

# Training methods for correction of behavioral rigidity in medical students during lifestyle changes

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## ABSTRACT

**Aim:** To empirically investigate the possibilities of training methods for behavioral rigidity correction during lifestyle changes due to internal displacement of medical students.

**Materials and Methods:** Three stages of the research were realized. The current state of mental health, resilience, coping styles and behavioral rigidity of medical students was established at the stating stage, using Positive Mental Health Scale, Connor-Davidson resilience scale, Coping inventory for stressful situations and Self-assessment of mental states: Rigidity scale that were reapplied at the control stage. The formative stage was aimed at objectification, assessment and correction of rigid behavior, as well as improvement of adaptive capabilities of internally displaced medical students by training methods. The training developed by the authors was implemented at this stage. The control stage allowed to confirm the effectiveness of the proposed training program in the contexts of mental health, coping strategies, resilience and behavioral rigidity.

**Results:** The implementation of training methods was effective in overcoming the complex of symptoms associated with post-traumatic stress connected with lifestyle changes due to internal displacement, leading to lack of resilience and psychological protection in the form of behavioral rigidity and maladaptive coping styles of medical students.

**Conclusions:** Behavioral rigidity of future doctors during lifestyle changes under the pressure of internal displacement turned out to be a relevant empirically identified problem affecting their quality of life, mental health and psychological well-being in the new conditions. As such, this training technology is useful in psychoprophylactic correctional work and psychosocial support for vulnerable groups of young adults, which include internally displaced medical students, and can be applied in psychoeducational work with them.

**KEY WORDS:** medical students, lifestyle, mental health, coping skills, psychological resilience

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## INTRODUCTION

Being a student brings many challenges and complexities for young adults. They have to cope with a busy study schedule, meet academic requirements, solve personal financial difficulties, maintain necessary living conditions, and take care of their health and relationships with their peers. The Russo-Ukrainian war did not cancel the usual student problems, instead providing a large number of additional stressors into the daily lives of students.

The impact of war-related stressful experiences on students has been experimentally confirmed [1-7]. At the same time, maintaining psychological well-being, positive relationships, and satisfaction with lifestyle is a necessary background for students to learn productively. Students' physical and psychological well-being has

been recognized as an important component of achieving academic success [8], while the loss of well-being can affect it [1, 9]. Indeed, against the background of stress, depression, anxiety and some symptoms of post-traumatic stress disorder, medical students during the war showed a decrease in academic performance [1, 2]. The limitations of the learning process also relate to the quality of education due to the disruption of teaching during alarms and shelling and increased workload of teachers [10].

The traumatic impact of war affects the mentality and mental health of students [2, 3, 11], manifested in neurotic disorders, psychopathological symptoms of depression and anxiety, indicators of acute stress [12], depressive and anxiety experiences, manifestation of some symptoms of PTSD [3 – 5]. The presence of

such manifestations has been noted both in students studying near the frontline and in distant from military operations areas.

The forced displacement of Ukrainian students caused by the Russo-Ukrainian war turned out to be a strong trigger for changes in their lifestyle. The disruption of the habitual way of life among displaced students is one of the serious psychological traumas experienced by them [13]. Usually, lifestyle change is associated with loss of home, property, fear for one's life, communication problems [12], which can also entail serious psychological traumas. Changes in habits as a consequence of lifestyle changes also have a negative impact on mental health [14]. Internal displacement affects lifestyle, quality of life, and therefore subjective wellbeing [15] and entails experiencing the stress of a change of residence and the need to adapt one's lifestyle to the new environment [13].

Behavioral rigidity may occur as a response to stress. Changes in lifestyle and quality of life are associated with trauma and impaired mental health [7]. Behavioral rigidity usually acts as the link most sensitive to psychogenic factors, in particular to situations that require an abrupt change in life pattern, adaptation to the new or abandonment of the familiar. It is noted that behavioral rigidity or inflexibility can be a consequence of post-traumatic stress [16] or can act as protection against trauma [17].

Rigidity can also be seen as resistance to change and preference for habitual patterns and strategies of behavior, even when they are ineffective or inappropriate. While psychological flexibility is defined as the ability to stay in touch with the current moment and change one's behavior according to the situation, the essence of behavioral rigidity is inflexibility that prevents adaptation to new conditions [18, 19]. Behavioral rigidity can manifest itself as an individual's difficulty in adapting their behavior to meet the changing conditions and requirements of the situation. It is an aspect of maladaptive behavioral strategies that determine the way of life, and can significantly affect the mental health of students, limiting their adaptability to new or stressful situations.

