

# Analysis on Normal Students in Local Universities by UPI

**Zhang Lian**

Student Work Department,  
China West Normal University,  
No.1 Shida Road, Shunqing District,  
Nanchong City, 637002, Sichuan Province,  
People's Republic of China

## **Abstract**

*Objective: To investigate students' psychological health. Method: 1096 normal students were investigated with the UPI questionnaire. Results: (1) The first group has 220 students accounting for 20.1%; the second group has 328 students accounting for 29.9%; the third group has 548 students of accounting 50%. (2) The selection rates in key items are all lower 10%.The selection rate which higher 30% have 14. The mean symptoms are obsessive, relationship, confidence, emotion control and perseverance. (3) There are no significant different in subject, place, normal students and free normal students at the three categories. Conclusion: There is high selection rate in the first group. The normal students' main psychological problems are obsessive, relationship, confidence, emotion and perseverance. These problems need special guide.*

**Keywords:** Psychological health; UPI; Normal students

## **1. Problem statement**

In order to understand the mental health status of local normal university students, the UPI was used to measure the mental health of the normal university students in order to find out their common problems and then make psychological intervention.

## 2. Subjects and methods

2.1 Subjects: Randomly selected from six faculties of China West Normal University, a total of 1096 students, including 279 male students accounted for 25.5%, female 817 accounted for 74.5%; liberal arts students 532 accounted for 48.5%, 564 science students accounted for 51.5. 296 students in urban areas accounted for 26.6%, 804 students in rural areas accounted for 73.4%; 256 free normal students accounted for 23.4%, 840 non-free normal students accounted for 76.6%.

### 2.2 Methods

2.2.1 Tools: The University Personality Inventory (UPI) was used to investigate the personality health status of college students. The scale was made by the psychological consultants and psychiatrists at Nihon University. Zheng Linke's<sup>[1]</sup> studies have shown that the UPI has high reliability, validity (Cronbach's  $\alpha = 0.871$ , validity test  $r = -0.701$ ,  $P < 0.001$ ). The scale consists of three parts: The first part is the basic situation of the subjects; the second part is the physical and mental conditions of the subjects; the third part is the auxiliary questions, to understand the evaluation about the subjects to their physical and mental health and whether they have received counseling and treatment as well as any consultation requirements. The second part consists of 60 questions, each question has two options: tick the items which experienced in recent years; do not mark the items if have no feelings. The selected items will be scored. The four pseudo-tests are not included in the total score. The highest score is 56 points, and lowest score is zero. Subjects were divided into three categories according to the selection criteria. Those who meet one of the following conditions are classified as the first category (that may have obvious psychological problems): <sup>1</sup>the person whose total score is 25 points and above; <sup>2</sup>the person who make positive selection in the 25<sup>th</sup> question; <sup>3</sup>the person who select two or more questions among the 8<sup>th</sup>, 16<sup>th</sup>, 26<sup>th</sup> questions; <sup>4</sup>the person who make two or more positive choice in auxiliary questions. Those who do not belong to the first and second categories fall into the third category, i.e., those who are healthier.

2.2.2 Testing procedures. 1096 teachers and students were randomly selected in a local normal university as the research object.

2.2.3 Statistical methods. The data were recorded and processed by SPSS 17.0. The comparison of the detection rates between the two groups was analyzed by chi-square test. The t test was used to compare the means of the two groups.  $P < 0.05$  was considered statistically significant.

## 3. Results

3.1 The overall detection rate of the subjects.

According to the screening criteria, 220 students belong to first class among 1096 normal students; the detection rate is 20.1%. The second group has 328 students and its detected rate is 29.9%. The third class has 548 students which accounted for 50%. On key items, the number of positive choices for question 8 (whose past and family are unfortunate) was 108, accounting for 9.9%; the number of positive choices for question 16 (often insomnia) was 97, accounting for 8.9%; the number of positive choices for question 25 (want to suicide) was 29, accounting for 2.6%; the number of positive choices for question 26 (not interested in anything) was 46, accounting for 4.2%.

### 3.2 The main psychological symptoms

In order to further explore the main performance of the psychological problems of normal students, we analyze the items with selectivity over 30%.

