, regardless of their ability, that is hindering their ability to attain future occupations, cultural classes, and school learning [8, 17]. As an example, male and female occupations are defined differently. Accordingly, the roles of males and females should match their gender roles (which jobs or majors are given only to males or only to females) [21]. Both women and men should act in a way that fits their predefined gender role. When people fail to attribute themselves to a given gender type of job, it leads to a conflict with the common sense that is being evaluated by individuals and society. The gender stereotyping of scientists occurs at a very young age and persists well into adulthood. Both parents and children think of science as a male-dominated field despite their own interests and personalities. Parental gender bias is associated with gender stereotypes. In the process of teaching boys and girls to solve math problems, parents communicate differently (explicitly or implicitly). Sometimes, girls lack confidence in math, even when they perform well on math tests compared to boys [23]. Children with large families show gender stereotypes explicitly, for example, older sisters tend to do more household chores than youngest brothers [24]. Generally, gender stereotypes on math and science interact with gender role culturally, parents' expectations, and self-evaluation [23].

In addition to gender stereotypes, various elements of culture, parents' expectations, and self-evaluation are influencing and interacting with each other at the same time. Culture, parents' expectation, self-evaluation at different levels, influencing an individual's belief system and behavior [23].

2.3. Socioeconomic status and family size

According to previous research, Chinese children are more likely to benefit from private tutoring for academic grade improvement. Chinese children also enjoy other cultural activities such as sports, dance, and music. In China, parents believe that cultural subject training in addition to formal schooling will contribute to children's development in terms of peer competition, occupations on the job, educational institutions, living conditions, and employment rate. Additionally, the study in Hong Kong found private tutoring or culture activities are associated with the educational level of parents, family income, and

family size. The research also found that culture activities are covered by different family socioeconomic income levels, such as low-income families, middle-income families, and high-income families, which have different levels of investment in children's culture activities [30]. It also revealed that Chinese parents in mainland China, despite the one child policy enforcement, were still able to involve their children in cultural activities or tutoring when needed, regardless of family size. Higher household families will pay more in school fees than middle and lower household families, but it still shows that Chinese parents place high value on subject course activities outside of school. Education level, family size, household income, and parental expectation are positively correlated with tutoring demand. In spite of parents factors, Chinese students also encounter peer pressure that contributes to unsatisfactory academic achievement [31].

Hypothesis: Parents show higher expectation positively relates to singleton's academic performance than multiple children.

3. METHOD

This research studies the relationship between sibship (one child or multiple children) interact with socioeconomic status, parental expectation, and gender stereotype in children's development. Sub-questions are as follows:

Do family size and parental education level influence the demand for parental decision on children's cultural activities?

How does gender stereotype display differently among singletons and multiple children families?

3.1. Participants

The participants were 55 Mainland Chinese college students (Female n=24, Male n=31), who were local birth in China and come from different provinces (Figure 2). Participants are age within the range of 19 to 23 years old. Female's age (M=19.92, SD=1.530). Male's age (M=20.45, SD=2.336). Female singletons were 8 participants. Male singletons were 13 participants. Females with siblings were 16 participants, Male with siblings were 18 participants. 9.1% of participants report there is parental favoritism, and 83.6 reports non-parental favoritism, total of 36 participants report graduate and master's degree graduation level by parental expectation (Figure 1).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	31	56.4	56.4	56.4
	female	24	43.6	43.6	100.0
	Total	55	100.0	100.0	

Figure 1 Participants sample size.

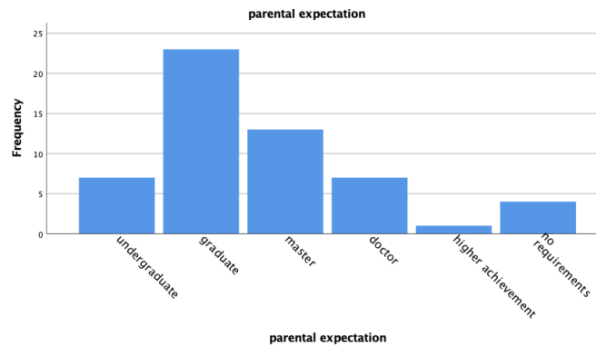


Figure 2 Parental expectation on children graduation level.