Thus, behavioral rigidity of internally displaced students is a complex of symptoms which can be attributed to post-traumatic stress, lifestyle changes due to internal displacement, leading to lack of resilience and psychological protection in the form of rigidity and maladaptive coping. We will consider behavioral to be one of consequences of experiencing an internal crisis of lifestyle change in displaced students.

Internally displaced students find themselves in a situation of acute crisis in which established earlier

stable rules of life are violated. In crisis, life situations disturb the image of people's reality and change their picture of the world. Forced relocation and adaptation to new conditions leads to the crisis of lifestyle change, the crisis of adaptation of displaced people, the consequence of which is a decline in the standard of living of displaced Ukrainians [7].

At the same time, the need for internally displaced students to undergo a stage of social adaptation and integrate into the community in a new place actualizes issues of subjective well-being and life satisfaction [20]. The processes accompanying internal relocation experience mental health, and the coping strategies that displaced students adhere to influence their resilience [21]. We emphasize that for medical students, the factors listed above act in a complex way; stress, displacement, loss, and academic burden are amplified by the challenges of war. The impact of war trauma and related stressors persists when moving out of danger zones, while the challenges of moving, changing residence, and settling into a new place can intensify other negative experiences [12].

A study by Wang et al., 2024, found that the use of adaptive coping was associated with higher quality of life among Ukrainians [7], which may indicate the need for interventions to prevent young adults from practicing maladaptive strategies. So, all this has a great impact on the training of qualified physicians. Medical students emphasized the significant impact of war on learning, mental health and psychological well-being, they characterized their training as a challenge [9]. Accordingly, displaced medical students need psychological help and it can be realized in training. Specialists note the lack of psychosocial support in Ukraine [22], an important element of which is the organization of group meetings and trainings that promote mental health awareness, psychological resilience, social integration, and improve the quality of life of participants [12, 23, 24] that would cope with disruptive coping strategies [7].

Of importance for the topic under discussion is the theoretical notion by Lunov et al. (2023) about the phenomenon of interpersonal behavior as a predictor of the triad, which includes interpersonal communication, adaptive potential and psychological health of young people [11]. This means that problems and deficiencies in interpersonal behavior, for example, behavioral rigidity, will affect not only the quality of interpersonal communication, but also the adaptive capacity and mental health of young adults. Developing this thought, we approach the possibility through social-psychological training, revealing in the objective form of interpersonal communication problems and

shortcomings leading to the appearance of rigidity, to strengthen the capabilities of social-psychological adaptation, and improve the mental health of medical university students. Training in adaptive behavioral strategies and coping will improve the quality of life of medical students.

## AIM

To empirically investigate the possibilities of training methods to correct behavioral rigidity in medical students during lifestyle changes.

## MATERIALS AND METHODS

The sample of subjects consisted of 168 medical students of I. Horbachevsky Ternopil National Medical University, who were internally displaced, among them 84 students of the 4th year and 84 students of the 6th year at the age of 20 to 24 years, among them 33.3% of guys and 66.7% of girls.

Three stages of the research were realized – the stating, formative and control stages. The stating stage aimed to establish the initial state of behavioral characteristics of the study participants, to identify the tendency, presence, level and peculiarities of behavioral rigidity, to further monitoring the dynamics of changes and the effectiveness of the implemented interventions. The formative stage was the key stage aimed at improving students' adaptive capabilities in response to changes in their lives, as well as identifying, assessing and correcting rigid behavior. The control stage allowed to compare initial and final indicators of the behavioral rigidity symptom complex in order to establish the dynamics of changes and evaluate the effectiveness of interventions.

## PROGRAM DESCRIPTION

Developed training was aimed at making participants aware of behavioral choices and teaching them to choose adaptive and situation-relevant strategies. A correctional training program was designed for 6 weeks and 6 key weekly activities (with 1.5 hour sessions), which combined individual and group work and were aimed at developing the ability to model situations and behavioral flexibility to adapt to new conditions. Each activity contained information messages and their discussion, role-playing games, brainstorming, group discussions, relaxation exercises. Twelve groups were organized with students of the 4th and 6th courses, in which 12 to 15 students participated. A selection of special psychoeducational influences and

psychocorrectional techniques was made, taking into account the traumatic experience of the majority of resettlement participants, which required a particularly sensitive approach to them in the training. At this stage, interventions for the formation of adaptive behavioral strategies were carried out. The program is given in an abbreviated form (See Appendix).

