

## Research on Contemporary Chinese College Students' Party Culture

Li Wang, Xinyu Fan

School of Statistics, Shanxi University of Finance and Economics, Wucheng Road, Taiyuan, China

**Keywords:** College party culture, Social phobia, Logistic regression model, Log-linear model.

**Abstract:** In the contemporary society where people's thinking is liberalized and the division of labor is gradually refined, the importance of communication is even more prominent. As a solid bridge for communication, gatherings have become an optimum way for college students to communicate their feelings and enrich their extra-curriculum life. The aim of our study is to obtain the information of college students' party participation situation and preference using Ad libitum sampling method. Empirical studies were conducted with first-hand data. Chi-square test was used for statistical analysis to detect different party behavior influenced by students' gender and personality. According to the fundamental principle of binary logistic regression model, we did multivariate analysis in assessing the correlation between students' background information and their dress up behavior. The log-linear model is used to study the difference between personality differences and the willing to attend large party, so as to better understand the behaviors and psychological changes of college students. Based on the above analysis, we can effectively deal with the problems that arise at their social life and bring up feasible suggestions. This is of great significance to the psychological guidance and education of college students.

### 1. Introduction

Along with the improvement of people's living standards, social activities are becoming more and more abundant. Contemporary college students are gradually integrated into the secular society, accumulating and consolidating social capital such as teachers and classmates.<sup>[1]</sup> Influenced by the social trends, gatherings have gradually become popular and fashionable among them. It now turned to an integral part of university life that plays a significant role of connecting our feelings and exchanging fresh ideas. However, this tendency also brought a series of problems of social issues which actually reveals college students' mental health and psychological status.

Firstly, the reason of party appears more casually regardless of the promotion of student cadres, the small gathering of dormitory or the welcome of the fresh blood. That causes college students to frequently shuttle between various parties.<sup>[2]</sup> It has deviated from the original purpose of communicating emotions, lost its appeal to us and finally become a new social burden.

Second problem is connected with the inferiority complex. College students may against their own willingness to participate in the party because of "peer pressure".<sup>[3]</sup> Thus they will be uncomfortable and embarrassed during the process that gives them a poor experience. Consequently, they will increasingly resist group activities such as gatherings, which is very unfavorable to the physical and mental development of college students.

Thirdly, the interpersonal communication of college students is often self-centered, lacking the concept of cooperation with others and the ability to empathy. The performance is that they always chose to be more silent because of the fear to break the silence at the party.

Therefore, studying the motives, places and contents of college students' gatherings has certain social significance. In view of the above situations, we want to investigate the basic characteristics of college students' gathering behavior and its relationship with their gender and personality. In this case, we can deeply explore their potential psychology of those problems and provide pertinent suggestions according to our research.

## **2. Empirical Analysis**

To obtaining the first-hand information, we investigated college students by sending out 200 questionnaires and collected 185 effective samples. With the 185 valid data from online random samples, the following part has done the empirical study to better understanding their gathering behaviors and psychological changes.<sup>[4]</sup>

### **2.1 Frequency Statistics**

For the purpose of analyzing the character of college students' party activities and concluding their preference and obstacles in the gathering behaviour, we use SPSS to calculating the frequency of the following aspects:

#### **2.1.1 Party Size and Frequency**

About 70% of respondents prefer to participate in gatherings with 10 people or less. Only 1.62% of those prefer a large gathering of more than 50 people. When specifically inquiring whether respondents liked a party of more than 10 people, the result shows that more than 60% of people express their dislike of it and majority of those surveyed attend this size of party only one or two times every semester.

#### **2.1.2 Party Type and Place**

The kind of party which college students attend most frequently is the classmate reunion party, roughly 29.7% of the total. Restaurant and Karaoke are chosen by 59.45% of the respondents as the most favourite meeting place. In addition, some emerging type of party like villa home party came into fashion. Youngsters are willing to experience some fresh entertainments such as the escape room during the party.

#### **2.1.3 Party Performance**

Our study reveals that nearly 65% of college students unwilling to take the initiative to talk to strangers at the social occasion. Most of people reflect that they feel uncomfortable when introducing themselves to strangers at a party. That result uncovered contemporary college students' deficiency of communication and social skills. Even more serious is the possibility of social phobia.

