

J. Environ. Treat. Tech. ISSN: 2309-1185

Journal weblink: http://www.jett.dormaj.com



# Study of the Strategies of Coping Behavior in Students of Psychology in the Context of Level-Based Higher Professional Education

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Received: 27/07/2019 Accepted: 02/10/2019 Published: 30/02/2020

### **Abstract**

The paper presents the experience and results of studying the features of strategies of coping behavior in psychology students (undergraduate and specialist degree students) within the system of level-based higher education. The study was conducted on the material of diagnostic results of 316 students using the COPE Inventory and the proactive coping behavior inventory based on SAT self-actualization test methods. The obtained results underlie the basis for the development of programs of psychological and pedagogical assistance in correction of the students' personal and professional development with respect to the mastered level of education and manifested features of undergraduate and specialist degree studies.

Keywords: Coping behavior strategies, Adequate and inadequate strategies, Professional and personal development, Bachelor degree, Specialist degree

### 1 Introduction

The transition of domestic higher education to the levelbased system has given rise to a number of problems and issues, the solution of which still remains a priority for research of specialists in the field of psychology and pedagogy of higher education. Such issues include a comparative analysis of the content specifics and organization of the educational process at the level of undergraduate, special, graduate and postgraduate studies (3, 14); psychological features of students and patterns of their personal and professional development with respect to various levels of education (5, 6, 7, 10, 15); etc.

A special place in this studies is given to the search of opportunities for psychological and pedagogical influence on the development of the personality of future professionals; such influence is usually associated with personalized and proficient psychological assistance both throughout crisis and other extremely dangerous situations. This is due to several

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circumstances: first are the noted in different studies characteristics of the students themselves: personal immaturity, the psychological age lag behind the numerical age, anxiety and emotional instability. Secondly, it is the changing requirements for the training of a specialist in the field of psychological assistance in the context of growing emotional tension and psychological stress in a society. Thirdly, it is also the search for ways and means of developing and enriching the future psychologists with behavioral skills conducive to the preservation of their psychological health, emotional well-being and the prevention of occupational deformities. Under these conditions the studies that reveal the essential characteristics of coping behavior in psychology students, and the features and conditions for the development of adequate coping strategies in the system of higher education become consequentially relevant.

The study of the problem of coping behavior as a special form of behavior reflecting the individual's willingness to solve life problems has begun in Western psychology in the 60s of the 20th century; represented by the works of R. Lazarus, S. Folkman, N. Haan, R. Mohs, J. Schaeffer, K. Aldwin, J. Amirhan, J. Weyllant and other authors [Lazarus

R., Folkman S., Haan N., Moos R., Schaefer J., Amirkhan J., Vaillant G.l.

Academicians of domestic psychology have been actively developing the problem of coping behavior since the 90s. Prerequisites for the study of the phenomenon were laid in the studies of K.K. Platonov, L.I. Umansky, B.M. Teplov; they considered this concept as stress resistance or 'emotional resilience'. In the works of V.S. Merlin it was represented as an 'emotional stability'. The appeal of Russian psychologists to the problems of coping behavior was due to the expansion of ideas about the forms of personal activity of an individual, attention to the issues of self-regulation and strengthening (within the framework of the subject-activity approach) of one of its sides - the psychology of the subject.

Domestic studies described strategies of coping behavior in different periods (family and academic) of individual's life (N.O. Belorukova, M.S. Golubeva, E.V. Kuftyak, O.B. Podobina, M.V. Saporovskaya).

Special attention was paid to the personal determinants of coping behavior (S.V. Gridneva, L.I. Dementiy, M.S. Zamyshlyaeva, T.L. Kryukova, D.A. Leontyev, A.Yu. Malenova, K. Muzdybaev, A.I. Tashcheva, M.A. Kholodnaya, S. Maddi, D. Khoshaba, S. Carver, J. Schaefer).

Of significant importance were the studies of coping strategies in the field of clinical and medical psychology (N.A. Sirota, V.A. Tashlykov, E.I. Chekhlaty, V.M. Yaltonsky).

