The Bidirectional Relationship Between Undergraduates' Social Abilities and Their Peer Relationships: A Quantitative Case Study of SYSU

Rui Ao[✉]

Psychology Department, Sun Yat-Sen University, Guangzhou, China
ruiaomail@163.com

Abstract. Social interaction and peer support are indispensable to college students. Based on the data from undergraduate students of Sun Yat-Sen University, this research studies the relationship between college students' social abilities and the quality of their existing peer relationships. A total of 132 valid data were collected by questionnaires, and the results of bidirectional analyses show that there is a positive correlation between the quality of their peer relationships and social abilities. Finally, this study suggests that college students should exert some social strategies to construct high-quality peer relationships and obtain better peer support, and they should improve their conflict management and emotional support capabilities.

Keywords: undergraduates · peer support · social abilities and strategies

1 Introduction

Human beings are social animals, and interpersonal relationships are indispensable parts of our daily lives. We spend three-quarters of our non-sleep time with friends or family [1], and in particular, when people are fearful, they often crave the companionship of others. In addition, one always has a desire to form a strong bond with a particular individual. As early as infancy, humans begin to form attachments to the adults around them, which can provide a sense of security and information about the environment. Robert Weiss (1974) proposed that individuals benefit from social relationships in six ways: attachment, social integration, value determination, sense of stable alliance, guidance, and opportunity to take care of others. All six ways help individuals feel better about themselves and receive information and help [2]. Furthermore, at all stages of life, adolescents have a greater need to connect with others. Studies have shown that adolescents and young adults are more likely to experience loneliness than older adults [3], and young people regard peers as "kindred spirits" rather than family members and teachers [4]. For teenagers, peer relationships are more significant.

Friends are indispensable, and the friends around a person usually influence him or her in many ways, and this influence is latent and difficult to find. Many researchers

have conducted studies on peer influence, such as crime rates, academic performance, and obesity rates. Several studies of adolescents and children have demonstrated a close relationship between students' school performance and the amount of social support available to them, including peer support [5, 6]. In addition, peers have an impact on crime rates. Researchers found that the criminal peers and friends around the one who committed crimes were a predictor of recidivism after returning to society. Recidivism and drug abuse are strongly correlated with criminal peers [7], and one's recidivism is also influenced by criminal peers [8]. Studies have found that obesity can also spread through social networks. If one's spouse become obese, his or her likelihood of becoming obese increased by 37 percent; when one of siblings become obese, the chances of others becoming obese increased by 40 percent; when one's friends become obese to a certain extent, the possibility of one becoming obese will increase by 57 percent [9]. The importance of peer support is also reflected in the help that peers can provide, because when encountering problems in our daily life, we often turn to our friends for help. Peer support can even have a positive effect on the solution of psychological problems. Houston, Cooper, and Ford (2002) conducted a qualitative study of young people with depression who received peer support on the Internet and found that peer support reduced the depressive symptoms of the participants [10]. A series of research has shown that many young people are more likely to turn to friends and family for help when they have psychological problems than seek professional help [11, 12].

2   Literature Review

The university stage is critical in the development of a person's youth because the college stage is a turning point in life. During this time, college students live independently from their parents, and their interaction with peers occupies a major position in social interaction. A good relationship with peers allows individuals to get more help in study and life, and getting support from peers can also effectively alleviate loneliness. Numerous studies have demonstrated the importance of peers for college students. A study on college students utilized online discussions to provide peer support for students, and the researchers measured the students' depression levels, loneliness, self-esteem, and social support. They found that such online discussions made students feel supported by their peers, increased self-esteem and social support levels, and significantly reduced symptoms of depression and loneliness [13]. Research has confirmed that, in some cases, college students' peers can provide academic help and emotional support [14]. Oehlkers and Gibson's study (2001) of college students found that college students viewed peers as " kindred spirit" compared to relatives and teachers. They believe that peers are more able to provide students with support related to emotion, schoolwork and social relationship [4]. Another study revealed that college students who received more peer support reported a higher quality of their learning experience. When college students experience high levels of peer support, they also report feeling more positive when attending courses [15]. In addition, compared with students who do not live in college, if the students who live on campus make friends with those who belong to the same college, they are more likely to persist in completing their studies. Students who live off-campus are more likely to drop out due to a lack of connections with other students [16].