3.2. Procedure

The data were collected through an online survey platform called Wenjuanxing. Informed consent is presented on the first page of questionnaires and respondents acknowledge their voluntary participation. They were invited to complete a questionnaire which consisted of singleton, sibship size, parental expectation, education level, academic achievement, gender, socio-economic status, peer relationships, psychological symptoms, etc.

3.3. Measures

3.3.1. Sibship size

Singleton status/multiple children in a family were identified by the participant's response to the question – "are you the only child in your family?". "The number of children in your family" is subsequent to the answer "No".

3.3.2. Parental expectation

Participants will be asked parental education expectation on children's academic achievement, expect education level measured by Parental Expectation Questionnaires (PEQ) [25]. For instance, "Which level of educational degree do your parents expect you to obtain? (1=primary school, 9=no request)" "What do parents want you to major in? (art design, economic and finance, doctors, biological engineer, architecture engineer, no request)". This method is to capture how parents' expectation associate with children's career selection, decision making, and educational achievement in order to know why parents' expectation is important to promote children's development on their personal identity at school and future career field.

3.3.3. Peer relationship

To measure internalizing symptoms, the questionnaire uses research measurement Youth Self-Report (YSR) that evaluates participants' emotional state [27]. For instance, "I am satisfied with my friendship." "I feel upset when I

am being isolate from others.” To measure external behavior of participants’ reaction and interaction with peer, for instance, “I am love to making new friends.” “I will help my friends when they need me.” This method is measuring how peer relationships associate with participants early social communication skills at home environment while interacting with parents and other siblings.

3.3.4. Gender stereotype

Participants were asked “what are some reasons that parents showed their favorite or share unequal love toward children? Given multiple options: gender difference, birth order, children standardize score, children personality, other options.” Previous study showed gender stereotype in relation with parents gender expectation on children’s gender role and resources distribution [10]. There is also gender stereotype correlated with workplace bias. Respondents state men tends to become more successful manage more than women [21].

3.3.5. Socioeconomics status

Birth order, sibship size, and family income are not significant factors influence singleton and multiple children’s intellectual ability. Previous study indicated that last-born even does better than the older children [17]. Therefore, sibship size isn’t present the strongest association with birth order. Instead, sibship size is possible relation to socioeconomics status of a family. Parents choose children’s quantity not quality determined a difference socioeconomic outcome. Additionally, parents’ occupation, educational background, parental pressure on children’s academic expectation, hence, these contribute a child’s educational attainment [29]. Another study also explains parental resources and sibship size at some point related to a family socioeconomics status in future education investment among children [4].

4. RESULTS AND DISCUSSION

4.1 Sibship size and children academic performance

As shown in Figure 3, 36.4% of students have academic score above 90, and 32.7% of students have academic score between 80 and 90. Twelve students who have siblings academic score between 80 and 90. Six students who are singletons with academic score between 80 and 90. Eleven students who have siblings academic score above 90 and 9 students who don’t have siblings academic score above 90. The findings suggested that children have siblings tend to achieve higher score compare to singleton. It is contradicted with a previous study purporting that children with fewer siblings tend to do better academically than children with siblings [15] because bigger families and larger sibships display less

distribution of family resources and therefore lower academic achievement [4]. The results of this study indicate the opposite regarding sibship size and academic performance. It is assumed that culture, ethnicity, region of origin, school base learning environment, childhood experience, neighborhood, communities, and GDP should be included. The limitation is that previous studies and current studies may not include other factors such as educational resources and test standards of schools/provinces/cities have impact on children’s academic score respectively.

		academic grade				
		between 60 to 80	between 80 to 90	above 90	Total	
sibship	yes, with siblings	Count	11	12	11	34
		within sibship	32.4%	35.3%	32.4%	100.0%
		within academic grade	64.7%	66.7%	55.0%	61.8%
no, without siblings	Count	6	6	9	21	
		within sibship	28.6%	28.6%	42.9%	100.0%
		within academic grade	35.3%	33.3%	45.0%	38.2%
Total	Count	17	18	20	55	
		within sibship	30.9%	32.7%	36.4%	100.0%
		within academic grade	100.0%	100.0%	100.0%	100.0%

Figure 3 Sibship size and academic score.

