THE RELATIONSHIP BETWEEN NETWORK COMMUNICATION AND MENTAL HEALTH OF COLLEGE STUDENTS IN HUNAN A UNIVERSITY, CHINA

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Abstract: This study aimed to investigate and analyze the current levels of college students' network communication and mental health, explore the correlation between them and the existing problems, provide some empirical materials for the formulation of college education, and play a certain reference role for the formulation and implementation of relevant policies. In this study, a total of 379 college students from Hunan A University, China were surveyed through questionnaires. The results showed that: 1) the network communication of university students in A is good, and their mental health is good; 2) there were significant differences in network communication among college students of different genders, ages, and majors; 3) and there were significant differences in mental health among college students of different genders and majors; 4) there was a significant correlation between the two variables of network communication and mental health of college students in some dimensions. This study analyzed the differences in network communication and mental health of college students with different demographic background variables as well as the relationship between two major variables. Discussion around each finding and related suggestions are put forward for the sample school to continue to maintain good guidance in network communication and mental health.

Keywords: College Students, Network Communication, Mental Health

Introduction

In today's society, whether in China or other countries, the development of the Internet has brought about a radical change in people's lives. The content of the Internet is all-encompassing, whether it is the release of network resources and information or network business transactions, all bring great convenience to people's lives. People can see the world without leaving home. Whether in politics, economy, education, people's livelihood and so on, the network plays a pivotal and important position. The gradual popularization of the use of the Internet has brought great changes to people's lives; the use of the Internet has a profound impact on people's own awareness, emotions, values and so

on.

With the rapid development of Internet science and technology, the application of the Internet covers all aspects of people's daily life, and people's social interaction extends from the real world to the network world and shows the trend of utilizing the powerful functions of the network to expand and maintain social interaction. Because of its difference from the traditional way of communication and all kinds of convenience and plasticity, the proportion of network communication in people's daily communication is increasing, and it has become an important way of social communication for modern people.

According to the latest data released by the 51st China Internet Development Report of China Internet Information Center, by March 2023, the Internet penetration rate reached 75.6%, and the number of Chinese residents online has reached 1.067 billion, of which the student group is the largest, accounting for 28.3% (China Internet Network Information Center, 2023).

With the rapid popularization of the Internet, various forms of networks such as social media, online games and virtual communities have become an important part of college students' social life, providing them with new social channels and modes of interaction. In the digital era, the frequency and prevalence of network communication in college students' daily lives are increasing, and at the same time, people are becoming more and more concerned about the potential impact of network communication on mental health.

Therefore, it is of great significance to pay close attention to the special group of college students, carry out scientific research, and help guide them to use the network rationally, improve their psychological quality, and maintain their physical and mental health.

Research Objectives

1) To determine the current level of network communication among college students.
2) To determine the current level of mental health among college students.
3) To analyze the differences in network communication among college students from demographic background variables.
4) To analyze the differences in mental health among college students from different demographic background variables.
5) To explore the relationship between network communication and mental health among college students.

Literature Review

Definition of Core Variables

Gao (2002) defined mental health as the development of an individual's mental health to the

optimal state within the scope of physical, intellectual and emotional well-being that is not contradictory to the mental health of others. The research on mental health was first concentrated in the medical field, and most of the research objects in that period were mental patients, but with the deepening of the research, the research on mental health in the field of psychology gradually occupied the mainstream of the research.

Yang (2018) pointed out that psychologically healthy individuals are attracted to current or future expectations, and individuals can realize and control such expectations, rather than subconsciously promote them. With the rise and development of positive psychology, scholars have expanded the definition of mental health. This state is manifested in the ability to recognize, express and cope with emotions in oneself and others, the ability to respond positively to and solve problems, and the ability to establish healthy and stable relationships with others. Psychological well-being also includes a clear sense of one's own identity, values and goals, as well as a sense of confidence and control over one's life.To summarize, this study defined mental health as the absence of mental illness and good physical and mental functioning of an individual who is able to overcome negative psychological problems and thus adapt positively to the social living environment.