The coping strategies of particular occupational and age groups were analyzed in the works of E.S. Balabanova, R.M. Granovskaya, S.V. Gridneva, E.E. Danilova, K.I. Kornev, G.S. Korytova, E.B. Lunina, I.V. Mikhailycheva, S.K. Nartova-Bochaver, I.M. Nikolskaya, L.E. Petrova, Yu.V. Postylyakova, S.A. Khazova.

Quite helpful for theoretical analysis and conducting of experimental work became the studies of coping strategies of psychology students, which revealed the perceptions of difficult life situations by youth of both genders, their assessment of such situations and the choice of coping strategies (E.A. Annenkova, I.P. Streltsova); the studies also gave a description of coping strategies in cases of intelligent tasks and experiences with the influence of creative thinking (A.G. Ilyukhin, N.S. Kolienko, Z.B. Kuchina), and provided the experience of psychological guidance of professional and personal development and support of students in a stressful state (A. A. Bekhter, M. V. Dontsova, A. R. Erbegeeva).

An analysis of conducted research indicated the authors' attention to the specifics of psychological defense mechanisms and behavioral strategies of students in conflict; to the psychological support for the constructive overcoming of frustration for students with learning challenges, and developing reflexivity as the subject resource of coping behavior. At the same time, the specifics of the development of coping behavior in the process of mastering the occupation by bachelors and specialists and the features of the educational process opportunities in ensuring the development of adaptive and correction of non-adaptive coping strategies in future psychologists are not yet sufficiently studied.

The concept of the personal and professional development of the subjects of education (L.M. Mitina) was

used in the present study as the theoretical and methodological basis for studying the coping behavior in psychology students. The concept examines two models of professional development of a prospective expert: a model of adapted functioning, which implies submission of the subject to external circumstances and adapting the environment to the subject's original interests; and a model of professional development of a future specialist, when a person is capable of going beyond usual behavior and reflecting on own actions (including occupational), and therefore, can competently manage and directly influence the situation, being aware of own potential.

In line with the described concept, coping with stress is considered as a strategy of behavior that promotes development of professionally important personality characteristics of psychology students, revealing the future specialist's commitment and ability to exercise cognitive, emotional and behavioral flexibility, develop professional identity and orientation towards the expert, the client and the situation in general, as well as professional competence.

Based on the developed by L.M. Mitina (8) models of personal and professional development of subjects of education (model of adaptive functioning and model of professional development) two types of coping behavior strategies were proposed and defined as adequate and inadequate. Adequate strategies are not only aimed at directly resolving a conflict situation by appropriate adequate means, but also develop individual's strive for self-development, creative activity, professional self-awareness, and contribute to the growth of occupational orientation, competence and flexibility. Inadequate strategies of coping behavior do not lead to proper resolution of the situation, leading only to the person's adaptation to this situational conditions; such strategies do not allow the further development of professional consciousness and other integral personal characteristics (orientation, competence, flexibility), and do not contribute to non-standard approach for resolving stressful situations.

## 2 Materials and methods of research

The study involved 316 psychology students aged 17 to 24 (115 undergraduate students of 1-4 academic years and 201 student of 1-5 years of specialist's degree) receiving training at the psychological-pedagogical faculty of the Arzamas branch of Lobachevsky State University of Nizhny Novgorod (UNN). A set of diagnostics techniques was used, corresponding to the stages of the study.

To study coping behavior Carver, Scheier & Weintraub's COPE Inventory (18) (adopted by E.I. Rasskazova, T.O. Gordeeva & E.N. Osina (4, 9) was used, along with PCI Proactive Coping Inventory adopted by E.S. Starchenkova (11–13). The choice fell on them because the COPE method reveals a sufficiently large range of coping strategies (it consists of 15 coping strategies); and PCI proactive coping inventory presents coping strategies that involve the development of resources in coping with stress (1, 2).

The COPE Inventory was developed in 1989 by C.S. Carver, M.F. Scheier & J.K. Weintraub based on the approach of R. Lazarus and the behavior self-regulation

model proposed by COPE authors. This methodology provides an opportunity to test a wide range of productive and unproductive coping strategies, including several types of avoidance coping, a tendency to use psychoactive substances, a tendency to turn to religion in stressful life situations, and also the propensity to rely on social support in its two forms: instrumental and emotional.

