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The Mediating Role of Psychological Resilience and Coping Mechanisms in the Relationship between Personality Traits and Stress, Anxiety and Depression in a Group of Students

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Abstract

The present study provides conclusive evidence on the importance of personality traits, dimensions of psychological resilience and coping mechanisms for optimal adaptation to situations of intense psychological stress or special life situations. The data show that there is a direct relationship between some personality traits and the specific manifestations of stress, anxiety and depression, in the sense that personality influences the onset versus non-onset of the aforementioned manifestations. At the same time, the most important aspect demonstrated concerns the existence of indirect relationships between personality traits and specific manifestations of stress, anxiety and depression, which can be strongly potentiated by some coping mechanisms and some dimensions of psychological resilience, when they play or are approached as mediators, facilitating, in turn, optimal cognitive, emotional and behavioral reactions for the adaptation and integration of students. The data, information and evidence highlighted by the present study support and urge us to consider the development and implementation of appropriate programs for the development of psychological resilience, given the strength of this psychological characteristic in the optimal functioning of people involved in various situations of acute distress.

Keywords

Psychological Resilience, Coping Mechanisms, Personality Traits, Stress, Depression, Anxiety

1. General Theoretical Framework

1.1. Argumentation for the Choice of Topic

With the present study, we aim to continue the identification of the most appro-

priate scientific evidence to highlight the role of psychological characteristics, such as coping mechanisms and psychological resilience in the management of cognitions, emotions and behaviors developed in particular life situations or in relation to stress and its specific manifestations.

In this endeavor we start, along with the efforts of many authors, from the need to find the answer and scientific explanations for the puzzles of many people, such as: *after facing an intense mental strain*, *why do some people show some specific manifestations of stress-related disorders and traumatic events*, *while for others life events*, *even severe*, *perhaps traumatic ones*, *are a factor in development*?

The answer could take into account the existence and functioning of sanogenesis mechanisms, i.e., psychological defense or coping mechanisms and positive coping or development of psychological resilience, as evidenced by the results of empirical research Wang, Liu, Wu, & Li (2024).

Some studies illustrate how resilience can be cultivated and developed even in the context of geopolitical conflicts and tensions through different programs and strategies. An example in this regard could be with reference to projects for the development of resilience in children in areas with different armed conflicts, where organizations such as UNICEF or local non-governmental institutions have implemented education and psychological support programs for children who have been exposed to stressors with extreme intensities and psychological trauma, aiming at the effective use of their own resources and the formation of specific resilience skills, as well as for psychological recovery after the traumatic events to which they have been exposed (Prisăcaru, 2024).

On the other hand, Wang et al. (2024) brings to attention the studies of Finstad in 2021, whereby resilience was positively related to subjective well-being and post-traumatic growth, and those of Gonda & Tarazi in 2022, which emphasize positive relationships between workplace mindfulness, resilience, hope, subjective well-being and posttraumatic growth, as well as some findings highlighting that workplace mindfulness had the strongest impact on posttraumatic growth ($\beta = 0.444$), followed by the relationship between workplace mindfulness and subjective well-being ($\beta = 0.404$), and resilience had the weakest effect on posttraumatic growth through subjective well-being ($\beta = 0.050$).

At the same time, an extensive study (Prisăcaru, 2024) concludes that coping mechanisms, psychological resilience, locus of control and self-esteem explain and predict the level of stress perceived by students in exam situations.

For example, self-blame as a dimension of coping mechanisms has a negative influence on the level of perceived stress in the proportion of 49.72%, compared to some dimensions that have a positive role in stress management, such as putting into perspective (35.64%), positive reappraisal (27.64%), positive refocusing (20.25%) or self-esteem (12.33%).

It is concluded that the level of stress perceived by students in exam situations can be managed through the prism of psychological characteristics, such as those related to resilience, coping mechanisms, self-esteem, recognized by many au-

thors as individual psychological resources, which each of us has in different proportions.

1.2. Practical Relevance of the Theme

Therefore, we can deduce that we are not born resilient but we can become resilient, and highlighting the existence of sanogenesis mechanisms, but especially the cultivation and development of psychological resilience can be a desideratum that aims to combine efficiency, doing things right, and effectiveness, doing the right things.

In terms of the effectiveness of developing psychological resilience, it can be considered in terms of the design and implementation of personal development programs or, where appropriate, in vocational training programs, as well as their content, and the effectiveness of the programs can be analyzed in terms of skills, performance acquired and, implicitly, the optimal response in situations where it is needed.

Combining efficiency with effectiveness in programs to develop psychological resilience will lead, on the one hand, to an optimal cognitive, emotional and action response, and on the other hand, a high level of psychological resilience will become a very good predictor of response behaviors in particular life situations or in relation to stress and its specific manifestations.

1.3. Conceptual Framework Underpinning the Research

At a general level, the concept of psychological resilience refers to an individual's ability to cope with and adapt to stress, traumatic events and difficulties, while maintaining an adequate level of psychological functioning. A commonly used definition is that proposed by Masten & Reed (2002), who define resilience as "an individual's ability to withstand stressful events and/or to recover and adapt positively in spite of them".

On the other hand, Wang et al. (2024), referring to the Covid-19 era, brings to attention and appreciates that psychological resilience reflects an individual's ability to maintain stability and balance in the face of a series of difficulties caused by epidemic, and resilient people could experience positive experiences and emotions.

But also Pereira & Rosa (2024) assess that the most important global social event after the Second World War was the Covid-19 pandemic, a context in which several segments of society around the world were affected in several aspects, such as education, commerce, transportation, leisure, etc. This phenomenon had a huge economic impact in all countries and also changed the routine and way of life in most societal activities: education, work, urban behavior, psychology and health, and good resilience facilitates overcoming problematic situations.

Therefore, we understand that psychological resilience is not synonymous with resilience, as it is about reconstruction, the person's ability not to become discouraged, the ability to overcome oneself despite the life situations one faces etc.

Steven J. Stein & Paul T. Bartone with their 2020 paper, Mental toughness: make stress your ally in achieving your goals, bring to our attention the concept of hardiness. The concept of hardiness was originally described as a personality characteristic possessed by individuals who successfully cope with severe stress, making it a transformative force that manifests itself cognitively, emotionally, and behaviorally (Stein & Bartone, 2020).

Later, the concept was enriched with new facets, and the theoretical model termed the 3 C's consists of *Commitment*, *Control and Challenge*, which form the hard core of psychological resilience, describing them as follows (Stein & Bartone, 2020):

- *commitment* refers to people's tendency to engage voluntarily in activities, driven by curiosity for knowledge and a developed sense of their own competence; lack of commitment is a strong predictor of PTSD (Zerach, Karstoft, & Solomon, 2017), at the same time, it is a strong predictor of career success;
- *challenging* refers to the tendency to engage in activities, the presence of a real interest in curiosity about the surrounding world, which implies the belief that events have meaning and significance; people with this tendency are characterized by cognitive flexibility, rationality and pragmatism, involving a range of positive and constructive perspectives on a problematic situation;
- *control* refers to a person's belief that he or she can influence the events that occur in his or her life through his or her own effort and tendency to act in a planned, coordinated, and efficient manner; good impulse control facilitates healthy relationships, healthy lifestyles, higher positions in the social hierarchy, and higher incomes.

