

LETTER TO THE EDITOR

Effectiveness of Ecological Perspective Cognitive Behavioral Stress Management Skills Training for Enhancement of University Students' Achievement Motivation

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In order to explore the effects of ecological perspective cognitive behavior stress management skills training on relieving psychological pressure and improving the achievement motivation of university students, the stress management skills training for 1060 university students with different attributes was carried out by using university student psychological pressure scale. From the two aspects of correlation analysis and regression analysis, the effect of ecological perspective cognitive behavioral pressure and the achievement motivation of university students are analyzed. The analysis results show that there is a correlation between cognitive behavioral pressure and the achievement motivation of university students, and the reduction of cognitive behavior pressure can promote the development of the achievement motivation of university students.

I Introduction

Elena I. Cherdymova, Liya V. Faleeva, Tatyana G. Ilkevich, Ivan A. Sharonov, Guzel B. Sayfutdinova, Irina V. Leusenko, Olga V. Popova. Buslaev published "Socio-Psychological Factors that Contribute to and Impede the Process of Student Eco-Vocational Consciousness Formation" on Issue: 107, Pages: 133-140, Article No: e107072, Year: 2019, in the article, the relevance of the issue under study is caused by the need to form a new socio-psychological paradigm in the field of environmental education. The purpose of the article is to determine the socio-psychological factors that contribute to and hinder the formation of eco-vocational consciousness of students.

Lazarus Folkman believes that stress is a state of anxiety caused by events and responsibilities that exceed personal coping ability (Baek et al. 2015). It is the body's state of tension and its response caused by the imbalance between adaptation and coping ability when the body adapts to a variety of unfavorable factors in the living environment. Stress can sometimes motivate people to improve, but those who are worried about the future and the stress of cognitive behavior in different situations often have potential deep consequences (Cui 2012).

The purpose of this research is to enable students to experience cognitive behavioral stress in training activities, to face reality and to adjust their emotions through ecological perspective cognitive behavioral stress management skills training. They should experience the ways and skills of self-decompression, and apply them to study life and interpersonal relationships, promote their physical and mental health development, and enhance their achievement motivation (Liu et al. 2018). Cognitive behavior stress management skills training includes: self-cognition,

recognition of cognitive behavior stress source, effective cognitive behavioral stress management strategy.

II Research Objects and Methods

There are 1060 undergraduate students in a university, including 800 boys, 260 girls, in which 360 urban students and 700 rural students, 192 liberal arts students, 256 science students, and 512 engineering students. The student cadres are 398 and 594 are the only children. The age is form 18 to 22. Through post poster recruitment, they have voluntary participation in cognitive behavioral stress management training group after interview. Group members are physically and mentally healthy, have no obvious psychological barriers, have a greater sense of stress in learning and life, and have a tendency to seek psychological pressure for relieving behavior and cognitive pressure. Please see Table 1.

Table 1. Category Comparison of the Object of Investigation

Attribute	Category	Number of People (Individual)	Percentage
Sex	male	800	75%
	female	260	25%
Subject category	Liberal arts	192	18%
	science	356	34%
	Engineering Course	512	48%
Birthplace	town	360	34%
	countryside	700	66%
Whether to serve as a student cadre	yes	398	38%
	no	662	62%
Whether it is the only child	yes	594	56%
	no	466	44%

The used theory: The theory of stress stimulation, system theory and group dynamics (Liu et al. 2004).

Evaluation method: Experienced instructors carry out six cognitive behavioral stress management skills trainings for students. One week before skill training, students were asked to conduct behavioral cognitive stress tests. A week after the skill training, the post test of the behavioral cognitive stress test for the students was conducted. Intervention effect of skills training on university students' behavioral cognitive pressure is compared, namely, intervention effect on university students' achievement motivation.

III Results

The investigation shows that the stress of cognitive behavior among university students mainly includes employment pressure, economic pressure, pressure of marriage and love, pressure of interpersonal communication, academic pressure, and family pressure (Lin et al. 2005). The general situation of university students' cognitive behavioral stress is shown in Table 2.

Table 2. Cognitive Stress of University Students' Behavior

	Behavioral Cognitive Stress	Effective N (List State)
N	1060	1060
Minimum value	2	

maximum value	5	
mean value	3.18	
standard deviation	0.382	

From Table 2, it can be shown that, the average cognitive behavioral pressure of university students is 3.18 and the standard deviation is 0.382. The score shows that university students’ cognitive behavior pressure is above medium level.

The motivation of university students’ achievement includes five dimensions, namely, interpersonal adaptation, learning adaptation, psychological adaptation, environmental adaptability and future adaptability (Ma et al. 2016). The descriptive statistical analysis results of university students’ achievement motivation and its dimensions are shown in Table 3.