Productive strategies of coping with a problematic issues are represented by positive reinterpretation and personal growth, active coping, restraint coping, acceptance and planning.

A more detailed description of productive coping strategies is as follows. The Positive Reinterpretation and Personal Growth strategy correlates with the ability to rethink the stressful situation in a positive way. The essence of the Active Coping strategy is to take active steps or direct actions aimed at overcoming a stressful situation. The Restraint strategy means waiting for the right moment for action and refraining from too hasty, impulsive action. The Acceptance strategy implies the acceptance of eventuated reality, and general awareness of the reality of a stressful situation. The Planning strategy is a reflection on how to deal with a difficult life situation and the development of behavioral strategies. The essence of the Seeking of Instrumental Social Support strategy lies in the propensity to receive an advice, help or information. The strategy of Seeking of Emotional Social Support is a desire to find emotional, moral support, empathy and understanding.

To a greater degree the Seeking of Instrumental Social Support and Seeking of Emotional Social Support strategies can be attributed to non-productive ones, since their frequent use blocks the autonomous behavior of the individual, making this person dependent on others or making the presence of others or external influence necessary to solve the problem. However, the average level of values collected by the respondent can also be considered satisfactory.

Non-productive strategies of coping with a problematic issues are the following: mental disengagement, focus on and venting of emotions, denial, turning to religion, humor, behavioral disengagement, use of 'sedatives' and suppression of competing activities.

The Mental Disengagement strategy presupposes the usage of various types of activity to distract from the unpleasant thoughts associated with the problem. The meaning of the Focus on and Venting of Emotions strategy is focusing on unpleasant emotions, troubles and expression of feelings. The Denial strategy is a refusal to believe in what happened or attempts to deny its reality. The Turning to Religion strategy means seeking the help of God, faith, and religion. The Humor strategy involves turning the situation into a joke. The Behavioral Disengagement strategy denotes giving up the goal and regulating efforts to interact with the stressor. The Use of 'Sedatives' strategy consists in alcohol, medications or narcotics employment as a way to avoid problems and improve well-being. The Suppression of Competing Activities strategy represents an avoidance of getting distracted by other types of activity and, possibly, ignoring other things in order to more actively cope with a stressful situation.

The Proactive Coping Inventory (PCI) is a test method designed to diagnose personal characteristics that prepare a person to live a stressful situation and to escape it with increased personal resources. This method was developed by Greenglas, Schwarzer and Taubert in 1999 (19) and adapted by E.S. Starchenkova in 2009 (11). Its authors comprehend the proactive coping as the integration of affective, cognitive, intentional and social factors into a set of coping strategies that not only enable an individual to cope with stressful challenges, but also contribute to the advancement to important personal goals. The PCI authors noted that proactive coping is a special lifestyle based on the conviction that what happens in life of each person depends on the very same person, but not on luck or external circumstances. The life of such people is guided by individual, not external factors; hereby they are responsible for the events that happen to them. Therefore, proactive individuals are prone to a positive assessment of what is happening; such individuals accumulate personal resources avoiding its waste, and they are capable of quick mobilization of the resources in case of stress, which requires highly developed social skills.

The Proactive Coping Inventory contains six scales:

- 1. Proactive coping: the process of setting important individual goals, as well as the process of self-regulation to achieve these goals, including cognitive and behavioral components. The essence of proactive coping lies in efforts to create shared resources that facilitate the achievement of important goals and contribute to personal growth.
- 2. Reflective coping: the perception and reflection on possible behavioral alternatives by comparing their possible effectiveness. It includes an assessment of possible stressors, an analysis of problems and available resources, the generation of a proposed plan of action and a forecast of the likely outcome of the activity along with the choice of ways to carry it out. In this case, perspective rather than retrospective reflection is being considered.
- 3. Strategic planning: the process of creating a well-thought-out, goal-oriented action plan, in which the most ambitious goals are divided into sub-goals (tree of goals), the management of the achievement of which becomes more accessible.
- 4. Preventive coping: the condition of anticipating potential stressors and preparing actions to neutralize negative consequences before a possible stressful event occurs. Such uncertainty stimulates a person to use a wide range of coping behaviors (accumulation of funds, insurance, healthy lifestyle, etc.).
- 5. Seeking for instrumental support: the process of obtaining information, advices and feedback from the immediate social environment in coping with stress.
- 6. Seeking for emotional support: this scale is focused on the regulation of emotional distress by sharing feelings with others, seeking sympathy and communicating with people from the immediate social environment.