Also, the American Psychological Association (2024) defines resilience as the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands. In other words, to be resilient is to "bounce back" from difficult experiences, representing the process of adapting positively in the face of difficulties, trauma, tragedy, threats, or significant sources of stress, such as family and relationship problems, serious health problems, or stressful workplace events (https://www.apa.org/topics/resilience).

Concluding on resilience, as Feldman (2020) assesses the key components of resilience include resilience, self-improvement, particularly positive attitudes, influencing the environment, determining the outcomes of events, learning from negative and positive experiences, and pursuing meaningful life goals.

As for psychic defense/coping mechanisms, they in turn play a significant role in coping, ensuring the elimination or specific interpretation of unpleasant influence, minimizing feelings of anxiety that arise from the awareness of inner conflict. Freud (2006), states that psychic defense mechanisms are everyday psychic means of neutralizing painful sensations, preventing psychically activated disturbances and increasing the body's resistance capacity.

And Ionescu, Jacquet, & Lhote (2002), states that "...defense mechanisms are

unconscious psychic processes aimed at reducing or canceling the unpleasant effects of real or imagined dangers, by reshaping the internal and/or external reality, whose manifestations through behaviors, ideas or affections, may be conscious or unconscious".

Alin Chiracu (2020) also believes that the determinants of resilience have been identified in the form of coping mechanisms, and Hauser & Allen (2006) believe that the individual's coping strategies and protective relational processes are part of the key elements of resilience, and the way in which they interact and interrelate determines the level of resilience.

Other authors interpret resilience as an extension of coping mechanisms (Bonanno, 2004), equivalent to a return to homeostasis or healthy and normal functioning.

Therefore, the better we know the individual psychological characteristics and resources of people, as well as the social, professional, family and other demands, we can design some appropriate psychoeducation/psychoprophylaxis programs, development of psychological resilience (Teterissa et al., 2023), etc., so as to prevent the onset of manifestations related to stress and/or traumatic events.

2. Research Methodology

2.1. Research Objectives

The general objective of the present work aims to highlight the role of coping mechanisms and resilience as mediators in the relationship between personality traits, stress, anxiety, and depression in a group of students, taking into consideration three specific objectives:

- ***the first specific objective*** aims to analyze the existence and intensity of relationships between some personality traits and specific manifestations of stress, anxiety and depression;
- ***the second specific objective*** is to highlight the relationships between coping mechanisms, psychological resilience and specific manifestations of stress, anxiety and depression;
- ***the third specific objective*** aims to study and highlight the role of coping mechanisms and psychological resilience as mediating factors of specific manifestations of stress, anxiety and depression in relation to some personality traits.

2.2. Research Hypotheses

In order to fulfill the research objectives, we proposed the following hypotheses:

- ***Hypothesis No.*** **1**— *We assume that between some personality traits and coping mechanisms there are* interdependent *relationships*.
- ***Hypothesis No.*** **2**— *We assume that between some personality traits and psychological resilience there are* interdependent *relationships*.
- ***Hypothesis No.*** **3**— *We* assume *that between some personality traits, stress, anxiety and depression there are interdependence relations*.
- ***Hypothesis No.*** **4**— *We assume* that *there are some gender-specific differences*

in the functioning of psychological resilience and coping mechanisms, as well as some age-specific differences in the levels of stress, anxiety and depression.

- ***Hypothesis No. 5****— We assume that between stress, anxiety, depression, coping mechanisms and* psychological *resilience there are interdependent relationships.*
- ***Hypothesis No. 6****— We assume that coping mechanisms and psychological resilience mediate between* personality *traits and specific manifestations of stress, anxiety and depression.*

2.3. Structure and Description of the Research Sample

The convenience sampling technique (non-probability technique) was used to constitute the research sample, which, according to Popa (2015), does not take into account the requirements of indicating the probability of case selection, as a result, there is no guarantee that the sample is composed of cases that faithfully describe the reference population.

Thus, the research sample consisted of 168 individuals, all with student status at a university in Bucharest/Romania and the following characteristics:

- gender balanced, respectively 88 females and 80 males;
- heterogeneous in terms of age, with ages ranging from 21 to 58 years and an average of 32.78 years;
- heterogeneous in terms of educational background, i.e. 145 with completed secondary education (currently students), 12 with completed bachelor studies (currently in their second faculty), 9 with completed master studies and 2 with doctoral studies.

2.4. Instruments Used for Data Collection

Four standardized instruments were used for data collection, i.e. for the psychological assessment of the persons who are part of the research group, as follows:

2.4.1. The Five-Factor Personality Questionnaire (CP-5F)

Developed by Monica Albu in 2008 according to the Five-Factor Personality Inventory model designed by Hendriks in 1997 (Cognitrom, 2024a).

The questionnaire contains 130 items and is designed to assess the five superfactors of the Big Five model, namely extraversion, emotional stability, conscientiousness, agreeableness and autonomy, but also includes a scale called social desirability to identify people whose answers do not conform to reality, either because they want to create a favorable image of themselves, or because they respond randomly or want to appear different from the rest of the people.

2.4.2. The Assessment Rating Scale of Psychic Resilience (ARES-i25)

Developed by Glaveanu (2024), which contains 25 items to assess five dimensions and the overall score (calculated by summing the five dimensions), as follows:

- tenacity and self-efficacy which help to evaluate life situations and the steps needed to solve the various problematic contexts and personal resources or

limitations, as well as the ability to organize resources to solve problems;
- self-confidence, which aims at reflecting a positive self-image, obtained in an objective relationship with intuition and personal abilities;
- ability to learn from personal life experiences and/or those of others;
- rapid recovery from negative life events, aiming at tolerance of negative affect, uncertainty, recovery from failure to adopt resolving means, identification of sources of support, focus on goal achievement and resistance to disruptive factors;
- social and family resources represented by some external factors external to the person, which play a supportive role in coping with various life problems and in showing resilience.

2.4.3. The Cognitive Emotional Coping Questionnaire (CERQ)

Which assesses some cognitive coping strategies. The questionnaire consists of 36 items that relate exclusively to what a person thinks and not to what he or she actually does when going through threatening or stressful life experiences. The questionnaire assesses nine cognitive coping strategies, as follows: acceptance, self-blame, rumination, positive refocusing, refocusing on planning, positive reappraisal, putting into perspective, catastrophizing, and blaming others (Cognitrom, 2024b).