In short, getting to know new friends in university is a "compulsory course" for college students. Of course, there are various ways for young people to meet new friends. These channels include classrooms, libraries, club activities, and volunteer activities. In meeting new friends, different individuals have different social strategies. Some individuals tend to use more proactive social strategies, while others are more passive and even somewhat avoidant. Some people like to make friends and meet new companions, while others are satisfied with existing close friends and like to create higher-quality peer relationships, developing from ordinary friends to confidants. The internal factor affecting college students' social strategies may be social anxiety. Some past studies have shown a relationship between peer relationships and social anxiety, and good peer relationships can alleviate social anxiety. A group of researchers (2012) conducted a one-year longitudinal study of 1528 adolescents. They found that low levels of peer acceptance predicted increases in social anxiety, and at the same time, if adolescents have social anxiety, the quality of their peer relationships will be worse [17]. According to the interpersonal relationship model, social anxiety and peer relationship traits are thought to be bidirectionally correlated. Social anxiety predicts an increase in poor peer relationships, which exacerbates social anxiety symptoms [18]. From this perspective, the existing peer relationships of college students before entering college may affect their later friendship ability and strategy. The quality of their friendships in college, in return, has an impact on their existing peer relationships. But few studies have investigated the bidirectional relationship between the quality of peer relationship and interpersonal skills or strategies, especially from the perspective of Chinese students.

Given the importance of social interaction and peer support to college students, this study hopes to understand the underlying reasons that affect college students' social strategies. Taking undergraduates of Sun Yat-Sen University as an example, this paper studies the bidirectional relationship between different social strategies and social abilities of Chinese college students and the quality of existing peer relationships.

3   Research Method

The researcher used questionnaires to investigate undergraduates at Sun Yat-Sen University. Before the formal use, the researcher did a pilot study among friends, and the researcher revised the draft questionnaire according to these friends' advice. In the formal study, a total of 183 questionnaires were issued and 132 effective questionnaires were finally obtained after two rounds. In the first round, questionnaires were randomly distributed and collected. But since participants in their senior years were more than expected, the author carried out the second round and questionnaires were distributed in a purposeful way to increase samples of other grades, ensure sample diversity, and make result more reliable. After the two-round data was collected, the author used SPSS to conduct descriptive analysis as well as correlation and bidirectional relationship analysis. There are four main parts of the research questionnaire:

- Basic information (age, gender, and so on).
- Survey 1 of scores on the number of friends and the quality of interpersonal relationships (friends' intimacy and friends' support) as well as scores on social skills

(five-point scale, including very dissatisfied, dissatisfied, unfeeling, satisfied, and very satisfied).

- Survey 2 of the evaluation scores on peer support supported by the 11 subjects (seven-point scale).
- A sub-questionnaire of Interpersonal skills in five-point scale with a total of 40 questions, including active communication, appropriate rejection, self-disclosure, conflict management, emotional support of five dimensions, and so on.

4   Data Analysis

Figures and tables should be placed either at the top or bottom of the page and close to the text referring to them if possible.

4.1   Descriptive Analysis

For small tables, please place it within a column and bigger table be placed in a text frame spanning to both columns. Use the Table facility available within the MSWord. The font in the row header should be bold and you can use the style available from the style palette. The age of samples in this study is between 18 ~ 25, and the average age is 20.26. Among the 132 undergraduates, 64% are male and 36% are female. As for their grades, there are 21 freshmen (15.91%), 27 sophomores (20.45%), 24 junior students (18.18%), 58 senior students (43.94%) and 2 students who delay graduation (1.52%). The data shows that 88.64 percent of them are in student clubs, and only 11.36 percent do not participate in any club activities. Most college students have been involved in students' club activities, which suggests that club activities are a common and important part of college students' life and interpersonal communication.

According to the results of the survey 1 in the questionnaire, most of the participants are satisfied with the quantity and quality their interpersonal relationships. 63.64% are satisfied with the number of their friends, and 65.91% are satisfied with the quality of their interpersonal relationships. Specifically for participants of different genders, among the 84 females, 55 (65.48%) are satisfied with the number of friends, and 58 (69.05%) are satisfied with the quality; among the 48 males, 29 (60.42%) are satisfied with the number of their friends, and 29 (60.42%) were satisfied with the quality. There is no significant difference in the satisfaction of their current relationships between different genders. In terms of grade distribution, among 58 seniors, 39 (67.24%) are satisfied with the quantity, and 37 (63.79%) are satisfied with the quality; among 24 juniors, 14 (58.33%) students are satisfied with the quantity, and 15 (62.5%) are satisfied with the quality; among the 27 sophomores, 20 (74.07%) are satisfied with the quantity, and 20 (70.07%) were satisfied with the quality; among the 21 freshmen, 11 (52.28%) are satisfied with the quantity, and 14 (66.67%) are satisfied with the quality. It can be seen that there is no great difference in samples' satisfaction between different grades, and the distribution of satisfaction does not change regularly with the growth of grades.