#### **2.1.4 Party Reason**

After investigating 185 respondents, we found that nearly 80% of college students go to party only in the situation of invited by an acquaintance. The reason for 71.35% attending the party was to relax and have fun. The percentage of students who participate in the party in order to expand the circle of friends is relatively low, it's less than 30%. Correspondingly, the reasons for not attending the party are mostly insufficient funds and time.

## **2.2 Chi-square Test**

In order to understand the differences in the gathering ways and preferences of different genders and personalities, we conduct Chi-square test to find out which aspect is influenced by the college students' personal characteristics. The variables we examined include the average number of attendances per semester, whether they would dress up for the party, whether they liked the party, the type of party they most attended and the favourite party length.

After calculating the value of  $\chi^2$ , we can determine whether the independence hypothesis is reliable by querying the critical value table of the Chi-square distribution.<sup>[5]</sup> The degree of freedom (DF) and the critical probability of the Chi-square distribution are showed in the Table 1.

By querying the whole table, the probability of all factors of party interrelated with gender and personality can be obtained.

Table 1 Gender, personality and gathering patterns cross tabulation.

	Gender		Personality	
	DF	P	DF	P
Frequency	4	0.153	4	0.043
Dress up	1	0.015	1	0.291
Preference	1	0.946	1	0.036
Size	3	0.353	3	0.072
Type	4	0.023	4	0.048
Duration	3	0.312	3	0.285

The above table shows that at 95% confidence level, people of different genders differ in whether they dress up for the party ( $P=0.015$ ) and the type of party they attend ( $P=0.023$ ). The relationship between party frequency, preference, size, duration and gender were not significant ( $P>0.05$ ).

The Chi-square test result reveals that no statically differences were observed between party size, duration and personality. However, statistically significant association was found between party frequency ( $P=0.043$ ), type ( $P=0.048$ ) and college students' characters, as well as whether they like the party of more than 10 people ( $P=0.036$ ).

### 2.3 Logistic Regression Model

Based on the Chi-square test, we want to calculate the main factors that can determine whether a college student would be well-groomed before attending some social occasions. Using 185 samples data analysis, we construct logistic regression model to find out the influence factors of college students' dress up behaviour through studying the respondents' background information. In this model, dependent variable is introduced to represent the dress up behaviour of college students. Independent variable is classified into the following dimensions: gender, personality, party size, frequency of gathering and monthly living expenditure. And we transform the categorical variable into dummy variables which represent the difference between each level.<sup>[6]</sup>

Previously, we conduct the multicollinearity test on the independent variables, the results are displayed in Table 2.

Table 2 Multicollinearity test results.

Model	Unstandardized coefficients		Standardized coefficients	T	Sig.	Collinearity Statistics	
	B	Std.Error	Beta			Tolerance	VIF
1							
Constant	0.522	0.137		3.804	0.000		
numparty	-0.008	0.046	-0.012	-0.167	0.868	0.974	1.027
gender	0.192	0.066	0.216	2.891	0.004	0.942	1.061
livexpenses	-0.009	0.042	-0.016	-0.218	0.828	0.919	1.088
count	0.053	0.031	0.129	1.692	0.092	0.900	1.112
character	0.075	0.062	0.092	1.216	0.225	0.924	1.082

We can view the output of SPSS that the variance inflation factor of all independent variables are less than 10, indicating the there is no existence of multicollinearity among those index.

Table 3 Omnibus tests of model coefficient.

		Chi-square	DF	Sig
Step 1	Step	11.725	4	0.020
	Block	11.725	4	0.020
	Model	11.725	4	0.020

Table 3 shows the omnibus test result of logistic regression model. the Chi-square value ( $\chi^2=11.725$ ) indicates the -2 log likelihood's reduction of our constructed model including all independent variables relative to the intercept model. The significance of model is 0.02,

representing at least one independent variable is significantly different from 0.

Table 4 Variable in the Logistic Regression Equation.

Variable meaning	Variable name	B	S.E.	Wald	DF	Sig	Exp(B)
Party size	<i>numparty</i>	0.043	0.289	0.022	1	0.883	0.958
Frequency	<i>count</i>	0.178	0.090	3.915	1	0.048	1.194
Character	<i>character</i>	0.496	0.395	1.579	1	0.209	1.643
Gender	<i>gender</i>	1.141	0.400	8.138	1	0.004	3.129
Live expenses	<i>livexpenses</i>	0.000	0.001	0.037	1	0.848	1.000
Constant	<i>Constant</i>	0.028	0.899	0.001	1	0.975	1.029

Table 4 is a summary table of fitting equation variable parameters. According to the significant level shown in the table, it can be concluded that the influence of gender and party frequency is significant with the P value <0.05. Through the column of B in the table 5, we can find out the impact of these two factors are all positive. It can be interpreted as: keeping the other independent variables unchanged, when one male student replaced by a female student, the natural logarithm of the ratio of student choosing 'not dress up' to 'dress up meticulously' probability increases by 1.141 units. The greater value of B, the more significant the change of the dependent variable is affected by the independent variable value.

