

A Study on the Situation and Behavioral Characteristics of "Homebody" of Undergraduates*

Yile Dong

College of Tourism
Huaqiao University
Quanzhou, China 362021

Mengyuan Yin

College of Tourism
Huaqiao University
Quanzhou, China 362021

Qing Zhang

College of Tourism
Huaqiao University
Quanzhou, China 362021

Tong Chen

College of Tourism
Huaqiao University
Quanzhou, China 362021

Abstract—A sample survey of 2190 undergraduates from 25 provinces in mainland China shows that 1,272 undergraduates consider themselves "homebodies". Taking 1,272 "homebodies" as analysis objects, this paper studies the status and behavior characteristics of "homebody" of undergraduates. According to the survey data, the "homebody" of undergraduates presents the characteristics of staying at home for a long time without going out of the house; the reason of "homebody" is mainly individual subjective quality. According to the principal component analysis, the behavior of "homebody" of undergraduates is classified into three behaviors, namely, staying indoors, visual hobbies and activities, and negative health, and the characteristics of "homebody" behavior statistically analyzed in the variables. In order to improve the "homebody" behavior of undergraduates more effectively, this paper puts forward some suggestions from the personal level, the family level and the school level.

Keywords—college students; "homebody" situation; characteristics

I. INTRODUCTION

Nowadays, the rapid development of pluralistic society, highly developed Internet technology, and prevalence of popular culture cause the popularity of "homebody" in today's college students. It is of great practical significance to explore the current situation and behavior characteristics of the "homebody" college students and its influence on their life and study. Combined with relevant research, this paper considers the "homebody" of college students has the characteristics of living in a closed living environment for a long time, being addicted to specific interests (such as playing online games and drama, etc.), showing a high

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dependence on the network, and relying on virtual life. [1]

II. RESEARCH OBJECTS AND METHODS

By using the method of random sampling, sample survey is made to 2190 undergraduates from 25 provinces of mainland China (all of them are full-time undergraduates). The sample covered a wide range of undergraduate colleges and universities in mainland China, and the data were statistically analyzed by spss22

The questionnaire is divided into three parts. The first part is statistical characteristic variable, including 9 questions; the second part is the investigation of "homebody" situation of college students, including six topics; the third part is the investigation about "homebody" behavior of college students, including 15 topics. The survey of "homebody" behavior of college students adopts five-point scoring method. The Cronbach's Alpha coefficients of each part are 0.803, 0.795 and 0.852 respectively.

III. ANALYSIS OF INVESTIGATION CONTENTS

A. The Present Situation of "Homebody" of College Students

1) "Staying" indoors for a long time without going outside: Based on the definition of "homebody" of college students in this survey, whether the college students belong to "homebody" or not is judged by subjective identification method. Among the 2190 college students surveyed, 1 272 consider themselves "homebody", accounting for 58.1%. The following analysis is mainly based on the analysis of the 1,272 "homebody" college students. For the 1,272 undergraduates, there are 360 males and 912 females. In terms of the question "approximate proportion of the time you spent in dormitory in all your spare time (except for normal rest), 33.5% of the undergraduates (426 persons) spend about 50%-70% of their spare time in the dormitory,

and 25.2% of the undergraduates (321 students) stay in the dormitory for about 70% of their spare time, which indicated that the undergraduates stay indoors for a long time and is stable.

2) *The reason for "homebody"—mainly subjective personal characteristics:* In terms of the problem "the reasons you think college students choose to stay indoors (Multiple choices, listing the top four)". The choice ranking first is the "personal habits", with 1187 people choosing, accounting for 93.3%; the second one is the "lack of planning for university life", with 1022 people choosing, accounting for 80.3%; the third is "network obsession", with 902 people choosing, accounting for 70.9%; the fourth is "monotonous school extracurricular activities", with 708 people choosing, accounting for 55.7%. It can be seen that the core of reason why "homebody" college students "stay indoors" is personal subjective characteristics.

