

Research on Characteristics and Relevance between Positive Personality and Leadership practice of Medical College Students

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Abstract—The purpose of this study is to explore positive personality and leadership practice of medical college students' relationship, so as to provide theoretical basis for improving the basic psychological quality of contemporary college students and cultivating excellent talents in the new era of multi-faceted development. Using the Positive Personality Scale and the Student Leadership Practice Scale, 2 980 medical college students were selected for research through group testing. The results showed that the scores of positive personality and leadership practice of medical college students are in the middle to high level. There is a significant correlation between positive personality and college students' leadership practice behavior. Positive personality can significantly predict college students' leadership practice. This can increase students' leadership practice by improving their positive personality.

Keywords—College Students; Positive Personality; Leadership practice; Correlation

I. INTRODUCTION

Positive personality is a concept put forward by Seligman in 1999. It is believed that personality is influenced not only by heredity but also by social environment, which indicates that personality has plasticity^[1]. People with positive personality will show positive mentality and make positive behavior, so that they can make correct understanding and judgment of their environment in the light of reality.

In University education, universities should not only provide students with good education in professional knowledge, but also pay more and more attention to the basic psychological quality of College students. Therefore, the cultivation of college students' leadership, which is a very important part of the basic psychological quality of College students, is the focus of quality education for college students. The Student Leadership Challenge Model is developed by Kouzes and Posner for the evaluation and cultivation of

student leadership. It aims to help students develop their leadership potential and lead others to outstanding achievements^[2]. The student leadership challenge model is based on the relationship to understand leadership. It defines leadership as a relationship between leaders and followers^[3]. The student leadership practice self-assessment scale is developed on the basis of the student leadership challenge model^[4].

In addition, Du Xiaohua's positive personality scale for college students includes the factor of leadership^[5]. Zhang Chao (2012) concluded that the appropriateness, responsibility and neuroticism in the qualification dimension, among which the appropriateness, responsibility and pursuit of success are positively correlated with the leadership score. He proposed using positive expectations, so cultivating student cadres to form positive personality traits can strengthen the leadership training of student cadres^[6]. At present, there are two main aspects in the study of positive personality: one is the study of positive personality, the other is the study of positive personality itself, but there is a lack of research on the relationship between positive personality and leadership practice of college students^[7]. The purpose of this study is to explore the characteristics and relationship between positive personality and leadership practice of medical college students, so as to improve the level of students' positive personality and increase their leadership practice, so as to provide a strong theoretical basis for better training of high-quality talents in Colleges and universities.

II. METHODS

A. Participants

A total of 2980 students of Jiangxi University of Traditional Chinese Medicine in 2017 were selected to conduct a questionnaire survey. 2742 valid questionnaires were collected, with an effective rate of 92.01%. There are 1095 boys (39.93%) and 1647 girls (60.07%); 597 only

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children (21.77%) and 2145 non-only children (78.23%); 2016 rural students (73.52%) and 726 urban students (26.48%); 289 students of literature and history (10.54%) and 2453 students of science and engineering (89.46%).

B. Measures

1) The College Student Positive Character Scale

Du Xiahua's Positive Personality Scale for College Students was adopted in 2009^[8]. There are 88 items in this scale, which are divided into 24 dimensions: creativity, judgment, insight, humor, enthusiasm, love, belief (belief), leadership, fairness, tolerance, hope, courage, curiosity, caution, sincerity, self-discipline, teamwork, appreciation, social intelligence, curiosity, modesty, kindness and gratitude. The scale was scored at 5 points, ranging from 1 (very inconsistent) to 5 (very consistent). The higher the score is, the more prominent the positive personality traits of individuals. The positive personality scale has good reliability and validity. The Cronbach alpha coefficient of the scale in this study is 0.974.

2) Leadership practice Scale

This research used the scale of students' leadership practice, which was compiled by Kouzes et al^[9] in 2006. There were 30 items in the scale, which included five dimensions: lead by example, inspiring a vision, challenging the status quo, making people act and inspiring people. Each item focuses on the frequency of specific leadership behaviors. The scale was scored at 5 points, ranging from 1 (never) to 5 (always). The higher the score, the higher the frequency of students' leadership practice. SLPI-Self has good reliability and validity. The Cronbach α coefficient of the scale in this study is 0.944.

3) Statistical Analysis

SPSS20.0 software is to be selected for statistical analysis of this study, using the methods of descriptive statistics, independent sample T test, analysis of variance, correlation analysis, regression analysis and others.