The inventory was designed to study the coping strategies of the individual, but not in terms of the traditional comprehension of coping as a way of avoiding a problem, but in terms of how to solve the difficulties that arise, including preventive preparation for expected issues.

Table 1: COPE inventory method results

Coping strategies		Bachelors					Specialists			
		<u> </u>	2	3	4	1	2	3	4	5
Adequate	F1 (Positive Reinterpretation And Personal Growth)		+				+	+	+	
	F4 (Seeking Of Instrumental Social Support)									+
	F5 (Active Coping)	+		+			+			
	F8 (Humor)		+							
	F10 (Restraint)									
	F13 (Accepatance)									
	F14 (Suppression Of Competing Activities)									
	F15 (Planning)			+	+	+	+	+	+	+
	F2 (Mental Disengagement)									
	F3 (Focus On and Venting Of Emotions)	+					+		+	
	F6 (Denial)									
	F7 (Turning To Religion)									+
	F9 (Behavioral Disengagement)									
	F11 (Seeking Of Emotional Social Support)		+		+					
	F12 (Use Of Sedatives)									

Therefore, from the point of view of the practice – educating people of how to use proactive coping strategies in the professional sphere may lead to a decrease in distress and an increase in the sense of professional competence. Utilization of the specified diagnostic tools and the adequacy of the results obtained with its assistance were confirmed by studies of coping strategies in other countries (16, 17, 20–23). The results were processed using the calculations necessary for analyzing statistical data in Microsoft Excel, IBM SPSS 23 (Friedman  $\chi^2$  test, Mann–Whitney U test).

### 3 Research results

At the **first stage** the features of coping behavior strategies of psychology students were studied using the COPE Inventory and the proactive coping behavior inventory. The results of this study are presented in comparative Table 1.

As can be seen in Table 1, there were differences between groups of bachelor and specialist students studying psychology in the choice of leading coping strategies.

First-year undergraduates in most cases in stressful situations tended to resort to active coping (F5 - 65%), which is expressed in active measures to overcome a stressful situation. When it did not help they started to focus on the unpleasant feelings associated with this situation and actively reacted to it: they shouted, they came into conflicts and violently reacted to what is happening (F3 - 45%). Secondyear undergraduates in most stressful situations tended to make fun of themselves and the current unpleasant situation (F8 - 60%), and when it did not save them the students turned to someone for emotional support, understanding and sympathy (F11 - 50%); however, if there were nobody to turn to for sympathy, then sophomores had to pull themselves together and try to reinterpret the situation in a positive way (F1 - 45%). Third-year undergrads were more likely to take steps to overcome the problematic issue (F5 - 42.86%), but they were only beginning to plan how to do this if it turns out that the problem is not solved right away (F15 - 35.71%). In most stressful situations 4th year seniors did not go into action right away, but, like third-year students, they planned different behavioral strategies (F15 - 50%), however, when it came to a dead end they turned to others for sympathy, emotional support or 'a shoulder to cry on' (F11 - 31.48%).

Statistical analysis comparing the use of certain coping strategies demonstrated verifiable difference between groups ( $\chi^2 = 7.869$ , p = 0.049), which proved significant changes in the preference of certain coping strategies by students during school time.