B. Analysis of Characteristics of "Homebody" Behavior of Undergraduates

1) *Dimension determination of "homebody" behavior of undergraduate:* Unified processing is made to the questions investigating "homebody" behavior of undergraduates. The principal component analysis is made to the standardized data. From the test value, it is calculated that the KMO value was 0.885 and the associated probability P value was 0.000 for the spherical Bartlett test, which indicates that it is suitable for factor analysis. Extracting factors according to the principle that the characteristic root is greater than 1, the first three common factors reflect 69.2% of the total variance of the variables related to the "homebody" behavior of the undergraduates. Therefore, we use the first three common factors to evaluate the behavior characteristics of "homebody" of the undergraduates. The factor loading matrix is calculated by the principal component analysis method, and the variance is rotated to the maximum.

"Table I" shows that the first common factor has a large load on A1-A6. These variables mainly describe the behavior of "keeping indoors" of undergraduates, and the variance contribution of this factor is 37.4%. The second common factor has a large load on A7-A13. These indexes mainly reflect the behavior of "visual hobbies and activities" of the undergraduates in the dormitory, and the variance contribution of this factor is up to 17.4%. The third common factor on has a larger load A14, A15, which mainly describe the "homebody" undergraduates have a high dependence on the network in the dormitory for a long period of time. They often stay up late and are sedentary, which has an important negative impact on their physical health, so it is named as "negative health" behavior, of which the variance contribution reaches 14.4%. According to the results of the principal component analysis of the questionnaire, it is determined that the "homebody" behavior of the undergraduates is composed of three dimensions, namely staying indoors, visual hobbies and activities, and negative health.

TABLE I. FACTOR LOADING AFTER ROTATION

	Composition		
	1	2	3
A1. I seldom go out except when I have to go out	.794	.200	.332
A2. I rarely participate in outdoor activities in my spare time	.744	.158	.324
A3. At weekends I can stay in the dorms all day	.741	.238	.299
A4. Staying at home during winter vacation is my normal life.	.734	.274	.392
A5. I enjoy the free life at home or in the dorm	.686	.411	.237
A6. I like to stay in the dormitory or study at home	.625	.463	-.041
A7. I get access to the political news on the internet	.205	.675	.235
A8. I often choose to learn on the Internet	.194	.665	-.033
A9. I often visit my favorite online forum	.194	.597	.228
A10. I get access to gossip or watch movies through the internet	.455	.573	.466
A11. I interact with people on social networks	.185	.552	.400
A12. I buy things mainly online	.273	.541	.470
A13. I often ask "mother Baidu" when I encounter problems in study.	.340	.505	.478
A14. I often stay up late	.251	.270	.790
A15. I often sit still for long	.486	.245	.731

^a. Extraction method: principal components Rotation method: Inclined rotation method with Kaiser standardization.

2) *Descriptive analysis of undergraduate's "homebody" behavior:*

TABLE II. THE SCORES STATUS OF THE BEHAVIOR CHARACTERISTICS OF UNDERGRADUATES' "HOMEBODY" IN GENERAL AND FRACTAL DIMENSIONS (N=1272)

Name	Mean value	Standard deviation	Maximum value	Minimum value
Staying indoors	21.25	4.24	30	6
Visual Hobbies and Activities	24.36	4.14	35	7
Negative health	7.07	1.57	10	2
Characteristics of "homebody" Behavior	52.69	3.01	75	15

According to "Table II", the average score of the behavior characteristics of the undergraduates' "homebody" in general is 52.69, which is much higher than the value of the middle level (the scale adopts the five-score method, and the critical value of the middle level is 45), indicating that the "homebody" behavior of the undergraduates is in a serious state. The scores of behavior characteristics of undergraduates' "homebody" in three dimensions are all higher than the critical value of the middle level (18, 21 and 6 respectively).