4.2. Sibship size and parental expectation

The results of T-test and chi-square showed that parental expectation and sibship size did not present significant relationship ($F=0.110$, $t=-0.023$, $p=0.742 >0.05$). According to Figure 4, sibship size and parental expectation with Pearson chi-square test result show that is it not significant relationship to each other ($p=0.645$), but it still presents there is a little positive linear association between two values. Parental expectation ($M=5.71$) shows total of 36 participants answer parents expect they able to achieve graduate and master’s degree (Figure 6). For More details (Figure4 5) total of 22 participants with siblings select graduate and master graduation level. Total of 14 participants without siblings select graduate and master’s graduation level. This shows participants without siblings (38.2%) are less strict on graduation level than participants with siblings (61.8%). Four participants with siblings show that they were expected to achieved doctor graduation degree. In contrast, three participants without siblings were expected to achieve doctor’s graduation degree. Therefore, the numbers of participants who have siblings show expect on doctor’s degree more than the numbers of participants who don’t have siblings on doctor’s degree.

		parental expectation						Total	
		1	2	3	4	5	6		
Sibship	yes, sibling	Count	5	12	10	4	1	2	34
		a	14.7%	35.3%	29.4%	12%	2.9%	5.9%	100%
		b	71.4%	52.2%	76.9%	57%	100%	50%	61.8%
		Count	2	11	3	3	0	2	21
no, sibling		a	9.5%	52.4%	14.3%	14%	0.0%	9.5%	100%
		b	28.6%	47.8%	23.1%	43%	0.0%	50%	38.2%
		Count	7	23	13	7	1	4	55
		a	12.7%	41.8%	23.6%	13%	1.8%	7.3%	100%
Total		b	100%	100.0%	100%	100%	100%	10...	100%

*a: within sibship
 *b: within I sick, friends comfort
 *1: undergraduate, 2: graduate, 3: master, 4: doctor, 5: higher achievement 6: no requirement

Figure 4 Sibship size and parental expectation on children education level.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.356 ^a	5	.645
Likelihood Ratio	3.776	5	.582
Linear-by-Linear Association	.001	1	.982
N of Valid Cases	55		

a. 9 cells (75.0%) have expected count less than 5. The minimum expected count is .38.

Figure 5 Sibship size and parental expectation on children education level. Chi-square test.

		parental expectation			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	undergraduate	7	12.7	12.7	12.7
	graduate	23	41.8	41.8	54.5
	master	13	23.6	23.6	78.2
	doctor	7	12.7	12.7	90.9
	higher achievement	1	1.8	1.8	92.7
	no requirements	4	7.3	7.3	100.0
	Total	55	100.0	100.0	

Figure 6 Sample rate on parental expectation.

In this study, the results indicate parents with large families (children with siblings) have higher expectations for their children's graduation. 10 participants with siblings chose master's degrees compared to 3 participants without siblings. However, this study predicts parents' expectations positively relate to a singleton's academic performance compared to multiples. Therefore, the results are opposite the predictions. Research shows that the increase in family size challenges the distribution of educational resources, with parents explicitly decreasing their expectations of their children's education [18]. Only children from Chinese families perform better academically, as well as in regard to educational expectations and psychological behavior adjustment [15]. Moreover, the large quantity of children and the bigger family size, it is difficult to ensure children quality. The Blake (1981) study showed that children's quality is related to their intelligence and ability, both of which influence their educational attainment [17]. The expectation of parents also being misinterpreted of how

their attitude relates to their children's behavior, however, it is vital to acknowledge the difference between children's perception and parental encouragement [28]. Another study illustrates parental expectation unnecessary has strong relationship with children's academic outcome or educational attainment in the future. The parent's expectations may exceed the child's academic achievements because parents focus on the child's future career heavily [14]. In this study, however, the participants were not asked for their birth order. In a large family, parents will have higher expectations for older children than other children [14]. Children's ages may vary in sibling size families, so parents may pay more attention to the youngest child's academic performance and graduation level compared to the oldest one. Another limitation of the results report is that parents' expectations may not always match their children's educational expectations. College students may decide their own futures, including their career path.

4.3. Sibship size and socioeconomic status (culture activities)

Additionally, in this study, culture activities, culture subject courses, living conditions, and sibling size are associated with a family's socioeconomic status (SES). All the participants are college students. Therefore, they report that their families are able to support their tuition until they graduate from college or achieve a higher level of academic achievement. Students are held accountable for academic performance in Chinese society. Parents in China believe that children who only acquire knowledge from formal education have limited opportunities to achieve higher academic positions, therefore private tutoring on other advanced subjects courses becomes an alternative way to help their children be more competitive academically among Chinese peers [29]. 39 of the participants in this study have experience participating in culture-related courses. In other words, they are mainly focused on grade improvement tutoring for improving grades in Chinese, Math, Physics, Chemistry, English, etc. The rest of the participants chose other cultural courses like dance, singing, and sports.