2.4.4. Depression, Anxiety and Stress Questionnaire (DASS-21 R)

Based on the Depression, Anxiety and Stress Scale developed by Lovibond and Lovibond in 1982, translated and then adapted for the Romanian population by A. Perţe (coordinator) in 2011. This version of the DASS-21R Questionnaire contains 21 items, equally distributed on 3 scales to assess negative emotional states in the sphere of depression, anxiety and stress. It assesses states rather than traits and is not used to assess momentary emotional states, as some items refer to experiences and situations outside the context of psychological assessment (Cognitrom, 2024c).

3. Research Results

In order to prove hypothesis no. 1, with the following content: *We assume that between some personality traits and psychological resilience there are interdependent relationships*, the statistical technique called Pearson correlations was used. The results are presented in **Table 1** and **Table 2**.

For data interpretation, in agreement with Colton (1974: p. 167), the values of the correlation coefficients have the following meanings: a correlation coefficient of −0.25 to 0.25 means weak or no correlation; a correlation coefficient of 0.25 to 0.50 (or −0.25 to −0.50) means an acceptable degree of association; a correlation coefficient of 0.50 to 0.75 (or −0.50 to −0.75) means moderate to good correlation; a correlation coefficient greater than 0.75 (or less than −0.75) means very good association or correlation.

Table 1. Descriptive statistics for dimensions of psychological resilience and personality traits (N = 168).

Mental resilience variables	Mean	Std. Deviation	Personality trait variables	Mean	Std. Deviation
Tenacity and self-efficacy	3.0952	0.88391	*Extraversion*	2.9286	0.87254
Self-confidence	3.1905	0.77345	*Agreeableness*	3.2500	0.86689
Ability to learn from personal experience	3.0536	0.85653	*Conscientiousness*	3.1429	0.87743
Recovery from difficult life situations	3.1190	0.78770	*Emotional stability*	3.0476	0.79527
Family and social resources	3.5595	0.50981	*Autonomy*	3.6548	3.16226
General psychological resilience	3.3393	0.74889			

Table 2. Correlation coefficient values between personality traits and psychological resilience (N = 168).

Mental resilience variables	Personality trait variables				
	(1)	(2)	(3)	(4)	(5)
Tenacity and self-efficacy	−0.170*	−0.070	0.260**	0.811**	−0.014
Self-confidence	−0.113	−0.214**	0.127	0.900**	−0.037
Ability to learn from personal experience	−0.027	−0.115	0.197*	0.893**	−0.135
Recovery from difficult life situations	−0.179*	−0.140	0.097	0.851**	−0.058
Family and social resources	0.212**	−0.291**	−0.126	−0.081	−0.113
General psychological resilience	−0.109	−0.224**	0.217**	0.827**	−0.051

**Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed). Legend: (1) Extraversion; (2) Agreeableness; (3) Conscientiousness; (4) Emotional stability; (5) Autonomy.

From the data presented in Table 2 it can be seen that between some variables/dimensions of psychological resilience and some variables of personality structure there are different degrees of association, expressed by multiple values of correlation coefficients, from values specific to weak or no association to very good values, which allows us to conclude that some dimensions of psychological resilience are influenced in different proportions by some personality traits.

Thus, we can observe very good values of the correlation coefficient between emotional stability as a personality trait and some dimensions of psychological resilience, such as: tenacity and self-efficacy r = 0.811**, self-confidence r = 0.900**, ability to learn from personal experience r = 0.893**, recovery after difficult life situations r = 0.851** and psychological resilience as a general factor r = 0.827**, which emphasizes the presence of strong intercorrelations, and the statistical relationship is significant 0.01 (99% confidence).

We also mention the low contribution of conscientiousness, agreeableness and extraversion, as personality traits, in relation to the dimensions of psychological resilience, but we consider that their role is insignificant, since the data obtained indicate weak or no correlation values (e.g.: between agreeableness and self-confidence r = −0.214**; between conscientiousness and general psychological resilience r = 0.217**).

Partial conclusion: from the data presented in Table 2, as well as from the interpretation presented, we can state that hypothesis no. 1 is statistically supported, and the variable emotional stability, as a personality trait, significantly influences and supports the acquisition, development and functioning of the dimensions of psychological resilience, as well as psychological resilience as a general characteristic.

To prove hypothesis no. 2, with the following content: *We assume that between some personality traits and coping mechanisms there are interdependent relationships*, the statistical technique called Pearson correlations was used. The results are presented in Table 3 and Table 4.

Table 3. Descriptive statistics for coping mechanisms and personality traits (N = 168).

Variables of coping mechanisms coping	Mean	Std. Deviation	Personality trait variables	Mean	Std. Deviation
Self-blaming	3.3750	0.93301	*Extraversion*	2.9286	0.87254
Acceptance	3.3571	0.65921	*Agreeableness*	3.2500	0.86689
Rumination	3.6012	0.78259	*Conscientiousness*	3.1429	0.87743
Positive refocusing	3.1250	0.79811	*Emotional stability*	3.0476	0.79527
Refocus on planning	3.1905	0.76567	*Autonomy*	3.6548	3.16226
Positive reassessment	3.1429	0.79131			
Putting into perspective	3.1607	0.82135			
Catastrophe	2.9226	0.85469			
Blame others	3.2024	0.95126			

Table 4. Correlation coefficient values between personality traits and coping mechanism variables (N = 168).

Variables of coping mechanisms coping	Personality trait variables				
	(1)	(2)	(3)	(4)	(5)
Self-blaming	0.151	−0.117	−0.117	−0.121	0.133
Acceptance	0.138	0.052	0.098	0.390**	0.008
Rumination	0.309**	0.245**	0.022	−0.008	−0.003
Positive refocusing	−0.168*	−0.132	0.077	0.859**	−0.154*
Refocus on planning	−0.042	−0.262**	0.084	0.890**	−0.047
Positive reassessment	−0.098	−0.244**	−0.081	0.865**	−0.054
Putting into perspective	−0.067	−0.090	0.217**	0.795**	−0.048
Catastrophe	0.081	−0.273**	−0.209**	−0.461**	−0.001
Blame others	0.169*	−0.047	−0.221**	−0.424**	0.077

**. Correlation is significant at the 0.01 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed). Legend: (1) Extraversion; (2) Agreeableness; (3) Conscientiousness; (4) Emotional stability; (5) Autonomy.

The data presented in Table 4 highlight the fact that there are different degrees of association between some variables of personality structure and some variables of coping mechanisms, expressed by multiple values of correlation coefficients, from values specific to weak or no association to very good values, which allows us to conclude that some coping mechanisms are in an interconditional relationship with some personality traits or, in other words, the development and functioning of some coping mechanisms is facilitated by some personality traits.