The program provided for further independent application by the participants of the learned techniques, as well as compliance with the basic principles promoting mental health, social-psychological adjustment and flexibility in crisis situations.

In order to control the psychological results of the implemented interventions, psychodiagnostic studies were conducted at the stating and control stages. The following methods were chosen for diagnostics: Positive Mental Health Scale (PMH-scale) (Lukat J., Margraf J., R. Lutz R. et al.) [25], Connor-Davidson resilience scale-10 (CD-RISK-10) [26], Coping inventory for stressful situations (CISS) (Endler N.S., Parker J.D.A.) [27], Self-assessment of mental states: Rigidity scale (Eysenck H.) [28].

## RESULTS

The stating stage revealed increased rigidity and reduced adaptability of medical students who changed the location of residence and education to the safer Ternopil region during the war.

At the control stage, after conducting psychological training interventions aimed at reducing behavioral rigidity among displaced medical students, a repeated psychodiagnostics using the same methods was conducted. As a result of applied training interventions, positive dynamics of mental health in medical students was noted (Table 1).

Analysis of the results of the CD-RISC-10 showed positive dynamics after psychoeducational interventions in training (Table 2). Comparison of initial and final indicators shows significant positive changes in the resilience category of students after psychoeducational interventions.

The study conducted using the CISS shows significant changes in the behavioral patterns of students when coping with stress towards the use of active styles (Table 3).

The study using the rigidity scale indicates an increased ability to search for alternative ways to solve problems (Table 4).

In general, the results confirm the effectiveness of the corrective training program to reduce students' behavioral rigidity, which will contribute to their better adaptation to the changing conditions of life and learning during the war.

**Table 1.** PMH scale results of medical students: before and after training

| PMH scale | Before |       | After |       |
|-----------|--------|-------|-------|-------|
| High      | 32     | 19,1% | 124   | 73,8% |
| Average   | 122    | 72,6% | 44    | 26,2% |
| Low       | 14     | 8,3%  | -     | -     |

Source: compiled by the authors of this study

**Table 2.** Medical students' resilience: before and after training

| Resilience category (N/%) | Before |       | After |       |
|---------------------------|--------|-------|-------|-------|
| High resilience           | 37     | 22,0% | 46    | 27,4% |
| Moderate resilience       | 110    | 65,5% | 122   | 72,6% |
| Low resilience            | 21     | 12,5% | 0     | 0     |

Source: compiled by the authors of this study

**Table 3.** Coping styles of medical students: before and after training

| Coping styles (N/%)        | 1           |             | 2           |             | 3            |              | 4           |             | 5           |             |
|----------------------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|
|                            | Before      | After       | Before      | After       | Before       | After        | Before      | After       | Before      | After       |
| Task-oriented coping       | 18/<br>10,7 | 0/<br>0     | 56/<br>33,3 | 26/<br>15,5 | 64/<br>38,1  | 94/<br>56,0  | 20/<br>11,9 | 30/<br>17,9 | 10/<br>6,0  | 18/<br>10,7 |
| Emotion-oriented coping    | 38/<br>22,6 | 18/<br>10,7 | 20/<br>11,9 | 15/<br>8,9  | 36/<br>21,4  | 46/<br>27,4  | 5/<br>33,3  | 66/<br>39,3 | 18/<br>10,7 | 23/<br>13,7 |
| Avoidance                  | 16/<br>9,5  | 21/<br>12,5 | 30/<br>17,9 | 50/<br>29,8 | 50/<br>29,8  | 60/<br>35,7  | 52/<br>31,0 | 32/<br>19,1 | 20/<br>11,9 | 5/<br>3,0   |
| Avoidant-distracted coping | -           | -           | -           | -           | 98/<br>58,3  | 42/<br>25,0  | 70/<br>41,7 | 93/<br>55,4 | 0/<br>0     | 33/<br>19,6 |
| Avoidant-social coping     | 24/<br>14,3 | 0/<br>0     | 36/<br>21,4 | 10/<br>6,0  | 108/<br>64,3 | 121/<br>72,0 | 0/<br>0     | 22/<br>13,1 | 0/<br>0     | 15/<br>8,9  |