In the 20th century, the world entered the Internet era. The rapid development of the network has brought earth shaking changes to people's lives. Huang (2009) defined network communication as "a new type of communication behavior formed by people's communication activities with the computer network as the medium", which clearly defined the subject of network communication - people, media - computer network, and nature - communication behavior.

Schulze et al. (2017) defined network communication as "any text-based human symbolic interaction conducted or promoted through digital technology". Under this definition, network communication is characterized by less perceived naturalness, lack of nonverbal communication cues, and need for higher cognitive resources.To sum up, network communication is a new type of communication with the characteristics of the times, which is formed on the basis of the Internet, through the hardware of mobile terminals and servers, the software of network media, and the digitized and symbolic content of communication, and on the basis of traditional face-to-face communication through the technological innovation of communication media. The nature of communication has not changed, nor has the subjective status of the person in communication. Interaction as an important part of personal behavior practice, with the development of the Internet, is no longer limited to the traditional face-to-face reality of interaction, but by the non-face-to-face network interaction to expand the connotation.

Relevant Studies on College Students' Network Communication

Relevant Studies on Network Communication.Huang's (2008) study of changes in the way of communication showed that the stability of communication forms is only temporary. Because with the

development of human activities, the way people communicate with each other is constantly changing. As the conditions and environment of people's communication change, the old ways of communication will be gradually replaced by new ways of communication. Therefore, the development of new forms of Network communication is inevitable. However, the basic expression of communication has not changed. Generally speaking, communication takes the form of information exchange, the whole communication process can be regarded as the process of information exchange, only with the development of technology, the means of communication has undergone fundamental changes.

With the arrival of the network era, the interaction seems to have a new change, Liu (2012) in the study showed that the network interaction is based on the Internet as an intermediary, personal communication and interaction are dependent on a certain medium, most of the symbolic form of expression and presentation, and network interaction with the help of the intangible platform, but it is also a kind of "sensitive response, fast dissemination, powerful real interaction". The most central concept of network communication is that it is a "sensitive, fast spreading, powerful and real communication". One of the most central concepts of network communication is self, which is also a central topic of social psychology. The Internet is a tool for connecting strangers and isolating them at the same time, and the anonymity of Internet interactions determines what basic information can be disclosed under self-control, which is in turn reinventing the self.

Relevant Studies on College Students' Network Communication. Feng and Li 's (2014) study concluded that college students hold an extremely positive attitude toward using social networks for interpersonal communication. This attitude is reflected in the fact that they regard social networks as an indispensable part of their lives. For most college students, social networks have become one of the main platforms for communicating with others in daily life. Social networks have become an important channel for college students to express their emotions and thoughts. They share their feelings, joys and sorrows through posting statuses, pictures, and videos, which not only make them feel heard and understood, but also gain support and response from friends. In their busy study and life, social networks provide a convenient way for college students to interact with society and keep social contacts, which helps to relieve stress and loneliness. The mediation between Internet use and Internet altruistic behavior was moderated by gender. The mediating role of self-efficacy in Internet use is more important in the male group than in the female group, and Internet use can increase men's self-efficacy in Internet use, thus promoting more altruistic online behaviors (Liu, Chen & Zhou, 2015).

Chinese college students' online behaviors are mainly characterized by the following features: openness and diversity, virtual interaction, group entertainment, and individual freedom. Wang (2023) pointed out in his study that, on the whole, scholars generally believe that college students' online behavior is a way of behavior generated by the intertwining of the subject and the object, the subjective world and the objective world, and that the real performance of college students' online behavior and

its general characteristics are fundamentally limited by the physical and mental level of the college students and the level of development of network technology.