Thus, we can observe:

- very high values of the correlation coefficient, which means a very good association between emotional stability as a personality trait and refocusing on planning (r = 0.890**), positive reappraisal (r = 0.865**), positive refocusing (r = 0.859**) and putting into perspective (r = 0.795**), all for a threshold of ($p < 0.01$), showing the presence of a very strong statistical relationship between these variables;
- we also find lower values of the correlation coefficient, with an acceptable degree of association, between the same personality trait, namely emotional stability and blaming others (r = −0.424**), catastrophizing (r = −0.461**) and acceptance (r = 0.390**), all for a threshold of ($p < 0.01$), which highlights the presence of a statistically significant relationship between these variables;
- less statistically supported intercorrelation relationships, such as those between extraversion and rumination (r = 0.309**), agreeableness and rumination (r = 0.245**), agreeableness and catastrophizing (r = −0.273**) conscientiousness and catastrophizing (r = 0.209**), conscientiousness and blaming others (r = −0.221**), as well as others that are highlighted but with lower values of the correlation coefficient.

Partial conclusion: from the data presented in Table 4, as well as from the interpretation presented above, we can state that hypothesis no. 2 is statistically supported, and the variable emotional stability as a personality trait has a particular role regarding the influence, support, development, interconditioning and functioning of some dimensions of coping mechanisms.

To prove hypothesis no. 3, with the following content: *We assume that between some personality traits*, *stress*, *anxiety and depression there are interdependent relationships*, the statistical technique called Pearson correlations was used. The results are presented in Table 5 and Table 6.

The data presented in Table 6 show that the most relevant intercorrelation relationships are established between the emotional stability variable and the

Table 5. Descriptive statistics for personality traits, depression, anxiety and stress (N = 168).

Personality trait variables	Mean	Std. Deviation	Depression, anxiety and stress variables	Mean	Std. Deviation
Extraversion	2.9286	0.87254	*Depression*	1.1250	0.33171
Agreeableness	3.2500	0.86689	*Anxiety*	1.0893	0.28601

Continued

Conscientiousness	3.1429	0.87743	*Stress*	1.4702	0.62795
Emotional stability	3.0476	0.79527			
Autonomy	3.6548	03.16226			

Table 6. Correlation coefficient values between personality traits, depression, anxiety and stress (N = 168).

Depression, anxiety and stress variables	Trăsăturile de personalitate					*Depression*	*Anxiety*	*Stress*
	(1)	(2)	(3)	(4)	(5)			
Depression	−0.052	0.057	−0.206**	−0.499**	0.013	-	0.765**	0.607**
Anxiety	0.098	0.127	−0.075	−0.387**	−0.012	0.765**	-	0.398**
Stress	−0.048	−0.107	−0.166*	−0.513**	0.055	0.607**	0.398**	-

**Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed). Legend: (1) Extraversion; (2) Agreeableness; (3) Conscientiousness; (4) Emotional stability; (5) Autonomy.

depression, anxiety and stress variables, supported by different degrees of association, expressed by different values of correlation coefficients, from acceptable to good values, as well as between the conscientiousness variable and the depression and stress variables, even if they are at a lower level compared to emotional stability, as follows:

- between emotional stability and depression, the Pearson linear correlation coefficient has negative sign or inverse relationship (when emotional stability increases, depression decreases and vice versa) and the value r = −0.499** (p < 0.01), which emphasizes the presence of a statistically significant relationship or moderate correlation between these variables;
- between emotional stability and anxiety, the Pearson linear correlation coefficient has a negative sign (when emotional stability increases, anxiety decreases and vice versa) and the value r = −0.387** (p < 0.01), which again shows the presence of a statistically significant relationship or an acceptable correlation between these variables;
- between emotional stability and stress the Pearson linear correlation coefficient has a negative sign (when emotional stability increases, stress decreases and vice versa) and the value r = −0.513** (p < 0.01), which emphasizes the presence of a statistically good relationship or a moderate correlation between these variables;
- at the same time, we observe evidence of intercorrelations between depression and anxiety, supported by very good values of the correlation coefficient r = 0.765** (p < 0.01), between depression and stress, supported by moderate values of the correlation coefficient r = 0.607** (p < 0.01), and between anxiety and stress, supported by acceptable values of the correlation coefficient r = 0.398** (p < 0.01), which means that they coexist or that they may be comorbid manifestations of the three disorders.

Partial conclusion: from the data presented in Table 6, as well as from the interpretation presented, we can state that hypothesis no. 3 is statistically supported, and that the emotional stability variable, as a personality trait, influences or is responsible in an important proportion for the onset of specific manifestations of depression, anxiety and stress.

To prove hypothesis no. 4, with the following content: *Assuming that there are some gender-specific differences in the functioning of psychological resilience and coping mechanisms, as well as some age-specific differences in the level of stress, anxiety and depression*, the statistical technique called Independent Samples Test was used. The results are presented in Tables 7-11.

Table 7. Descriptive statistics for mental resilience variables by gender (N = 168).

Variables psychological resilience	Gender of persons	N	Mean	Std. Deviation	Std. Error Mean
Tenacity and self-efficacy	Male	80	3.0375	0.81821	0.09148
	Female	88	3.1477	0.94126	0.10034
Self-confidence	Male	80	3.0125	0.68425	0.07650
	Female	88	3.3523	0.81706	0.08710
Ability to learn from personal experience	Male	80	2.9250	0.74247	0.08301
	Female	88	3.1705	0.93737	0.09992
Recovery from difficult life situations	Male	80	2.9500	0.63445	0.07093
	Female	88	3.2727	0.88053	0.09387
Family and social resources	Male	80	3.6125	0.49025	0.05481
	Female	88	3.5114	0.52510	0.05598
General psychological resilience	Male	80	3.1500	0.55347	0.06188
	Female	88	3.5114	0.85761	0.09142

Table 8. Values of statistical mean differences (Independent Samples Test) on mental resilience variables by gender (N = 168).

Variables psychological resilience	$t_{calculated}$	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Tenacity and self-efficacy	−0.806	166	0.421	−0.11023	0.13669	−0.38010	0.15964
Self-confidence	−2.906	166	0.004	−0.33977	0.11690	−0.57058	−0.10896
Ability to learn from personal experience	−1.869	166	0.063	−0.24545	0.13134	−0.50476	0.01385
Recovery from difficult life situations	−2.702	166	0.008	−0.32273	0.11945	−0.55857	−0.08689
Family and social resources	1.287	166	0.200	0.10114	0.07860	−0.05405	0.25632
General psychological resilience	−3.209	166	0.002	−0.36136	0.11260	−0.58367	−0.13906

From the data presented in Table 7 and Table 8 we can draw some conclusions

regarding the difference in the functioning of psychological resilience between the two sublots, respectively between female and male individuals, as follows:

- on the variable toughness and self-efficacy, the difference between the means is −0.11023, corresponding to a $t_{calculated}$ = −0.806 and a significance threshold Sig.(2-tailed) = 0.421;
- regarding the self−confidence variable, the difference between the means is −0.33977, corresponding to a $t_{calculated}$ = −2.906 and a significance threshold Sig.(2-tailed) = 0.004;
- on the variable ability to learn from personal experience, the difference between the means is −0.24545, corresponding to a $t_{calculated}$ = −1.869 and a significance threshold Sig.(2-tailed) = 0.063;
- regarding the variable recovery from difficult life situations, the difference between the means is −0.32273, corresponding to a $t_{calculated}$ = −2.702 and a significance threshold Sig.(2-tailed) = 0.008;
- on the family and social resources variable, the difference between means is 0.10114, corresponding to a $t_{calculated}$ = 1.287 and a significance threshold Sig.(2-tailed) = 0.200;
- regarding the general psychological resilience variable, the difference between means is −0.36136, corresponding to a $t_{calculated}$ = −3.209 and a significance threshold Sig.(2-tailed) = 0.002.

