

Interpersonal Obsession and Its Relevant Factors among Undergraduates

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Abstract Objective: To explore the characteristics of interpersonal obsession and its relevant factors among undergraduates.

Methods Eight hundred and nineteen undergraduates were selected by stratified random sampling from 7 universities in Guangzhou City. They were investigated with College Students' Self-Esteem Rating scale (CSSERS), College Students' Empathy Ability Questionnaire (CSEAQ), Simplified Coping Style Questionnaire (SCSQ), Interpersonal Comprehensive Diagnostic scale for College Students (ICDS), and a self-compiled questionnaire on the general personal information

Results (1) The total scores of CSSERS, CSEAQ, SCSQ and ICDS were (48.96±7.67), (91.21±12.56), (-0.22±1.50) and (9.12±5.62), respectively. (2) The students with serious, medium and mild interpersonal obsession accounted for 37.4%, 44.4% and 18.2% respectively. (3) Multiple linear stepwise regression analysis showed that the total score of ICDS was positively correlated with whether only-child or not and family monthly income ($\beta=.218$ and $.377$, all $P < 0.05$), while the following 8 factors like the total score of CSSERS and CSEAQ, coping style tendency, grade, school category, major, whether your parents are good at interpersonal communication, as well as whether you are in love or have been in love.

Conclusion Interpersonal obsession is an important mental problem among college students, which is closely related to such factors as family rearing, education, personal progression and personality characteristics.

Keyword: Undergraduates, Interpersonal obsession, Self-esteem, Empathy, Coping style, Relevant factors

Chinese college students generally suffer from interpersonal problems, which vary greatly among individuals [1-2]. Among them, 38.0%-53.8% of college students have less interpersonal problems [3-4], 12.4%-38.6% of college students have certain interpersonal problems [1,3], and 2.2%-17.9% have relatively

serious interpersonal problems [3,5]. The problem of making friends has the greatest impact on interpersonal obsession among college students. Compared to peer relationships, teacher-student relationships are more distant [6].

Interpersonal relationship distress has a profound impact on the mental health of college students: It negatively predicts their psychological qualities such as learning engagement [7], subjective well-being [8], and sense of meaning in life [9], and positively predicts their psychological and behavioral problems such as anxiety emotion [10], anxiety behavior [10], and career decision-making difficulties [11].

There are three types of factors related to interpersonal problems among college students: demographic factors, social factors, and psychological factors. The first is demographic factors, mainly including grade [4, 7, 12], gender [3-4, 7, 13-14], major [4], whether one is an only child [3, 7], birth order [14], educational background [14], and family economic conditions [12]. The second is social factors, mainly including primary school bullying [15], family functions [4], parenting styles [16], online interpersonal relationships [17], and mobile phone addiction [18]. The third is psychological factors, including protective factors such as self-esteem [2, 5, 9, 18], self-worth [12], time management disposition [13], adult self-status [3], and free children's self-status [3], and risk factors such as shyness [18], external attribution [2], fear of negative evaluation [8], controlling parental self-status [3], compliant child self-status [3], interpersonal sensitivity [16], attachment anxiety [5], attachment avoidance [5], neuroticism [16].

In summary, most of previous literature has only focused on several related factors related to interpersonal obsession among college students, and each study involves different and fragmented factors. There is no consistent conclusion on the role of factors, especially many demographic factors. The reason for this is that most of these studies use non random sampling methods such as cluster sampling, with a small sample size and insufficient representativeness of the samples; In the extraction of factors, single factor analysis (independent sample t-test or one-way analysis of variance) is mostly used, which fails to comprehensively consider the effects and mutual influences of various factors. For example, although many psychological qualities have an impact on interpersonal distress among college students, interpersonal relationships are directly and closely related to coping styles as they arise in interpersonal communication [19-20]. Self-esteem is the evaluation that an individual typically holds of themselves, expressing an affirmative or negative attitude, indicating to what extent they believe they are capable, important, successful, and valuable. Self-esteem has a significant negative predictive effect on interpersonal distress among college students [2, 5, 9, 18]. Empathy is the foundation of interpersonal understanding and support, and negatively predicts interpersonal relationship distress [21-24]. Based on the above analysis, we can assume that coping styles, empathy, and self-esteem are relevant factors for interpersonal relationship distress among college students.