Table 1. Correlation between subjective satisfaction with peer relationships and quality of peer support

	Quantitative Subjective Satisfaction	Subjective Quality Satisfaction	Interpersonal Skills Satisfaction	Quality of Interpersonal Relationships
Quantitative Subjective Satisfaction	1	0.637**	0.600**	0.365**
Subjective Quality Satisfaction	0.637**	1	0.570**	0.509**
Interpersonal Skills Satisfaction	0.600**	0.570**	1	0.278**
Quality of Interpersonal Relationships	0.365**	0.509**	0.278**	1

Note: The ** mark in the upper right corner indicates that the correlation is significant at the 0.01 level (one-sided test), and the * mark in the upper right corner indicates that the correlation is significant at the 0.05 level

4.2   Correlation and Bidirectional Relationship Analysis

The basic correlation analysis is the correlation of subjective satisfaction with peer relationships and peer support scores, and the result can be seen in Table 1.

Table 1 shows that there is a significant correlation between the objective peer relationship quality and the three subjective satisfaction levels. These correlations are all positive relationships; a high level of satisfaction corresponds to a high level of peer relationship quality. However, the magnitude of the correlation coefficient shows that the general correlation coefficient between objective peer relationship quality and subjective satisfaction with quantity and communicative ability is below 0.4, which is relatively close to subjective satisfaction with quality. This suggests that high-quality peer relationships are more important for students to have a good experience in this relationship than the number of friends and their own communication skills.

Tables 2, 3 and 4 give the results of the bidirectional relationship analysis between subjective satisfaction with peer relationships and interpersonal skills, between subjective quality satisfaction and interpersonal skills, and between subjective satisfaction of communicative competence and interpersonal skills.

Table 2 demonstrates that quantitative subjective satisfaction significantly correlated with various interpersonal skills. However, there is no correlation with the ability of appropriate rejection.

Table 3 illustrates a significant positive correlation between subjective quality satisfaction and various interpersonal skills. The correlation coefficient between quality subjective satisfaction and conflict management and emotional support is above 0.4, and the correlation coefficient with appropriate rejection is only 0.146. This suggests that good

Table 2. Bidirectional relationship between quantitative subjective satisfaction and interpersonal skills

	Quantitative Subjective Satisfaction	Active Communication	Appropriate Rejection	Self-disclosure	Conflict Management	Emotional Support
Quantitative Subjective Satisfaction	1	0.342**	0.119	0.222**	0.290**	0.351**
Active Communication	0.342**	1	0.322**	0.491**	0.493**	0.427**
Appropriate Rejection	0.119	0.322**	1	0.551**	0.284**	0.373**
Self-disclosure	0.222**	0.491**	0.551**	1	0.424**	0.398**
Conflict Management	0.290**	0.493**	0.284**	0.424**	1	0.658**
Emotional Support	0.351**	0.427**	0.373**	0.398**	0.658**	1

Table 3. Bidirectional relationship between subjective quality satisfaction and interpersonal skills

	Subjective Quality Satisfaction	Active Communication	Appropriate Rejection	Self-disclosure	Conflict Management	Emotional Support
Subjective Quality Satisfaction	1	0.354**	0.146*	0.309**	0.404**	0.436**
Active Communication	0.354**	1	0.322**	0.491**	0.493**	0.427**
Appropriate Rejection	0.146*	0.322**	1	0.551**	0.284**	0.373**
Self-disclosure	0.309**	0.491**	0.551**	1	0.424**	0.398**
Conflict Management	0.404**	0.493**	0.284**	0.424**	1	0.658**
Emotional Support	0.436**	0.427**	0.373**	0.398**	0.658**	1

conflict management and emotional support abilities in peer relationships are more predictive of higher peer relationship quality satisfaction than appropriate rejection. Table 4 also shows a significant positive correlation between the subjective satisfaction of communicative competence and various interpersonal skills, but the correlation coefficient is only above 0.4 for emotional support and active communication and as high as 0.575 for active communication ability. This shows that in peer relationships, compared with other abilities, college students with good emotional support and active communication skills are more likely to be satisfied with their communication skills.