Chinese parents care about their children's abilities during peer competition regardless of their income level. In previous studies, it has been shown that parents considering children's quantity will decrease their socioeconomic status [18], which means they will invest less in education, culture, etc. Moreover, previous researchers noted that culture activities are associated with family's socioeconomic status: higher parental education, higher family income, and smaller sibling size are associated with more opportunities to participate in culture [29]. While this study considers Chinese cultural background and social norms (academic proficiency among peers), many of the participants lived in urban cities with diverse

living environments, and thus were able to approach diverse cultural activities. According to our first question in this study, family size and parental education level have no strong relation to the demand for parental decision-making on children's culture. It shows that parents in China invest more in their children's education resources regardless of the number of children in a family. Accordingly, this study shows opposite results to previous studies on family resource allocation by sibship size. Thus, parents are willing to invest in cultural activities with different amounts of payment, but it is not significantly affected by family size. One limitation of this study was that all participants were able to attend college. According to the survey, their parents are able to pay for their children's college tuition until they graduate. As a result, parents will invest educational resources into their children regardless of their family size, especially those living in the cities.

4.4. Gender and parental favoritism

Result indicate gender isn't significantly correlated with parental favoritism ($p=0.970 > 0.05$). The study result also shows that there is 54.9% within male answered there isn't parental favoritism occur in family. And 35.3% within female answered there isn't parental favoritism (Figure 7). So in answer to the second question of this study, there isn't a different gender stereotype displayed in singletons and children with siblings. However, 7 female participants reported that their parents shared love unequally due to their birth order in comparison to 4 male participants.

		parental favouritism		Total	
		yes. favouritism	no. favouritism		
gender	male	Count	3	28	31
		within gender	9.7%	90.3%	100.0%
		within parental favouritism	60.0%	60.9%	60.8%
female	Count	2	18	20	
		within gender	10.0%	90.0%	100.0%
		within parental favouritism	40.0%	39.1%	39.2%
Total	Count	5	46	51	
		within gender	9.8%	90.2%	100.0%
		within parental favouritism	100.0%	100.0%	100.0%

Figure 7 Gender and parental favoritism.

According to the highest sample rate, parents show preference and unequal sharing of love based on a child's birth order. Even though a large number of the sample population did not experience parental favoritism, it provides some insight into why they think parental favoritism occurs among them. Birth order is one of the reasons parents prefer to have older children or younger children. According to a previous study, children's gender roles and resources are distributed differently [10], but the survey did not ask if parents have any influence on a child's choice of job. Thus, it is still unclear whether parental favoritism occurs but participants may not recognize it because the survey question is too broad. Previous studies have mentioned workplace bias is influenced by gender

stereotypes. It has been reported that men tend to become successful managers more often than women [21]. As patricians were all college students, the survey questionnaires did not directly ask if there was workplace bias among them. Tingshuai Ge and Quanbao Jiang (2021) found that siblings are an important element of Chinese family culture [32]. Younger siblings receive more attention from parents than older siblings, and jealousy easily occurs between siblings [6]. As children age, however, this situation will diminish. A study found that younger siblings in China visit older siblings more often. Gender may also play a role in the relationship between siblings. Female and female siblings interact more than female and male siblings [32]. Oliveira (2019) showed that one child policy creates a sex-ratio imbalance in China on the one hand, but on the other reduces the gender gap in educational attainment. In one aspect, birth order increases the chances of a boy doing the household rather than a girl. This may lead to uneven resource allocation and create a negative effect on girls since the youngest son has all the attention and materials more than older daughters [33]. Previous studies have demonstrated how gender and sibship size interact with parental favoritism. It is implicit and explicit that participants convey the reasons for parents' preference for their children. However, the limitation of this study is that all participants were college students. Additionally, sibling relationships with parental favoritism tend to decrease gradually as children grow older [32]. Another limitation of this study is that it could not generalize to the Chinese population with parental favoritism. Moreover, it cannot cover individual differences in personality, family culture, parents' education, family income, etc.

