

Research on the Effectiveness of Class Psychological Quality Development Training for Freshmen—Taking A University in Guangdong Province (China) as an Example

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ABSTRACT

Class quality development training for freshmen is an outdoor practice teaching link in college students' mental health education courses. In order to demonstrate its practical effect, the author conducted a self-designed questionnaire survey on 279 college students who participated in the activity. Two surveys are conducted before and after the activity, and SPSS22.0 software is used to analyze the data before and after the activity. Research methods, such as reliability and validity, difference test, correlation analysis, etc., are used to quantify the training results. The data analysis results show that the self-compiled questionnaire used in the research has good reliability and validity, and the homogeneity and split and half reliability is above 0.7. The KMO value of exploratory factor analysis is above 0.8, which is consistent with the psychometrics index. After training, the self-evaluation of group members has a positive trend, including three significant indicators of "trust yourself", "share experience" and "know others". This work concluded with some implications: Psychological quality development can activate the positive factors of individual's core self-evaluation, improve the level of interpersonal trust, and make individuals have more sense of collective belonging. The complementarity of individual and collective development can be recognized to stimulate individual growth initiatives. It is proved that the effectiveness of quality development training is significant.

Keywords: *Quality development; Class; Chinese college students; Psychology; Investigation and research*

1. INTRODUCTION

Currently, China is promoting the concept of quality-oriented education. The country pays attention to the development of students' comprehensive ability, instead of using test scores as the only standard to measure students in the past. Mental health education for college students is a compulsory course in colleges and universities. Quality development training, as an activity (course) with strong interaction, more experience and high challenge in mental health education, has been carried out in colleges and universities all over China, and is well received by students. However, most of the research on school quality development training is theoretical review at present, and few can make objective data empirical analysis on the essence of activities. Based on applied psychology, this work will demonstrate the actual effect of this activity with intuitive data by using research methods such as questionnaire design, sampling survey and statistical data, etc.

2. ISSUES RAISED

The purpose of general quality development training is to tap individual potential and melt team cohesion. It is an experiential quality education form to achieve the expected goal through the process of team overcoming difficulties and combining the efforts of individual and group [1]. Psychological quality development training is a new and unique experiential learning method. From the perspective of human psychological development and personality building, the three-dimensional objectives of students' "knowledge and skills", "process and method", "emotional attitude and values" are taken as teaching objectives, and the students are given experiential education or training [2]. "Guidelines for students' mental health education in institutions of higher learning" require that the "four-in-one" pattern of mental health education including education and teaching, practical activities, counseling services and prevention and intervention should be set up in college students' mental health courses. Also, it is required to actively carry out behavior training and psychological experience teaching activities [3].

Psychological quality development training is an important way to implement behavior training and psychological experience teaching activities. It is the product of combination between general quality development training and mental health education. General quality development training offers the support of curriculum form, and mental health education offers the aggregation of subject content. In this work, the research object is a university in Guangdong Province, China. Since 2009, the university has carried out class quality development training activities for freshmen (referred to as "class quality development for freshmen"). Since 2016, the school has incorporated college students' mental health education curriculum into the public compulsory curriculum system. From 2019, 2 class hours are listed as "participating in the class quality development for freshmen" in the 32 class hours of college students' mental health education. All freshmen are required to participate, and all students are required to carry out attendance scoring and rating. Due to the change of the military training time for freshmen from September at the beginning of the first semester to early January at the end of the semester, the class quality development has become the largest outdoor collective activity with the largest number of freshmen after enrollment. Through the investigation of fresh class quality development participants, this work will analyze the role, significance and value of the activity to the students' individual and group, thus enriching the experience teaching content of mental health education and promoting the development of quality expansion training.

3. RESEARCH METHODS

3.1. Object

Data sampling can be divided into two stages: pre-test and post-test. 501 people participated in the pre-test, and 347 people participated in the post-test. 279 people were retained as experimental objects through student number matching. Among them, 55 boys and 224 girls are freshmen.

3.2. Tools

Referring to "self-evaluation scale for group members" and related materials, the author selected 8 items that can reflect the evaluation of the relationship between the group members and themselves based on the actual situation of quality development training [4]. The scoring method of 1-5 points is used for evaluation, and a high score indicates a high degree of recognition.

3.3. Research procedures

3.3.1. Research pre-test

One of the colleges was selected to participate in the class quality development activity, and all participants were required to fill in the self-compiled questionnaire before the activity.

3.3.2. Implementing class quality development activity

Every year, the program of class quality development activity for freshmen will be modified based on the actual situation. Taking the activity in 2019 as an example, 8 links are designed with a total of 90 minutes.

3.3.3. Research post-test

At the end of the activity, all members are tested again, and the measuring tool is the same as the pre-test.

