Research on the Psychological Status and Characteristics of “Indoorsy” Undergraduate Students

Based on Survey about 1,272 Undergraduate Students Nationwide*

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Abstract—A total of 1,272 “indoorsy” undergraduates are taken as the analysis objects in this paper to research the psychological characteristics of “indoorsy” undergraduate students. By virtue of principal component analysis, the psychological status of “indoorsy” undergraduate students is summarized as three factors, namely the negative emotional state, the negative attitudes towards social issues and the self-satisfaction. According to the analysis on the difference of three factors regarding different variables, the result shows the “indoorsy” undergraduate students have strong negative emotional state, relatively strong negative evaluation on the negative attitudes towards social issues and low self-satisfaction, which have a deep impact on their learning and life at the stage of undergraduate. In this paper, four proposals are put forward about improving the psychological status of “indoorsy” undergraduate students and provide reasonable guidance; parents need to strengthen the guidance and communication as well as create a safe and comfortable family atmosphere; consolidate the construction of campus culture in university, create the atmosphere of humanistic care and give play to the subjectivity, improve the ability of self-control and sense of identity.

Keywords—college students; “indoorsy” status; behavior

I. INTRODUCTION

The growth of undergraduate students completes in the bilateral interaction between the society and them. That’s to say, the society provides the growth and development of undergraduate students with the resources that can meet their material and cultural needs and the opportunities for them to realize the value of life. At the meantime, in the process of self-development, undergraduate students will have different requirements at different stages and promote the development of society when the new requirements are met. In the era of information networking, the increasing number of “indoorsy” undergraduate students proposes new tasks for the work of psychological health education in universities. How about the psychological status of these people? It is necessary and significant to guide the health growth of “indoorsy” undergraduate students. According to relevant researches, here the “indoorsy” of undergraduate students is defined as the state that they live in the closed environment for a long time, be addicted to specific hobbies and interests (such as play online games and follow TV series), showing the characteristics of highly depending on the network and virtual life. [1]

II. RESEARCH OBJECT AND METHOD

The method of random sampling is adopted to conduct the sample survey on 2,190 undergraduate students in 25 provinces of Chinese mainland (they are full-time college students on campus”). The research samples widely cover undergraduate colleges at all levels that have been constructed

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in Chinese mainland at present. The spss22 is used to carry out the statistical analysis of data.

The questionnaire has two parts. The first part is the characteristic variables of statistics and contains 9 questions; the second part is the questionnaire scale regarding the psychological status of “indoorsy” undergraduate students and contains 22 questions. The scale adopts 5-point scoring, namely “always like this”, “often like this”, “occasionally like this”, “never like this” and “seldom like this”, and the corresponding scores are 5, 4, 3, 2 and 1 respectively. The higher score shows the condition is more serious. Questions 17 to 22 are reverse scoring questions, which are treated correspondingly before the data analysis. The overall and the second part’s Cronbach’s Alpha coefficient values of the questionnaire are 0.831 and 0.799, which conform to the relevant standards of statistics.

III. ANALYSIS ON THE RESEARCH CONTENT

A. Current Situation of the “Indoorsy” of College Students

1) The “indoorsy” college students spend a lot of time indoors and remain within doors: On the basis of the definition on the “indoorsy” of college students in the survey, subjective identification method is adopted on whether the college students belong to the “indoorsy” group. Among 2,190 college students in the sample survey, 1,272 college students think they belong to the “indoorsy” group and account for 58.1%. The following investigation and analysis in this paper mainly base on the analysis on the 1,272 “indoorsy” undergraduate students. The 1,272 undergraduates include 360 male students and 912 female students. In terms of “the rough proportion of the time you spend in the dormitory in the spare time (except for the time for normal rest)” the time spent by 33.5% of undergraduate students’ “indoorsy” behavior, the time spent by 33.5% of undergraduate students (426) in the dormitory accounts for 50% to 70% of the spare time; the time spent by 25.2% of undergraduate students (321) in the dormitory accounts for above 70% of the spare time. It shows undergraduate students spend a lot of time indoors and the “indoorsy” behavior has stability. They often remain within doors.