Source: compiled by the authors of this study

**Table 4.** Models of medical students' rigid behavior: before and after training

| Responses to the rigidity scale (N/%)                           | 2       |          | 1        |           | 0        |           |
|-----------------------------------------------------------------|---------|----------|----------|-----------|----------|-----------|
|                                                                 | Before  | After    | Before   | After     | Before   | After     |
| I change my habits with difficulty                              | 58/34,5 | 36/21,43 | 68/40,48 | 80/47,62  | 42/25,00 | 52/30,95  |
| I distract my attention to something else with                  | 32/19,1 | 0/0      | 48/28,57 | 32/19,05  | 88/52,38 | 136/80,95 |
| I treat with caution to anything new                            | 52/31,0 | 12/7,14  | 98/34,52 | 108/64,29 | 18/10,71 | 48/28,57  |
| It's difficult to persuade me                                   | 64/38,1 | 14/8,3   | 62/36,9  | 82/48,8   | 42/25,0  | 72/42,9   |
| I often have thoughts in my mind which I should have got rid of | 75/44,6 | 60/35,7  | 25/14,9  | 35/20,8   | 68/40,5  | 73/43,5   |
| It's difficult for me to make friends                           | 25/14,9 | 5/3,0    | 32/19,1  | 42/25,0   | 111/66,1 | 121/72,02 |
| I get upset of even the smallest changes in a program           | 28/16,7 | 4/2,4    | 42/5,0   | 46/27,4   | 98/58,3  | 118/70,2  |
| I often behave stubborn                                         | 8/4,8   | 0/0      | 25/14,9  | 10/6,0    | 135/80,4 | 158/94,1  |
| I risk rarely                                                   | 35/20,8 | 32/19,1  | 52/31,0  | 55/32,7   | 81/48,2  | 81/48,2   |
| I sudden because of the changes to my routine                   | 42/25,0 | 10/6,0   | 54/32,1  | 70/41,7   | 72/42,9  | 88/52,4   |

Source: compiled by the authors of this study

DISCUSSION

The study of different contexts of the situation of internal displacement is still relevant, as the number of internally displaced people in Ukraine continues to increase. Ukrainian medical students who are experiencing adaptation due to lifestyle changes influenced

by military events need psychological support and correction programs. This is all the more important as student status is one of the risks for internally displaced persons [4]. We hope that this article will contribute to filling the deficit of psychoeducational and psychosocial trainings on working with affected students [23, 24].

Ukrainian folk wisdom says that each generation has its own war and its own crisis. Frozen rigid reactions characterize the consequences of students' experience of crisis circumstances due to the influence of war, while adaptation to a different way of life requires a change in behavior patterns [29]. Improving quality of life can be associated with interventions that promote mental health and adaptive coping [7, 22] against the background of changing the dynamic stereotype, habits and living conditions of displaced medical students.

Experiencing psychological distress due to decreased quality of life by medical students may lead to reduction in their manifestation of personality traits that are important for successful medical practice in the future (such as empathy, humanity, compassion, patience, and others) [1]. Therefore, training interventions aimed at psychological support and psychocorrection are important, which will reduce the burden of mental health pressure, lead to a decrease in stress, anxiety levels, depression [30] and improve the quality of life of Ukrainian students.

Medical university education is oriented towards high professional standards and requires students to consistently put a lot of effort towards acquiring both medical knowledge and practical skills. Behavioral rigidity is a serious obstacle for medical students, especially when they face dramatic changes in learning, and its elimination will help them to better focus on their studies and complex tasks [30].

The importance of the considered aspect of the scientific problem lies in the need to find ways to help internal military migrants in Ukraine. Taking into account behavioral rigidity among their possible psychological problems allows to expand the field of study of internal

migration. Consideration of behavioral rigidity, which arises as a protective response to increased emotional and intellectual strain when changing the way of life during the war, should probably be continued in further research.

## CONCLUSIONS

The Russo-Ukrainian war has brought a large number of traumatic events to Ukrainians, resulting in reduced quality of life and significant psychological harm in general. Displaced medical students are under significant pressure of circumstances that have changed their lifestyle. The crisis situation of internal displacement triggers a defensive reaction in most of them in the form of behavioral rigidity. The applied training interventions reduced the behavioral rigidity of medical students, which facilitated their adaptation to the changed living conditions and lifestyle, and enhanced their ability to model their behavior.