Although the values of the calculated difference between the statistical averages are not large, it is emphasized that females have a higher level of development and functioning of most of the variables of psychological resilience compared to males, but they have a lower level of family and social resources compared to males.

Table 9. Descriptive statistics for the variables coping mechanisms by gender of individuals (N = 168).

Variables coping mechanisms	Gender of persons	N	Mean	Std. Deviation	Std. Error Mean
Self-blaming	Male	80	3.4750	0.98051	0.10962
	Female	88	3.2841	0.88342	0.09417
Acceptance	Male	80	3.0000	0.00000	0.00000
	Female	88	3.6818	0.78118	0.08327
Rumination	Male	80	3.3750	0.62389	0.06975
	Female	88	3.8068	0.85578	0.09123
Positive refocusing	Male	80	2.9500	0.63445	0.07093
	Female	88	3.2841	0.89634	0.09555
Refocus on planning	Male	80	3.0750	0.63195	0.07065
	Female	88	3.2955	0.85982	0.09166
Positive reassessment	Male	80	3.0375	0.60470	0.06761
	Female	88	3.2386	0.92220	0.09831
Putting into perspective	Male	80	2.9625	0.71942	0.08043
	Female	88	3.3409	0.86949	0.09269

Continued

Catastrophe	Male	80	3.3125	0.82052	0.09174
	Female	88	2.5682	0.72390	0.07717
Blame others	Male	80	3.5500	0.84043	0.09396
	Female	88	2.8864	0.93994	0.10020

Table 10. Values of statistical mean differences (Independent Samples Test) on coping mechanisms variables by gender (N = 168).

Variables coping mechanisms	$t_{calculated}$	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Self-blaming	1.328	166	0.186	0.19091	0.14380	−0.09301	0.47483
Acceptance	−7.804	166	0.000	−0.68182	0.08736	−0.85430	−0.50933
Rumination	−3.706	166	0.000	−0.43182	0.11653	−0.66190	−0.20174
Positive refocusing	−2.763	166	0.006	−0.33409	0.12091	−0.57281	−0.09537
Refocus on planning	−1.878	166	0.062	−0.22045	0.11740	−0.45224	0.01133
Positive reassessment	−1.654	166	0.100	−0.20114	0.12161	−0.44124	0.03897
Putting into perspective	−3.056	166	0.003	−0.37841	0.12383	−0.62289	−0.13393
Catastrophe	6.246	166	0.000	0.74432	0.11916	0.50905	0.97959
Blame others	4.806	166	0.000	0.66364	0.13810	0.39098	0.93629

From the data presented in Table 9 and Table 10 we can draw some conclusions regarding the difference in the functioning of coping mechanisms between the two sublots, i.e. between female and male individuals, as follows:

- females have a higher level of development than males with respect to acceptance, rumination, positive refocusing, refocusing on planning, positive reappraisal and putting into perspective;
- males have a higher level of development than females in self-blaming, catastrophizing and blaming others.

Although the values of the calculated difference between the statistical means are not large, it can be concluded that both females and males have different coping mechanisms that may facilitate or disrupt adaptation, integration and optimal functioning in situations of intense stress.

Table 11. Values of statistical mean differences (Independent Samples Test) on the variables depression, anxiety and stress according to age (N = 168).

Depression variables, anxiety and stress	$t_{calculated}$	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Depression	−1.461	166	0.146	−0.07467	0.05110	−0.17556	0.02622
Anxiety	0.029	166	0.977	0.00128	0.04434	−0.08627	0.08883
Stress	−3.524	166	0.001	−0.33096	0.09391	−0.51637	−0.14555

The data presented in Table 11 highlight some differences between the two sublots of people, i.e. between the sublot of people aged under 32 and the sublot of people aged over 32, with reference to the higher level of depression and accumulated stress of people aged over 32, as well as the lack of difference in the level of anxiety between the two sublots.

Partial conclusion: from the data presented in Tables 7-11, and from the interpretation presented, we can state that hypothesis no. 4 is statistically supported.

To prove hypothesis no. 5, with the following content: *We assume that between stress, anxiety, depression, coping mechanisms and psychological resilience there are interdependent relationships*, the Pearson correlation statistical technique was used. The results are presented in Table 12 and Table 13.

Table 12. Descriptive statistics for coping mechanisms, psychological resilience, depression, anxiety and stress (N = 168).

Variables of coping mechanisms coping	Mean	Std. Deviation	Variables of depression, anxiety, stress and psychological resilience	Mean	Std. Deviation
Self-blaming	3.3750	0.93301	*Depression*	1.1250	0.33171
Acceptance	3.3571	0.65921	*Anxiety*	1.0893	0.28601
Rumination	3.6012	0.78259	*Stress*	1.4702	0.62795
Positive refocusing	3.1250	0.79811	*Tenacity and self-efficacy*	3.0952	0.88391
Refocus on planning	3.1905	0.76567	*Self-confidence*	3.1905	0.77345
Positive reassessment	3.1429	0.79131	*Ability to learn from personal experience*	3.0536	0.85653
Putting into perspective	3.1607	0.82135	*Recovery from difficult life situations*	3.1190	0.78770
Catastrophe	2.9226	0.85469	*Family and social resources*	3.5595	0.50981
Blame others	3.2024	0.95126	*General psychological resilience*	3.3393	0.74889

Table 13. Correlation coefficient values between depression, anxiety, stress, coping mechanisms and psychological resilience (N = 168).