Further studies of the Exp(B) would be helpful to assess the exact impact of gender and party frequency. According to the odds ratio of gender, the possibility of female students decking out before the party is about three times higher than the male students. Women will pay more attention to the positive effects of their own dress and appearance. Similarly, we can conclude that along with the increase of party frequency of per unit, the probability of dressing up will increase by 19.4%.

## 2.4 Log-linear Model

The log-linear model is based on the analysis of the frequency in the two-dimensional contingency table, but compared with the traditional Chi-square test, its' advantage is that it can conveniently limit the parameters of the interaction term related to the theoretical hypothesis, thus making the interaction table analysis is not limited to just checking whether the variables are related or fitting the frequency of observations.<sup>[7]</sup>

In order to further study the degree of preference of college students with different personalities to large gatherings (defined here as large parties with more than 10 people), we would like to choose the character indicator to describe "personality". Whether or not you like parties with more than 10 people describes the "preference for large parties". Table 6 is the contingency table of those two indicators.<sup>[8]</sup>

Table 5 Personality preference for large parties.

		Personality		Total line
		Introverted	Extroverted	
Do you like big parties?	Yes	32	68	100
	No	49	45	85
	Total column	72	113	185

### 1) Independent Model

The independent hypothesis that there is no correlation between row variables and column variables is the starting point of logarithmic linear model. The independence hypothesis means that college students' personality differences have nothing to do with party preferences. As the basis of logarithmic linear model analysis, fitting independent model has two advantages: one is independence test and the other is that it can be used as a benchmark for model comparison. Constructing the independent model as:

$$\log F_{ij} = u + u_i^A + u_j^B \quad (1)$$

$\log F_{ij}$  is the logarithmic expected frequency, a parameter  $u$  representing the total mean,  $u^A$  and  $u_j^B$  representing the row effect parameter and the column effect parameter, respectively.

Table 6 Overall test results of independent models.

Likelihood chi-square ratio	DF	Sig.
10.380	2	0.006

Table 6 shows that the likelihood chi-square ratio of the model is 10.380 and the degree of freedom is 2, as well as the corresponding significant level is  $\text{Sig.}=0.006 < 0.05$  which indicates that there is a correlation between personality differences and college students' preference for large parties.

## 2) Saturated Model

Based on a statistical test of the independent model, there is a correlation between personality differences and college students' preference for large parties, so fitting the saturation model can estimate all the parameters of non-redundant interaction. Perfectly unfold the connection between the two.

$$\log F_{ij} = u + u_i^A + u_j^B + u_{ij}^{AB} \quad (2)$$

$\log F_{ij}$  is the logarithmic expected frequency, a parameter  $u$  representing the total mean,  $u^A$  and  $u_j^B$  representing the row effect parameter and the column effect parameter respectively,  $u_{ij}^{AB}$  representing interaction parameters.

Table 7 Global test results of saturated Model.

Likelihood chi-square ratio	DF	Sig.
27.232	3	0.000

Table 7 shows that the sig is close to 0, indicating that the interaction effect is significant.

Table 8 Parameter estimation of saturated Model.

Parameter	B	Std. Error	95% Wald Confidence Interval		Hypothesis Test		
			Lower	Upper	Wald Chi-Square	df	Sig.
(Intercept)	3.807	0.1491	3.514	4.099	652.081	1	0.000
[Personality=1.00]	0.413	0.1922	0.036	0.789	4.615	1	0.032
[Personality=2.00]	0 <sup>a</sup>	.	.	.	.	.	.
[Do you like parties with more than 10 people?=1.00]	-0.118	0.2173	-0.544	0.308	0.294	1	0.588
[Do you like parties with more than 10 people?=2.00]	0 <sup>a</sup>	.	.	.	.	.	.
[Personality=1.00] * [Do you like parties with more than 10 people?=1.00]	-0.636	0.3053	-1.234	-0.038	4.341	1	0.037
[Personality=1.00] * [Do you like parties with more than 10 people?=2.00]	0 <sup>a</sup>	.	.	.	.	.	.
[Personality=2.00] * [Do you like parties with more than 10 people?=1.00]	0 <sup>a</sup>	.	.	.	.	.	.
[Personality=2.00] * [Do you like parties with more than 10 people?=2.00]	0 <sup>a</sup>	.	.	.	.	.	.