I. Objects and Methods

1. Objects

A total of 900 college students from Guangdong Pharmaceutical University, Jinan University, Guangzhou Academy of Fine Arts, Guangdong University of Technology, Xinghai Conservatory of Music, Guangdong University of Physical Education, and Guangdong University of Foreign Studies were selected by stratified

random sampling method. 819 valid questionnaires were collected, with an effective rate of 91.0%. The age ranges from 17 to 24 years old, with an average of (19.82 ± 1.52) years old. Among them, there are 435 boys and 384 girls; 256 only children and 563 non only children; 502 from urban and 317 from rural area; 231 in their freshman year, 217 in their sophomore year, 187 in their junior year, and 184 in their senior year.

1.2 Tools

1.2.1 College Students Self-Esteem Rating Scale, CSSERS

Compiled by Song Fang and Zhang Lihua (2010) [25], there are a total of 18 questions, divided into four dimensions: sense of importance (SI), competence (SC), belonging (SB), and appearance (SA). The Likert 4-point scoring method is used to score from 1 to 4 points corresponding to “completely disagree” to “completely agree”. The higher the score, the higher the level of self-esteem. In this study, the Cronbach's α coefficient of the total questionnaire was 0.782, and the Cronbach's α coefficients of the four subscales were 0.77, 0.65, 0.73, and 0.69, respectively.

1.2.2 College Students' Empathy Ability Questionnaire, CSEAQ

Compiled by Pan Xiaofu et al. (2010) [26], there are 32 items divided into three dimensions: empathetic identification (EI), empathetic understanding (EU), and empathetic response (ER). The Likert 5-point scoring method is used to score from 1 to 5 points corresponding to “never like this” to “always like this”. The higher the score, the higher the level of empathy. In this study, the Cronbach's α coefficient of the total questionnaire is 0.830, and the Cronbach's α coefficients of the three dimensions are 0.74, 0.69, and 0.77, respectively.

1.2.3 Simplified Coping Style Questionnaire, SCSQ

Compiled by Xie Yaning (1998)[27], it is a self-evaluation scale consisting of 20 questions that involve different attitudes and measures that may be taken in daily life. These 20 items are divided into two subscales of positive response (PR) and negative response (NR). The Likert 4-level rating method is used to score from 0 to 3 points corresponding to “not to use” to “frequently to use”. The standard score of positive response minus that of negative response is the coping style tendency (CST). In this study, the Cronbach's α coefficient of the total scale is 0.889, and the Cronbach's α coefficients of two subscales are 0.868 and 0.785.

1.2.4 Interpersonal Comprehensive Diagnostic scale for College Students, ICDS

ICDS was developed by Zheng Richang et al. (1999) [28] to measure the degree of interpersonal relationships puzzles and related behavioral distress. A total of 28 questions are mainly in four dimensions: talking with people (TA), making friends (MF), dealing with people (DE) and heterosexual interactions (HI). Adopt the "yes-no" scoring system in which “yes” gets one point while “no” means no point. The higher the score, the more serious the one puzzled by interpersonal relationship. According to the total score, it can be divided into three levels: few or no communication trouble (0-8 points), a certain degree of communication distress (9-14 points), and serious communication problems (15-28 points). In the study, the Cronbach's α coefficient of the scale was 0.847, and the Cronbach's α coefficient of each subscale was 0.791~0.821.

1.2.5 Self-compiled personal general information questionnaire

The CNKI, Wanfang database, VIP database, Baidu, google, Pubmed and other search engines are used to search the literatures about “college students' interpersonal obsession” or “college students' interpersonal

distress” or “college students' interpersonal problem” (1244 in Chinese and 3812 in foreign languages). Based on that, the basic content of the questionnaire are constructed, with a total of 10 items. Combined with the results of 3 collective discussions with 10 representatives of undergraduates and 5 experts in the field of higher education, 1 items are deleted and 2 items are added. The final questionnaire for personal general information involves 12 items, which includes grade, gender, place of origin, only child or not, family monthly income, school category, major category, academic achievement, are parents good at handling interpersonal relationships, the investment of school in social skills training, are you or have you been in love.

1.3 Data manipulation

SPSS 20.0 is used for statistical analysis. Descriptive statistics are used to calculate the average score and standard deviation of each scale; Pearson product correlation is used to explore the correlation between variables; multiple stepwise linear regression is used to analyze the related factors of ICDS total score.

II. Results

2.1 Descriptive statistics

2.1.1 Descriptive statistics of the total score and score of each factor (or dimension)

From Table 1, it can be seen that the coping styles of this group of college students are basically intermediate [27], with moderate self-esteem [25], empathy [26], and obvious interpersonal problems [28].