3.3.4. Data analysis

Spss22.0 software was used to compare and analyze the data before and after the test. Combined with the data changes, the effect of this group quality development training program was quantified.

4. RESEARCH RESULTS

4.1. Reliability analysis

Based on the pre-test data of 501 students and the post-test data of 347 students, the total score of 8 items and the scale was analyzed by homogeneity reliability and split half reliability. The total score of the scale and the homogeneity reliability (α coefficient) and split half reliability (Spearman-Brown coefficient) of each item were between 0.742-0.925. Re-test reliability analysis was conducted on the sample data of 279 students with matching test numbers. The results show that the total score of the scale and the retest reliability of each item are between 0.513-0.752, as shown in Table 1. The results show that the scale has a good level of reliability.

Table 1. Self-evaluation of group members scale credibility analysis indicators

Reliability	Self-centred	Trust yourself	Share experiences	Trust others	Help others	Know yourself	Know others	Understanding of class quality development training activities	Total score
Pre-test homogeneity reliability (N=501)									0.743
Pre-test split-half reliability (N=501)									0.903
Post-test homogeneity reliability (N=347)									0.742
Post-test split-half reliability (N=347)									0.925
Re-test reliability (N=279)	0.609**	0.703**	0.660**	0.619**	0.695**	0.663**	0.626**	0.513**	0.752**

Note: *P<0.05, ** P<0.01, *** P<0.001 (bilateral, same below).

4.2. Validity analysis

Exploratory factor analysis was carried out on the pre-test and post-test data respectively. The results show that KMO value and Bartlett spherical test value are up to the standard, and the data are suitable for exploratory factor analysis. Principal component analysis and maximum

variance method are used to rotate. Seven items about self-evaluation are closely surrounded by one factor (i.e. total score), and the total explanatory variation of 7 items is 100%. Except for the negative correlation factors, the factor load is greater than 0.6, as shown in Table 2. Therefore, the test validity is all above, which shows that the test scale has good structural validity.

Table 2. The factor analysis results of each item in self-evaluation scale of group members

	Pre-test		Post-test	
	Factor load	Coefficient ranking	Factor load	Coefficient ranking
Share experiences	0.792	1	0.831	1
Help others	0.768	2	0.782	3
Trust yourself	0.757	3	0.797	2
Know yourself	0.731	4	0.777	4
Know others	0.718	5	0.774	5
Trust others	0.630	6	0.763	6
self-centered	-0.299	7	-0.310	7
KMO value	0.836		0.850	
P	<0.001		<0.001	

Before and after quality development training, 279 students (55 boys and 224 girls) in 8 items of self-evaluation score difference test results are shown in Table 3.

4.3. Self-evaluation difference test of group members before and after quality development

Table 3. Matching test of quality development training pre and post test data

Project		M±SD			T	P
		Total (N=279)	Boys (N=55)	Girls (N=224)		
Self-centred	Pre-text	3.40±1.15	3.09±1.38	3.48±1.07	1.037	0.301
	Post-text	3.34±1.13	3.00±1.28	3.42±1.07		
Trust yourself	Pre-text	3.63±0.99	3.73±1.19	3.61±0.94	-3.933	0.000
	Post-text	3.81±0.95	4.05±1.03	3.75±0.93		
Share experiences	Pre-text	3.72±0.97	3.78±1.05	3.71±0.96	-2.309	0.022
	Post-text	3.84±0.93	4.09±0.97	3.77±0.91		
Trust others	Pre-text	3.42±0.93	3.47±1.14	3.41±0.87	-1.514	0.131
	Post-text	3.50±0.97	3.73±1.08	3.44±0.94		
Help others	Pre-text	4.05±0.81	4.15±0.95	4.03±0.77	0.331	0.741
	Post-text	4.04±0.87	4.22±0.90	4.00±0.86		
Know yourself	Pre-text	3.75±0.92	3.78±1.01	3.75±0.90	0.867	0.387
	Post-text	3.71±0.94	3.75±1.00	3.71±0.93		
Know others	Pre-text	3.15±0.89	3.31±1.12	3.12±0.82	-2.465	0.014
	Post-text	3.27±0.90	3.38±0.99	3.24±0.87		

Understanding of class quality development training activities	Pre-text	2.56±0.83	2.42±0.98	2.59±0.79	-3.704	0.000
	Post-text	2.73±0.76	2.75±0.87	2.73±0.74		
Total score (self-centre reverse score)	Pre-text	25.14±3.98	25.31±4.83	25.10±3.76	-2.094	0.037
	Post-text	25.51±4.27	26.22±4.70	25.33±4.15		

The results show that after the activity intervention, the evaluation scores of students participating in the class quality development are significantly improved in four aspects: "trust yourself, share experiences, trust others, know others". Among them, there was a significant difference in the scores of "self-trust" and "understanding of class quality development training activities" ($P < 0.001$). There were differences in "share experience", "know others" and total scores ($P < 0.05$). It shows that the class quality development training is an activity to promote the individual to integrate into the collective. In the process of activity, the individual's interpersonal trust level rises, and the centripetal force to the group increases. Also, the recognition of the group is strengthened, and the

psychological phenomenon of self-centeredness and self-confidence is enhanced.

