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# PERSONAL SELF-ACTUALISATION AND COPING STRATEGIES OF TECHNICAL AND HUMANITARIAN STUDENTS

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#### Abstract

This article addresses the problem of studying personal self-actualisation and coping strategies of students in an exam environment. The results of an experimental study of gender and professional differences in the use of coping strategies during an exam are presented. Analysis of the results obtained on the basis of the self-assessment of typical mental states in the exam situation showed that the degree of emotional distress for students of both sexes and both professional profiles is slightly above average. The results of the study of coping strategies of students in stressful situations have shown that they most often use problem-oriented strategies and avoidance-oriented strategies. Most of the students, based on self-assessment, demonstrate a constructive style of behaviour in difficult life situations and prefer a strategy for solving problems. The avoidance strategy is also dominant in student preference. It is characterised by an attempt to avoid contact with a stressful situation and avoid problem solving. The results of diagnostics of coping methods that are typical for students in the examination situation are presented. For the first time, the differences in coping strategies of technical and humanitarian students are investigated in connection with the personal self-actualisation peculiarities. Psychological testing methods are applied in the research. The correlations between the indicators of coping strategies and students' personal self-actualisation are revealed

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Keywords: Student, exam, coping strategies, stress, professional orientation.



#### 1. Introduction

The level of students' university preparation for professional activities often depends on the idiosyncrasies of their emotional sphere and on their ability to achieve success during the examination session and also to demonstrate good results. Exam as a stress factor takes a leading position among the various causes of mental stress in students. The effects of exam stress go beyond the situation of passing the exam and may have a negative impact on the student's experience during the post-examination period. It should be noted that academic success is determined not only by the knowledge level, but also by the mental stress degree during the session (Pierceall & Keim, 2007). Since the exam period is very stressful for a majority of students, coping with stress becomes an important issue (Bonneville-Roussy, Evans, Verner-Filion, Vallerand, & Bouffard, 2017). The increased stress level during the examination period has a strong influence on mental and somatic health, performance, cognitive, emotional and physiological indicators. Despite the importance of studying the problem, it should be noted that generalised work on this topic is currently lacking (Zhujkova, 2010).

Recently, the study of "coping strategies" as an important perceived regulation mechanism of human behaviour and activity has become increasingly relevant (Freire, Ferradás, Valle, Núñez, & Vallejo, 2016). The designation of ways to counter stress among Western researchers is reflected in the concept of "coping", meaning "successfully cope, overcome." To designate a set of methods (cognitive and behavioural), undertaken by an individual to reduce the stress effects, Lazarus and Folkman (2013) introduced the "coping" concept. Coping can reduce the stressful impact of the situation and, thus, preserve the mental and physical health of a person (Cohen, Ben-Zur, & Rosenfeld, 2008). In Russian psychology, the concept of "coping" is included in the structure of stress and is translated as "psychological overcoming" or "coping", including a set of methods and techniques to overcome maladjustment and stressful states. Study of the problems of coping behaviour in our country has started relatively recently. Researchers (T.L. Kryukova, A.N. Demin, A. Prikhodko, M.V. Saporovskaya, S.A. Hazova, R.M. Granovskaya, I.M. Nikolskaya & V.A. Bodrov and others) describe various coping strategies used by people in difficult life situations. Moreover, all authors agree that the main function of coping is to effectively adapt a person to the requirements of the situation (Nartova-Bochaver, 1997).

Currently, there is no generally accepted classification of types of coping behaviour. However, most researchers rely on the concept of two coping strategies proposed by Lazarus and Falkman (2013): problem-oriented coping and emotion-focused coping. The first type of coping is associated with a rational analysis of the problem and manifests itself in an independent analysis of what happened, in seeking help from other people (mobilizing resources for behaviour). Coping focused on emotions, is manifested in the mobilisation of resources to regulate emotional experiences. Efforts aimed at regulating emotional experiences can take various forms: distraction from negative emotions, distancing from a problem, orientation towards positive aspects of a situation, etc.

