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Correlation Between Concept of Stress and Coping Strategies Among Youth

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Abstract

Introduction. The article presents the results of the analysis of the correlation between the structural organization of the concept of stress and coping strategies among the freshmen, studying the humanities. The research into the subjective experience of stress of this age group reflects the content structure of the representations of stress and style of coping behaviour. **Method**. The concept of stress has been studied by means of the directed associative experiment, which helps to describe the organisation of implicit representations of stress and difficult situations of a person. The content categories (stress-factors – state and immediate effects – consequences – stress process – stress management) were found in the respondents' answers; the number of the presented categories is a measure of differentiation of the stress concept. Coping strategies were analysed with the application of the common form of «Adolescent Coping Scale». **Results**. It has been revealed that the increase in the degree of differentiation of the concept results in strengthening such strategies as 'anxiety', 'not coping', 'tension reduction' and 'self-accusation' ($p \leq 0.005$); 'content simplification' of the concept leads to the demand in the strategy 'social action' ($p = 0.000$). The stylistic specifics of coping behaviour of a student are connected with the degree of differentiation of the concept. Those students who have diverse implicit representations of stress are characterized by problem-oriented coping combined with the positive focus and tendency towards solitude. The orientation to problem-solving of the respondents, who gave incomplete descriptions of stress signs, is accompanied by a competing activity in terms of physical activity. The students, scarcely describing stress, enhance socio-oriented resources application for coping with a difficult situation. **Conclusion**. Practical relevance of this research consists in identifying the psychological conditions, which are necessary for effective coping among various groups of students.

Keywords: stress, representations of stress, concept, coping strategies, coping behaviour, cross-cultural differences, student, youth

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1. Introduction

The notion of cognitive appraisal of a difficult situation as a constituent of coping with life hardships was introduced into the psychology of stress by R. Lazarus [13]. The type of cognitive appraisal 'here and now' determines the necessity of coping behaviour application. Understanding of a situation by a person as a threatening one activates the analysis of some possible ways to cope with difficulties and facilitates purposeful activity. The views of psychologists about cognitive appraisal have advanced towards differentiation of factors, which determine the choice of coping strategies [2]. The realization of the lack of control and the uncertainty of a situation results in activation of defensive coping; the awareness of difficulty in deciding and insufficiency of personal resources provokes socio-oriented coping; the prediction of further development of a situation contributes to active coping. The research into the connection between initial cognitive appraisal and relative coping strategies is closely related to the content and conditions of a particular situation, thus, it does not take into consideration personal life experience of coping with difficulties.

A new direction of the research into coping is the correlation between the peculiarities of coping behaviour and the formation of conceptual abilities of a person [1, 11, 12]. The notion of concept as a unit of conceptual thinking [11] and a mental model of personal experience of interaction with the subject environment [4, 5] could be used for the analysis of the organisation of implicit representations of a person about stress. The representations of stress are strictly individual, which implies subjectively relevant features of a wide range of difficult situations and emotional distress. The concept represents a generalized image of stress, which is preserved in memory and represented in a verbal form. The research into subjective experience of being stressed, which is reflected in the concept and manner of coping with difficulties, allows us to predict the further direction of coping behaviour application both at present and in future. Thus, the aim of this research is to study the correlation between the organisation of the concept of stress and coping strategies among university youth.

2. Method

2.1. Participants

The data collection was carried out in 2014 – 2018 among the students of Russian (Ural Federal University, Kazan' Federal University) and foreign universities (Yerevan State

University, Thracian University, Gazi University, Anadolu University, Ataturk University). 712 people participated in the research, among whom 510 are female and 202 – male, whereas the average age is 19.2±2.0. The sample comprises various cultural groups: 329 Russian, 161 Armenian, 73 Tatar, 72 Turkish and 77 Chinese respondents.

2.2. Method

In order to identify the connection between the structural organization of the concept of stress and coping strategies, diagnostic and statistical methods of data processing were applied:

1. To assess the organization of concept we used the directed associative experiment: the respondent had to write as many adjectives in the mother tongue (stimulus word – 'stress', 3 mins). The respondents' answers were analysed in terms of the representation of various content categories (stress-factors – state and immediate effects – consequences – stress process – stress management). The content categories were distinguished on the basis of modern psychology achievements in the field of stress research [3, 7, 9, 10, 13]. The fact of recording of each category gives 1 point. The measure of differentiation of the concept is the overall number of all applied content categories in the respondents' answers (the maximum – 5 points).