2) Reasons for the “indoorsy” behavior: Mainly individual subjective quality: “What are the reasons for college students to become “indoorsy” from your point of view? (Multiple choice questions, list the first four reasons)”. The first reason is “personal habit” selected by 1,187 people that account for 93.3%; the second reason is “lack planning for college life” selected by 1,022 people that account for 80.3%; the third reason is “be obsessed with the network” selected by 902 people that account for 70.9%; the fourth reason is “the extra-curricular activities of the school are boring” selected by 708 people that account for 55.7%. It is evident that the main reason for the “indoorsy” behavior of college students is the individual subjective quality.

B. Analysis on the Psychological Status of “Indoorsy” Undergraduate Students

1) Determine The Dimension Of Analyzing The Psychological Status Of “Indoorsy” Undergraduate Students: Normalization processing is conducted for the questions to investigate the psychological status of “indoorsy” undergraduate students. The principal component analysis is carried out for the data after normalization. The test value shows the KMO value that measures the index of “indoorsy” behavior of the undergraduate students is 0.889, and the concomitant probability P value of Bartlett’s Test of Sphericity is 0.0000, showing it’s suitable for factor analysis. Factor extract is conducted according to the principle that the characteristic root is greater than 1. The first three common factors reflect 64.07% of the total variance of correlation variable for the psychological status of “indoorsy” undergraduate students. Therefore, we evaluate the psychological status of “indoorsy” undergraduate students through the first three common factors, calculate the factor loading matrix through principal component analysis and carry out max rotation of variance.

"Table I" shows the first common factor has relatively heavy loading on A1 to A8. These variables mainly describe the emotional experience of the “indoorsy” undergraduate student groups. The variance contribution rate of the factor reaches 28.43% and it is named as “negative emotional state”. The second common factor has relatively heavy loading on A9 to A16. These indexes mainly reflect the negative attitudes of “indoorsy” undergraduate students towards social issues. The variance contribution rate of the factor reaches 19.99% and it is named as “the negative attitudes towards social problems”. The third common factor has relatively heavy loading on A17 to A22. These indexes mainly reflect the satisfaction state of “indoorsy” undergraduate students for their school work, performance, body and prospect. The variance contribution rate of the factor reaches 15.65% and it is named as “self-satisfaction”. According to the result of principal component analysis, it’s determined that the psychological status of “indoorsy” undergraduate students consists of three dimensions, namely negative emotional state, negative attitudes towards social problems and self-satisfaction respectively.
2) Descriptive analysis on the psychological status of "indoorsy" undergraduate students: According to "Table II", the mean score of the psychological status of "indoorsy" undergraduate students on the whole is 70.55, which is higher than the intermediate level (the scale adopts five-point scoring and the intermediate critical value is 55), and it shows the psychological status of "indoorsy" undergraduate students is serious; the mean score of the psychological status of "indoorsy" undergraduate students on the negative emotional state is 24.84, and it shows the "indoorsy" undergraduate students have obvious experience about negative emotional state; the mean score regarding the dimension of self-satisfaction is 19.35, and it shows the "indoorsy" undergraduate students have relatively low self-satisfaction degree about their school work, body and future development. It will seriously weaken the happiness and self-efficacy and have great negative influence on their school work and life.