Table 1. Descriptive statistics of the total scores and factor scores of each scale (n=819)

Dimension	Min	Max	M	SD	Item number	M of item	SD of item
CSSERS total score	4	57	48.96	7.67	18	2.72	0.43
SI	8	24	16.68	3.15	6	2.78	0.52
SC	5	18	11.76	1.69	4	2.94	0.43
SB	4	18	10.44	2.27	4	2.61	0.58
SA	4	17	10.08	2.31	4	2.52	0.60
CSEAQ total score	56	131	91.21	12.56	32	2.85	0.47
EI	27	55	43.48	6.13	13	3.34	0.50
EU	14	41	37.81	4.37	11	2.53	0.40
ER	10	31	19.59	3.65	8	2.44	0.46
PR	6	36	23.44	5.52	12	1.95	0.46
NR	0	22	10.26	4.16	8	1.29	0.52
CST	-5.3	2.55	-0.22	1.50	20		

TA	0	7	2.53	1.81	7	0.36	0.26
MF	0	7	3.32	2.05	7	0.47	0.29
DE	0	7	1.51	1.44	7	0.22	0.21
HI	0	7	1.77	1.69	7	0.25	0.24
ICDS total score	0	27	9.12	5.62	28	1.30	0.80

2.1.2 Distribution of types of interpersonal problems among college students

Frequency statistics show that 306 people (37.4%) have more severe/severe interpersonal problems, 364 people (44.4%) have some degree of interpersonal problems, and 149 people (18.2%) have no/less interpersonal problems [28].

2.2 Correlation analysis of scores on various scales

According to Table 2, there is a significant negative correlation between the total scores of SCSQ, CSSERS, CSEAQ, and ICDS ($r=-0.508, -0.460, -0.296$; all $P<. 01$).

Table 2. Correlation analysis of total scores and factor scores of each scale

Variable	1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17						
1. PR											
2. NR		-.238**									
3. CST		.788**	-.786**								
4. SI		.348**	-.376**	.423**							
5. SC		.479**	-.339**	.544**	.257**						
6. SB		.273**	-.159**	.350**	.342**	.511**					
7. SA		.205**	-.145**	.267**	.318**	.288**	-.358**				
8. CSSERS		.327**	-.284**	-.484**	.668**	.613**	.730**	.690**			
9. TA		-.395**	.349**	-.473**	-.456**	-.464**	-.504**	-.485**	-.448**		
10. MF			-.235**	.379**	-.390**	-.383**	-.628**	-.464**	-.433**		
	-.494**	.625**									
11. DE			-.295**	.319**	-.390**	-.432**	.479**	-.478**	-.314**		
	-.466**	.491**	.509**								
12. HI			-.270**	.323**	-.376**	-.338**	.531**	-.365**	-.426**		
	-.399**	.528**	.553**	.468**							
13. ICDS			-.369**	.429**	-.508**	-.398**	-.433**	-.351**	-.412**		
	-.460**	.824**	.852**	.751**	.775**						
14. EI			.133**	-.188**	.144**	.161**	.069	.055	.037	.055	-.319**
	-.243**	-.248**	-.185**	-.251**							

15. EU	.167**	-.193**	.172**	.180**	.065	.049	.041	.057
	-.338**	-.289**	-.253**	-.223**	-.276**	.661**		
16. ER	.256**	-.231**	.250**	.242**	.073	.077	.063	.068
	-.382**	-.337**	-.301**	-.284**	-.323**	.575**	.575**	
17. CSEAQ	.197**	-.206**	.213**	.196**	.067	.062	.054	.063
	-.344**	-.291**	-.277**	-.254**	-.296**	.742**	.768**	.714**

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (the same below)

2.3 Analysis of variables affecting interpersonal relationships among college students

2.3.1 Variable assignment

First, the possible situations (alternative answers) of the demographic classification variables that may affect the total score of ICDS are assigned, and the results are shown in Table 3.