Variables of coping mechanisms and psychological resilience	Depression	Anxiety	Stress
Self-blaming	−0.191*	−0.149	0.157*
Acceptance	−0.123	−0.043	−0.321**
Rumination	0.009	0.133	−0.164*
Positive refocusing	−0.218**	−0.416**	−0.249**
Refocus on planning	−0.589**	−0.461**	−0.374**
Positive reassessment	−0.548**	−0.427**	−0.522**
Putting into perspective	−0.536**	−0.418**	−0.264**
Catastrophe	0.182*	0.004	0.581**
Blame others	0.204**	0.131	0.431**
Tenacity and self-efficacy	−0.470**	−0.365**	−0.426**
Self-confidence	−0.303**	−0.321**	−0.284**

Continued

Ability to learn from personal experience	−0.466**	−0.362**	−0.337**
Recovery from difficult life situations	−0.218**	−0.420**	−0.247**
Family and social resources	−0.204**	−0.098	0.034
General psychological resilience	−0.557**	−0.394**	−0.405**

**Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

From the data presented in Table 13 it can be seen that between some variables of coping mechanisms, depression, anxiety and stress there are different degrees of association, expressed by different values of correlation coefficients, from values specific to weak or no association to moderate to good values, which allows us to conclude that some coping mechanisms have influence, in different proportions, on the specific manifestations of depression, anxiety and stress.

Thus, we can observe statistically significant values or good values of the Pearson linear correlation coefficient, some of them with negative sign or inverse correlation (when one variable increases, the other decreases and vice versa), such as for example:

- between refocusing on planning and depression r = −0.589**, between positive reappraisal and depression r = −0.548**and between putting into perspective and depression r = −0.536**;
- between positive refocusing and anxiety r = −0.416**, between refocusing on planning and anxiety r = −0.461**, between positive reappraisal and anxiety r = −0.427**and between putting into perspective and anxiety r = −0.418**;
- between positive reappraisal and stress r = −0.522** and between catastrophizing and stress r = 0.581**;

Intercorrelation relationships are also evidenced between some dimensions of psychological resilience, depression, anxiety and stress, expressed by different values of correlation coefficients, ranging from weak or no association specific values to moderate to good values, such as for example between general psychological resilience and depression r = −0.557**, between general psychological resilience and anxiety r = −0.394** and between general psychological resilience and stress r = −0.405**, with negative sign or inverse correlation, meaning that when general psychological resilience increases, depression, anxiety and stress decrease.

Partial conclusion: from the data presented in Table 13, as well as from the interpretation presented, we can state that hypothesis no. 5 is statistically supported, and that some coping mechanisms, as well as some dimensions of psychological resilience significantly influence the onset of specific manifestations of depression, anxiety and stress.

To prove hypothesis 6, with the following content: *We hypothesize that coping mechanisms and psychological resilience play a mediating role between personality traits and specific manifestations of stress, anxiety and depression*, the statistical technique called simple linear regression and multiple linear regression was used. The results are presented in Tables 14-16.

Given the large number of variables of coping mechanisms and variables of psychological resilience, as well as the multiplicity/complexity of data and information obtained in the scientific approach to prove the hypothesis, we will present only some of them, considered the most significant, in order to highlight their mediating role through the examples used.

Table 14. Values of regression coefficients on the direct relationship between independent variables personality traits* and the dependent variable depression, anxiety, stress (N = 168).

	B	Std. Error	Beta	t	Sig.
Dependent variable—Depression					
(Constant)	1.886	0.151		12.490	0.000
Emotional stability	−0.197	0.029	−0.473	−6.730	0.000
Dependent variable—Anxiety					
(Constant)	1.390	0.139		9.967	0.000
Emotional stability	−0.133	0.027	−0.369	−4.902	0.000
Dependent variable—Stress					
(Constant)	3.189	0.282		11.308	0.000
Emotional stability	−0.420	0.055	−0.532	−7.664	0.000

*data on emotional stability are presented for exemplification and are the most significant.

Table 15. Values of regression coefficients on the direct relationship between the independent variables traits personality traits* and moderator variables coping mechanisms* and psychological resilience* (N = 168).

	B	Std. Error	Beta	t	Sig.
Dependent variable—Positive refocusing					
(Constant)	0.499	0.126		3.969	0.000
Emotional stability	0.862	0.040	0.859	21.571	0.000
Dependent variable—General psychological resilience					
(Constant)	0.965	0.129		7.463	0.000
Emotional stability	0.779	0.041	0.827	18.976	0.000

*data on emotional stability, positive refocusing and general psychological resilience are presented for exemplification and are the most significant.

Table 16. Regression coefficient values on the relationship between emotional stability, positive refocusing*, general psychological resilience* and depression, anxiety, stress (N = 168).

	B	Std. Error	Beta	t	Sig.
Dependent variable—Depression					
(*Constant*)	1.736	0.095		18.244	0.000
Emotional stability	−0.365	0.067	−0.876	−5.470	0.000
Positive refocusing	0.301	0.049	0.723	6.182	0.000
General psychological resilience	−0.131	0.047	−0.296	−2.771	0.006

Continued

Dependent variable—Anxiety					
(*Constant*)	1.705	0.098		17.400	0.000
Emotional stability	0.082	0.069	0.228	1.192	0.235
Positive refocusing	−0.145	0.050	−0.405	−2.900	0.004
General psychological resilience	−0.123	0.049	−0.323	−2.532	0.012
Dependent variable—Stress					
(*Constant*)	2.203	0.184		11.942	0.000
Emotional stability	−1.094	0.129	−1.386	−8.457	0.000
Positive refocusing	0.621	0.094	0.789	6.585	0.000
General psychological resilience	0.199	0.092	0.237	2.166	0.032

*data on positive refocusing and general psychological resilience are presented for exemplification and are the most significant.

We consider Baron & Kenny (1986: pp. 1173-1182):

- mediation is a mechanism through which the relationship between the independent variable and the dependent variable is potentiated;
- the confirmation of the mediation relationship requires the concomitant fulfillment of certain conditions concerning the relationship between the independent and dependent variables, with reference to the significance level of the value of the correlation or regression coefficient.

Regarding the mediation relationship between personality trait variables (I.V.) and depression, anxiety and stress variables (D.V.), in agreement with Sobel (1987: pp. 155-176), it concerns the mediation effect of mediator variables (M.V.), discussed in the literature as intermediate variables, respectively of psychological resilience variables and coping mechanism variables.

Figure 1 shows schematically the mediation relationship between VI and DV, where "a-index" represents the relationship between VI and M, "b-index" represents the relationship between M and DV, "c-index" represents the direct relationship between VI and DV, and "c' index" represents the relationship between VI and DV mediated by mediators (MV).

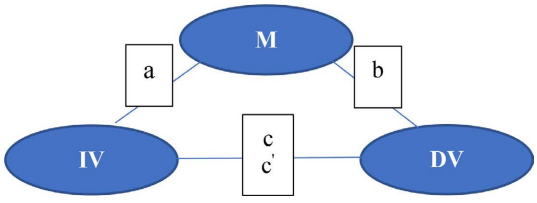

Figure 1. Mediation relationship between IV and DV.

We also observe that the effect of the independent variable (IV) on the dependent variable (DV) propagates in two ways. The first path targets the direct relationship between VI and DV, labeled by "index c", and the second path targets the relationship between VI and DV mediated by the mediator (M), labeled by "index

c'" through "index a" and "index b". The value of "index c" is only part of the VI and VD, because in this case part of the effect of VI on VD is manifested through the mediator, along the path: VI→M, then M→VD.