Some scholars are concerned about the influence of Network communication on the interpersonal relationship of college students. Zhang (2023) believed that, unlike traditional communication methods, the scope of Network communication is larger, richer in content, more diversified in form, and the platform of communication has been broadened, and the frequency of communication has also increased. Based on this, college students' innovative consciousness is constantly stimulated, their social skills are constantly enhanced, their real life is constantly enriched, their personal values are realized, and their interpersonal relationships are maintained.

In the Internet era, computers, cell phones, microblogs, WeChat and other new media are emerging, and communication through the Internet has become a common way of communication among college students. It is important to note that, while network communication has brought positive impacts on college students' daily life and study, it has also brought negative impacts on college students. To summarize, the subject of college students' network communication is complex and diverse, and it involves the impact of social media on mental health, interpersonal relationships, academic performance, and personal identity, etc. Research in this field is deepening in order to better understand and respond to the various challenges and opportunities that contemporary college students face in their network communication.

Studies Related to the Mental Health of College Students

Relevant Studies on the Mental Health of College Students. Mental health education in the modern sense originated in the United States in the late 19th and early 20th centuries and was first developed in Europe and the United States (Cai & Qi, 2011). Sun & Wang (2008) believed that the research on college students' mental health in the United States has become more mature, which is mainly reflected in the large scale of the research, multidimensional selection of topics, diversification of research tools, and empirical research paradigm. Some scholars have found through comparative studies that the existing teacher admission mechanism, curriculum development system, and research paths in the United States can provide important references for China to build a mental health training system (Zhang, Fu & Ji, 2011).

The mental health problems of Chinese college students have long been emphasized by the state and scholars from all walks of life, and solutions have been actively sought. Liu (2009) found that the common psychological problems or disorders among Chinese college students include depression, anxiety, obsession, poor interpersonal relationships, personality disorders, and mental illnesses, and the overall proportion of college students with psychological problems is about 30%.

Current Research on the Mental Health of College Students. Wang et al. (2023) found that the gap between college students' mental health and reality has a close correlation with the pressure of

reality, and after college students finish the theoretical courses in university, they will have a brand new orientation for their future work and study through the practice and understanding of their professional fields. The double pressure of further education or employment also makes students have to spend more time and energy on professional learning, in order to think about how to highlight their own advantages in the increasingly saturated job market, or to go to a higher level of higher education, which becomes a source of pressure on students' learning. The incidence of psychological problems among college students is higher than that of other groups of the same age, and their overall mental health is gradually declining, but they seldom take the initiative to seek professional help (Liu & Cao, 2022). When studying the subject of college students' mental health, some scholars start with external factors such as body, while others analyze the internal psychological factors. Qi (2022) pointed out in his research that college stage is an important period for students to mature physically and mentally. Students pursue personal identity, desire the attention and recognition of others, and care more about their own personal self-image.

Research on the Relationship between Network communication and Mental Health

Zhang & Shao (2014) pointed out that network interaction provides college students with information sources and information channels, facilitates college students to pay attention to and inquire about current affairs and politics in a timely manner, and is conducive to the establishment of their sense of social responsibility. However, the complex mass of information also makes college students' judgment ability decline, causes college students' values to be impacted, makes college students addicted to the network, reduces self-control, and affects their real life. The behaviors and attitudes of network communication, altruism or egoism, group influence, and social relations with others all belong to the field and scope of social psychology.

At present, there are many studies on the motives of college students' online interpersonal relationships, mainly from the psychological point of view. College students in the network society, although they can carry out virtual cognitive activities in a virtual identity, but most of this experience is carried out in the pre-set scenarios by the network designers, and compared with the practice in the real society, this cognitive activity is not active enough, and there is a lack of rational understanding and participation. People in the information age not only do not have the freedom to browse more information, but also sink themselves in the "information cocoon".Chen (2006) pointed out in her research that the relationship between network interaction and mental health is mutual influence, mutual cause and effect, but the two are not simply necessarily linked, but the result of the joint action with other factors. From the point of view of the influence of network interaction on mental health, the nature of the mental health effect of network interaction depends on the degree of psychological dependence of the subject of interaction on the Internet, rather than on network interaction itself. Factors such as the individual's use of and dependence on the Internet, psychological quality, and social support work

together to determine the nature and extent of the effects of Internet interaction on mental health.