3) Analysis of the psychological status of "indoorsy" undergraduate students on the gender difference: In "Table III", in terms of the overall mean score of the psychological status of "indoorsy" undergraduate students, the mean score of female students is slightly higher than that of the male students. On the three dimensions of negative emotional state, negative attitudes towards social problems and self-satisfaction, the mean score of male students is also below that of the female students. However, the overall and specific psychological status of "indoorsy" undergraduate students does not have significant sex differences.
4) Differential analysis of the psychological status of “indoorsy” undergraduate students on the origin of students: "Table IV" shows: The test method of independent sample T is adopted to analyze, and the result shows no significant difference exists on the dimension of negative attitudes toward social problems between the “indoorsy” undergraduate students from city and from countryside, but significant difference exists on the 0.5-level statistical significance about self-satisfaction and “indoorsy” psychological status, and significant difference also exists on the 0.1-level statistical significance about negative emotional state. In the option that “I am confident about my prospect”, the question regarding self-satisfaction, the “indoorsy” undergraduate students from cities choosing “always like this” and “frequently like this” account for 29.81%, and the “indoorsy” undergraduate students from countryside choosing the same options account for 24.66%; in the option that “I feel anxious and restless”, the option that “I feel anxious and restless”, the “indoorsy” undergraduate students from countryside choosing the same options account for 37.81%. It shows a vast difference exists between them.

5) Differential analysis of the psychological status of “indoorsy” undergraduate students on the grade: In order to research the difference of the psychological status of “indoorsy” undergraduate students on the grade, one-way analysis of variance is adopted to conduct difference tests of the psychological status of “indoorsy” undergraduate students on the variable of grade. The result is shown in "Table V".

According to "Table V", the psychological status of “indoorsy” undergraduate students at different grades does not have significant difference on the overall mean score, negative emotional state and negative attitudes towards social problems. The psychological status of “indoorsy” undergraduate students at different grades has significant difference on self-satisfaction. The schematic diagram on the mean score of “self-satisfaction” of indoorsy undergraduate students at different grades is as follows.

In terms of the mean score of self-satisfaction, the mean score of freshman is highest and the mean score of junior is lowest as shown in "Fig. 1". Freshman is at the stage of transformation and adaptation from high school to college, the learning stress in the new environment, the response to interpersonal relationship and the confusion about the future lead to the low self-satisfaction of freshmen; junior students have been adapted to the learning and life of the stage of undergraduate after the exploration in the first two years. On the other hand, the planning and thinking about the future and the goal programming for the future and actions make junior
students have relatively high self-satisfaction. Striving for the future of their life requires them in good spirits.

6) Differential analysis of the psychological status of “indoorsy” undergraduate students on academic records: In order to research the differences of the psychological status of “indoorsy” undergraduate students on academic records, the one-way analysis of variance is adopted to carry out difference tests of the psychological status of “indoorsy” undergraduate students on the variable of academic scores. The result is shown in “Table VI”.

According to "Table VI", the psychological status of “indoorsy” undergraduate students with different types of academic records on the overall mean score and the negative attitudes towards social problems does not have significant difference. The psychological status of “indoorsy” undergraduate students with different types of academic records on the negative emotional state and the self-satisfaction has significant difference. In terms of the negative emotional state, students with a good performance on academic records have lower negative emotional state. Further research has discovered the undergraduate students whose academic records are in the back 25% of the major and who spend about “50% to 70%” of the spare time (except for normal rest time) in staying in dormitory account for 29.17%, and students who spend “more than 70%” of the spare time (except for normal rest time) in staying in dormitory account for 32.41%. Regarding the self-satisfaction, students with better academic records have lower self-satisfaction. The reasons are worthy of study. It may be related to the high expectation and pursuit for perfection of these students. Another guess is that these students are less satisfied with the school but they pursue progress, and the two of them conflict.

7) Differential analysis of the psychological status of “indoorsy” undergraduate students on family relationships: In order to research the differences of the psychological status of “indoorsy” undergraduate students on family relationship, the one-way analysis of variance is adopted. Students’ satisfaction degree about the harmonious relationships between family members of them (divided into three conditions of satisfied, general, dissatisfied) are taken as the basis, and the result is shown in “Table VII”.