4.4. Research on the correlation between self-evaluation indicators of group members

Through the quality development training intervention of class groups, students' self-evaluation has a positive trend in general. In order to further explore how the seven items of individual self-evaluation interact with each other, internal correlation analysis is conducted on the data of pre-test and post-test respectively, as shown in Table 4.

Table 4. Correlation matrix of group members' self-evaluation scores

	Self-centred		Trust yourself		Share experiences		Trust others		Help others		Know yourself	
	Pre-text	Post-text	Pre-text	Post-text	Pre-text	Post-text	Pre-text	Post-text	Pre-text	Post-text	Pre-text	Post-text
Trust yourself	-0.208**	-0.206**										
Share experiences	-0.117**	-0.098	0.539**	0.606**								
Trust others	-0.147**	-0.199**	0.321**	0.521**	0.434**	0.572**						
Help others	-0.008	-0.035	0.473**	0.568**	0.577**	0.677**	0.460**	0.556**				
Know yourself	-0.132**	-0.133*	0.530**	0.618**	0.456**	0.570**	0.245**	0.435**	0.470**	0.525**		
Know others	-0.143**	-0.169**	0.386**	0.463**	0.454**	0.566**	0.381**	0.534**	0.425**	0.479**	0.493**	0.619**

It can be seen that in addition to "self-centered", the post-test has a deeper impact on the internal relevance of self-evaluation than the pre-test in the five dimensions of "know and trust yourself, trust and help others, and share experiences". Among them, the three groups with the highest correlation coefficient are "share experiences" and "help others", "know yourself" and "know others", "know yourself" and "trust yourself". This should be related to the activation of individual core self-evaluation by group psychological activities. On the one hand, it promotes students' awareness of their own autonomy, initiative and achievement motivation. On the other hand, it enables individuals to have more needs for individual integration into the group or the expectation of the group to contain themselves, and realizes the inseparable relationship between individual development and group construction.

Analysis and Discussion

Quality development training can effectively promote college students' mental health development [5]. The development of quality development training course has a complementary effect on students' mental health and interpersonal trust. As an innovative and interesting teaching form, quality development not only meets the

needs of students' learning subjectivity, but also has a positive impact on students' mental health and interpersonal trust. Developing class-oriented quality development in freshman class can enhance students' collective consciousness, improve team cooperation ability, and improve the communication skills and mutual assistance ability among students. In a harmonious and happy environment, freshmen should be more active to face all kinds of new things in University. In training, the class team can enhance cohesion and centripetal force, and team members can better learn to use the resources around them to overcome difficulties.

Compared with individual psychological counseling, group counseling is better than it. Group counseling or development training is more helpful for individuals to form positive self-concept and promote self-reflection. Each member of the group can observe others' ideas and emotional feedback to examine themselves, establish a new self-identity schema, find self-positioning, promote self-acceptance and achieve self-transcendence. For a group formed in a positive and harmonious atmosphere, group members are more likely to accept the attitude and evaluation of other members, which can offer them with

opportunities to reflect on their own bad qualities and form positive communication qualities [7]. The age of college students is the peak period of cognitive, thinking and intellectual development. The most important psychological task for college students is to establish self-identity, and clear self-identity is the basis of growth and development. Individuals have a clear cognitive and behavioral tendency to their growth and development [8]. Individual growth initiative plays a very good role in positive direction, effectively improving the level of individual prosperity [9].

4. CONCLUSION

This study shows that the self-designed questionnaire used in the study has good reliability and validity, conforms to the psychometric indicators, and the data analysis results are reliable. Second, the items and the total scores have a positive trend compared with the self-evaluation scores of the group members in the pre-test and post-test. Among them, "trust yourself", "share experiences" and "know others" are the three most significant differences ($P < 0.05$), indicating that the intervention of class quality development is effective. Third, psychological quality development can activate the positive factors of individual's core self-evaluation, improve interpersonal trust level, recognize the complementarity between individual and collective development, and stimulate individual growth initiative. Fourth, class quality development training for freshmen is an important link of practical teaching with strong experience, remarkable effect and indispensable in the course of mental health education for college students.

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- 2) "The influence of individual growth initiative on college students' mental health level" (19-034B).

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