Table 3. Variable assignments

Item	Option and assignment
1. Grade	0=freshman, 1=sophomore, 2=junior, 3=senior
2. Gender	0=male, 1=female
3. Origin	0=rural areas, 1=urban areas
4. Are you an only child?	0=No, 1=Yes
5. Monthly family income	0=0-4000 yuan, 1=4001-8000 yuan, 2=8001-12000 yuan, 3=12001-16000 yuan, 4=over 16001 yuan
6. School category	0=Comprehensive, 1=Engineering, 2=Normal, 3=Finance, 4=Language, 5=pharmaceutics, 6=agriculture, 7=art category
7. Major categories	0=Science, 1=Engineering, 2=Liberal Arts, 3=Medicine, 4=Agriculture, 5=Education, 6=Law, 7=Arts
8. Grade ranking of academic performance	0=top 10%, 1=top 10% to 20%, 2=top 20% to 40%, 3=top 40% to 60%, 4=top 60% to 80%, 5=bottom 20%
9. Are your parents good at handling interpersonal affairs?	0=very bad, 1=not very good, 2= average, 3= good, 4=excellent
10. Does the school pay attention to the training of social skills for college students?	0=not valued, 1=not very valued, 2=unclear, 3=average, 4=very valued

11. Are you in love or have you ever been in love? 0=never in love, 1= in love, 2= previously in love

2.3.2 Multiple stepwise linear regression analysis of main related factors of college students' interpersonal obsession

Taking the total score of ICDS as the dependent variable and the factors that may be related to the total score of ICDS (including 11 demographic variables, total score of CSSERS and CSEAQ, as well as score of CST) as the independent variables, a multiple stepwise linear regression analysis is carried out within the 95% confidence interval, the results are shown in Table 4.

It can be seen from table 4 that 2 factors such as total score of are you an only child, and monthly family income are positively correlated with the total score of ICDS ($\beta=0.218$, and 0.377 , both $P<0.05$). Eight factors such as the total score of CSSERS, total score of CSEAQ, coping style tendency, grade, school category, major category, are your parents good at interpersonal affairs, as well as are you in love or have you ever been in love are negatively correlated with the total score of ICDS ($\beta=-0.140$ to -0.758 , all $P<0.05$).

Table 4. Multiple stepwise linear regression analysis of factors related to the total score of ICDS

Dependent variable	Independent variable	B	SE	β	t	P	R ²	R ² _{adj}
Coping style tendency	Coping style	-.618	.081	-.526	-14.922	<.001	0.479	0.479
	CSSERS total score	-.597	.069	-.424	5.517	<.001		
	CSEAQ total score	-.503	.076	-.398	-3.877	<.001		
	School category	-.255	.051	-.140	4.578	<.001		
	Major category	-.468	.092	-.284	-7.255	<.001		
	Grade	-.393	.059	-.178	-2.535	.011		
	Are you an only child	.433	.076	.218	3.046	.002		
	Monthly family income	.522	.084	.377	7.441	<.001		
Are your parents good at interpersonal affairs	Are your parents good at interpersonal affairs	-.842	.089	-.758	-5.981	<.001		
	Are you in love or have you ever been in love	-.694	.095	-.431	-7.048	<.001		

III. Discussion

The total score of CSSERS, CSEAQ, and ICDS, as well as score of coping style tendency of this group of college students are (48.96 ± 7.67) , (91.21 ± 12.56) , (9.12 ± 5.62) , and (-0.22 ± 1.50) , which are consistent with previous research results [2, 5, 9, 18, 19, 24-26], indicating that college students' coping styles are basically

intermediate and lack aggressiveness and effectiveness. They have a moderate level of self-esteem and empathy, and generally experience significant interpersonal problems, with individual differences in the severity of these problems.

This study finds that coping style tendency negatively predicts the total score of ICDS, which is consistent with previous research results [19]. Interpersonal problems mainly refer to obstacles in interpersonal relationships or communication that arise due to individual, social, and cultural factors (such as differences in certain aspects of both sides) in the process of interpersonal communication [32]. College students come from all over the country and often have various differences in personal experiences, concept and personalities, lifestyle habits, and local subcultures. How can these differences not affect interpersonal communication and relationships? It largely depends on the individual's coping style. If an individual has a positive coping style, they are more likely to coordinate interpersonal differences correctly, solve obstacles in interpersonal communication, and alleviate interpersonal troubles; On the contrary, if an individual does not have a positive coping style, it will be difficult to coordinate interpersonal differences correctly, solve obstacles in interpersonal communication, and even expand interpersonal differences, exacerbate obstacles, and worsen interpersonal troubles.