The last table is about the result of bidirectional relationship between peer support quality and interpersonal skills.

Table 5 shows that the quality of peer relationships has a significant positive correlation with each dimension of interpersonal skills. From the perspective of the correlation coefficient, the correlation coefficient with emotional support is relatively high, reaching 0.480, but the correlation coefficient with other dimensions of interpersonal skills is relatively low. This shows that, compared with other abilities, good emotional support ability can predict higher peer support scores; that is to say, when a college student can give better emotional support to friends, he also tends to get better support.

5   Conclusion

The results of data analysis demonstrate that all interpersonal skills had significant positive correlations with satisfaction and peer support scores, which implies that students with better interpersonal skills tend to enjoy higher-quality peer relationships. And good peer relationships can give these students better peer support [18] to better deal with the upcoming new social relationships. More specifically, although the peer support score is relatively high with the three kinds of subjective satisfaction, from the perspective of the correlation coefficient, the quality satisfaction is more closely related to the peer support score, which means peer support can mainly bring students satisfaction with the quality of interpersonal communication. Observing the relationship between quantitative subjective satisfaction and interpersonal skills, we can find that several abilities with significant correlation were not closely related to quantitative subjective satisfaction in the correlation coefficient. The ability to properly reject this dimension is irrelevant to this satisfaction. It shows that college students who pursue a larger number of friends may not need to pay attention to the improving certain interpersonal skills and strategies. As long as they do it properly in all dimensions, they can already make new friends. Although the interpersonal skills of the five dimensions are significantly correlated with subjective satisfaction with quality, conflict management, and emotional support abilities are more closely related from the perspective of the correlation coefficient. That is to say, conflict management ability, that is, the ability and strategy to avoid conflicts with friends, is very beneficial to maintaining high-quality, high-intimacy peer relationships. A better understanding of peers' emotions and providing them with emotional support are equally important in creating high-quality peer relationships. Conversely, students pursuing higher-quality peer relationships may focus on developing both competencies and using related strategies.

Table 4. Bidirectional relationship between subjective satisfaction of communicative competence and interpersonal skills

	Communicative Competence Satisfaction	Active Communication	Appropriate Rejection	Self-disclosure	Conflict Management	Emotional Support
Communicative Competence Satisfaction	1	0.575**	0.233**	0.336**	0.396**	0.405**
Active Communication	0.575**	1	0.322**	0.491**	0.493**	0.427**
Appropriate Rejection	0.233**	0.322**	1	0.551**	0.284**	0.373**
Self-disclosure	0.336**	0.491**	0.551**	1	0.424**	0.398**
Conflict Management	0.396**	0.493**	0.284**	0.424**	1	0.658**
Emotional Support	0.405**	0.427**	0.373**	0.398**	0.658**	1

Table 5. Bidirectional relationship between peer relationship quality and interpersonal skills

	Peer Relationship Quality	Active Communication	Appropriate Rejection	Self-disclosure	Conflict Management	Emotional Support
Peer Relationship Quality	1	0.186*	0.217**	0.243**	0.386**	0.480**
Active Communication	0.186*	1	0.322**	0.491**	0.493**	0.427**
Appropriate Rejection	0.217**	0.322**	1	0.551**	0.284**	0.373**
Self-disclosure	0.243**	0.491**	0.551**	1	0.424**	0.398**
Conflict Management	0.386**	0.493**	0.284**	0.424**	1	0.658**
Emotional Support	0.480**	0.427**	0.373**	0.398**	0.658**	1

In addition, the interpersonal skills of the five dimensions are significantly correlated with the satisfaction of communicative competence, among which active communication and emotional support are closely related. It means that students who are confident in their own communication skills are more inclined to interact with others and adopt more proactive social strategies actively. At the same time, being able to provide better emotional support to their friends is seen by these students as a sign of better communication skills. Correspondently, students who are able to employ more proactive social strategies were also more likely to be satisfied with their social skills. Finally, ratings of peer support were most strongly associated with emotional support abilities. It shows that students with better quality of existing peer support may pay more attention to providing emotional support to friends in socialization process because they are also beneficiaries of emotional support.