2. The common form of «Adolescent Coping Scale» developed by E. Frydenberg and R. Lewis was used to analyse the peculiarities of coping behaviour and was suggested to the respondents in their mother tongue [6]. ACS is directed at determining common ways of coping with difficult, anxious or problematic situations. The productive style includes 4 strategies: problem solving, work and achievements, spiritual support, positive focus. The non-productive style is represented by 9 strategies: anxiety, miracles, not coping, tension reduction, self-accusation, ignoring, self-absorption, relaxation, active leisure. Also, there are 5 strategies of the sociotropic style: social support, friends, feeling of belonging, professional support, social action.

3. So as to determine the correlation between the structural organization of the concept of stress and coping strategies, we used cluster analysis (Ward method) and factor analysis (principal component analysis, Varimax rotation with Kaiser normalization); IBM SPSS. Statistics 22.0.

TABLE 1: Groups of respondents with various types of concept.

Content categories	Descriptive statistics (average value, standard deviation)		
	Group 1 (n = 251)	Group 2 (n = 356)	Group 3 (n = 105)
Cause or stress-factors	0.88 ± 0.32	0.57 ± 0.49	0.99 ± 0.09
State and immediate effects	0.85 ± 0.35	0.67 ± 0.46	0.94 ± 0.23
Long-term effects (consequences)	0.75 ± 0.45	0.28 ± 0.44	0.87 ± 0.34
Stress process	0.40 ± 0.49	0.18 ± 0.38	0.86 ± 0.35
Stress management	0.11 ± 0.31	0.04 ± 0.20	0.44 ± 0.49
Provisional name	Half-differentiated concept	Poorly differentiated concept	Highly differentiated concept

3. Results

3.1. The types of the concept of stress

The sample was divided into 3 groups of students according to the degree of differentiation of the concept (cluster analysis, Ward method, Table 1).

According to Table 1, as for the majority of students (50%, Group 2), who have a poor understanding of stress, their verbalisations are presented mostly in terms, which describe diverse aspects of stress. Students of Group 1 generally highlight stress-factors, state and immediate effects and negative consequences; the category 'coping' is rarely verbalized. Students of Group 3 have the highly differentiated concept: the answers contain an abundant content description of stress.

3.2. The correlation between the degree of differentiation of the concept and coping strategies

It was discovered that a change in the degree of differentiation leads to a change in the indexes of these or those strategies. Increase in the degree of differentiation results in heightened anxiety (χ^2 = 18.50, p = 0.001), not coping (χ^2 = 16.14, p = 0.003), tension reduction (χ^2 = 15.06, p = 0.005), self-accusation (χ^2 = 28.53, p = 0.000); decrease in the degree of differentiation of the concept is connected with reinforcement of the strategy 'social action' (χ^2 = 32.51, p = 0.000).

TABLE 2: Structure of coping strategies among students with highly differentiated concept.

Rotated component matrix						
Coping strategies	Factors					
	1	2	3	4	5	6
Social support	0.835					
Friends	0.754					
Feeling of belonging	0.611					
Social action	0.420					
Problem solving		0.778				
Work/achievement		0.737				
Positive focus		0.655				
Self-absorption	−0.489	0.538				
Not coping			0.791			
Tension reduction			0.726			
Self-accusation			0.694			
Spiritual support				0.863		
Professional help				0.518	0.428	
Anxiety	0.413			0.487		
Ignoring					0.738	
Relaxation	0.435				0.707	
Miracles						0.753
Active leisure						−0.582
% of described dispersion	14.8	13.0	12.3	10.2	9.0	7.6
Rotation converged in 12 iterations						

3.3. The specifics of coping among the students with the highly differentiated concept

Table 2 demonstrates a 6-factor structure of coping strategies of students, who give a sufficient description of stress. Factor 1 comprises 7 strategies: readiness for social interaction helps finding a solution, which was suggested in collaboration with other people; it also facilitates dealing with anxiety and reaching the state of emotional comfort by means of distraction/ relaxation. Factor 2 is formed by problem-oriented strategies, optimism and self-absorption. Factor 3 consists of emotion-dominated strategies: 'not coping', tension reduction, self-accusation. Factor 4 reflects the correlation between anxiety and necessity of consulting specialists and spiritual guidance. Factor 5 emphasizes the fact that spiritual guidance promotes conscious ignoring a problem and distraction. In terms of factor 6 the strategy 'miracles' and 'active leisure' are juxtaposed: the more physical activity a person has, the less belief in chance there is.