III. RESULTS

A. Common method deviation test

Using Harman's single factor test^[10], exploratory factor analysis was carried out on all questionnaires. The results show that there are 16 factors whose eigenvalues are greater than 1. The first common factor interpretation rate is 28.73%, which is less than 40% of the critical criteria, indicating that there is no serious common method deviation in this study.

B. General Characteristics of Positive Personality and Leadership practice of Students in Medical Colleges

The average score of leadership practice behavior of medical college students is 110.69 (SD=16.04), which is higher than the midpoint value of 90.00. The average score of five dimensions of example, shared vision, challenge status quo, making people and inspiring people are also slightly higher than the theoretical median. The average score of leadership practice of medical college students is 110.69 (SD=16.04), which is higher than the midpoint value of 90.00. The average score of five dimensions of example, shared vision, challenge status quo, making people and inspiring people are also slightly higher than the theoretical median. It shows that the scores of leadership practice of medical college students are in the middle to high level.

TABLE I. DESCRIPTIVE STATISTICS OF POSITIVE PERSONALITY AND LEADERSHIP PRACTICAL OF MEDICAL COLLEGE STUDENTS (N=2742).

Statistics	Positive Personality's Total Score	Leadership Practice's Total Score	Lead by Example	Inspiring Vision	Challenging the Status Quo	Making People Act	Inspiring People
$\bar{x} \pm s$	330.41±42.17	110.69±16.04	22.38±3.44	21.82±3.86	21.19±3.94	22.65±3.11	22.66±3.56
Midpoint	264	90.00	18.00	18.00	18.00	18.00	18.00
Title Number	88	30	6	6	6	6	6

TABLE II. DIFFERENCES IN DEMOGRAPHIC VARIABLES OF POSITIVE PERSONALITY AND LEADERSHIP PRACTICAL BEHAVIOR AMONG MEDICAL COLLEGE STUDENTS

	Factor	Positive Personality	t	Leadership practice	t
Gender	Male(N=1067)	438±49.68		111.53±15.89	
	Female(N=1629)	438.11±44.33	-0.59	109.63±15.17	3.125**
Student Origin	From rural areas (N=1999)	437.03±45.32		109.86±15.27	
	From urban areas (N=697)	441.03±49.70	-1.870	111.89±16	-2.983**
Subject types	Literature and History	439.41±47.13		109.73±14.98	
	Science and Engineering	437.90±46.45	0.516	110.46±15.54	-.751
Only-child	Only Child	334.81±47.22		112.66±16.25	
	Non Only Child	329.19±40.58	2.648**	110.15±15.94	3.359**

Note: *P<0.05, **P<0.01, ***P<0.001

TABLE III. ANALYSIS OF CORRELATION BETWEEN POSITIVE PERSONALITY AND LEADERSHIP PRACTICE OF MEDICAL COLLEGE STUDENTS

Item	Leadership Practice's Total Score	Lead by Example	Inspiring Vision	Challenging the Status Quo	Making People Act	Inspiring People
Positive Personality's Total Score	0.622**	0.558**	0.585**	0.59**	0.498**	0.538**

Note: **P<0.05, *P<0.01, ***P<0.001

C. Differences in Demographic Variables of Positive Personality and Leadership Practical Behavior among Medical College Students

Table 2 shows that the scores of positive personality traits of medical college students are significantly different in gender (t = 4.482, p < 0.001). The scores of positive personality traits of male students are significantly higher than that of female students. The scores of positive personality traits of urban students were significantly higher than those of rural students (t=-2.832, p < 0.01). The positive personality trait score also has significant difference in whether it is an only child variable (t = 2.648, P < 0.01). The positive personality trait score of the only child is significantly higher than that of the non-only child, while the positive personality trait score has no significant difference in the subject type (t=295, P > 0.05).

There were significant differences in the scores of leadership practice between male and female medical college students (t = 3.518, P < 0.001). The scores of leadership practice of male students were significantly higher than that of female students. There were significant differences in the scores of leadership practice among the students' origins (t=-3.231, P < 0.01). The score of leadership practice of urban students is significantly higher than that of rural students. There are also significant differences in whether the leadership

practice score is an only child variable (t = 3.359, p < 0.01). The only child's leadership practice score is significantly higher than that of the non-only child, while there is no significant difference in the subject type of leadership practice score (t = 654, P > 0.05).

D. Analysis of Correlation between Positive Personality and Leadership practice of Medical College Students

Table 3 shows that there is a significant positive correlation between the total score of Positive Personality and the total score of leadership practice of Students in medical colleges (r = 0.622, p < 0.01). Among them, the total score of positive personality traits is positively correlated with the dimensions of lead by example, inspiring a vision, challenging the status quo, making people act and inspiring people.