3) Analysis on gender difference of undergraduate's "homebody" behavior

TABLE III. ANALYSIS OF GENDER DIFFERENCES IN "HOMEBODY" BEHAVIOR OF UNDERGRADUATES (N=1272)

Name	male (N=360)		female (N=912)		T	P
	Mean value	Standard deviation	Mean value	Standard deviation		
Staying indoors	19.67	4.58	21.88	3.92	-8.06	.000**
Visual Hobbies and Activities	23.34	4.80	24.76	3.77	-5.05	.000**
Negative health	6.82	1.70	7.17	1.50	-3.41	.000**
behavior characteristics of homebody	49.83	9.18	53.82	7.20	-7.39	.000**

^b Note: *represents P < 0.05, ** represents P < 0.01.

According to "Table III", it can be seen from the overall average score of "homebody" behavior of undergraduates that the average score of female is higher than that of male. The average scores of male are lower than the those of female in the three dimensions of staying indoors, visual hobbies and activities and negative health, and there is significant gender difference in the overall and specific dimensions of college students' "homebody" behavior (P < 0.01), which indicates that the "homebody" behavior of female is more serious than that of female in the

undergraduate group. Through interactive analysis, it is found that 61.4% of the female students choose "often" and "always" for the question "always sit still for long", while in the same statistical category, 46.9% of the male students choose so. For the question of "Often stay up late", 56.11% of the male students choose "always" and "often", while 61.45% of the female students choose the same.

4) The analysis of differences of undergraduates' "homebody" behavior in the origin of student

TABLE IV. THE ANALYSIS OF DIFFERENCES OF UNDERGRADUATES' "HOMEBODY" BEHAVIOR IN THE ORIGIN OF STUDENT

Name	City (N=530)		Country (N=742)		T	P
	Mean value	Standard deviation	Mean value	Standard deviation		
Staying indoors	21.10	4.57	21.36	3.98	-1.07	.282
Visual Hobbies and Activities	24.77	4.62	24.07	3.73	2.86	.004**
Negative health	7.19	1.68	6.99	1.48	2.19	.029*
behavior characteristics of homebody	53.05	8.93	52.42	7.28	1.34	.180

^c Note: *represents P < 0.05, ** represents P < 0.01.

"Table IV" shows that through the t-test method for independent sample, there is no significant difference between undergraduates from city and country in "homebody" behavior in term of "staying indoors", but there is a significant difference in visual hobbies and activities at

0.01 level statistically, and the difference in negative health at 0.05 level statistically is significant.

5) Analysis of the difference of undergraduate's "homebody" behavior in whether assuming a student cadre or not

TABLE V. ANALYSIS OF THE DIFFERENCE OF UNDERGRADUATE'S "HOMEBODY" BEHAVIOR IN WHETHER ASSUMING A STUDENT CADRE OR NOT

Name	Yes (N=563)		No (N=709)		T	P
	Mean value	Standard deviation	Mean value	Standard deviation		
Staying indoors	20.83	4.51	21.59	3.98	-3.16	.002**
Visual Hobbies and Activities	24.29	4.26	24.41	4.04	-.50	.612
Negative health	7.13	1.62	7.03	1.52	1.19	.231
behavior characteristics of homebody	52.25	8.51	53.03	7.57	-1.70	.085

^d Note: *represents P < 0.05, ** represents P < 0.01.

"Table V" shows that there is no significant difference in the overall mean scores and dimensions of visual hobbies and activities and negative health in terms of whether assuming a Student Cadre or not, but there is a significant difference in the dimensions of staying indoors (P=0.002 < 0.01). This suggests that undergraduates who work as student cadres may spend less time in dorms since they need to organize student activities, participate in student activities and engage themselves in students work, and thus the

realistic interpersonal communication and interaction are more frequent. Through interactive analysis, it is found that 40.31% of the student cadres in the sample choose "always" and "often" in the item of "I rarely take part in outdoor activities after class", while in the same statistical category, non-student cadres choosing the same options account for 53.03%, with a difference of 12.28%. In the item "the proportion of your spare time spent in dorms (except normal rest)", 64.50% of the non-student cadres select "30%-50%"

and "70% above". In the same statistical category, only 51.50% of the student cadres choose the two options, with the difference of 13.0%.