<table>
<thead>
<tr>
<th>TABLE VI</th>
<th>DIFFERENTIAL ANALYSIS OF THE PSYCHOLOGICAL STATUS OF “INDOORSY” UNDERGRADUATE STUDENTS ON ACADEMIC RECORDS (N=1272)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 25%</td>
<td>Negative Emotional State</td>
</tr>
<tr>
<td>Mean value</td>
<td>21.20</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>6.65</td>
</tr>
<tr>
<td>Top 26%-50%</td>
<td>Mean value</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>6.71</td>
</tr>
<tr>
<td>Top 51-75%</td>
<td>Mean value</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>6.42</td>
</tr>
<tr>
<td>N=265</td>
<td>Mean value</td>
</tr>
<tr>
<td>N=138</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>F value</td>
<td>2.89</td>
</tr>
<tr>
<td>P value</td>
<td>.034*</td>
</tr>
</tbody>
</table>

Note: * represents $P < 0.05$, ** represents $P < 0.01$.

<table>
<thead>
<tr>
<th>TABLE VII</th>
<th>DIFFERENTIAL ANALYSIS OF THE PSYCHOLOGICAL STATUS OF “INDOORSY” UNDERGRADUATE STUDENTS ON FAMILY RELATIONSHIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>Negative Emotional State</td>
</tr>
<tr>
<td>Mean value</td>
<td>20.84</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>6.50</td>
</tr>
<tr>
<td>General</td>
<td>Mean value</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>6.45</td>
</tr>
<tr>
<td>Unsatisfied</td>
<td>Mean value</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>7.78</td>
</tr>
<tr>
<td>N=461</td>
<td>Mean value</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>9.20</td>
</tr>
<tr>
<td>F value</td>
<td>.000**</td>
</tr>
<tr>
<td>P value</td>
<td>.000**</td>
</tr>
</tbody>
</table>

Note: * represents $P < 0.05$, ** represents $P < 0.01$.  

Fig. 1. The mean score of self-satisfaction.
The above table shows the psychological status of “indoorsy” undergraduate students has a close relationship with students’ satisfaction with the harmonious family relationship. The mean score declines with undergraduate students’ increasing satisfaction with the harmonious family relationship. That’s to say, the higher the undergraduate students’ satisfaction with family relationship, the lower the overall mean score and the mean scores about negative emotional state, negative attitudes towards social problems and self-satisfaction for the psychological status will be. Significant differences exist among the psychological status of “indoorsy” undergraduate students, negative emotional state, negative attitudes towards social problems and self-satisfaction and the variable of family relationship. The improvement of the satisfaction with family relationship will obviously change the psychological status of “indoorsy” undergraduate students.

8) The cognition of “indoorsy” undergraduate students on “indoorsy” life: Further analysis has been conducted to understand the cognition of “indoorsy” undergraduate students and the influence of “indoorsy” culture on their learning, life and interpersonal relationship. For the question “the indoorsy life has intensified the alienation of interpersonal relationship”, 71.54% of undergraduate students agree with it. It shows the “indoorsy” undergraduate students have realized the negative impact of indoorsy life on the interpersonal relationship. In the question “the indoorsy life is beneficial to personality development of college students”, 76.8% of undergraduate students disagree with it. It shows they do not think the “indoorsy” life will benefit their development; in terms of the opinion “the indoorsy life is the tendency and is worth advocating”, 84.04% of undergraduate students hold the attitude of disapproval. It shows they do not approve the “indoorsy” life ideologically and rationally, but they enter into the “indoorsy” lifestyle in action.

IV. CONCLUSION AND SUGGESTION

A. Conclusion

To sum up, the “indoorsy” undergraduate students and the accompanied psychological characteristics are the expression of some undergraduate students in the network society. In the networked social survival and expression space, the space for individual survival transforms from the emotional experience that we have to experience and bear to symbolized metaphor. Life experience extends to the virtual world. Social interaction was real-time and present but now is time-share and online. This paper takes 1,272 “indoorsy” undergraduate students as the analysis objects to research the psychological characteristics of “indoorsy” undergraduate students. The principal component analysis has summarized the psychological status of “indoorsy” undergraduate students into three factors, namely negative emotional state, negative attitudes toward social problems and self-satisfaction. The differences of the three factors on different variables are analyzed. The result shows “indoorsy” undergraduate students have relatively intense negative emotional state, have strong negative evaluation on the negative attitudes towards social problems and relatively low self-satisfaction. It will have profound influence on their learning and life at the stage of undergraduate.