Research on Countermeasures for College Students Network communication

Different scholars have put forward different countermeasures from different perspectives to address the reality of guiding college students' network communication. Lin (2017) mentioned that the subject and object of college students' online interpersonal interactions are partially alienated and should be deepened from the network ideological and political education to find the best good governance network "other law", college students' network moral subject to build "self-discipline", and the organic unity of the two norms, freedom and three aspects of the regulation and control of college students' online interpersonal interactions.

The organic unity of the norms and freedom of the three aspects of the college students network interpersonal interaction regulation and control.Liu (2016) analyzed the object of college students' interpersonal interaction in the network era, as well as the roles of both sides, the mode of interaction, the tools of interaction, and the change of interaction ability, summarized the three major problems of college students' network interpersonal interaction, namely, indifference of relationship, weakening of integrity, and weakening of sense of security, and put forward the measures of real name authentication of the network, perfecting the laws and regulations of the network, and strengthening the ideological and ethical education.

Some scholars have studied the impact of WeChat on the interpersonal communication of college students, such as Li & Hu (2016) commented that in the network society, interpersonal communication is not only limited to acquaintances, but also extended to strangers, and young people are very easy to establish WeChat interpersonal relationships with strangers, so to avoid the negative impact of the result, we should cultivate the youth's sense of honesty and friendliness, expanding the reality of the youth's social life, and using peer counseling identity, Strengthening network supervision and other ways. Liu (2015) conducted a research paper on the use of WeChat on individual self-expression, self-knowledge, self-image shaping, etc. The results showed that the five motives for college students to use WeChat are information exchange, keeping in touch with acquaintances, chatting, making new friends, and satisfying curiosity.

Hu (2012) pointed out that through the network role model demonstration method, network gatekeeper method and network guidance education method to improve the level of teacher education; through the network activities and practice method, network self-cultivation method to improve students' self-education ability; through the network media propaganda method, network implicit education method to optimize the network interaction environment; through the network public opinion guidance method, network crisis management method to cohesion of the network education synergistic force.

Methodology

This study is based on college students in Hunan Province. According to the telephone consultation with the college admission office. There are about 30000 full-time college students. Due to the large number of college students, it is difficult to adopt random sampling. Therefore, this study adopts the convenient sampling method, sampling in the affiliated colleges of A University. According to the sample size requirement of Morgan (1970), at least 379 questionnaires need to be distributed. Of the 379 questionnaires distributed, 155 were from science and engineering majors, 136 from arts majors, and 88 from arts and sports majors. After sorting it out, 313 questionnaires were included in the data analysis, with an effective return rate of 83%.

The scale tool used in this study to measure college students' online interactions is derived from the college students' online interaction questionnaire compiled by Chen (2013). This questionnaire contained 49 questions covering five factors. The overall Cronbach's α score for this part of the questionnaire was 0.957, and Cronbach's α for other dimensions all above 0.7 indicated that the questionnaire had good reliability. The scale instruments used in this study to measure the mental health of college students were derived from the Personality Questionnaire for College Students jointly revised by Fan et al. (1993). This questionnaire contained 60 questions covering three factors. The overall Cronbach's α score for this part of the questionnaire was 0.894, and Cronbach's α for other dimensions all above 0.8 indicated that the questionnaire had good reliability. The results indicated that the items for network communication and mental health were appropriately assigned to their respective factors. Additionally, the cumulative variance explained by each factor exceeded 50%, confirming the structural validity of the questionnaire scale.

