# Research on Students' Coping Style in a Certain Medicine University

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**Abstract:** In order to know the medical university students' basic condition about coping style in Tang Shan, this research provides the theory basis for education, consultation and treatment of mental health in higher college. Using Coping Style and SCL-90 to test 882 medical students, Applying SPSS11.5 to deal with database with methods of t test, description, ANOVA analysis, multiple linear regression. The mental health of medicine university students was not very well. There are several factors in this study. The main factors are sex, born address, mother's education, coping style and so on. For student's coping style, the important factors are born address, father's education, mental health and so on. In this study, we can find that mental health has interrelation with coping style.

Keywords: Mental Health; Coping Style; College Students; Influencing Factors

# 1. Introduction

#### (1) Research object

To begin the 2012 medicine university students as the research object. With 822 taken back, a total of 1000 questionnaires were provided. The rate of recovery was 82.2%.

(2) Research methods

This research used the questionnaire survey method. The investigators provided questionnaires in the class, which were filled in by students and taken back on the scene. The content included: (1) basic condition; (2) mental health questionnaire; (3) coping style questionnaire.

(3) Statistics and data processing

After the data have been collected, the material uses Excel data tables to establish and adopts SPSS11.5 statistical software for statistical processing. The methods of statistical analysis are: t test, ANOVA analysis, and correlation.

## 2. Result

# 2.1. Common Situation

The common situation is shown in Table 1. Table 1. The common situation

	Table 1. The co	minon situation	1
Item	Category	Number of people	Percentage(%)
Gender	Boy	257	31.3
	Girl	565	68.7
Origin of Students	City	200	24.3
	Town	245	29.8
	Country	377	45.9
Whether the only child	The only child	289	35.2
	non-only child	531	64.8

#### 2.2. The Mental Health State of Medical Freshmen

As is shown in Table 1, scores of every factor in SCL-90, except hostility, have statistical difference between Medical Freshmen and common norms. And scores of all the factors are above that of national common norms, except that the scores of somatization symptom are lower than national common norms.

#### 2.3. Gender Difference of Medical Freshmen's Mental Health

As is shown in table 3, there is statistical significance between somatization of medical freshmen in SCL-90 and hostility factor, representing boys exceed girls. And there is no statistical significance between boys and girls on another seven factors.

# 2.4. The Influence of Mother's Education on Medical Freshmen's Mental Health

As is shown in table 6, both the difference of mother's education and interpersonal sensitivity, depression and psychoticism of their children have statistical significance, that is, those who are under senior high school are superior to those who are above college degree<sub>o</sub> Another factors' differences have no statistical significance.

In addition, we also analyzed the effects of some factors on medical students' SCL-90 each factor scores, such as Fathers occupation, father's education, mother's occupation, family income, living together with who, and so on, while the differences are not statistically significant.

#### 2.5. Coping Style of Medical Freshmen



(1) Compari-son of different students' coping style of students

It can be seen from Table 5, medical students in terms of positive response, cities, towns and villages have statistical significance, for further pairwise comparisons, there are statistical differences between urban and rural areas, urban is higher than rural areas, and there are no statistical significance among urban, rural areas and towns. While there are no statistically significant differences in terms of negative coping.

#### Table 2. The Comparison of Medical Freshmen's Scores in SCL-90 with that of Common Norms( $\overline{X} \pm S$ )

Factor	Medial Freshman(n=822)	National Common Norms(n=1388)	u	Р
Somatization	$1.3 \pm 0.4$	$1.4 \pm 0.5$	3.52	< 0.01
Anancastia	$1.9 \pm 0.6$	$1.6 \pm 0.6$	11.00	< 0.001
Interpersonal Sensitivity	$1.8 \pm 0.6$ $1.6 \pm 0.6$	$1.6 \pm 0.5$ $1.5 \pm 0.6$	7.04 5.16	<0.001<0.001
Depression	$1.5 \pm 0.5$	$1.4 \pm 0.4$	7.10	< 0.001
Anxietas	$1.5 \pm 0.6$	$1.5 \pm 0.6$	1.39	>0.05
Hostility	$1.4 \pm 0.4$	$1.2 \pm 0.4$	10.24	< 0.001
Angot	$1.6 \pm 0.6$	$1.4 \pm 0.6$	7.23	< 0.001
Psychoticism	$1.5 \pm 0.5$	$1.3 \pm 0.4$	10.93	< 0.001