#### 2. Problem Statement

In relation to a specific situation, people can use different strategies, while the same person in different situations can apply either different strategies or strategies that are most typical for him. Man's

coping behaviour includes many ways, strategies and reactions aimed at overcoming difficult life situations (Helbig & Backhaus, 2017). The holistic style of coping is a synthesis of all methods and strategies into an individual structure for each person, which is determined both by the specifics of the situation and by personal characteristics (Appelhans & Schmeck, 2002). To date, the psychological literature lacks a unified concept and classification of coping methods and strategies, since many situations are quite specific. Kryukova (2008) emphasises that coping behaviour is triggered by a certain situation that sets its features, the "situational factor". In the exam situation, in particular, an assessment of the degree of its stress level occurs, which affects the choice of strategies and coping styles (Kryukova, 2004). So, in the work of Kuchina (2009) found differences in the use of coping strategies of students on different types of exams: academic (oral) and internet testing.

However, the personal factor also has a significant influence on the choice of coping, including personal characteristics and psychological qualities, which are manifested in the exam situation (Ringeisen, Lichtenfeld, Becker, & Minkley, 2019). It is important to study the relationship of personality indicators and the level of stress among students during the examination period. The fruitfulness of this approach is substantiated in the works of Vodop'yanova (2009), Isaeva (2009), & Ostanina (2009). These papers emphasise the need to study stress in the exam as an important theoretical and practical problem. It is obvious that the exam situation, which provides for mental stress in a limited period of time, requires the student to mobilise all psycho-physiological and psycho-emotional resources, including the whole range of coping strategies (Razinkina et al., 2018). In this context, the research questions of students' coping strategies in the exam situation and their connection with personal characteristics are relevant (Cerkovskij, 2006).

#### 3. Research Questions

We carried out a study, the purpose of which was to identify the gender and professional features of the use of coping strategies of students in the exam situation. The sample consisted of students of technical and humanitarian specialties of various universities of St. Petersburg. The study involved 72 students of both sexes aged 20 to 24 years.

#### 4. Purpose of the Study

To study personal self-actualisation and coping strategies of technical and humanitarian students

#### 5. Research Methods

In accordance with the objectives of the study, the following experimental methods were chosen (Olennikova, 2010):

- Test "Overcoming Difficult Life Situations of the PTZhS/SVF120"
- Yanke, G. Erdmann (adaptation by N.E. Vodopyanova) for diagnosing typical coping methods typical of students during the exam period.
- Questionnaire "Self-actualisation test" E. Shostroma to assess the self-actualisation potential of the student, his value and behavioural characteristics.

- The technique of "Coping behaviour in stressful situations" S. Norman,
- D.F. Endler, D.A. James, M.I. Parker; (adaptation by T.A. Kryukova) to determine the strategies of coping most preferred by students in a stressful situation.

Author's questionnaire to determine the severity of the mental states of students in the exam

### 6. Findings

Analysis of the results obtained on the basis of the self-assessment of typical mental states in the exam situation showed that the degree of emotional distress for students of both sexes and both professional profiles is slightly above average. Most often, students experience a state of excitement and tension in the exam. No significant gender differences were found. At the same time, women's performance is still higher than that of men. There are no significant differences in the studied parameters and between students of humanitarian and technical specialties. As a trend, it is possible to indicate the presence of a higher level of mental tension among technical students.

The results of the study of coping strategies of students in stressful situations have shown that they most often use problem-oriented strategies and avoidance-oriented strategies. Most of the students, based on self-assessment, demonstrate a constructive style of behaviour in difficult life situations and prefer a strategy for solving problems.

The avoidance strategy is also dominant in student preference. It is characterised by an attempt to avoid contact with a stressful situation and avoid problem solving. Variants of this strategy are: "Distraction" and "Social distraction", which are associated with the desire of a person to seek help and support from other people in order to relieve mental stress.

