Gender Perceptions in Multi-child Families: The Structure of Family Affecting Gender Stereotypes among Chinese College Students

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Abstract: This paper focuses on gender stereotypes in Chinese multi-child and one-child families to examine whether siblings influence gender stereotypes in College students. In this work, 141 questionnaires ($M=67,\ F=74$) on gender stereotype representations were collected. The t-test was used to detect gender stereotypes between groups from different families. This study demonstrates that large families influence gender stereotypes among college students, with females from large families showing significantly different feedback on gender stereotypes than males with siblings. Due to son preference, more resources for survival and education in the family will be invested in boys, which implies injustice and oppression of girls. China has already enacted the three-child policy, and the impact of gender inequality ideology on children's gender stereotypes in multi-child families, as reflected in this study, has theoretical value for the future promotion of gender equality education in Chinese families.

Keywords: Gender stereotypes, Chinese College students, son preference, gender quality, multi-child families

1. Introduction

Gender equality has been a hotly debated topic since the Chinese economic reform. In order to promote gender equality and the comprehensive development of women, China has established the promotion of gender equality as a basic national policy. It can be seen that gender equality has great significance for China's development and the progress of humankind [1]. However, the profound influence of gender stereotypes and son preference on people's perceptions has hindered the advancement of gender equality and caused serious gender imbalance. With the announcement of the three-child family policy in China, the issue of women's employment and gender imbalance may become even more serious in the future. This research will focus on college students' perceptions of gender stereotypes and explore whether multi-child families affect children's gender stereotypes.

2. Research rationale

Even though China has made a lot of efforts to promote gender equality, the son preference and gender stereotypes are still deeply rooted. The family planning policies implemented in China in recent years have reduced the size of families and eased family budget constraints, thereby improving

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girls' access to education [2]. Although in recent years there have been studies showing that girls receive more investment in education than boys in multi-child families in urban China [3], there is no research that could prove an improved sense of gender inequality in these families. With the promulgation of China's three-child policy to encourage childbearing, the competition among siblings for limited family resources is becoming more intense. It can be assumed that women's resources for education and survival will be greatly oppressed by their brothers in the family according to the gender stereotype about women's role within the family [4]. On the one hand, these gender stereotypes [5]. On the other hand, the son preference and gender stereotypes have led to significant gender imbalances. The size and sex ratio of male and female youth in previous censuses showed that in 2020, the sex ratio of the 'post-80s generation' was 105.70, the sex ratio of the 'post-90s generation' was 110.54, and the sex ratio of the 'post-00s generation' was 115.38. The sex ratio continues to rise with the development of the time [6]. The gender imbalance creates a surplus of men in marital relationships that will have an impact on the traditional and stable structure of marriages. Meanwhile, the increase in these unmarried men will hurt crime rates, well-being, female development, and socioeconomics [7]. It is detrimental to the balanced development of the population and social stability [8]. Therefore, it is important to know the extent of gender stereotyping in colleges in multi-child families and strengthen education on gender equality following the current gender attitudes of young people. With the advancement of modern concepts and the awakening of women's consciousness, reducing the influence of people's son preference and gender stereotypes through cooperation between education and society to achieve a quality and harmonious society is essential [9].

3. Research purpose

This research aims to collect the views of current college students on gender stereotypes and explore whether the structure of a multi-child family has an impact on the gender stereotyping of children. The research wishes to raise public awareness of gender stereotypes and it is hoped that the awareness of gender equality within the family could be increased after the implementation of the three-child policy.

4. Literature review

4.1. Formation of gender stereotypes

A gender stereotype is an attribute or characteristic that women and men are supposed to show [4]. Gender stereotypes include personal attributes, behavior, career, and physical appearance [10]. For example, the gender stereotype in terms of anticipated priorities is that men should work hard, and women always focus on the family [11].

Gender schema theory mentions [12] that children learn male and female roles from the cultures in which they live. According to this theory, children begin to adapt their behavior to the gender norms of their culture from the earliest stages of their social development. In these stages, children rapidly pick up gender stereotypes [13], which help them to predict and understand gender behavior and simplify the process of social interaction. However, once stereotypes are formed, children's cognition is highly resistant to change, and when information is presented that is inconsistent with the stereotype it leads to the expectation of consistent behavior that fits the stereotype, and prejudice and discrimination tend to be perpetuated [14]. Parents as the first educators their gender concepts play an important role in the formation of gender stereotypes during a child's development [15].