4.5. Sibship and peer relationship

It shows that both children with and without siblings have friends to comfort them when they are sick ($p=0.049 < 0.05$). Both children with siblings and those without siblings scored the same (Figure 8 9). Three participants (with/without siblings) both scored 2. Ten participants (with/without siblings) both scored 4. Therefore, there isn't a big difference between children with and without siblings in terms of peer interaction. There is a difference on question "I like to help my friends when they need me" (Figure 10). A total of 30 participants with siblings rate score of 4-5 tend to help friends. In contrast, 16 of the participants did not have siblings and rated themselves between a 4 and a 5 tend to help friends. Children who have sibling relationships have a higher chance of social interaction [5]. Children with siblings are better able to solve problems for themselves or help their friends. It is beneficial for children to interact with peers, especially in a safe home environment. As an example, they can develop communication skills through playing games, portraying different characters, and participating in sports activities, and later develop these abilities through social networks at school [20]. However, this study had some limitations:

it did not indicate a strong correlation between siblings' relationships and peer relationships. Children who get along with their siblings do not apply the same idea to developing a better peer relationship. In many cases, children have good relationships with their peers at the same age but have conflicts with their siblings at home [20]. Although siblings tend to develop stronger social skills, this still does not cover a child's development throughout their lifetime. It is possible for peer and sibling relationships to change during adolescence or other stages of life [34]. Research indicates positive sibling relationships often result in successful peer relationships [34]. However, the limitation of the study is that we do not know the role parents play in children-sibling relationships.

5. CONCLUSION

The paper examines the relationship between family size and other variables (parental expectations, socioeconomic status and gender stereotypes). In the study, parental expectations of children's graduation levels did not show a strong correlation with sibling size, and the data suggest that this relationship is not significant. Although previous research provided evidence that parental expectations on their children's graduation level decrease or increase with sibling size (small or large), this study's results indicate the opposite and may be affected by overall living standards. Socioeconomic status does not appear to be strongly correlated with the number of siblings. Parents will invest in their children regardless of how many children they have. However, the study only focuses on college level students, so it cannot generalize all Chinese families or account for siblings' size and resources. Among participants with and without siblings, gender stereotypes are not often encountered. Later, participants also report what are possible factors that contribute to parental favoritism based on gender expectations. In general, parental expectations, socioeconomic status (SES), and gender stereotypes at some point play an important role in indirectly influencing a child's academic achievement, decision making, intelligence, emotional state, etc. Ideally, future research will include some underlying factors, such as the order of participants and their siblings, how participants view their academic achievement in comparison with their siblings, and other factors that may explain the unknown answer for the current study and future research.

		when I sick, my friends will comfort me					Total	
		1	2	3	4	5		
sibship	yes, sibling	Count	4	3	9	10	8	34
		a	11.8%	8.8%	26.5%	29.4%	23.5%	100.0%
	b	100.0%	50.0%	52.9%	50.0%	100.0%	100.0%	61.8%
	no, sibling	Count	0	3	8	10	0	21
a		0.0%	14.3%	38.1%	47.6%	0.0%	100.0%	38.2%
b	0.0%	50.0%	47.1%	50.0%	0.0%	100.0%	38.2%	
Total	Count	4	6	17	20	8	55	
	a	7.3%	10.9%	30.9%	36.4%	14.5%	100.0%	
	b	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

*a: within sibship

*b: within I sick, friends comfort me

Figure 8 Sibship and peer interaction (when I sick, my friend will comfort me).

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.518 ^a	4	.049
Likelihood Ratio	13.592	4	.009
Linear-by-Linear Association	.125	1	.724
N of Valid Cases	55		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is 1.53.

Figure 9 Sibship and peer interaction (when I sick, my friend will comfort me). Chi-square test.

		I love to help my friends when they need me					Total	
		1	2	3	4	5		
sibship	yes, sibling	Count	1	1	2	15	15	34
		a	2.9%	2.9%	5.9%	44.1%	44%	100.0%
	b	100%	50.0%	33.3%	62.5%	68%	61.8%	
	no, sibling	Count	0	1	4	9	7	21
a		0.0%	4.8%	19.0%	42.9%	33%	100.0%	
b	0.0%	50.0%	66.7%	37.5%	32%	38.2%		
Total	Count	1	2	6	24	22	55	
	a	1.8%	3.6%	10.9%	43.6%	40%	100.0%	
	b	100%	100%	100%	100%	100%	100.0%	

*a: within sibship

*b: within I help my friends

Figure 10 Sibship and peer interaction

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