In agreement with Popa (2015), "index a" denotes the intensity of the relationship between VI and M, and "index b" denotes the intensity of the relationship between M and DV, independent of the effect of VI on DV. The effect taken by the mediator is called the indirect effect and is calculated as the product of the "indices a and b" with the formula M = (a*b), and the total effect (c) is calculated with the formula c = c' + (a*b).

The results of the regression equations presented in **Tables 14-16** are presented in the following paragraphs.

a) Estimation of the total direct effect of VI→VD noted with "c-index" in **Figure 1**, respectively of emotional stability, as a personality trait, on depression, anxiety and stress, according to the data in **Table 9** the effect is significant for:

- depression (coefficient β = −0.197, and Std. Error = 0.029);
- anxiety (coefficient β = −0.133, and Std. Error = 0.027);
- stress (coefficient β = −0.420, and Std. Error = 0.055);
- the value of *p* (in the Sig. column) being *p* = 0.000 (the variance of *p* must be *p* ≤ 0.05), which indicates that the total direct effect is significant.

b) Estimation of the direct effect of VI→M noted with "index a" in **Figure 1**, respectively of emotional stability, as a personality trait, on positive refocusing as a coping mechanism and general psychological resilience as a dimension of resilience, according to the data in **Table 10** the effect is significant for:

- positive refocusing (coefficient β = 0.862, and Std. Error = 0.040);
- for general psychological resilience (coefficient β = 0.779 and Std. Error = 0.041);
- the value of *p* (in the Sig. column) being *p* = 0.000 (the *p*-value must be *p* ≤ 0.05), which emphasizes that the total direct effect is significant.

c) Estimation of the indirect effect of VI→VD, through the prism of M→VD noted with "index b" in **Figure 1**, respectively of emotional stability as a personality trait, of positive refocusing as a coping mechanism, of general psychological resilience as a dimension of resilience, on depression, anxiety and stress, according to the data in **Table 11** the effect is significant for:

- emotional stability on depression (coefficient β = −0.365, and Std. Error = 0.067);
- positive refocusing on depression (coefficient β = 0.301, and Std. Error = 0.049);
- general psychological resilience over depression (coefficient β = −0.131, and Std. Error = 0.046);
- positive refocusing on anxiety (coefficient β = −0.145, and Std. Error = 0.050);
- general psychological resilience over anxiety (coefficient β = −0.123, and Std. Error = 0.049);
- emotional stability over stress (coefficient β = −1.094, and Std. Erro r = 0.129);

- positive refocusing on stress (coefficient β = 0.621, and Std. Error = 0.094);
- general psychological resilience to stress (coefficient β = 0.199, and Std. Error = 0.092);
- the value of p (in the Sig. column) being $p = 0.000$ or $p = 0.032$ (the p-value must be $p \leq 0.05$), which shows that the total direct effect is significant.

So, we have obtained all the coefficients we need to estimate the indirect effect for the mediation analysis, i.e. for the "c' index", as follows:

a) The values obtained for the VI→M relation, i.e. the "a-index" are:

- for positive refocusing β = 0.862 (0.040);
- for general psychological resilience β = 0.779 (0.041).

b) The values obtained for the relationship M→VD, respectively "index b" are:

- for positive refocusing on depression β = 0.301 (0.049);
- for general psychological resilience to depression β = −0.131 (0.046);
- for positive refocusing on anxiety β = −0.145 (0.050);
- for general psychological resilience over anxiety β = −0.123 (0.049);
- for positive refocusing on stress β = 0.621 (0.094);
- for general psychological resilience to stress β = 0.199 (0.092).

c) The values obtained for the relationship VI→VD, respectively "c-index" are:

- for emotional stability over depression β = −0.365 (0.067);
- for emotional stability on stress β = −1.094 (0.129).

To finalize the estimation of the statistical significance of the indirect effect from the mediation analysis we will use the Sobel (1987) test, and the indirect effect for VI→M→VD will be:

- for positive refocusing on depression Test Statistic = 5.9075376, Std. Error = 0.0439205 and p-value = 0;
- for positive refocusing on anxiety Test Statistic = −2.87409287, Std. Error = 0.0434885 and p-value = 0.0040519;
- for positive refocusing on stress Test Statistic = 6.31624784, Std. Error = 0.08475 and p-value = 0;
- for general psychological resilience to depression Test Statistic = −2.816366, Std. Error = 0.03623428 and p-value = 0.00485703;
- for general psychological resilience on anxiety Test Statistic = −2.48857941, Std. Error = 0.03850269 and p-value = 0.00414646;
- for general psychological resilience to stress Test Statistic = 2.14916116, Std. Error = 0.07213093 and p-value = 0.

The most important parameter is the p-value (must be $p \leq 0.05$), therefore we can conclude that the indirect effect between some moderating variables, in this example positive refocusing and general psychological resilience, on the dependent variables, in this case depression, anxiety and stress, is statistically significant ($p \leq 0.05$).

In order to find out the point estimate of the indirect effect of the moderating variables, in the relationship between some personality traits and depression, anxiety, stress, we calculate the product of the coefficient β of the value of "index a"

and the coefficient β of the value of "index b", obtaining the moderating effect value, as follows:

- for positive refocusing on depression = 0.259462;
- for positive refocusing on anxiety = −0.12499;
- for positive refocusing on stress = 0.535302;
- for general psychological resilience on depression = −0.102049;
- for general psychological resilience over anxiety = −0.095817;
- for general psychological resilience to stress = 0.155021.

Partial conclusion: from the data presented in Tables 14-16, as well as from the interpretation presented, we can state that hypothesis no. 6 is statistically supported and that some coping mechanisms as well as some dimensions of psychological resilience have an important mediating effect between personality traits and specific manifestations of depression, anxiety and stress.

4. Conclusions

The objectives of this research aimed to analyze the relationship, but more particularly the role of coping mechanisms and psychological resilience as mediators in the relationship between personality traits, stress, anxiety and depression in a group of students, in order to identify potential needs for increasing resilience or directions for some training and development programs that help to facilitate optimal adaptation of students in situations of intense demand.

The research results demonstrate and support, on the one hand, that emotional stability has an essential role in the direct relationship with the specific manifestations of stress, anxiety and depression, and on the other hand, the role of emotional stability can be enhanced by the association of psychological resilience with some coping mechanisms that participate, as mediators, to facilitate the functioning, adaptation and management of stress, depression and anxiety, for example through the high levels of positive refocusing as a coping mechanism and general psychological resilience.