**Table 1 Items with selectivity over 30%**

	Selectivity (%)
Worry about everything unless repeated confirmation	54.7
Can't help worrying everything	53.3
Care about other people's attention	50
Always pay attention to the people around	44.1
Lack of self - confidence	43.1
Care about the dirty	42.4
Lack of ability to make decisions	39.5
Deterioration of the memory	39.3
Mood easily damaged	37.2
Distraction	37.1
Worry too much about the future	36.8
Lack of endurance	34.3
Easy to diarrhea or constipation	32.8
Can not get rid of meaningless ideas	31.6

Note: Does not include the selectivity of the four pseudo-tests.

### 3.3 Three types of normal students in the distribution of gender

**Table 2 The proportion of different genders in the three kinds of personality health**

Screening results	Gender		X <sup>2</sup>
	Male	Female	
First class	53 (19.0%)	167 (20.4%)	7.365*
Second class	68 (24.4%)	260 (31.8%)	
Third class	158 (56.6%)	390 (47.3%)	

\*p<0.05;\*\*p<0.01;\*\*\*p<0.001

As can be seen from table 2, there are significant differences between boys and girls in the distribution of the three types of screening results. The boys' personality health is better than the girls.

3.4 The distribution of the students in disciplines, origins, and whether they were free charge normal students.

**Table 3 The proportion of the 3 kinds of normal students in other demographic variables**

		First class	Second class	Third class	X <sup>2</sup>
Disciplines	Liberal arts	115 (21.6%)	164 (30.8%)	253 (47.6%)	2.742
	Science	105 (18.6%)	164 (29.1)	295 (52.3%)	
Origins	Town	65 (22.3%)	87 (29.8%)	140(47.9%)	1.287
	Countryside	155 (19.3%)	241 (30.0%)	408(50.7%)	
Free normal students or not	Yes	45(17.6%)	75(29.3%)	136(53.1%)	1.732
	No	175(20.8%)	263(30.1%)	412(49.0%)	

\*p<0.05;\*\*p<0.01;\*\*\*p<0.001

It can be seen from Table 3 that there are differences among the three types of normal students in demographic variables, but the difference is not significant.

### 3.5 Differences among key items in different source regions.

**Table 4 Differences in percentages of key items from different sources**

	Town(M±SD)	Countryside(M±SD)	t
Question 8	0.10±0.304	0.10±0.304	-0.024
Question 16	0.06±0.241	0.98±0.298	-2.083*
Question 15	0.04±0.191	0.02±0.148	1.394
Question 16	0.05±0.214	0.04±0.196	0.594

\*p<0.05;\*\*p<0.01;\*\*\*p<0.001

From table 4, we can see that in the question 16 (often insomnia), students from countryside are higher than the students from town; rural students of normal school have more insomnia.

### 3.6 The difference between free normal students and non-free normal students on items over 30%

**Table 5 Comparison of scoring differences between free normal students and non-free normal students on items over 30%**

Items over 30%	Free or not(M±SD)		t
	Yes	No	
Worry about everything unless repeated confirmation	0.43±0.497	0.58±0.494	-4.210***
Can't help worrying everything	0.49±0.501	0.55±0.498	-1.490
Care about other people's attention	0.41±0.494	0.53±0.500	-3.173**
Always pay attention to the people around	0.40±0.491	0.45±0.489	-1.569
Lack of self - confidence	0.38±0.485	0.45±0.497	-2.084*
Care about the dirty	0.38±0.485	0.44±0.497	-1.846
Lack of ability to make decisions	0.39±0.488	0.40±0.490	-0.312
Deterioration of the memory	0.37±0.483	0.40±0.488	-0.983
Mood easily damaged	0.32±0.466	0.39±0.483	-2.167*
Distraction	0.37±0.484	0.37±0.476	-0.010

Worry too much about the future	0.31±0.463	0.39±0.487	-2.305
Lack of endurance	0.34±0.473	0.35±0.476	-0.275
Easy to diarrhea or constipation	0.32±0.466	0.33±0.471	-0.434
Can not get rid of meaningless ideas	0.22±0.417	0.34±0.475	-3.943***

\*p<0.05;\*\*p<0.01;\*\*\*p<0.001

Table 5 shows that for those items with a selectivity of more than 30%, there are significant differences between the compulsory examination items and the compulsory thinking items, and the free normal students' scores are lower than non-free normal students, that is to say, their obsessive-compulsive symptoms are lower than non-free normal students. There is a very significant difference in the score of "care about others". Non-free normal students are more concern about others opinion than free normal students. In the aspect of self-confidence and mood swings, there were significant differences between them, which showed that the self-confidence of free normal students are better than non-free normal students, and mood swings and bad feelings appear less frequently.