Results

Demographic Analysis of the Respondents

In this study, 313 questionnaires were collected from college students at A University in Hunan Province. The statistics of demographic background variables such as gender, age, major and family background are as follows:

From the statistical results of basic information of the subjects in Table 4.1, it can be seen that in the gender variable, there were 124 males, accounting for 39.6%, and 189 females, accounting for 60.4%, which means that there are more females than males among the college students participating in the survey, and the overall gender ratio is more than 4:6.In the age variable, there were 179 students under the age of 20, accounting for 57.2%, 110 students between the ages of 20 and 24, accounting for 35.1%, and 24 students above the age of 24, accounting for 7.7%, of which there were more students under the age of 20 and fewer students above the age of 24. There were 24 students over 24 years old, accounting for 7.7%, among which there were more students under 20 years old and fewer students

over 24 years old. In the variable of major category, there were 125 students of liberal arts, accounting for 39.9%, 106 students of science and engineering, accounting for 33.9%, and 82 students of arts and sports, accounting for 26.2%.

The number of students majoring in liberal arts and science and engineering is more concentrated, and the number of students majoring in arts and sports was less, which was related to the proportion of majors in comprehensive colleges, and the distribution of the proportion of specialty categories is basically in line with the reality. Among the variables of family background, there were 99 students with urban household registration, accounting for 31.6%, and 214 students with rural household registration, accounting for 68.4%, which means that the number of students from rural areas is relatively large in the survey.

Descriptive Statistics on the Levels of Network Communication and Mental Health

(1) The overall mean score of college students' network communication is below the middle level (M=2.90), Except for the dimension of network information communication (M=3.15), the other dimensions are also below the middle level, including the dimension of network interaction outcome (M=2.70), the dimension of network social awareness (M=2.91), the dimension of network self-exposure and emotional experience (M=2.80), the dimension of network interaction awareness (M=2.93). The results are shown in Table 1:

Table 1: The College Students' Level of Network Communication (*N*=313)

Dimension	N	M	SD	Interpretation
Network Interaction Outcome	313	2.70	0.638	Low
Network Social Awareness	313	2.91	0.598	Low
Network Self-Exposure and Emotional Experience	313	2.80	0.713	Low
Network Interaction Awareness	313	2.93	0.633	Low
Network Information Communication	313	3.16	0.734	High
Overall	313	2.90	0.545	Low

(2) The descriptive statistical analysis was used to investigate the level of mental health of college students in A university，the mean value of the three dimensions of college students' mental health was higher than 1.5, which indicates that these college students were in good mental health. The overall status are shown in Table 2:

Table 2: The College Students' Level of Mental Health(*N*=313)

Dimension	N	M	SD	Interpretation
Neurotic Tendencies	313	1.85	0.163	High
Depressive Tendencies	313	1.84	0.179	High
Schizophrenic Tendencies	313	1.85	0.169	High
Overall	313	1.85	0.161	High

Comparison of Differences in Network Communication and Mental Health under Different Demographic Backgrounds

The study used Independent samples *t*-test analysis and One-way ANOVA analysis to examine the differences in network communication and mental health among college students at A University.

There was no significant difference in the network communication of college students with different ages, family backgrounds and majors but there were significant differences in the network communication of college students of different genders , it could be seen in Table 3 showed that the network communication (*F*=2.334, *p*=0.021),network self-exposure and emotional experience (*F*=2.410, *p*=0.017),network interaction awarenes(*F*=2.729, *p*=0.006).Comparing the mean values can be seen，there were significant differences between college students of different genders in network communication and the dimensions of network self-exposure and emotional experience and network interaction awareness, and the network information communication of boys was higher than that of girls. The difference analysis results are shown in Table 3:

Table 3: Analysis of Differences of College Students Network Communication with Genders