At the same time, the study highlights a difference between females and males in the functioning of some resilience variables, as well as in some coping mechanisms, such as:

- female individuals have a higher level of development in relation to male individuals on acceptance, rumination, positive refocusing, refocusing on planning, positive reappraisal and putting into perspective;
- males have a higher level of development than females in self-blaming, catastrophizing and blaming others.

At a deeper level of analysis, corresponding to hypothesis no. 6, it is found that the level of stress, depression and anxiety can be moderated and explained by the simultaneous contribution of coping mechanisms and dimensions of psychological resilience, characteristics investigated in this research.

Based on these results, a series of programs can be proposed with the aim of identifying students' dysfunctional coping mechanisms, the formation and devel-

opment of functional coping mechanisms, as well as personality traits such as emotional stability and conscientiousness (in smaller proportions) that support adaptation and development in the face of various life challenges, as Jiang Guifang (2024) proposes a series of coping strategies to support high school students with psychological problems as part of the collaboration between schools, families and communities as a mental health effectiveness perspective.

In conclusion, the present research provides evidence for the scientific validation of the fact that some students in situations of intense demand (such as exams), accumulate a high level of stress, anxiety and depression, but these can be optimally managed through coping mechanisms, such as positive refocusing and developed psychological resilience, which are effective in such situations, and students who have these will more frequently show lower levels of stress, anxiety and depression, which helps us to conclude that they will cope well in these situations.

5. Benchmarks of a Program to Increase Psychological Resilience

Cognitive-behavioral orientation brings into focus the concept of resilience building, which involves consciously changing one's thinking and behavior through appropriate techniques, such as those related to cognitive restructuring (David, 2012).

Also, the American Psychological Association (2014), through scientifically validated contributions, advocates increasing resilience based on ten strategies, which refer to:

- maintaining good and close relationships with family members, friends and members of their groups;
- avoiding exposure to stressful or traumatic events that lead to dysfunctional reactions and manifestations;
- accepting situations that cannot be changed and cannot be acted upon;
- developing and guiding lifestyle according to realistic goals;
- thorough preparation of decisions in critical situations;
- self-awareness of one's own psychological characteristics, functional coping mechanisms and using them as opportunities for overcoming situations with significant distress;
- developing confidence in one's own strengths and resources;
- developing the way of dealing with life situations by changing the overall perspective and integrating them into a broader life context;
- maintaining an optimistic outlook and positive expectations, and visualizing a more friendly future;
- engaging in self-treatment or engaging in mental, physical, emotional and spiritual self-care practices.

Taking into account the recommendations of the A.P.A. above, as well as the results of the present study, we consider that the program to increase psychological resilience in students (perhaps also in other categories of people) should focus

on two directions, as follows (Prisăcaru, 2024):

- prevention/prophylaxis/psychoeducation activities, tailored to the specific group;
- the use of specialized intervention strategies and techniques, i.e. the learning and use of techniques to enhance the three specific components of the ABC cognitive-behavioral model (cognitions, affective processes/emotions and behaviors).

In terms of prevention/prophylaxis/psychoeducation activities, these can be carried out through the promotion of multimedia psychological products, online or in print, such as POSTERs, which contain messages and solutions focused on managing anxiety, panic attacks, promoting healthy behaviors in response to concrete situations generated by stress, optimal management of relationships with family and colleagues, etc.

As regards the use of specialized intervention strategies and techniques, we consider focusing on learning and practicing adapted techniques, aiming at:

- identification of the stressor factor—awareness of the problem causing the stress state;
- self-awareness and personal development—knowledge of strong versus weak psychological characteristics (awareness of personal resources), increasing self-esteem, working on goals, understanding and accepting the meaning of life;
- effective time management—planning and prioritizing work and family activities;
- using relaxation—controlled breathing exercises, progressive muscle relaxation, mindfulness techniques;
- developing assertive communication—expressing needs and desires in a direct, non-aggressive manner, including when tasks become overwhelming or uncomfortable;
- regular sport—walking outdoors, cycling, going to the gym, dancing, movement in any form;
- connecting emotionally with family and friends—the role and importance of emotional support from someone close to you, especially when facing difficult situations;
- identifying and practicing hobbies—setting aside time dedicated to satisfying needs, joys, pleasures or fulfilling activities;
- allocating time for rest—quality sleep can help reduce stress and some manifestations of sleep disorders;
- practicing a healthy lifestyle through healthy eating—eating a balanced diet, reducing excessive consumption of high calorie foods, coffee, alcohol etc.

In certain situations, i.e. for more severe cases, these can be addressed through systematized, standardized, scientifically validated interventions, such as cognitive-behavioural coaching, as presented in **Table 17**.

Cognitive-behavioural coaching is a scientifically validated intervention

method for optimizing psychological processes. The principles underlying this approach are identical to those applied in cognitive-behavioral therapy, but in the case of coaching they are used to facilitate learning, performance and development outside the therapeutic area (David, 2012).

Table 17. Program-specific techniques to increase mental resilience (example).

Tracked factors	Intervention procedures
The ability to manage emotions and impulses	*Biological, emotional and behavioral or multimodal intervention techniques* (*relaxation techniques*)
Ability to make realistic plans and take action to achieve them	*Pragmatic-functional techniques* (*e.g. perspective-shifting technique*; *cost-benefit analysis*)
Taking a positive approach	*Diffusing and mindfulness techniques*; *distraction*
Developing confidence in personal strengths and abilities	*Guided imagery technique; positive reinforcement technique*; *dialog technique*
Developing communication skills	*Assertiveness training*
Problem solving	*Problem-solving procedures*

The content of the aforementioned program is the subject of a pilot study currently in the design phase, which will be carried out with students in laboratory classes as well as in the home prescription version, in order to practice and practice in various life situations, and the results will be discussed in a new article upon its completion.

6. Future Research

Although the data collection and statistical data processing procedures were fair and relevant, the research has some limitations that need to be addressed in future studies, taking into consideration:

- online data collection may affect, to some extent, the validity of the results, as we might think that the answers are subjective and we cannot use a form of monitoring of individuals who fill in the answers to the proposed psychological assessment instruments on their own;
- the study group comprised students from a single locality, therefore it can be assumed that the results will only be addressed to students from that locality, without the possibility of generalization;
- introducing and addressing intermediate variables that may influence the results obtained, i.e. variables related to external factors, such as socio-economic status, background of the persons included in the study group, mental health problems, etc.;
- the use of at least two instruments to collect data on psychological resilience, based on complementary theoretical models: as the theme revolves around the concept of psychological resilience, which is a very complex concept, a broader, more comprehensive approach is needed, containing items with a broader perspective to cover a wide range of students' experiences;

- the study was initiated and carried out only through the personal contribution of the author, and the limited funds allocated allowed for a study group of only 168 persons/students.

Although the study has some limitations, we can appreciate that its results may be provocative for other authors as well, and for the continuation and deepening of the theme through a larger study to be conducted in the future, we will collect samples of students from different universities located in different localities by attracting interested researchers.

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Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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