### 3.7 Comparison of scores of free normal students and non free normal students on key items.

**Table 6 the comparison of the scores of the free normal students on the key items**

Key items	Free or not(M±SD)		t
	Yes	No	
Whose past and family are Unfortunate	0.09±0.281	0.11±0.311	-1.089
Often insomnia	0.09±0.287	0.09±0.284	0.086
Want to suicide	0.02±0.152	0.03±0.163	-0.344
Not interested in anything	0.03±0.185	0.04±0.205	-0.621

\*p<0.05;\*\*p<0.01;\*\*\*p<0.001

It can be seen from Table 6 that there is no significant difference between the free normal students and the non-free normal students in the key items.

## 4. Discussions

4.1 Through the survey of normal students, the screening rate of the first class of students is 20.1%. Jiang Fulian<sup>[2]</sup> has investigated 14 universities freshmen of Grade 1999-2000, the detection rate of the first class students in most universities is 10%. Compared with this study, the detection rate of the first class students is obviously higher. Some scholars have done a longitudinal study, the results show that, the first detection rate of freshmen showed a clear upward trend over time<sup>[3]</sup>. The emergence of this phenomenon may be due to changes in the era, the social background is different, and the overall mental health status will be different. The proportion of the first class students is getting higher and higher, and it deserves our attention.

Items with a choice rate of more than 30% presented psychological problems including obsessive-compulsive symptoms, interpersonal sensitivity, lack of self-confidence, emotional control, and willpower. This result is consistent with the results of Yang Zijun<sup>[4]</sup>, Feng Jun<sup>[5]</sup>, Zhang Mingliang<sup>[6]</sup> and Tanqian<sup>[7]</sup>, which indicated that psychological problems of freshmen are universal. Obsessive-compulsive symptoms may be related to carefulness they have developed in previous school. Making them get into the habit of repeated inspection and confirmation. The interpersonal relationship go along with the whole

school-days, it is also a common problem for college students. At the university stage, the time is relatively free, and students prefer to stay in the dormitory; each person has different living habits and family background, all of this will cause the problem in the interpersonal relationship. In the face of these kinds of differences, how to adjust and express their feelings and thoughts are the problems that these freshmen need to face. In view of these problems, the school psychological counseling center can group counseling activities or experience activities regularly, so that more students can carry out related problems. At the same time, carry out special lectures to improve students ability to solve those problem.

4.2 By examining an analysis of demographic variables, it can be seen that the detection rate of boys are lower than that of girls; that of science students are lower than that of liberal arts students; that of rural areas are lower than that of towns; and free normal students are lower than non-free normal students, which account for 17%-20%, but there is no significant difference between the two. However, there was a significant difference between the scores of male and female ( $t = -3.944$ ,  $P < 0.001$ ), and also between free normal students and non-free normal students ( $t = -2.867$ ,  $P < 0.01$ ). The survey shows that the proportion of rural students in the first class and second class are lower than urban students, and there is no significant difference in the total score, which is inconsistent with the previous study of other scholars<sup>[8]</sup>. This may be due to the rural students have different growth environment than urban students, but rural students experienced frustration and suffering more than urban students, so personality health status is better than urban students. This discrepancy is worthy of further study. However, in the key items on the question 16 (often insomnia), the score of urban students is significantly lower than rural students, indicating that the insomnia symptoms of rural students is serious than urban students.

4.3 In the comparison of the differences of over 30%, it can be seen that the free normal students are lower than the non-free normal students in the average of the scores, and are lower than the non-free normal students on individual subjects. This shows that free normal students in the health of personality are better than non-free normal students. Because of the particularity of their choice, free normal students have a clear understanding of their identity. They have to go to the basic service and join the basic education work. This state of preparation means that they are ideologically accepted such a reality, but also willing to do so, such a prerequisite may be cause the reasons for this difference. In key items, free normal students have no significant difference with non-free normal students, indicating that there is no obvious difference in their principles on those key items.

## 5. Conclusion

5.1 The detection rate of the first class students is 20.1%, and the second class students is 29.9%, which means that there may be serious psychological problems, and there are 50% of the students need to be concerned.

5.2 The main problems of normal students are obsessive-compulsive symptoms, interpersonal sensitivity, and lack of self-confidence, emotional control problems and lack of willpower, as well as some physical symptoms.

5.3 There are significant differences in the distribution of different genders in the three categories. The third class of boys is significantly more than the girls, and the boys' mental health is better than the girls.

5.4 The number of free normal students in the first and second class are less than non-free normal students.

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