Considering apparent lack of psychosocial and correctional programs for support of displaced students in Ukraine, development of such training methods is important as a representation of practical psychocorrectional work that has been shown to be effective. This study contributes to validated methods of psychological support for young adults in extreme conditions and is important as a successful case study. Psychological work with rigid reactions and correction of behavioral rigidity is one of the promising areas of work with students in traumatic conditions.

Further research could focus on identifying optimal techniques, approaches and interventions to correcting behavioral rigidity with lifestyle changes for different groups of internally displaced people.

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## CONFLICT OF INTEREST

The Authors declare no conflict of interest

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**Aim:** To introduce students to the concepts of behavioral rigidity, its role in stressful situations and to teach them to be aware of their own reactions to change.

**Objectives:** to understand what behavioral rigidity is and how it can hinder adaptation; to analyze how rigid attitudes influence behavior and reactions in new conditions; to teach students to identify rigid patterns in their own behavior and analyze their influence.

**Methods:** information messages, group discussion, brainstorming, analysis of case studies, written reflection.

1. Introductory part (10-15 min.). Greeting and familiarization with the topic. The psychologist begins the session by explaining the importance of the topic of behavioral rigidity, referring to the works of psychologists A. Beck (1995) on cognitive rigidity and L. Festinger (1957) on cognitive dissonance. It is emphasized that rigidity can be a barrier to adaptation, especially in medicine where active change, due to the demands of the times, is the norm. Questions for students: Have you ever had a time when you could not accept change even when you understood the need for it? How do you respond to new teaching methods? What is your reaction to changes in specialization requirements? How do you react to the fact that it is possible that you may be mobilized as a health professional?

2. Main part (40-45 min.). Review and analysis of rigidity questionnaires (10 min.). Definition of behavioral rigidity (according to A. Beck and A. Adler) and its impact on training and professional activity of a doctor. Discussion of rigidity in student life (15 min.). 1, 1.5 hours

The psychologist invites students to give examples of rigidity in their own learning experiences (e.g., inability to accept new teaching methods, resistance to change in teaching, difficulty in changing teachers). The discussion takes place in a brainstorming format. Exercise "Analyzing Rigid Situations" (15-20 min.). Students in small groups discuss real situations when it was difficult for them to adapt to changes (e.g., switching to distance learning, first going to a hospital for an internship). Each group analyzes their reactions: emotional (anxiety, fear, anger), behavioral (resistance, avoidance), cognitive (negative attitudes, beliefs).

3. Final part (20-30 min.). Written reflection "What situations cause me the most rigidity?" (10-15 min.). Students analyze in writing their own trigger situations where they felt rigidity and try to find ways to improve adaptation. Group discussion of reflections (10-15 min.). Several students volunteer to share their findings. The psychologist summarizes the importance of self-observation and awareness of one's own rigidity reactions.

**Homework.** Students should write down three more situations where they noticed their own rigidity and suggest possible ways to overcome it.

**Expected Outcomes.** Students will be aware of what behavioral rigidity is and how it affects their adaptation. They will identify their own behavioral patterns and be better able to recognize their reactions to changes, develop skills of self-reflection and critical thinking about their own behavior.

## APPENDIX 1 cont.

**Development of awareness and emotional self-control**

**Aim:** To teach students to recognize and manage emotions that cause rigidity in order to increase adaptability in stressful situations.

**Objectives:** to develop skills of awareness of their own emotional reactions in response to stress; to develop the ability to control emotional impulses and maintain emotional flexibility; to learn to use conscious self-regulation techniques to reduce the influence of negative emotions; to develop skills of reflection and analysis of their own emotional state.

**Methods:** information messages, group discussion, role playing games, analysis of case studies, relaxation exercises, written reflection.

1. Introductory part (10-15 min). Introduction to the topic of the concept: explanation of the importance of awareness and emotional self-control in overcoming behavioral rigidity. Discussion of the influence of emotions on decision making and behavior. What emotions are important that prevent us from being flexible? How does stress affect our ability to adapt to change?