First-year specialist degree students in a stressful situation often resorted to problem solving planning (F15 -56.25%). During the second year the set of coping strategies expanded: being stressed out the students most often were equally inclined to both overestimate the situation (F1 -37.04%) and to perceive it in a negative way and concentrate on negative emotions (F3 - 37.04%); when it didn't lead to a positive result the second-year specialists proceeded to active measures to solve the problem (F5 - 33.33%) or at least to plan the solution (F15 - 33.33%). Third-year specialist degree students significantly reduced the number of coping behavior strategies compared to the previous course: first of all, in stressful situations they resorted to thinking about how to deal with difficult life situations (F15 - 80%), and secondly, attempted to reinterpret the stressful situation in a positive way (F1 - 40%). Fourth-year seniors had a similar situation with third-year students, however, on the contrary, they primarily resorted to finding positive moments in the current situation (F1 - 57.44%), and only then to plan the solution (F15 - 42.55%); same as second-year students they could also fall into despair and succumb to negative emotions (F3 -34.04%). Senior specialist students of the 5th course (in contrast with all the previous ones) in a stressful situation resorted to a greater degree to the help of an instrumental type, such as an advice on a particular case, information, etc. (F4 - 51.16%), the next step was the planning of the situational resolution (F15 - 34.88%), and as a last resort students took refuge in a somewhat non-standard strategy of coping behavior as a turn to religion (F7 - 32.56%), what generally could denote the desire to 'shift' a part of the solution to their problems to someone or something else. Statistical analysis comparing the prevalence of different coping strategies in specialist degree students depending on the academic year did not give statistically significant differences ( $\chi^2 = 1.619$ , p = 0.805), which may be due to the presence of repetitive coping strategies during numerous academic terms (F1 and F15).

Table 2: Indicators of adequacy of coping strategies for bachelors and specialist degree students of psychology (COPE)

Academic Years	Bachelors		Specialists	Specialists				
Academic Tears	Adequate	Inadequate	Adequate	Inadequate				
1	65%	35%	31.26%	68.74%				
2	75%	25%	55.56%	44.44%				
3	42.86%	57.14%	20%	80%				
4	50%	50%	31.91%	68.09%				
5	-	-	27.91%	72.09%				

Table 3: The results of proactive coping behavior methodology polling

Dung stive Stustening of Coming Debayion	Bachelors					Specialists					
Proactive Strategies of Coping Behavior	1	2	3	4	1	2	3	4	5		
Proactive coping	+		+	+		+	+	+	+		
Reflective coping			+			+	+				
Strategic planning											
Preventive coping				+			+	+	+		
Seeking for instrumental support											
Seeking for emotional support		+		+	+	+		+			

The next step was to consider the number of prevailing adequate and inadequate strategies for coping behavior in psychology students enrolled in bachelor and specialist degrees. The results are presented in Table 2. As it is clearly seen in Table 2, junior undergraduate students were dominated by the number of adequate coping strategies, on the contrary, the number of inadequate strategies increased in senior academic years. Inadequate coping strategies dominated among specialist degree students, despite the fact that within the dominant strategies of coping behavior were also the adequate ones (F1 and F15), that was notable particularly during 1, 3 and 5 academic years. Thus, both in the case of bachelors and specialists the emergence of a crisis period starting from the 3rd year to the end of training was observed, which was also confirmed by the presence of inadequate F3, F7 and F11 among the dominant coping strategies in different periods.

The **second stage** of the research was the study of proactive strategies of coping behavior in undergraduate and specialist degree psychology students using the inventory of proactive coping behavior adapted by E.S. Starchenkova. The results are presented in Table 3.

According to the results shown in Table 3, undergraduate and specialist degree students had qualitative differences in the prevalence of proactive (resource) coping behavior strategies. For the first-year freshmen the leading proactive strategy was proactive coping (65%), which is expressed in setting goals and self-regulating in achieving them. Secondyear undergraduates were dominated by the search for emotional support (60%), characterized by the regulation of emotional distress by sharing feelings with others. During the third academic year the range of used proactive strategies of coping behavior was expanded and changed: proactive coping (57.1%) becomes the leading strategy, thanks to which bachelor students formed common resources for achieving goals; not so far behind was the reflexive overcoming (50%), characterized by perception and reflection on possible behavioral alternatives by comparing their possible effectiveness. By the fourth year near the finals the number of leading strategies of proactive coping behavior of bachelor students became even greater: proactive coping (44.7%), allowing students to form common resources that facilitate the achievement of important goals and promote

personal growth; preventive coping (38.3%), expressed in anticipation of potential stressors and preparation of actions to neutralize negative consequences before a possible stressful event occurs; and seek for emotional social support (38.3%), characterized by the search for empathy and dialogue with people from the immediate social environment. Comparison of bachelor students by years did not give statistically significant differences in the use of proactive coping strategies ( $\chi^2 = 3.931$ , p = 0.269), which may be due to the use of similar proactive coping strategies during different academic terms (proactive coping, seeking for emotional support).