B. Suggestions

1) Respect the psychological demands of “indoorsy” undergraduate students and give reasonable guidance: According to the hierarchy of needs theory of the contemporary psychologist Maslow, the higher a person’s hierarchy of needs, the more sufficient the embodiment of his social property will be. In the process of socialization, a person will have self-esteem, self-confidence and self-excitation when the need of respect is met, or it will lead to dismay and self-abasement [2]. Therefore, educators should respect “indoorsy” undergraduate students and involve in their mental space. They can enter students’ life as friends in life, interact with students on the basis of equality and roundly understand students’ inward world, let students personally feel the respect and alleviate psychological pressure. When the need of respect is met, students will have self-confidence, self-improvement and self-excitation, and it is possible for them to change “indoorsy” life and broaden the vision of communication. Furthermore, teachers should strengthen psychological counseling especially using modern network techniques that the “indoorsy” students like to see and hear to alleviate psychological stress of “indoorsy” students, improve their negative emotional state and their self-satisfaction with learning and life.

2) Parents must intensify the guidance and communication and create safe and comfortable family atmosphere: Family atmosphere plays a vital role in the growth of undergraduate students. The motive power of undergraduate students in learning comes from the original family. The care and help of parents can promote the prevention from the “indoorsy” of college students. The research in this paper also proves significant difference exists between the psychological status of “indoorsy” undergraduate students and the satisfaction with family relationship. Parents should learn to affect and guide the healthy growth of children through rational and optimistic mind [3]. Meanwhile, parents can establish communication with children through some topics, give confidence to children and make them face waywardness with more self-confidence. The psychological supports of family members will be helpful to alleviate the psychological stress of college students.

3) Strengthen the construction of campus culture in colleges and create the atmosphere of humanistic care: Marx once said, “Human create environment, and the environment also create people similarly”. [4] Culture is the power of development. Profound and characteristic campus culture will bring different feelings for college students and make students feel the vitality of school. Therefore, it’s necessary to strengthen the construction of campus culture and create the atmosphere of humanistic care. Schools can be constructed into the spiritual home of students to improve their spiritual sense of belonging and attract students to participate in the
practice of campus culture, “carry out the education of the true, the good and the beautiful for college students in the true and natural state and then make it involve in the cognition, emotion, will and behavior of college students” [5]. On the level of material culture, we should mainly strengthen the construction of facilities and equipment of the school, consider the requirements of college students for learning and life and intensify the construction of infrastructure that meets their needs. On the level of spiritual culture, we should strengthen the construction of associations which are taken as the carriers, encourage college students to present themselves through taking activities as well as promote the mutual understanding and trust of college students.

4) Give play to the subjectivity and improve the self-control ability and sense of identity: The “indoorsy” undergraduate students should give play to their subjectivity, correctly treat frustrations and failures in learning, life and emotions, face life with an optimistic mind and improve self-control ability instead of staying away from the external world and hiding the spiritual world blindly. At the meantime, they should realize the indoorsy life is only a kind of lifestyle but not the ultimate goal of life. Keeping “indoorsy” blindly cannot solve problems. They should gradually contact with society, communicate with good friends frequently and accept new environment. In this way, they will acquire pleasure in the interaction with others, obtain the identification of others and society and meet the safety needs, love and belonging needs. In the process of constant interaction with others and solving other realistic problems, students will improve self-confidence, better apply their knowledge and broaden their horizons and realize the position and value of survival.

REFERENCES