2. Theoretical block (15 min). The mechanism of emotions: how the brain reacts to a stressful situation. The link between emotions and behavioral rigidity: how fear, anxiety, and anger can contribute to fixed patterns of behavior. The role of mindfulness in emotion management: the concept of "emotional pause" (momentary awareness of an emotional response before responding).

3. Practical part (40 min). Exercise 1: Conscious breathing (10 min). Teaching the technique of deep breathing to stabilize the emotional state. Execution of the exercise "4-7-8" (inhale for 4 seconds, support for 7 seconds, exhale for 8 seconds). Discussion of sensations after the exercise. Exercise 2: "Emotional Diary" (15 min). Students write down a situation during the day that caused strong emotions (positive or negative). Record their thoughts, feelings and reactions. Analyze how much control they had over their reaction and what could have been changed. Exercise 3: "Step Back" - developing emotional flexibility (15 min). Participants support cases with quick stressful situations. Their task is to analyze the stress, change emotions, and offer options for a conscious response. Discussion of how attention can be modified for more adaptive focusing behavior.

4. Group discussion and reflection (20 min). Sharing experiences on the "difficulty" of the difficulty. Psychologist gives feedback and recommendations. Discussion of practical strategies for maintaining emotional flexibility in daily life.

**Homework.** Continue to keep the Emotional Diary for 3 more days. Do the "4-7-8" exercise every morning and before bed. Identify one stressor for next week and try to do the "Step Back" method.

**Expected Results.** Improved skills in consciously recognizing one's own emotions. Developing the ability to manage emotions without impulsive reactions. Developing greater emotional flexibility and adaptability to change.

Session 2

1, 1.5 hours

**Development of flexible thinking and the possibility of alternative approaches**

**Aim:** to develop the ability to think flexibly, to change stereotypical attitudes and to form skills of alternative approach to problem solving.

**Objectives:** to teach students to rethink the situation and consider alternative solutions; to develop skills to overcome thinking rigidity through the development of open thinking; to expand the ability to see the problem from different perspectives; to develop critical thinking and argumentation skills.

**Methods:** information messages, group discussion, role playing games, analysis of case studies, brainstorming, and written reflection. Exercise "Alternative Solutions": students consider real or apparent situations and formulate the best options for their solution. Exercise "Changing Perspective": each participant chooses a problem and analyzes it from different perspectives. A group discussion is held on the importance of critical thinking and the ability to rethink.

1. Introductory part (10 min). Familiarization with the topic of the concept: what flexibility of thinking is and why it is important. Discussion: How do stereotypes influence our thinking? Have you ever had to change your point of view under the influence of new facts?

2. Theoretical block (15 min). What is cognitive rigidity and how does it manifest itself? Principles of flexible thinking: Ability for perspective changes. Alternative approaches to problem solving. Openness to new information. The link between thinking and decision making: how fixed attitudes can limit possibilities.

3. Practical part (45 min.). Exercise 1: "Alternative solutions" (20 min). Students work in groups and are given a task (e.g., conflict with a teacher, group dilemma with learning, conflict with a patient). Task: Formulate possible solutions to these situations. Presentation of solutions and group discussion. Analysis of non-obvious but effective options. Exercise 2: "Changing Perspective" (15 min). Each participant chooses his/her own problem or receives a task with a problem from the psychologist. Task: analyze the problem from different perspectives (e.g., teacher's perspective, patient's perspective, neutral observer, skeptic, etc.). Discussion in pairs or groups: did their perception of the problem change after the analysis? Exercise 3: "Improving Critical Thinking" (10 min). The psychologist offers participants statements (e.g., "all young people are addicted to social networks", "people do not change", "all students are stupid", "all doctors are mediocre"). The task is to find counterarguments and build an alternative point of view. Collective discussion: how to learn not to take information as absolute truth, but to analyze it?

4. Group discussion and reflection (20 min.). Sharing experience in expanding one's own point of view. Discussion of barriers that prevent opinions from being flexible. Psychological feedback and recommendations for further development of critical and flexible thinking.

**Homework.** During the week, try to evaluate any complex situation from three different perspectives. Analyze whether the perception of this situation has changed after alternative consideration. Keep a "Changing Perspective" diary - record a system in which participants consciously practice alternative thinking.

**Expected Outcomes.** Improved thinking flexibility skills. Changing the influence of stereotypes on decision making. Increased ability to analyze situation from different perspectives. Formation of more open and critical thinking. Choice of alternative behavior in non-standard situations.