For the first-year specialist degree students the leading proactive coping strategy was the search for emotional social support (56.3%), expressed in the desire to share their experiences and emotions with loved ones. In addition to the search for emotional support of close people (36.7%), second-year students-specialists also actively exhibited proactive coping (36.7%), characterized by the formation of common resources for achieving the goal, and reflective coping (30%), manifested in perception and reflection on possible behavioral alternatives by comparing their possible effectiveness. During the third academic year the leading strategies were still proactive coping (40.4%) and reflective coping (31.9%); however, the third place was occupied by preventive coping (36.2%), which is featured by actions aimed at preparing to neutralize potentially dangerous situations. Among the students of the fourth year the leading strategies were again proactive coping (63.8%) and preventive coping (84%), but besides that the strategy of seeking for emotional support (63.8%) was back to the lead team, which implies a student's search for sympathy and understanding. By the end of the training proactive (40.9%) and preventive coping (40.9%) became the leading strategies for proactive coping behavior. A comparative analysis of the preferences of proactive strategies of coping behavior by specialist degree students by years of study also did not give statistically significant differences ( $\chi^2 = 4.933$ , p = 0.294), which, as in the case of bachelor students, is expressed by the presence of similar strategies of proactive coping behavior within years of study (proactive overcoming, preventive overcoming, search for emotional support).

Table 4: COPE and PCI proactive coping inventory indicators of performance differences in undergraduate and specialist degree students

Factors	Mann-Whitney U test values	Level of statistical significance
COPE Inventory		
Adequate strategies of coping behavior	2.000	0.050
Non-adequate strategies of coping behavior	2.000	0.050
F1 (Positive reinterpretation and personal growth)	8.000	0.624
F2 (Mental disengagement)	0.000	0.013
F3 (Focus on and venting of emotions)	9.000	0.806
F4 (Seeking of instrumental social support)	7.000	0.455
F5 (Active coping)	2.000	0.050
F6 (Denial)	0.000	0.011
F7 (Turn to religion)	8.500	0.712
F8 (Humor)	5.000	0.221
F9 (Behavioral disengagement)	5.000	0.213
F10 (Restraint)	9.000	0.806
F11 (Seeking of emotional social support)	0.000	0.014
F12 (Use of sedatives)	6.000	0.325
F13 (Acceptance)	9.000	0.806
F14 (Suppression of competing activities)	3.500	0.108
F15 (Planning)	7.000	0.462
PCI proactive coping inventory		
Proactive coping	6.000	0.327
Reflective coping	10.000	1.000
Strategic planning	8.000	0.623
Preventive coping	8.000	0.624
Seeking for instrumental support	6.000	0.325
Seeking for emotional support	9.000	0.806

The **third stage** of the research was a comparison of psychology students by groups (bachelors and specialists) within their coping behavior strategies representation. The comparison results are presented in Table 4.

Thus, the obtained data indicated several statistical differences between undergraduate and specialist degree students of psychology: the predominance of adaptive and non-adaptive coping strategies, F2, F5, F6, F11.

Based on the data shown it can be concluded that the coping behavior of psychology students differs depending on the curriculum, which is reflected in the prevalence of different types of behavior strategies (adequate coping behavior strategies are more prevalent among the bachelor students; inadequate - among the specialists). This may be due to the initial characteristics of students: as a rule, undergraduates who study for 4 years are more focused on practical work, besides their area of study are far wider; therefore, they have no competition for admission to a certain faculties. Specialist degree students, on the contrary, due to more lengthy studies are more focused on the deepening of knowledge, they are not too eager to practice immediately or to enroll in discipline (the list of which is becoming less and less every year); their environment is way more competitive, and since the forces and energy are spent large - they are no longer left to search for and to use adequate methods of coping behavior. This is also manifested in the application of certain coping behavior strategies: practice-oriented bachelors are using active coping more than specialists; this strategy implies quick and abrupt inclusion in a problem situation, as well as the search for emotional support as the simplest and most accessible coping behavior strategy. Students-specialists to a greater degree than bachelors use those coping behavior strategies that do not require abrupt and quick actions, but only delay the solution of the problem - this is either using various types of activity to distract from unpleasant thoughts associated with the problem, refusing to believe in what happened or attempting to deny its reality.