Table 8 shows the results of parameter estimation for saturated models. We choose the second row and the second column (vivacious college students do not like large parties) as the reference class, with only one non-zero interaction effect  $u_{ij}^{AB}$ . For its natural index, there are

$$\theta = \exp(u_{11}^{AB}) = \exp(-0.636) = 0.529$$

The result shows that college students who are introverted like large-scale gatherings 0.529 times more likely than those with extroverted personalities, that is to say, those who are introverted are less likely to like large-scale gatherings. The former is 47.1% smaller than the latter. The results in Sig. column showing that the significant level of the interaction item was  $0.037 < 0.05$ , the logarithmic dominance ratio is significantly different from 0, that is, the dominance ratio is significantly different from that of 1. It can be concluded that the correlation between college students' personality differences and their preference for large parties is significant.

### 3. Conclusion

People's living standards are improving day by day. At the same time, social activities are also increasingly rich. Gathering has become the best way for college students to communicate their feelings and enrich their after-school life. However, college students tend to be self-centered, lack empathy, rarely experience the feelings of others from the perspective of others, lack the concept of cooperation and the ability to think about others, and often use their own thoughts. Emotion and need are the starting point. Choosing to be more silent at a party because fear breaks the silence is a manifestation of this problem. The second is "inferiority complex". Before college students choose whether to go to a party, they maybe go against their will to attend a party out of "Peer Pressure", where the experience is extremely poor because of more or less self-esteem or inferiority, so it will become more and more resistant to collective activities such as gatherings." It is unfavourable to the physical and mental development of college students. In the face of such rich and diverse gatherings, college students must gradually exercise their social skills, accumulate their own experience and skills in communication with others, and participate in some group activities properly so that they can perform better in the future.

### References

- [1] Wei Yunqing. When the reunion becomes a cultural journey [J]. Talk, 2016 (3).
- [2] Ning Zekui, Gao Xiong, Liu Dan. An Analysis of the cost and influencing factors of College students' gathering in Contemporary China [N] .Journal of Vocational and Technical Teachers' College in Henan, 2007 (6).
- [3] Peer pressure [J]. Rural work Newsletter, 2012 (12).
- [4] Jakeman, Rick C, Silver, Blake R, Molasso, William. Student Experiences at Off-Campus Parties: Results from a Multicampus Survey[J]. Journal of Alcohol and Drug Education, 2014,58(2).
- [5] Mahami Oskouei Mahmoud, Hamidi Faezeh, Talebi Mahnaz, Farhoudi Mehdi, Taheraghdam Ali Akbar, Kazemi Tohid, Sadeghi-Bazargani Homayoun, Fallah Esmaeil. The correlation between Toxoplasma gondii infection and Parkinson's disease: a case-control study.[J]. Journal of parasitic diseases: official organ of the Indian Society for Parasitology, 2016,40(3).
- [6] Dou, Jian, and Y. Aliaosha . "Optimization Method of Suspected Electricity Theft Topic Model Based on Chi-square Test and Logistic Regression." International Conference of Pioneering Computer Scientists, Engineers and Educators Springer, Singapore, 2018.
- [7] Elsa E. Moreira. SPI drought class prediction using log-linear models applied to wet and dry seasons [J]. Physics and Chemistry of the Earth, 2016, 94.
- [8] Haresh D. Rochani, Robert L. Vogel, Hani M. Samawi, Daniel F. Linder. Estimates for cell counts

and common odds ratio in three-way contingency tables by homogeneous log-linear models with missing data [J]. *AStA Advances in Statistical Analysis*, 2017,101(1).

[9] Yi Liu, Jiawen Peng, and Zhihao Yu. 2018. Big Data Platform Architecture under The Background of Financial Technology: In The Insurance Industry As An Example. In *Proceedings of the 2018 International Conference on Big Data Engineering and Technology (BDET 2018)*. ACM, New York, NY, USA, 31-35.