Self-esteem negatively predicts interpersonal distress, consistent with previous studies [2, 5, 9, 18]. Individuals with high self-esteem have a higher sense of self-worth and can reasonably protect their rights and interests. In interpersonal communication, they often interpret the words and actions of others from a positive perspective, promote positive information and emotional communication with others, and establish good interpersonal relationships. On the contrary, individuals with low self-esteem tend to view their interpersonal environment as threatening and ill intentioned, often using hostile and defensive methods for negative communication, exhibiting hostile attacks on others, and ultimately deteriorating interpersonal relationships.

The negative prediction of empathy ability for interpersonal obsession is consistent with previous research results [22-24]. Empathy refers to the emotional experience that individuals experience through observing, imagining, or inferring the emotions of others, while recognizing that their own feelings come from others (DeVignemont & Singer, 2006). Empathy enables us to empathize with, identify with, and accept others' thoughts and feelings (but not completely agree), analyze problems and guide them in their way of thinking, convey information about their understanding in an appropriate way, and reach resonance and understanding with them as much as possible, thereby reducing differences and disputes and alleviating interpersonal troubles.

Grade negatively predicts ICDS total score. That is to say, the higher the grade, the lower the total ICDS score, which is consistent with the research results of Qiu Huiyan [29], and Fan Lijun et al. [30]. The reason behind this is that students of higher grade have richer social experience, more opportunities to exercise their communication skills, better understand and tolerate interpersonal differences, and better avoid and solve interpersonal obstacles, resulting in less interpersonal problems.

The school and major categories can significantly predict the total score of ICDS, which is consistent with the research results of Wang Junshan et al [31], reflecting the impact of educational goals and learning characteristics on students' mental health. Generally speaking, the total score of ICDS in teacher training schools

is the lowest, because they will be primary and secondary school teachers who will need to serve as class managers in the future, coordinate the relationships of all students, and become friends with primary and secondary school students. Therefore, teacher training schools systematically offer courses on teacher-student and classmate relationship management. At the same time, the learning time and methods in teacher training schools are relatively flexible, and students have more time to communicate and exchange ideas, as well as more opportunities to interact with society, which is beneficial for improving their interpersonal skills and reducing interpersonal problems.

Compared with only children, non only children have less interpersonal problems, which is consistent with the research results of Su Wenkui et al [32] and Shen Yanting et al [33]. For teenagers and children, peer communication is the main form of communication and an important way to improve interpersonal skills. Non only children have more opportunities to communicate with peers (especially brothers and sisters) and get more communication training since childhood, so they can better deal with interpersonal problems and reduce interpersonal obsession.

The positive prediction of monthly household income for the total score of ICDS is inconsistent with the research results of Liu Jia et al [34]. It may be due to different sampling methods. The results of this study suggest that economic ability can enhance interpersonal relationship distress. The reason is that due to different family economic conditions, college students exhibit stratification in various aspects such as habits, social concepts, social methods, living standards, consumption concepts, and consumption patterns. They are easy to communicate and resonate with classmates from the same economic class and circle, resulting in better interpersonal relationships; And it is difficult to communicate and resonate with students from different social classes and circles. Due to the fact that there are fewer college students with better family economic conditions in this group, there are fewer who are more likely to understand and resonate with them, and their interpersonal problems are more and more serious.

The negative prediction of ICDS total score based on whether parents are good at handling interpersonal affairs is consistent with the research results of Su Wenkui et al [32] and Shen Yanting et al [33], suggesting the family upbringing style plays an important role in the psychological quality of children. Children live with their parents from a young age and are deeply influenced and taught by them. Due to the authority of parents and the strong plasticity of children and adolescents, parents' ideas and behaviors are easily imitated and internalized by children and adolescents. If parents are good at handling interpersonal affairs, their social behavior and skills are easily learned by their children and applied in the social interactions, promoting the establishment and maintenance of good interpersonal relationships, and reducing interpersonal problems. Due to the heavy learning tasks of children and adolescents, they have no time to self-study social skills, and the lack of systematic social courses in schools, if parents are not good at handling interpersonal affairs, children will lack opportunities and avenues for social exercise, and are prone to interpersonal obsession due to insufficient social skills.

The ICDS total score of students with romantic experiences is significantly lower than that of those without romantic experiences, consistent with the research results of Hou Yongmei et al [35]. Love is the most

comprehensive and in-depth process of interpersonal communication, which can effectively improve an individual's self-awareness, ability to understand others, and interpersonal coordination, and help reduce interpersonal problems.

IV. Conclusion

Overall, the interpersonal relationship of college students is not optimistic, which is the result of multiple factors such as individual cognition and coping, family atmosphere and upbringing, school and social education.

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