As for proactive coping strategies that involve finding and using resources in stressful situations, there are no statistically significant differences in the choice of bachelors and specialists. The absence of significant differences also confirms that during training both types of students equally often employed such types of behavior like proactive coping and seeking for emotional support as the most accessible ways of searching for resources and overcoming a stressful situation; and equally rare of more mature proactive coping behaviors such as strategic planning and the seeking for instrumental support. The similarity of the prevalence of these types of strategies can be explained by the insufficient psychological maturity of students of the same age.

#### 4 Discussion

The findings suggested that by the middle of training the number of inadequate coping strategies among undergraduate students is increasing, but there is no single leading strategy that would be present through all the grad days. At the same time, as students move up to senior classes, they keep using strategies of junior years (active coping during years 3 and 1, emotional support in 4 and 2, planning in 4 and 3), which reflects some search for the most understandable and 'right' (in student's understanding) ways of responding to critical situations, bearing in mind that if a particular strategy has previously worked well, it means that it can be used in similar situations. Nevertheless, as an increasing number of inadequate coping strategies shows, in addition to the 'right' ways of responding there are also 'wrong' recipes in the students 'cook books' that exacerbate the crisis, preventing students from adequately coping with the stressful situation.

This crisis extends not only to the personal development of students, but also to the professional due to the fact that bachelors in the finals are somewhat scared of upcoming departure from the usual 'comfort zone' - graduation and job hunting.

In contrast to the bachelor students, the specialists had a more pronounced crisis state, characterized by the growth of inadequate coping strategies by the end of their academic education. This may indicate a greater fear of graduation, because unlike undergraduates, the specialists are less likely to enter the master's program due to the need to pay tuition. The fear gets stronger before the graduation, which is also manifested in the leading coping strategies: the constancy of the leading coping behavior (planning) is more pronounced during first and third academic years, but gets significantly reduced by finals. The frequently encountered strategy of positive reinterpretation and personal growth appears in the middle of learning process as an attempt to look for something good in the difficulties associated with learning and personal development in a given period, and almost disappears by the end against the background of the emergence of other coping strategies (seeking of instrumental social support and turn to religion). It is these strategies that indicate that students really need help in this period — either in a specific counselling, or just in someone to take over of some work and responsibilities, especially when preparing

As for proactive coping behavior, bachelor students did not have a leading coping strategy that would hold throughout the entire training, but it is still the most common strategy that occurs during 1-3-4 academic years; this fact testifies that during this time students are looking for and trying to form resources that facilitate the achievement of important goals and promote personal growth. It is also worth noting that among the second-vear students the far not most constructive way of proactive coping behavior prevailed - the search for emotional support (which indicates a certain crisis), and bachelors in this period of study would appreciate some support and encouragement. After this crisis period students expanded the range of proactive coping behavior strategies: there were two in the 3rd year and three in the 4th, when the proactive strategies were mainly concerned with evaluating potential stressors, analyzing problems and available resources, generating a proposed action plan and preparing actions to neutralize negative consequences before a possible stressful event occurs. But since among the leading strategies of coping behavior in the 4th year seeking for emotional support was found again, one can observe another students' 'cry for help' - a search for sympathy and communication with the people from immediate social environment, which again speaks of a rather difficult period in the life of graduates.

Both bachelors and specialist degree students did not manifest the presence of leading strategy of coping behavior, but over a sufficiently long period of study a strategy such as proactive coping revealed itself, which also suggests that students found common resources to overcome stress and crisis situations. In addition, coping behavior strategies such as the search for emotional support (1, 2 and 4 years) and preventive coping (3-5) were also often found in specialists;

this also testifies to the inner turmoil of some crisis conditions during 1, 2 and 4 training years when students simply needed to share their feelings with a close environment, and get some support and positive emotions. However, towards the end of training students developed the skill of anticipating potentially dangerous and stressful situations, as well as thinking through options to eliminate negative consequences, which presupposes certain self-stimulation to use a fairly wide range of coping behaviors. Noteworthy is that starting from the second year students also used a wide range of proactive strategies for coping behavior, but by the last term this range narrowed down to two: proactive and preventive coping behaviors, since these behavioral strategies have shown the greatest efficiency in previous years.