Men and women show similar results in the frequency of strategies used. However, the indicators "Distraction" and "Social Distraction", which are more represented in the women's group, differ significantly.

A comparison of indicators of students of technical and humanitarian specialties indicates the presence of significant differences with regard to coping "Avoidance". This strategy is more often demonstrated by humanities students.

The results of diagnostics of typical coping methods typical for students in the examination situation allowed to conclude that men most often use the following coping strategies: "Control over the situation", "Self-control" and "Positive self-motivation". These strategies are positive and relate to actions aimed at reducing stress.

The predominant strategies of women are: "Search for social support", "Acceptive avoidance" (intention to prevent recurrence of a stressful situation in the future or to avoid them) and "Broken record" (inability to distract mentally, to constantly think over the situation, "to wrestle").

In the S. Norman classification, these strategies are classified as "negative" and concern ways that can increase stress. Such behaviour may indicate a tendency to constantly mentally reflect on the situation and blame itself for its occurrence.

The least used by both men and women were strategies: "Helplessness", "Self-pity", "Drug intake". These strategies in the theory of coping behaviour are usually referred to as passive.

The analysis is supplemented by consideration of criteria for the reliability of differences in groups of men and women. In general, men, in comparison with women, assess their actions in the examination situation as more effective and perceive what is happening as a challenge rather than a threat. Coping strategies associated with behavioural and cognitive responses to stress, with active attempts to solve the problem, predominate.

Significant gender differences are noted primarily in relation to emotional coping strategies. Women more often than men resort to the "Search for social support" strategy, involving the involvement of other people in their experiences. Passive strategies: "Avoiding" negative emotions associated with stress, and "Drug intake" are also more characteristic of women.

In order to determine the characteristics of coping behaviour among students of technical specialties and students of humanities, we analysed their performance on the basis of the PIDV test.

The dominant behavioural strategies for both groups of students turned out to be strategies belonging to the group of "active positive": "Control over the situation", "Self-control" and "Positive selfmotivation". These data indicate that students in the exam situation in the first place seek: to ensure success, recognition and self-assertion; analyse the situation, plan and carry out actions to control it, control your behaviour, maintain self-control. Counting significant differences, however, made it possible to determine that students of the humanities, regardless of gender, more often resort to a strategy of searching for social support, substitution and distraction in the search for positive emotions. Analysing the use of positive and negative strategies among students of different professional areas, it can be concluded that the scale values dominate exclusively on positive strategies. In order to determine the manifestations of self-actualisation of the personality in the group of students under study, the "Selfactualisation test" was used. When comparing indicators, taking into account the reliability of differences, it can be concluded that men have more independence in their actions, more than women, accept themselves as individuals, regardless of the assessment of their strengths and weaknesses on the part of others. Women are more likely to demonstrate flexibility in behaviour, a greater focus on emotions, reflection and the ability to quickly establish contacts. Comparison of groups of students of technical and humanitarian orientation allow us to conclude that students of technical specialties are more independent in their actions and demonstrate a higher degree of acceptance of the values of self-actualisation. Compared to technical students, students in humanities demonstrate a more creative approach to problems, a pronounced orientation towards emotional problems, reflection and the ability to quickly establish contacts. As a result of the application of correlation analysis, multiple correlations between the studied parameters were obtained. Let us turn to the correlation pleiad, which reflects the connection of the total stress indicator with the indicators of coping strategies and personality traits (Figure 01)

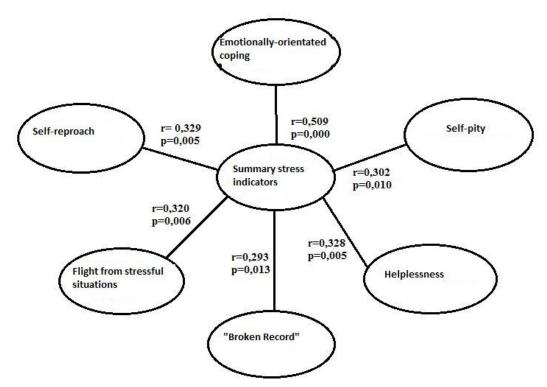


Figure 01. The relationship of the total stress indicator and coping strategies

The total indicator of stress means a subjective level of experiencing emotional stress on the exam. It seems to be a non-random positive correlation of this indicator with emotionally orientated coping, a number of "negative" coping strategies and self-accusation.