#### Table 3. Different gender medical freshmen all factor scores of SCL-90 (+ S)comparison

Factor	Boy (n=257)	Girl (n=565)	t	Р
Somatization	$1.4 \pm 0.5$	$1.3 \pm 0.4$	2.338	0.020
Anancastia	$1.9 \pm 0.6$	$1.9 \pm 0.6$	0.578	0.563
Interpersonal sensitivity	$1.8 \pm 0.7$	$1.8 \pm 0.6$	0.456	0.649
Depression	$1.6 \pm 0.6$	$1.6 \pm 0.6$	1.024	0.306
Anxiety	$1.6 \pm 0.5$	$1.5 \pm 0.5$	0.302	0.763
Hostility	$1.6 \pm 0.6$	$1.5 \pm 0.5$	2.183	0.030
Angot	$1.4 \pm 0.4$	$1.4 \pm 0.5$	1.286	0.199
Insistence	$1.6 \pm 0.6$	$1.6 \pm 0.6$	1.241	0.215
Psychoticism	$1.5 \pm 0.5$	$1.5 \pm 0.5$	0.701	0.483

# Table 4. The Comparison of Different Mothers' Education of Medical Freshmen's Scores in SCL-90 ( $\overline{X} \pm S$ )

Factor	Under senior high school (n=666)	Above college degree (n=155)	t	Р
Somatization	$1.3 \pm 0.4$	$1.4 \pm 0.4$	1.001	0.317
Anancastia	1.9±0.6	$1.8 \pm 0.6$	1.021	0.308
Interpersonal Sensitivity	$1.8 \pm 0.6$	$1.7 \pm 0.6$	2.539	0.011
Depression	1.7±0.6	$1.5 \pm 0.5$	2.164	0.031
Anxiety	$1.5 \pm 0.5$	$1.5 \pm 0.5$	0.767	0.443
Hostility	$1.5 \pm 0.6$	$1.5 \pm 0.5$	0.937	0.349
Angot	$1.4 \pm 0.5$	$1.4 \pm 0.4$	1.208	0.227
Insistence	1.6±0.6	$1.5 \pm 0.5$	1.495	0.135
Psychoticism	$1.5 \pm 0.5$	$1.4 \pm 0.4$	2.256	0.024

# Table 5. Comparison of different students' coping style of medical freshmen ( $\overline{X} \pm S$ )

origin	n	Positive Coping	Negative Coping
City	200	$1.9 \pm 0.5*$	$1.1 \pm 0.5$
town	245	$1.8 \pm 0.5$	$1.2 \pm 0.5$
rural areas	377	$1.8 \pm 0.5$	$1.1 \pm 0.5$
	F	3.226	0.674
	Р	0.040	0.510
Note : *denotes urban and rural c	comparison P<0.05		

# Table 6. Effect of father's education level on medical students ' mental health ( $\overline{X} \pm S$ )

Father's education level	n	Positive Coping	Negative Coping
high school or less	603	$1.8 \pm 0.5$	$1.1 \pm 0.5$
College and above	213	$1.9 \pm 0.5$	$1.2 \pm 0.5$
t		2.257	0.396
Р		0.024	0.692



International Journal of Intelligent Information and Management Science ISSN: 2307-0692 Volume 4, Issue 5, October 2015

Table 7 Correlation analysis of nine factors of students' psychological health in positive coping

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factors	Positive Coping		negative Coping	
	r	Р	r	Р
somatization	-0.045	0.198	0.264	0.000
anancastia	-0.122	0.000	0.326	0.000
interpersonal sensitivity	-0.147	0.000	0.341	0.000
depression	-0.174	0.000	0.379	0.000
anxiety	-0.101	0.004	0.350	0.000
hostility	-0.127	0.000	0.294	0.000
angot	-0.137	0.000	0.310	0.000
insistence	-0.082	0.019	0.317	0.000
psychoticism	-0.085	0.015	0.336	0.000

(2) Effects of father's education on coping style of medical freshmen

Table6 shows that medical freshmen's positive coping styles are connected with their father's education level. In addition, we also analyzed the gender, family structure, living together with who, the mother's education level, parents' occupation and whether the only child, and there

were no statistical differences of these coping styles.