6 Suggestion

In general, if college students want to construct high-quality peer relationships and obtain better peer support, they should focus more on improving their conflict management and emotional support capabilities. Furthermore, if some students are not satisfied with their social skills, the universities, departments, teachers, and counselors should give them some advice on improving emotional support and active communication skills or set up relevant training courses and lectures to help them learn and master more relevant skills.

References

1. Larson, R., Csikszentmihalyi, M. , & Graef, R. (1982). Time Alone in Daily Experience: Loneliness or Renewal? In L. A. Peplau, & D. Perlman (Eds.), *Loneliness: A sourcebook of Current Theory, Research and Therapy (Wiley Series on Personality Processes)* (pp. 40-53). New York: Wiley.
2. Weiss, R. (1974). The Provisions of Social Relationships. In Z. Rubin (Ed,), Doing unto Others (pp.17-26), Englewood Cliffs: Prentice Hall, 17-26.
3. Perlman, D. (1990). Age Differences in Loneliness: a Meta-Analysis. *Paper presented at the Annual Convention of the American Psychological Association (98th, Boston, MA, August 10-14,1990)*, 1-10.
4. Oehlkers, R. A., & Gibson, C. C. (2001). Learner Support Experiences by RNs in a Collaborative Distance RN-to-BSN Program. *The Journal of Continuing Education in Nursing*, 32(6), 266-273.
5. Epstein, J. L. (1981). *The Quality of School Life*. Lexington, KY: D.C. Heath and Company.
6. Epstein, J. L., & McPartland, J. M. (1976). The Concept and Measurement of the Quality of School Life. *American Educational Research Journal*, (13), 15–30.
7. Boman, J. H., & Mowen, T. J. (2017). Building the Ties that Bind, Breaking the Ties that Don't. *Criminology & Public Policy*, 16(3): 753–774.
8. Breese, J. R., Ra'el, K., & Grant, G. K. (2000). No Place like Home: A Qualitative Investigation of Social Support and its Effects on Recidivism. *Sociological Practice: A Journal of Clinical and Applied Research*, (2), 1-21.
9. Christakis N. A, Fowler J. H. (2007). The Spread of Obesity in a Large Social Network over 32 Years. *The New England Journal of Medicine*, 357(4), 370-379.

10. Houston, T., Cooper, L., & Ford, D. (2002). Internet Support Groups for Depression: A 1-Year Prospective Cohort Study. The American Journal of Psychiatry, 159(12), 2062–2068.
11. Ciarrochi, J., Wilson, C., Deane, F., & Rickwood, D. (2003). Do Difficulties with Emotions Inhibit Help-seeking in Adolescence? The Role of Age and Emotional Competence in Predicting Help-seeking Intentions. *Counselling Psychology Quarterly*, 16(2), 103–120.
12. Constantine, M., & Arorash, T. (2001). Universal-Diverse Orientation and General Expectations about Counselling: Their Relation to College Students' Multicultural Counselling Expectations. *Journal of College Student Development*, (42), 535–544
13. Shaw, L. H., & Gant, L. M. (2002). In Defense of the Internet: The Relationship between Internet Communication and Depression, Loneliness, Self-esteem, and Perceived Social Support. *Cyberpsychology & Behavior*, 5(2), 157–171.
14. Cain, D. L., Marrara, C., Pitre, P. E., & Armour, S. (2003). Support Services that Matter: An Exploration of the Experiences and Needs of Graduate Students in a Distance Learning Environment. *Journal of Distance Education*, 75(1), 42-56.
15. Schwitzer, A. M., & Lovell, C. (1999). Effects of Goal Instability, Peer Affiliation, and Teacher Support on Distance Learners. *Journal of College Student Development*, 40(1), 43-53.
16. Skahill, M. P. (2002/2003). The Role of Social Support Network in College Persistence Among Freshmen Students. *College Student Retention*, 4(1), 39-52.
17. Tillfors, M., Persson, S., Willén, M., & Burk, W. J. (2012). Prospective Links between Social Anxiety and Adolescent Peer Relations. *Journal of Adolescence*, 35(5), 1255–1263.
18. Alden, L. E., & Taylor, C. T. (2004). Interpersonal Processes in Social Phobia. *Clinical Psychology Review*, (24), 857–882.
19. Schachter, S. (1959). *The Psychology of Affiliation.* Stanford, CA: Stanford University Press.