Dimension	Gender	N	M	SD	*F*	*p*
Network Interaction Outcome	Male	124	2.78	0.751	1.777	0.077
	Female	189	2.65	0.546		
Network Social Awareness	Male	124	2.97	0.689	1.468	0.143
	Female	189	2.87	0.529		
Network Self-Exposure and Emotional Experience	Male	124	2.92	0.804	2.410	0.017
	Female	189	2.72	0.637		
Network Interaction Awareness	Male	124	3.06	0.726	2.729	0.006
	Female	189	2.85	0.549		
Network Information Communication	Male	124	3.24	0.739	1.550	0.122
	Female	189	3.10	0.729		
Overall	Male	124	2.99	0.632	2.334	0.021
	Female	189	2.84	0.471		

There was no significant difference in mental health among college students of different gender, ages and family backgrouds. There was a significant difference in mental health among college students with majors, it could be seen in Table 4 showed that the mental health among college students with majors(*F*=3.932, *p*=0.021). The neurotic tendencies (*F*=5.219, *p*=0.006), schizophrenic tendencies (*F*=3.403, *p*=0.035). Comparing the mean values of various options, College students majoring in arts and sports have the highest level of mental health in the neurosis tendencies dimension.

In the dimension of neurotic tendencies, the mental health level of college students majoring in arts and sports have the highest level. In terms of mental health, the mental health level of college students majoring in arts and sports is higher than that of college students majoring in science and

engineering and liberal arts, and the mental health level of college students majoring in science and engineering is higher than that of college students majoring in liberal arts. The difference analysis results are shown in Table 4:

Table 4: Analysis of Differences of College Students' Mental Health with Majors

Dimension	Major	N	M	SD	F	p
Neurotic Tendencies	Liberal Arts	125	1.81	0.199	5.219	0.006
	Science and Engineering	106	1.86	0.136		
	Arts and Sports	82	1.89	0.122		
Depressive Tendencies	Liberal Arts	125	1.82	0.209	2.562	0.079
	Science and Engineering	106	1.84	0.171		
	Arts and Sports	82	1.88	0.130		
Schizophrenic Tendencies	Liberal Arts	125	1.82	0.203	3.403	0.035
	Science and Engineering	106	1.86	0.146		
	Arts and Sports	82	1.87	0.130		
Overall	Liberal Arts	125	1.82	0.195	3.932	0.021
	Science and Engineering	106	1.85	0.142		
	Arts and Sports	82	1.88	0.114		

Correlation between College Students' Network Communication and Mental Health

There was a significant negative correlation between college students' network communication and mental health in some dimensions, and the dimensions of network information communication with the dimensions of neurotic tendencies (r=-0.180, p=0.001), the dimensions of network information communication with the dimensions of depressive tendencies (r=-0.154, p=0.006), the dimensions of network information communication with mental health (r=-0.155, p=0.006). There was no significant correlation between college students' network communication and mental health. The correlation analysis results are shown in Table 5:

Table 5: Correlation between College Students' Network Communication and Mental Health

	Neurotic Tendencies	Depressive Tendencies	Neurodivergent Tendencies	Mental Health
Network Interaction Outcome	0.072	0.024	0.024	0.042
Network Social Awareness	-0.068	-0.060	-0.069	-0.069
Network Self-Exposure and Emotional Experience	0.037	-0.011	-0.006	0.007
Network Interaction Awareness	-0.075	-0.059	-0.052	-0.066
Network Information Communication	-0.180**	-0.154**	-0.106	-0.155**
Network Communication	-0.054	-0.066	-0.052	-0.061

Note: **p <0.01

Discussion

Network Communication and Mental Health among College Students

According to the descriptive statistical results, the overall immersion index of college students' network communication is low, the mean score of college students' online social interaction is below the medium level, and the mean score of five dimensions of network communication outcome, network social awareness , network self-exposure and emotional experience, network interaction awareness and network information communication is also below the medium level, It reflects that the college students of Hunan A University have a low index of immersing in online social networking. This result is basically consistent with the research of Feng (2022). Feng found in his research that college students have low trust in strangers, which means that friends developed from strangers are not as familiar as those they have already met in real life. According to the survey on the mental health of college students in Hunan A University, the overall mental health of college students in Hunan A University is good. This result is basically consistent with the research of Liu (2019). Liu pointed out in the research that although the level of mental health has gradually declined, the overall mental health of college students is good at present.