TABLE 3: Structure of coping strategies among students with poorly differentiated concept.

Coping strategies	Factors					
	1	2	3	4	5	6
Self-accusation	0.796					
Anxiety	0.671					
Tension reduction	0.611					
Not coping	0.608					
Active leisure	−0.433	0.421				
Work/achievement		0.800				
Problem solving		0.631		0.427		
Spiritual support			0.816			
Positive focus			0.687			
Miracles	0.450		0.630			
Relaxation						
Friends				0.851		
Feeling of belonging				0.645		
Professional help				0.500	0.769	
Social action					0.763	
Self-absorption						0.796
Social support						−0.585
Ignoring		−0.469				0.522
% of described dispersion	14.0	11.6	10.8	10.7	10.1	8.7

Rotation converged in 10 iterations

Rotated component matrix

3.4. The specifics of coping among the students with the poorly differentiated concept

In Table 3, there is a 6-factor structure of coping strategies among the students describing stress poorly. Factor 1 includes 6 strategies: the respondents are characterized by the emotion dominated style (guilt, anxiety, increased tension), which is accompanied by conscious ignoring a problem, believing in miracles, desire for relaxation and non-participation in physical activity. Factor 2 consists of problem-oriented strategies together with physical activity and ignoring. Factor 3 integrated spiritual worldview, positivity and hopes for a better outcome. The content of factor 4 is a bit illogical: distraction form a problem with the help of friends and feeling of belonging are connected with finding a problem solution. The strategies 'professional help' and 'social action' present external social resources (Factor 5). Factor 6 suggests distancing from a problem and self-absorption.

Table 4: Structure of coping strategies among students with half-differentiated concept.

Rotated component matrix					
Coping strategies	**Factors**				
	1	**2**	**3**	**4**	**5**
Social support	0.796				
Friends	0.754				
Self-absorption	−0.705				
Feeling of belonging	0.685				
Work/achievement		0.744			
Problem solving		0.711			
Active leisure		0.696			
Positive focus		0.456			0.407
Self-accusation			0.776		
Anxiety			0.717		
Not coping			0.521	0.482	
Miracles			0.516		
Ignoring				0.717	
Tension reduction				0.626	
Relaxation				0.494	
Social action				0.434	
Spiritual support					0.829
Professional help					0.587
% of described dispersion	14.6	12.3	11.6	10.7	9.3
Rotation converged in 7 iterations					

3.5. The specifics of coping among the students with the half-differentiated concept

According to Table 4, factor 1 includes socio-oriented strategies ('social support', 'friends', 'feeling of belonging'), which are juxtaposed to aloofness. Factor 2 consists of problem-oriented coping strategies such as 'positive focus' and 'active leisure'. Factor 3 is formed of the non-productive strategies: when stressed or anxious, a student consciously avoids actions aimed at solving a problem and hopes for a lucky turn of events. Factor 4 demonstrates the connection between not coping, ignoring, tension reduction, relaxation and social action. Factor 5 unites the necessity of spiritual support, positive categorization of a difficult situation and professional help for a student.

4. Discussion and Conclusion

The stylistic specifics of coping behaviour of a student are connected with the degree of differentiation of the concept. Those students, who have multifaceted implicit representations of stress, are characterized by problem-oriented coping in conjunction with positive categorization of a difficult situation and tendency to isolation. As for the students who gave incomplete descriptions of stress features, the orientation to managing a difficulty is accompanied by a competing activity in form of physical activity. Students, giving a poor description of stress, activate socio-oriented resources ('friends', 'feeling of belonging', 'professional help') in terms of viewing a difficult situation from different angles.

The style of coping with a difficulty among the students with the highly differentiated concept coincides with the pattern of mature behaviour, which was obtained during the research into the correlation between formal-dynamic features of temper and coping strategies [8]. Thus, mature coping behaviour includes active subject-oriented behavioural activity with prominent social psychomotor orientation, mind flexibility and conscious rejection of a competing activity. It can be assumed that the introduction of the strategy 'active leisure' in the problem-oriented direction among the respondents with poorly differentiated concepts performs the function of a substitute activity. Switching to physical activity, students decrease their anxiety and distance themselves from direct problem solving.

Practical relevance of the conducted research lies in identifying the psychological conditions, which are necessary for the realization of effective coping among different groups of students. The chance to stay alone is a condition for the youth having a diverse understanding of stress. Active involvement of other people in solving a problem and exclusion of a competing activity are the measures for achieving resultant coping among other groups of students.

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