4.2. Son preference within the family in the Chinese social context

In 1971, China launched the Family Planning Policy that each family could only raise one child. However, there are still many families who persist in raising more than one child even if they have to pay exorbitant fines. Especially those families who have had a daughter. Moreover, the Chinese's preference for boys is not diminished by fertility restrictions, and the development of ultrasound technology and abortion techniques has provided technical support for fetal sex selection [16]. Women always abort and abandon girls just to have boys.

In China's patriarchal family culture, parents are obviously gender biased and they have a strong preference for sons influenced by traditional Confucian culture [17, 18]. It means when there are children of different genders in the family, parents will allocate more family resources to boys [9]. Chen's study [17] also demonstrated that the years of education of women were significantly reduced when they had brothers.

In the presence of son preferences, a woman's status may increase once she gives birth to a boy and she may gain respect among her husband's family [19]. It reinforces the mother's son preference and creates unfair treatment of sons and daughters in the family. According to Liu's research [20], mothers with lower levels of education and multiple children at home have higher levels of preference for boys. Mothers with a high level of preference for boys are likely to have a more negative parenting style towards girls, resulting in less frequent communication with them.

From the above discussion, it can be seen how the Chinese traditional culture and gender stereotypes persecuted girls in their families. Therefore, this study hopes to gain insight into the gender stereotypes of the younger generation, in the hope that the public can realize the huge burden that gender stereotypes and son preference in China place on females. In the future, more gender equality can be promoted in family education to improve the survival plight of girls in multi-child families.

5. Method

5.1. Research design

This study will utilize a quantitative research methodology that sets up a web-based questionnaire for participants to answer. Personal information about these participants is collected at the beginning of the questionnaire. All participants were asked about their age, gender, and whether they had any siblings. The questionnaire was initially developed based on Liu's Gender Stereotyping Scale [21], which selected the parts of Liu's questionnaire related to personal attributes. However, the questionnaire questions were less relevant to the participant's life and most of the participants chose to be neutral. It was not possible to get their actual thoughts on gender stereotypes. Therefore, the second version chose eight expressions of gender stereotypes from the questionnaire "How Traditional Concepts, gender consciousness, and Family Support Influence Women's Perceptions of Work Research" [22]. These expressions mainly focus on family roles and the gender temperament of males and females. This questionnaire will be posted on the internet and will be filled out randomly by internet users. Each individual had to complete the questionnaire to score personal information about the composition of siblings in the family as well as endorsement of several stereotypical narratives. Because participants are more interested in these points of view, they will give more precise answers.

5.2. Participants

This research is targeted at college students ages 18-24. On the one hand, 18-24 years old is the stage of gender maturity, when university students have a solid and independent gender awareness. On the

other hand, even though these college students were born during the implementation of the one-child policy, China is gradually adopting the two-child policy as they grow up, so the chances of them having siblings have increased significantly. Hence, more useful data from college students with multi-child family structures could be obtained according to this questionnaire. The process of collecting the questionnaires lasted one week and was finally completed by 141 participants (M = 67, F = 74). There are 71 participants from one-child families and 70 have siblings.

5.3. Measure

The questionnaire presented eight descriptions of gender stereotypes, with response options that would use a 5-point scale from strongly disagree to strongly agree (range: 1= strongly disagree, 5= strongly agree). Respondents were required to give their own opinions based on these descriptions. The data was recorded and analyzed using a t-test to verify that multi-child families exacerbate children's gender stereotypes by SPSS. 28.