Table 3. Descriptive Statistics Analysis of University Students’ Achievement Motivation and its Dimensions

	N	Minimum value	maximum value	mean value	standard deviation
Interpersonal adaptability	1060	1	5	2.9	0.789
Learning adaptability	1060	1	5	3.5	0.753
Psychosocial adaptability	1060	1	5	2.4	0.852
Environmental adaptability	1060	1	5	2.5	0.888
Future adaptability	1060	1	5	3.5	0.93
The motivation of College Students’ achievement	1060	1	5	2.98	0.405
Effective N (list state)	1060				

Utility analysis of cognitive behavioral stress and university students’ achievement motivation

Correlation analysis of cognitive behavioral stress and university students’ achievement motivation

In order to study the relationship between cognitive behavioral stress and achievement motivation of university students, SPSS19.0 software is used. Based on the data of the relationship between university students’ cognitive behavioral stress and their achievement motivation and their dimensions, the results of correlation analysis are shown in Table 4.

Table 4. Correlation Analysis of University Students’ Cognitive Behavioral Stress and Achievement Motivation and their Dimensions

	Behavioral Cognitive Stress		
	Pearson correlation	Significance (bilateral)	N
Interpersonal adaptability	-0.235 * *	0.000	1060
Learning adaptability	-0.419 * *	0.000	1060
Psychosocial adaptability	-0.734 * *	0.000	1060
Environmental adaptability	-0.262 * *	0.000	1060
Future adaptability	-0.295 * *	0.000	1060
The motivation of College Students’ achievement	-0.785 * *	0.000	1060

* * indicates a significant correlation at the 0.01 level (bilateral).

From Table 4, it can be seen that, there is a significant correlation between university students’ cognitive behavioral stress and their achievement motivation and their dimensions.

Regression analysis of cognitive behavioral stress and university students’ achievement motivation

In order to further study the relationship between cognitive behavior pressure and the motivation of university students and their dimensions, that is, the influence of cognitive behavioral pressure on university students’ achievement motivation and its various dimensions, the cognitive behavior pressure is taken as the dependent variable and the five dimensions of achievement motivation are taken as independent variables. Multiple regression analysis of behavioral stress is carried out. The results are shown in Table 5 and Table 6.

Table 5. Regression Analysis Model Fitting Table for Employment Pressure and University Students’ Achievement Motivation

Model	1
R	0.899e
R party	0.809
Adjust the R party	0.805
Error of standard estimation	0.1685

Predictors: (constant), learning adaptability, psychological adaptability, interpersonal adaptability, environmental adaptability, and future adaptability.

From Table 5, it can be seen that, R is 80.9% in predicting cognitive behavior pressure of university students’ learning adaptation, psychological adaptation, interpersonal adaptation, environmental adaptation, and future adaptability. It shows that the regression model has good fitting degree. Independent variables can explain 80.9% of changes in cognitive behavioral pressure variables.

Table 6. Regression Analysis of University Students’ Employment Pressure and University Students’ Achievement Motivation

Model	B	Standard error	Trial Edition	t	Sig.
(constant)	3.24	0.081		8.132	0.000
Learning adaptability	-0.365	0.015	-0.719	-24.720	0.000
Psychosocial adaptability	-0.127	0.014	-0.284	-8.864	0.000
Interpersonal adaptability	-0.096	0.014	-0.199	-6.913	0.000
Environmental adaptability	-0.110	0.014	-0.256	-7.974	0.000
Future adaptability	-0.090	0.012	-0.218	-7.695	0.000

Dependent variable: employment pressure

From Table 6, it can be seen that, the regression model of university students’ cognitive behavioral stress and achievement motivation is expressed as: cognitive behavioral stress 3.24, learning adaptation ability -0.365*, psychological adaptation ability -0.127*, environmental adaptability -0.110*, interpersonal adaptation -0.096*, and future adaptability -0.090*.

Specific analysis: in regression analysis of data, the five dimensions of university students’ achievement motivation have entered the regression equation. Among them, the absolute value of regression coefficient of learning adaptability and psychological adaptability is larger than that of other dimensions of university students’

achievement motivation. That is to say, the change of cognitive behavioral stress has a great influence on the same ability of learning adaptation or psychological adaptation. Therefore, it is necessary to train the highly efficient university students with cognitive behavior stress management skills.

IV Discussions

During the training of ecological perspective cognitive behavior stress management, students recognize themselves and rediscover themselves. Through communication with other members and sincere feedback to experience pressure, students feel the warmth and strength of the partner, discover the strengths and advantages, and enhance self-confidence, and experience the coping methods and techniques of self-reduction (Tian et al. 2016).

The change of cognitive behavioral stress has a greater influence on learning adaptability and psychological adaptability. The school should cultivate the talents needed to adapt to the social development, help to reduce the cognitive behavior pressure that the college students face, and improve university students' achievement motivation. It is best to start from the psychological training of the teaching and cognitive behavior pressure management.

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