E. Regression Analysis between Positive Personality and Leadership practice

Table 4 shows that the scores of positive personality are used as predictive variables, and the scores of students' leadership practice are used as dependent variables. The regression analysis shows that positive personality can predict leadership practice positively (t = 41.568, P < 0.001). The regression equation is $\hat{y}=32.56+0.236x$.

TABLE IV. THE REGRESSION ANALYSIS BETWEEN POSITIVE PERSONALITY AND LEADERSHIP PRACTICE

Dependent Variable	Predictor Variable	B	β	t	R ²
Leadership practice	Positive Personality	.236	.622	41.568***	.387

Note: *P<0.05, **P<0.01, ***P<0.001

IV. DISCUSSION

This study found that the overall score of positive personality of medical college students was in the middle to high level, indicating that the overall level of positive personality developed well, which was consistent with the results of Wu Yazhi and others [11]. The results show that the positive personality of medical college students has significant differences in gender, place of origin and whether they are only children, but there is no significant difference in subject types. Compared with female students, male students show higher judgment, creativity and insight in personality traits, and higher self-discipline level, while female students show more tolerance and gratitude [12]. Compared with rural students, urban students can access to more modern life and have better adaptability to social life. These bring better insight and curiosity to urban students and make them show higher positive personality traits. Only-child can get more attention and love without sharing with siblings. Therefore, in the measurement of positive personality traits, only-child and non-only-child will show significant differences. Students of

literature, history and science and technology may show different personalities. However, no matter what major they are in, the campus environment is similar. The knowledge they learn will not have a great impact on the students' positive personality traits. Therefore, there is no significant difference in the positive personality traits among students of different disciplines.

The study found that the average score of leadership practice of students in medical colleges was only in the middle level, and did not show a high level of leadership practice, which was consistent with Tao Siliang's research results [13]. This shows that students have not trained and improved their leadership practice too much in college, which also shows that colleges and universities need to strengthen the cultivation of students' leadership practice. Students in Colleges and universities not only need to learn the necessary professional knowledge and skills, but also need to learn and exercise the basic psychological qualities such as leadership required to enter the society. The results of this study show that there are significant differences in gender, place of origin and whether students are only children, but no significant differences in

subject types. The score of male students' leadership practice is significantly higher than that of female students, which may be related to the impact of our social environment. We generally believe that boys should take more social responsibility and be more responsible than girls, thus showing higher leadership ability. While girls do not need to bear these pressures, they are more introverted and delicate. Compared with rural students, urban students can access more social services and activities in urban life, so that they can get more exercise in life, so that they can communicate with others, cooperate and better coordinate their work. Therefore, the score of leadership practice of urban students is significantly higher than that of rural students. Whether it is students of literature, history or science and technology, the practice of leadership in Colleges and universities is equal. Even if the knowledge and background of the subject are different, it will not lead to any difference in the way of education in universities. Therefore, there is no significant difference in the type of discipline in the leadership practice of students.

There is a significant positive correlation between positive personality and leadership practice of Medical College students. Positive personality can predict students' leadership practice positively. This is similar with the results of Zheng Rong (2015). There is a significant correlation between personality traits and leadership level of College students. When university student leaders are placed in different leadership situations, personality traits are still a significant factor affecting the level of leadership^[14]. Leadership practice includes five dimensions: setting an example, inspiring a vision, challenging the status quo, making people act and inspiring people. Therefore, the more obvious the positive personality traits of students, the more their leadership practice behavior will be. This also enables us to find that in the development of quality education in Colleges and universities, leadership practice can be improved by cultivating students' positive personality traits.

This study also found that there are still some students with low level of positive personality and leadership practice. For these students, it is necessary to carry out timely education and learning on positive personality traits and leadership. It also reflects the necessity and reality of this study, that is, the cultivation of students' positive personality traits and leadership qualities should be paid attention to by colleges and universities. However, there are some shortcomings in the process of this study. The single type of school and lack of comprehensiveness may lead to deviations in the research

results. In future studies, we should diversify the source of samples to avoid the limitations of the results.

V. CONCLUSION

In conclusion, the scores of positive personality and leadership practice of medical college students are in the middle to high level. Positive personality has a significant correlation with college students' leadership practice. Positive personality can significantly predict college students' leadership practice. Therefore, we can increase students' leadership practice by improving their positive personality.

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