Session 3

1, 1.5 hours

APPENDIX 1 cont.

**Behavioral Flexibility Skills and Adaptation to New Conditions**

**Aim:** to develop skills of adaptation to change and teach students to act flexibly in non-standard situations, reducing the fear of uncertainty.

**Objectives:** to practice adaptive behavior in the face of change; to develop skills of openness to new circumstances and conditions; to learn to make quick decisions and adjust their behavior in unpredictable situations; to understand their own emotional reactions to change and be able to regulate them.

**Methods:** information messages, group discussion, role playing games, analysis of case studies, written reflection.

1. Introductory part (10 min.). Familiarization with the topic of the lesson: why adaptation is a key skill in the modern world. Discussion: Do you find it easy to adapt to new conditions? What factors are most likely to cause difficulties when a situation changes? How do you usually react to sudden changes of plans?

2. Theoretical block (15 min). What is behavioral flexibility and why is it important? How the brain reacts to change: the mechanism of resistance to the new and ways to overcome it. Basic adaptation strategies: Readiness for variability of decisions. Developing a positive attitude towards change. Use of flexible planning. Assessing one's own level of tolerance to uncertainty.

3. Practical part (45 min). Exercise 1: Role-playing "Unexpected scenarios" (20 min). Students are given individual or group situations in which they have to change their plans and adapt. For example: a sudden change of schedule, the need to act in unfamiliar conditions, a new group for a task. Participants have to quickly find a solution and present it to the group. Discussion: what emotions arose, what difficulties were experienced, what helped to adapt faster? Exercise 2: "My place in the change" (15 min). Participants recall a recent change in their lives that caused discomfort. Task: describe their first reaction and try to change it to a more adaptive one. Group work: discuss alternative approaches to adaptation. Exercise 3: "Alternative Behavior" (10 min). The psychologist offers participants situations in which they have to choose one of several behavioral options. Analysis of each option: what can be the consequences? Which option is the most flexible? Collective discussion: how to learn to quickly find the best solution?

4. Group discussion and reflection (20 min). What was the most difficult part of working with adaptation? What skills helped to cope with the change faster? How can behavioral flexibility be developed in everyday life? Psychological feedback and tips for working with adaptation.

**Homework.** During the week, try to consciously respond to any changes (even small ones) with openness. Analyze your emotions and ways of adaptation in a diary. Perform the "Alternative Solution" exercise: write down the situation that needed adaptation and propose 3 different behavioral options.

**Expected results.** Improved ability to adapt to change. Reduction of fear of instability and uncertainty. Development of decision-making speed in new conditions. Formation of a positive attitude towards change and the ability to act effectively in unpredictable situations.

Session 4

1, 1.5 hours

**Developing positive reappraisal and working with cognitive attitudes**

**Aim:** to teach medical students to positively reevaluate difficult situations and see them as opportunities for development, as well as to reduce rigidity of thinking by changing restrictive cognitive attitudes.

**Objectives:** to develop skills to positively reappraise difficult life situations; to learn to reframe negative experiences, reducing their impact on behavioral rigidity; to identify and change restrictive cognitive attitudes to more flexible ones; to develop skills to see opportunities in changing and uncertain situations.

**Methods:** information messages, group discussion, brainstorming, analysis of case studies, written reflection.

1. Introduction (10 min) Introduction to the topic of the lesson: what are cognitive attitudes and how they influence our behavior and perception of reality. Discussion: Do you have beliefs that limit your behavior? How often do you see opportunities in difficult situations?

2. Theoretical block (15 min). What we understand under term "cognitive attitude"? Automatic beliefs that determine reactions to events. Examples of rigid attitudes ("I don't know how to do this", "Change is always bad"). Positive reappraisal as a tool for mental flexibility: How does the cognitive reappraisal mechanism work? Examples of people who used crisis as an opportunity for development. Cognitive restructuring: Learning to transform negative attitudes into more adaptive ones.