6) *The analysis of difference of undergraduate's "homebody" behavior in grade:* In order to study the

difference of college students' "homebody" behavior in grade, one-way variance analysis of is used to test the difference of "homebody" behavior in four grades. The results are shown in "Table VI".

TABLE VI. ANALYSIS OF DIFFERENCE OF UNDERGRADUATES' "HOMEBOY" BEHAVIOR IN GRADE (N=1272)

		Staying Indoors	Visual Hobbies and Activities	Negative health	Behavior characteristics of homebody
Freshman year N=373	mean value standard deviation	20.53 4.30	23.72 4.31	6.94 1.65	51.20 8.35
Sophomore year N=361	mean value standard deviation	21.09 4.09	24.42 3.88	7.11 1.53	52.61 7.56
Junior year N=273	mean value standard deviation	21.74 4.22	24.58 4.00	7.11 1.52	53.43 7.80
Senior year N=265	mean value standard deviation	21.99 4.20	24.95 4.28	7.18 1.55	54.12 8.01
F value		7.76	5.10	1.39	8.07
P value		.000**	.002**	.242	.000**

^c Note: *represents P < 0.05, ** represents P < 0.01.

From "Table VI", it can be seen that there are significant differences in general average scores of undergraduates' "homebody" behavior, and in staying indoors, visual hobbies and activities at the 0.001 level, and the average scores of the three types show a trend of the change in same direction with the increase of grade. That is to say, with the increase of grade, the "homebody" behavior of undergraduates becomes more and more serious. There is no significant difference in the negative health dimensions of "homebody" behavior of the undergraduates. The reason is that there is no difference in the negative impact of "homebody" behavior of the undergraduates on their bodies. This indicates that the key node in the education and guidance of "homebody" behavior of undergraduates should be paid attention to, which refers to

the planning education and guidance for freshmen in the university which can enhance the adaptability of the freshmen to the university and the ability to plan independently.

7) *The analysis of difference of the "homebody" behavior of undergraduates in the family relationship*

In order to study the difference of undergraduates' "homebody" behavior in family relationship, one-way ANOVA was used to analyze the satisfaction degree of students to the harmonious relationship among their family members (divided into three situations: satisfaction, ordinary and dissatisfaction). The results are shown in "Table VII".

TABLE VII. ANALYSIS OF DIFFERENCE IN UNDERGRADUATES' "HOMEBOY" BEHAVIOR IN FAMILY RELATIONSHIP (N=1272)

		Staying indoors	Visual hobbies and activities	Negative health	Behavior characteristics of homebody
satisfaction N=815	mean value standard deviation	21.12 4.40	24.27 4.26	7.00 1.58	52.39 8.35
ordinary N=393	mean value standard deviation	21.37 3.80	24.30 3.97	7.14 1.53	52.81 7.56
dissatisfaction N=64	mean value standard deviation	22.20 4.59	25.83 3.35	7.66 1.51	55.69 7.80
F value		2.14	4.26	5.71	5.11
P value		.118	.014*	.003**	.006**

^f Note: *represents P < 0.05, ** represents P < 0.01.

From the "Table VII", it can be seen that the behavior characteristics of the undergraduates' "homebody" have a close relationship with the satisfaction of the students to the harmony of the family relations. The average scores decrease with the rise of the satisfaction of the undergraduates to the harmony the family relations. In addition, except the dimensions of staying indoors, the other dimensions shows that with the rise of satisfaction of the students to family relations, the scores show a simultaneous decline trend. From the significance difference test, there are significant differences between the average scores of the undergraduates' "homebody" behavior characteristics and the dimensions of visual hobbies and activities and negative

health and the satisfaction of the students to the family relations.