6. Results

6.1. Sex differences

Table 1: Gender stereotypes of male and female students

	Gender (Mean ± Std. Deviation)		t	p
-	female(n=74)	male(<i>n</i> =67)	_	
Men have to work hard and cannot stay at home and be dependent on others.	4.03±1.16	3.82±1.03	1.113	0.268
Women should stay at home and raise their children, and not work outside	1.28±0.69	2.22±1.04	-6.241	0.000**
Men should be powerful (can carry, lift, support)	3.96±1.14	4.01±0.79	-0.339	0.735
A superwoman can run two lives without difficulty, one at home and one at work.	1.96±1.00	3.00±0.80	-6.863	0.000**
Men must be tall and strong.	3.28 ± 1.07	3.19 ± 0.84	0.558	0.578
Women should be gentle, beautiful with a good figure	1.96±0.93	3.12±0.86	-7.665	0.000**
Men's work centers around outside	2.20±1.06	3.30±0.97	-6.384	0.000**
Women's work centers around the home	1.85±0.95	3.01±0.81	-7.877	0.000**
Totals	20.53±4.39	25.69±3.91	-7.340	0.000**

^{*} p<0.05 ** p<0.01

Male students have stronger stereotypes than female students about the appearance of the sexes and the division of labor in the family.

6.2. Female

Table 2: Gender stereotypes among female students whether they are the only child in their families

	Are you the only child in your family (Mean ± Std. Deviation)		t	p
	No(<i>n</i> =41)	Yes(n=33)		
Men have to work hard and cannot stay at home and be dependent on others.	4.15±1.13	3.88±1.19	0.988	0.327
Women should stay at home and raise their children, and not work outside	1.34±0.82	1.21±0.48	0.796	0.428
Men should be powerful (can carry, lift, support)	4.20±0.95	3.67±1.29	2.024	0.047*
A superwoman can run two lives without difficulty, one at home and one at work.	2.15±1.09	1.73±0.84	1.822	0.073
Men must be tall and strong.	3.41±1.09	3.12±1.02	1.180	0.242
Women should be gentle, beautiful with a good figure	2.02±0.99	1.88±0.86	0.668	0.506
Men's work centers around outside	2.12±1.14	2.30 ± 0.95	-0.728	0.469
Women's work centers around the home	1.83±1.05	1.88 ± 0.82	-0.222	0.825
Totals	21.22±4.45	19.67±4.22	1.526	0.131

^{*} p<0.05 ** p<0.01

Table 3: Gender stereotypes among female students whether they have brothers.

	Do you have brothers (Mean ± Std. Deviation)		t	р
	No(n=45)	Yes(n=29)		Γ
Men have to work hard and cannot stay at home and be dependent on others.	3.96±1.15	4.14±1.19	-0.659	0.512
Women should stay at home and raise their children, and not work outside	1.22±0.52	1.38±0.90	-0.952	0.345
Men should be powerful (can carry, lift, support)	3.89±1.23	4.07±1.00	-0.661	0.511
A superwoman can run two lives without difficulty, one at home and one at work.	1.73±0.84	2.31±1.14	-2.512	0.014*
Men must be tall and strong.	3.22 ± 0.97	3.38±1.21	-0.616	0.540
Women should be gentle, beautiful with a good figure	1.87±0.84	2.10±1.05	-1.072	0.287

Table 3: (continued).

Men's work centers around outside	2.20±0.97	2.21±1.21 -0.027	0.978
Women's work centers around the home	1.84 ± 0.82	1.86±1.13 -0.078	0.938
Totals	19.93±3.80	21.45±5.11 -1.461	0.148

^{*} p<0.05 ** p<0.01

Some literature showed that siblings reinforce a child's own gender identity [23]. The way siblings interact with each other also directly affects women's gender perceptions and girls with brothers are more likely to display feminine attitudes and behaviors in their daily interactions [24]. Hu's research in 2023 also proved that the gender composition of siblings plays a crucial role in the formation of women's gender perceptions [18]. Even though Tables 1 and 2 do not explicitly show that "whether a girl is an only child in the family" (p=0.131) and "whether they have a brother" (p=0.148) indicate a significant difference in the gender stereotype results, they do show differences in some topics. It can be seen that females with siblings are more likely to recognize that men should be powerful and females with brothers are more accepting of the gender stereotype that women got to be able to walk down the hall and into the kitchen.

6.3. Male

Table 4: Gender stereotypes among male students whether they are the only child in their families.