(3) The correlation between mental health and coping style of the students

To do the linear correlation analysis between two types of coping style and the factors in SCL-90.The results are shown in Table 7, except for somatization and positive external, other factors and positive response and response all have the correlation, and the relationship between positive coping and the factors in SCL-90 is negative, while the relationship between negative coping and the factors in SCL-90 is positive.

## 3. Discussion

# **3.1.** The Basic and Coping Style in a Certain Medical University

Based on the SCL-90 of medical freshmen scores compared with the national norm, 9 factors of SCL-90, there are 8 higher than the national norm, apart from a hostile factor, other factors there was statistical difference with the national norm, consistent with domestic research results [8]. This may be due to college freshmen, facing the life, learning and the change of the environment, more and more mental disorders and adjustment disorders manifested in various forms of the results.

The research about the aspect of mother's education level to the influence medical freshmen's mental health . The thesis mainly compares mother's level of education at high school degree and below and college and above. The result shows that except interpersonal sensitivity, depression, psychotic factor have statistical difference, other factors have no statistical significance. And it's the score of education at high school degree and below higher than the level of education at college and above. This might be related to the contact time between mother and children. Generally speaking, since the child is born, who lives with his mother all the time, but the father can not always be with the child because of the career, so the mother has to take the duty of raising the child. To the mother, she would impart all the knowledge into her child, so the thinking of the children takes shape in their childhood. Changing by the time the children go to school, the situation among every child will be different. Therefore the mother's level of education to the way the child looking at the issue, solving the problem and the resulting psychological problems are inseparable. It deserves us to pay attention.

Nowadays the research of the coping style to the different origin of students and the education level of the father is less. The thesis's result shows that the medical freshman on the aspect of responding actively have statistical difference between urban and rural. The urban is higher than the towns , it might be similar to the reason of influencing mental health. On the aspect of the father's level of education, the medical freshmen take active coping style is related to the father's level of education. It indicates the score of taking coping style on high school degree and below is lower than the level of college and above. This might be when the child run into a hard problem, they like asking their father for help, so when they respond actively , they are almost the same with their father's thought.

# **3.2.** The Research of the Relationship between the Mental Health of the Medical Freshmen in a Certain Medical University and Coping Style

Many researches [13] [11] had shown the individual coping style is correlated significant with mental health status. When the positive coping style get the high score, the mental problems and symptom get the low score; while the negative coping get the high score, the mental problems and symptom also get the high score. Wu Sumei's [21] survey shows that the choice of coping style is correlated significant with individual's physical and mental health. Lan Jinsong's [12] survey shows that positive coping style has a remarkable principal effect on the college students' self acceptance, it is in favour of improving college student's mental health. The researches of this aspect have so many, and has already proved the relationship between the mental health and coping style. The thesis also has the linear correlation analysis between the

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two types of coping style and the factors in SCL-90. The result shows that positive coping style and factors in SCL-90 calls positive correlation while negative coping style and factors in SCL-90 calls negative correlation. This is basically the same with the results that many researchers have studied in the country.

In conclusion, the university level is an important stage of developing coping style, college student's age, knowledge and experience can let them deal with it when they facing pressure. However, at the same time, college students are the high-risk groups of mental problems, they are still the subject of attention. The above opinions about the college students' psychological problems and coping style's correlational studies can provide theoretical basis for high schools' mental health education, consulting and treatment. Because it can reflects from only one side that the relationship between college students' mental health, coping style and some other factors are closed, so it cannot indicate causal relationship. To the mental health workers, the most important is with practice, the concrete problem need a concrete analysis, analysis which factors could be changed, which factors are effective, thus establish the suitable college students' coping style under the concrete situation to reach the aim of mental health promotion.

## 5. Conclusion

The mental health of medicine university's students was not very well .we should enforce mental health education as well as mental consult in the future. I think our students' mental health and coping style will be better.

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