IV. CONCLUSION AND SUGGESTIONS

A. Conclusion

A sample survey of 2190 undergraduates from 25 provinces in mainland China shows that 1,272 undergraduates consider themselves "homebodies". Taking 1,272 "homebodies" as analysis objects, this paper studies the status and behavior characteristics of "homebody" of undergraduates. According to the survey data, the undergraduates' "homebody" presents the status of "staying"

indoors for a long time, and the reasons for not leaving the house and "homebody" — the current situation of subjective characteristics of individuals. According to the principal component analysis, the behavior of undergraduates' "homebody" is classified as staying indoors, visual hobbies and activities, and negative health. According to the sample data, the statistics show that the average scores of Chinese undergraduates' "homebody" behavior and its sub-dimensions are above the middle level, which shows a serious situation of "homebody". There are significant differences in undergraduates' "homebody" behavior in gender, grade and family relationship. For the dimensions of staying indoors, there are significant differences in whether assuming a student cadre and gender; for the dimensions of visual hobbies and activities, there are significant differences in gender, origin of student, grade and satisfaction of family relationship; for negative health, there are significant differences in gender, origin of students and satisfaction of family relationship.

B. Suggestion

1) *To perfect self-personality and improve self-management ability:* Socio-cognitive theory emphasizes the interaction among behavior, environment and personal determinant (self-regulation, expectation, self-reaction and self-reflection). It holds that individuals can make plans, set goals, anticipate possible outcomes, make use of experience and reflect oneself based on formed self-regulation ability. According to the results of the survey, it is found that the primary reason for undergraduates' "homebody" is "personal habits", and the reasons show obvious individual subjective characteristics. Therefore, the undergraduates should perfect their personality, consciously adjust and improve their living conditions, establish the concept of time, cultivate self-management consciousness, make rational use of the network, enhance the ability of self-control and self-regulation, and attach importance to strengthening the communication in real life, so as to constantly perfect themselves and choose a healthy way of life.

2) *To create a good family atmosphere and play the role of parents:* The motive force of undergraduates in students' study and students' source comes from the original family, so the family atmosphere plays a root role in the growth of undergraduates, and the parents' care and help can promote the prevention of college students' deep "homebody" behavior. The study suggests that "college students with incomplete family structures are more likely to choose a "homebody" life." [2] The study also shows that there is a significant difference between the "homebody" behavior of undergraduates and the satisfaction of family relationship. Home is the most safe harbor in children's hearts, which requires parents to strive to create a warm family atmosphere, so that the children can experience the care and love of parents from the feelings and actions. We should avoid the situation that the undergraduates are unable to find the emotional sustenance and objects to talk about in their

daily life for lack of family warmth, so they escape from the interpersonal communication in reality, vent their melancholy and anger with the help of virtual network, and then choose the "homebody" life [3].

3) *To strengthen the construction of school culture and create humanistic atmosphere:* Marx once said: "man creates the environment, and similarly, the environment also creates the person". [4] "Culture is the driving force of development and the campus culture with depth and characteristics can bring different feelings to college students and make them feel the vitality of the school" [5]. Therefore, it is necessary to strengthen the construction of campus culture and create a humanistic atmosphere. We can construct the school as the spiritual home of the students, to promote the spiritual sense of belonging of the students, attract the students to participate in the campus cultural practice activities, and "give the education of the true, the good and the beautiful to undergraduates in the true and natural state, thus infiltrating into the cognition, emotion, awareness and behavior of college students" [6]. It is necessary to strengthen the construction of various facilities in schools, take into account the study and living needs of college students, and strengthen the construction of infrastructure in line with their needs. In the aspect of spiritual culture, we should strengthen the construction of clubs and take the platform of clubs as the carrier to encourage the undergraduates to show themselves by participating in the activities, and promote the mutual understanding and trust of the university students.

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