Statistical analysis demonstrated significant differences in the application of strategies for coping behavior by undergraduate and specialist degree students of psychology, however, no significant difference was found between the choices of proactive coping strategies. This suggests that psychology students, depending on the training programs, have initially different ways of coping with stress, but the resources available for coping with a stressful situation are similar to those available to their age group.

### 5 Conclusion

The conducted empirical study allowed considering the strategies of coping behavior of psychology students enrolled in the undergraduate and specialist degree academic training from the point of view of the adequacy of the application of these strategies, as well as analyzing the choice of leading strategies of students' coping behavior during their grad days. Proven by the data, qualitative and quantitative differences between psychology students studying for undergraduate and specialist degrees were also statistically confirmed. In most cases students used inadequate ways of coping behavior to overcome a stressful situation, however, the undergraduates used such inadequate strategies only in the middle of their studies, but specialist degree students - during the whole course of academic training.

As for proactive coping strategies, there is a rather large similarity in use since all of them utilize simpler and accessible resource means of coping behavior. Thus, the obtained data indicated that psychology students are in need of a program correcting coping strategies and developing resources for coping behavior. Moreover, the correction programs should differ from each other depending on the undergraduate or specialist degree curriculum.

The obtained materials can be of practical use for developing curricula for educational psychology, developmental psychology, stress psychology and the basics of stress management, as well as for option courses that study the characteristics of coping behavior as a professionally important feature of an expert's personality, which determines the success of occupational activities, organizational and managerial decisions, prevention of emotional burnout and occupational deformities.

One of the alternatives could be an option course on 'Coping strategies in solving professional tasks' with the following focus areas: the development of professional

consciousness and professional reflection, the acquisition of experience of available professional activities by students and providing them with individual assistance in comprehending the strategies used. The program contains 36 academic hours, each of which is the basis for building the next class. The program of the 'Coping strategies in solving professional tasks' course consists of the following sets.

## Stage 1. Motivational-advisory set.

At this point students using brainstorming to formulate and reflect on the concept of 'coping behavior' by analyzing what professionally important qualities are necessary to maintain self-control, emotional balance and constructive solution. Subsequently, down the road of a conversation about the essence of the phenomenon of coping behavior, its role in the life of a person and the professional activity of a psychologist - the exchange of available initial experience and occupational knowledge and coping behavior in professional situations is taking place. Next, the students are introduced to the types of strategies of coping behavior by solving professional situations with a description of client or group actions and characteristics of strategies according to specified criteria: modus operandi, emotional reaction, awareness of the situation and one's own position in it, the result and its consequences. At the end of the set students diagnose their own coping strategies. Preparation and conduct of professional diagnostic micro-practical exercises (search and analysis with groupmates of situations similar to the discussed in class) are offered as a homework. During the debriefing of this set, practical recommendations on the future specialist's self-development are developed together with the students.

Stage 2. Motivational-organizational set. During this set students familiarize themselves with various types of activities of a psychologist, different representatives of this occupation and institutions where the psychologist works; students also practicing in approbation of adaptive coping strategies and solving professional tasks using training exercises, analysis of professional situations, business games, and imitation of psychological counseling for specialist degree students.

Stage 3. Motivational- actionable set. This set is dedicated to the independent performance of tasks by students during the externship or volunteering (first-year students). Students are invited to develop professional-creative tasks and micro-practical works for independent practices.

Stage 4. Reflective set. This set summarizes three previous stages: an analysis of the experience of professional interaction acquired by students in different situations, an assessment of their own preparedness for professional interaction using adaptive coping strategies, and analysis of acquired personal experience during externship or volunteering. At the end of this stage, re-diagnosis of strategies of coping behavior of students is carried out.

Stage 5. Set of psychological and pedagogical support. The unique features of this conditionally distinguished stage consists in its successive implementation throughout the whole course of the experiment. This implies that students are provided with individual assistance in comprehending of their own coping strategies and in identifying personal and

professional self-development resources; situations of success are created within the framework of individual and group solving professional tasks; individual and group counseling is provided to students on the issues of self-checking and development of adaptive coping strategies in everyday life and professional activities.

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