	Are you the only child in your family (Mean ± Std. Deviation)		. t	p
	No(<i>n</i> =29)	Yes(n=38)	·	P
Men have to work hard and cannot stay at home and be dependent on others.	3.93±0.80	3.74±1.18	0.803	0.425
Women should stay at home and raise their children, and not work outside	2.34±0.97	2.13±1.09	0.828	0.411
Men should be powerful (can carry, lift, support)	3.90±0.82	4.11±0.76	-1.075	0.286
A superwoman can run two lives without difficulty, one at home and one at work.	3.14±0.64	2.89±0.89	1.241	0.219
Men must be tall and strong.	3.31±0.81	3.11±0.86	0.991	0.325
Women should be gentle, beautiful with a good figure	3.31±1.00	2.97±0.72	1.533	0.132
Men's work centers around outside	3.14±0.83	3.42 ± 1.06	-1.226	0.224
Women's work centers around the home	3.07±0.65	2.97±0.91	0.476	0.636
Totals	26.14±2.76	25.34±4.60	0.878	0.383

^{*} p<0.05 ** p<0.01

Table 5: Gender stereotypes among male students whether they have sisters.

	Do you have sisters (Mean ± Std. Deviation)		t	p
	No(<i>n</i> =46)	Yes(n=21)		1
Men have to work hard and cannot stay at home and be dependent on others.	3.72±1.15	4.05±0.67	-1.477	0.145
Women should stay at home and raise their children, and not work outside	2.17±1.04	2.33±1.06	-0.578	0.565
Men should be powerful (can carry, lift, support)	4.04 ± 0.79	3.95 ± 0.80	0.436	0.664
A superwoman can run two lives without difficulty, one at home and one at work.	2.89±0.88	3.24±0.54	-1.673	0.099
Men must be tall and strong.	3.17 ± 0.85	3.24 ± 0.83	-0.288	0.774
Women should be gentle, beautiful with a good figure	3.02±0.68	3.33±1.15	-1.148	0.261
Men's work centers around outside	$3.41{\pm}1.00$	3.05 ± 0.86	1.443	0.154
Women's work centers around the home	3.00 ± 0.84	3.05±0.74	-0.222	0.825
Totals	25.43±4.29	26.24±2.91	-0.778	0.439

^{*} p<0.05 ** p<0.01

Based on these two tables, it is evident that the presence of a sibling or sister has little effect on gender stereotyping among men, which is highly significant regardless of whether or not they come from a family with many children. One-child families do not mean that parents have a sense of gender equality. After the implementation of the family planning policy in China, the number of births is limited [25] and gender preferences may be strengthened [26]. Many boys in one-child families may be the result of sex selection.

Table 6: Gender stereotypes among male and female university students with siblings of different genders

	the family	different sexes in (Mean ± Std. viation)	t	р
	Men have sisters. (<i>n</i> =20)	Women have brothers. (<i>n</i> =20)		
Men have to work hard and cannot stay at home and be dependent on others.	4.00±0.65	4.10±1.12	-0.346	0.732
Women should stay at home and raise their children, and not work outside	2.35±1.09	1.35±0.67	3.496	0.001**
Men should be powerful (can carry, lift, support)	3.95±0.83	4.00±1.03	-0.170	0.866

rable of (continued)	Table 6:	(continued)	١.
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A superwoman can run two lives without difficulty, one at home and one at work.	3.25±0.55	2.15±1.04	4.181	0.000**
Men must be tall and strong.	3.25 ± 0.85	3.55 ± 1.15	-0.940	0.354
Women should be gentle, beautiful with a good figure	3.45±1.05	2.00±0.86	4.781	0.000**
Men's work centers around outside	3.05 ± 0.89	2.40 ± 1.10	2.062	0.046*
Women's work centers around the home	3.05 ± 0.76	1.90 ± 1.02	4.043	0.000**
Totals	26.35 ± 2.94	21.45 ± 3.52	4.779	0.000**

^{*} p<0.05 ** p<0.01

Table 6 compares males and females with siblings of different genders and shows that they demonstrate significant differences (p <0.05). This study demonstrates that siblings influence gender stereotypes among college students, which is also proved in Ravirakula's research [27].

7. Conclusion

Chinese traditional gender stereotypes reflect a long history of gender inequality. In China's one-child policy era, gender stereotypes as well as son preference are implied to a certain extent in multi-child families. With the development of the Internet and technology, most women's awareness of gender equality is awakening, and gender stereotypes are diminishing. However, gender stereotypes of men are still perpetuated by social, family, and cultural influences.

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