These data can be interpreted as follows: an increase in the level of emotional stress on the exam is associated with an increase in feelings of helplessness and self-pity, an attempt to escape from a stressful situation, an inability to mentally escape from the problem and an increase in self- incrimination.

In the centre of the correlation group of personal factors of self-actualisation is the indicator "Behaviour flexibility" (Figure 02).

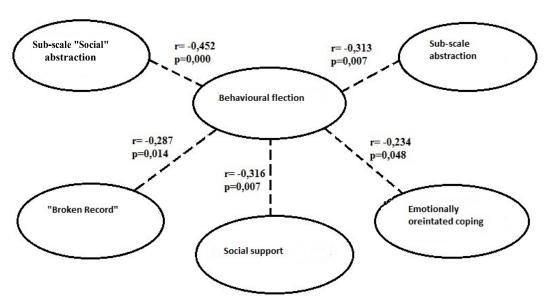


Figure 02. Relationship between the "Flexibility" indicator and coping strategies

The data obtained mean that a decrease in the level of flexibility of behaviour (realisation of values in behaviour, interaction with people around you, the ability to quickly and adequately respond to a changing situation) entails the use of mainly emotional-oriented strategies related to the search for emotional support, distraction in other activities, as well as "chewing problems" stressful situation.

Note some more significant correlations. The negative relationship of self-esteem with the indicator "Emotionally-oriented coping" suggests that the subject's ability to value his own virtues forces him to abandon non-adaptive strategies. The negative correlation of the "Escape from Stress" and "Cognitive Need" indicators means that with an increasing need for knowledge, students are less likely to "run" from a stressful situation.

The positive correlation of the indicator "Sensitivity to oneself" and "Substitution" means that with the growth of the ability to realise and understand one's feelings, the activity is also directed towards appeal to positive life manifestations in order to overcome stress.

#### 7. Conclusion

According to the results of the study, the following conclusions can be drawn:

- **7.1.** There are no significant sex differences and differences between students of different specialties in the level of stress experience in the exam.
- **7.2.** Students use positive coping strategies more often than negative ones. In a situation of exam stress, their efforts are focused on stress reduction through actions to control a difficult situation and their own reactions. Students are also characterised by an exaggeration of their abilities regarding effectively overcoming a stressful situation.
- 7.3. There are differences between men and women in the ways they resort to cope with their negative experiences. Men more often resort to coping strategies related to behavioural and cognitive reactions to stress, active attempts to solve the problem. Women more often use emotional strategies that manifest themselves in distraction from problems, in avoiding strong experiences and seeking social support.
- **7.4.** Humanities students, regardless of gender, more often than technical students, resort to a strategy of seeking social support, replacing and distracting in the search for positive emotions.
- **7.5.** Increasing the level of emotional stress on the exam is associated with an increase in the feeling of helplessness and self-pity, an attempt to escape from a stressful situation, inability to mentally distract from the problem and an increase in self-accusation. Reducing the flexibility of behaviour entails the use of predominantly emotionally-oriented strategies. With the growth of the ability to realise and understand their feelings, the activity directed at addressing positive life manifestations to overcome stress also grows.

In summary, it should be noted that a comprehensive study of the behaviour of students in an exam situation, including the definition of his personal characteristics and coping strategies, will help manage their mental state and acquire skills and abilities associated with reducing unpleasant emotional experiences during exams. Individual iagnostics of students and training sessions can also serve this purpose.

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