Differences in Network Communication and Mental Health among College Students under Different Demographic Backgrounds

(1) Discussion on differences in the network communication of college students under different demographic backgrounds

In terms of network communication, the research results of There was no significant difference in the network communication of college students with different ages, family backgrounds and majors but there were significant differences in the network communication of college students of different genders. The comparison results of different gender differences show that there are significant differences in college students' network communication and mental health, and there are significant differences in college students' network communication between different genders. This result is basically consistent with the research conclusions obtained by Jiang & Song (2023). Gender plays an important role in Internet use. Boys have always played a leading role in computers and the Internet. Compared with girls, boys socialized in the network environment earlier. Girls tend to be less confident when using the Internet and are more prone to anxiety about the use of the Internet and technology. Boys have stronger computer and network operation ability and higher network use frequency. Compared with girls, boys are more able to develop better use skills and abilities from the use of the Internet, so they have a more positive attitude and self-confidence towards the use of the Internet. Therefore, boys have a higher index of network communication than girls. From the gender perspective, boys' network communication behavior is more than girls', which is related to the physiological characteristics of individuals. Boys prefer rich information resources, updated and diverse

communication methods, and is easier to quickly meet friends in the network environment.

(2) Discussion on differences in mental health of college students under different demographic backgrounds

In terms of anxiety levels, there was no significant difference in mental health among college students of different gender, ages and family backgrouds. There was a significant difference in mental health among college students with majors. In the study, There are significant differences in the mental health of college students in different majors. This result is consistent with the research conclusion obtained in the study of Wang & Yang (2023). The study of Wang & Yang shows that liberal arts students have more mental problems. The results of this study show that the mental health level of college students majoring in liberal arts is lower than that of college students majoring in science and engineering and arts and sports. The reason may be that subject courses usually involve strict academic requirements, such as extensive reading, critical thinking and thesis writing, which are demanding on brains and time-consuming. Some liberal arts majors may face uncertainty about their future career prospects, which leads to increased stress and anxiety. For liberal arts majors, the definition of success and the criteria for social recognition may be more ambiguous. In contrast, science and engineering and humanities majors may find it easier to find professional related jobs directly, which may reduce their employment pressure.

(3) Discussion on the relationship between network communication and mental health among college students

According to Pearson's correlation analysis, network communication and mental health of college students are significantly correlated in some dimensions, but there is no significant correlation between network communication and mental health of college students as a whole. Just as Chen (2006) pointed out that the relationship between network communication and mental health is interactive and causal, but the two are not necessarily linked. It is the result of interaction with other factors. From the perspective of the impact of network communication on mental health, the nature of the mental health effect of network communication depends on the psychological dependence of the communication subject on the Internet, not on the network communication itself. The impact of network communication on mental health is influenced by many complex factors, including an individual's psychological state, social environment, mode of online interaction, and frequency and purpose of Internet use. Therefore, it is not comprehensive to simply consider network communication as an influence on mental health. Instead, we need to consider the interactions between multiple factors in order to better understand the association between network communication and mental health.

Conclusions

1) The network communication of university students in A is good, and their mental health is

good.

2) There are significant differences in network communication among college students of different genders. There were no significant differences in network communication among college students of different ages, majors, and family backgrounds.

3) There were significant differences in the mental health of college students of different majors, and there were no significant differences in the mental health of college students of different genders, ages, and family backgrounds.

4) The two variables of college students' network communication and mental health are significantly correlated in only part of the dimensions.

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