3. Practical part (45 min). Exercise 1: "Positive Reassessment" (20 min). Participants recall a stressful or difficult situation that had a negative impact on them. Task: Describe what emotions this situation aroused. Try to find at least three positive aspects or opportunities for development. Discuss whether attitudes have changed after this reassessment. Group discussion of the results. Exercise 2: "Cognitive restructuring" (15 min). Each participant writes down their most common limiting thought (e.g., "I can never do it," "I always fail"). The group then works together to help find evidence that this attitude is not universal (e.g., when the participant has successfully overcome challenges). Task: to formulate a new, more flexible attitude that allows them to see more possibilities. Discussion: how might the new attitude change behavior? Exercise 3: "Reframing Change" (10 min). The psychologist provides participants with an example of a certain stressful situations (e.g., changing groups, moving, failing an exam). Task: instead of a negative view of the situation, find potential positive opportunities in it. Group discussion: how does the perception of the problem change with this approach?

4. Group discussion and reflection (20 min.). What was the most difficult part of trying to change the attitude? Were you able to find benefits in negative situations? How can the skills of positive reassessment be applied in real life? Psychological feedback and tips for practicing cognitive flexibility.

**Homework.** During the week, consciously analyze difficult or unpleasant situations and look for at least one positive possibility in them. Write down at least three limiting attitudes and develop alternative, more flexible attitudes for them. Keep a "Positive Reassessment Diary" and write down situations in which you managed to change your attitude to the problem.

**Expected Outcomes.** Improved ability to rethink negative experiences. Formation of more flexible thinking and reduction of the influence of limiting beliefs. Increased emotional resilience and ability to see possibilities in change. Learning cognitive restructuring skills for further independent use.

Session 5

1, 1.5 hours

APPENDIX 1 cont.

|                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>Summarizing the results and forming strategies for further behavioral flexibility</b>                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |
| <b>Aim:</b> to summarize the results of the program, to assess students' progress in developing behavioral flexibility and to develop a personal action plan for further self-development.                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |
| <b>Objectives:</b> to assess changes in the level of behavioral rigidity during the program period; to form individual strategies for developing behavioral flexibility; to identify areas requiring further improvement; to strengthen self-reflection and adaptive thinking skills. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |
| <b>Methods:</b> group discussion, analysis of case studies, written reflection.                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |
| Session 6                                                                                                                                                                                                                                                                             | 1. Introductory part (10 min). Discussion of the goals of the meeting: what we will summarize today, why it is important to evaluate progress and develop strategies for further development. Discussion: How do you evaluate your changes during the program period? Were there situations when you consciously applied new skills?                                                                                                                                                                                                                                                                                                                                                                                                               | 1, 1,5 hours  |
|                                                                                                                                                                                                                                                                                       | 2 Evaluating progress (20 min) Exercise 1: "Flexibility Wheel". Participants receive a template of the "wheel of flexibility" divided into segments (adaptation to change, emotional flexibility, openness to alternative points of view, readiness to new conditions, etc.). Task: to assess your level in each segment before the program (retrospectively) and now (after the program). Comparison of results and reflection: which areas have improved and which still need work? Rigidity self-assessment. Participants complete a short questionnaire with reflexive questions: What skills have I developed during this time? How has my behavior changed in stressful situations? In what situations do I still struggle with flexibility? |               |
|                                                                                                                                                                                                                                                                                       | 3. Development of an individual strategy (30 min.). Exercise 2: "My development plan". Each participant makes a personal action plan for maintaining and developing flexibility: What skills do I want to strengthen? How will I practice behavioral flexibility in my daily life? What methods or exercises will help me maintain progress? How will I track my progress? Working in pairs: participants present their plans and get feedback and suggestions from others.                                                                                                                                                                                                                                                                        |               |
|                                                                                                                                                                                                                                                                                       | 4. Group discussion and reflection (20 min). Sharing experiences: what was most valuable in the program? Discussion of difficulties: what challenges remain? Final recommendations: How to maintain and improve behavioral flexibility in the future? How to act in case of a return to rigid behaviors?                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |
|                                                                                                                                                                                                                                                                                       | 5. <b>Program wrap-up</b> (10 min). Review of key topics covered in the course. Recommendations for further support. Self-assessment of the level of rigidity by questionnaire or reflection. Individual counseling for those who wish to work more deeply on specific aspects. Possibility of continuing group meetings to maintain adaptability skills. Expected results. Awareness of one's own progress and changes in the level of behavioral rigidity. Clearly defined personal strategies for developing flexibility. Readiness to apply the acquired skills in real life. Increased confidence in the ability to adapt to change.                                                                                                          |               |
|                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Total 9 hours |