Sofia University St. Kliment Ohridski

Faculty of Philosophy

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SUMMARY

of the dissertation work

on

THE ROLE OF PERSONALITY TRAITS AND SOCIAL SUPPORT IN COPING WITH EXISTENTIAL CRISES

Submitted for a Doctor of Philosophy degree

Scientific discipline: 3.2. Psychology

Research Supervisor:

Prof. Ph.D. Irina Zinovieva

Sofia, 2024

This dissertation was discussed and proposed for defense by the Department of General, Experimental, Developmental, and Health Psychology, Faculty of Philosophy, Sofia University St. Kliment Ohridski. It pertains to the role of personality traits and social support in coping with existential crises and is 209 pages in length, including 16 pages of references. It contains 1 figure and 52 tables. The bibliography includes 171 titles, in Bulgarian, English, and French. Five scientific papers have been published in relation to the dissertation topic, and the author has participated in two national and three international conferences, as well as one scientific project. The author has achieved 55 points, exceeding the minimum national requirements.

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The dissertation is scheduled to be defended on June 6, 2024 at 1 p.m. in Hall 63 of Sofia University St. Kliment Ohridski at an open session of the scientific committee.

The defense materials are available in the Psychology Department office, Faculty of Philosophy, Room 60, third floor, South Wing, Rectorate – Sofia University St. Kliment Ohridski, as well as on the university website (www.uni-sofia.bg).

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One of the characteristics distinguishing an existential crisis from other types of crises is the intensity of the internal conflicts that emerge and the accompanying existential anxiety. An existential crisis can also be seen as a prolonged confrontation, independent of the individual's desire, requiring resources beyond their capabilities and thus causing the emergence of existential anxiety—a consequence of deep despair, often caused by loss or trauma. The crisis tears apart the established structure of the self and affects the person's psyche in the long term. The outcome of such a crisis, however, can be both traumatizing and constructive, and even lead to the emergence of resilience or posttraumatic growth.

This study aimed to monitor the progression and outcomes of existential crises while examining the influence of personality traits, self-esteem, and social support in coping with such crises, as well as the potential for personal growth, such as resilience and posttraumatic growth. Two studies were conducted to achieve this goal and presented in chapters three, four, and five. They draw upon an analysis of existing literature on this issue, as presented in the first two chapters.

Chapter 1. THEORETICAL APPROACHES TO THE STUDY OF EXISTENTIAL CRISES, RESILIENCE, AND SOCIAL SUPPORT

Existential crisis

Existential crises can take on different forms depending on the issues they raise. Here are some of the most common ones: 1. Crisis of freedom of choice and responsibility; 2. Crisis related to personal mortality and the concept of death; 3. Crisis related to aging; 4. Crisis of connectedness with others; 5. Crisis of goals (meaninglessness); 6. Crisis of emotions and their experience.

Sometimes, in our efforts to remain positive, we suppress negative emotions regardless of the situation. However, it is not possible to suppress our emotions indefinitely, as doing so can result in feelings of emptiness and a loss of meaning.

Symptoms

Experiencing anxiety or depression does not necessarily result in an existential crisis. For this to occur, there must be an unmet need to find existential meaning. The following are some of the most common symptoms of this condition, as outlined by Buténaité et al. (2016): 1. Existential depression; 2. Anxiety derived from existential crisis; 3. Existential obsessive-compulsive disorder.

It should be noted that these symptoms and the types of crises they are associated with cannot be defined in a rigid manner. Rather, they are fluid and can transform.

Components

The origin of the existential crisis may be attributed to a multitude of factors, yet the primary elements of the phenomenon can be classified into three principal categories: emotional, cognitive, and behavioral (Buténaité et al., 2016).

The emotional component of the existential crisis is characterized by emotional suffering, despair, helplessness, impaired sense of integrity, emotional vulnerability, fear, guilt, anxiety, and loneliness. The cognitive component of the existential crisis encompasses several aspects, including loss of meaning and purpose, awareness of personal mortality, loss of values (moral, spiritual, social), and decision-making. Behavioral aspects are related to a range of negative outcomes, including limited opportunities for action, ritualistic behavior, damaged relationships, health problems, addiction, and antisocial behavior. In some cases, seeking therapy may be necessary to address these issues.

The work also examines *crises related to development (identity crises)*. It discusses the natural processes that occur during the ontological development of personality, encompassing emotional,

cognitive, and behavioral aspects. The analysis focuses on the adolescence (sophomoric), maturity, and late-life crisis stages (Andrews, 2016).

Existential crisis and resilience

Nobody is immune to experiencing an existential crisis and its consequences. For some, however, the experience is much more painful and has lasting effects. Differences in subjective experience are mostly rooted in personality traits such as resilience, optimism, positive-negative emotionality, openness to new experiences, and humor.

Resilience theory emerged in the 1960s from research focused on children growing up in risky environments. Later, the scope of the theory expanded to include all age groups (Ionescu, 2011). Resilience in psychology can be viewed as both an individual personality trait and a group phenomenon (Eachus, 2014). Like individual resilience, several factors facilitate group resilience. The Climate Disaster Resilience Index created by Joerin and Shaw (Eachus, 2014) identifies five of them: physical, social, economic, institutional, and natural.

Culture and resilience

Exposure to specific traumatic events is often linked to cultural affiliation. The interpretation of a stressor and the subsequent response can often be shaped by cultural aspects of the experience. Race, ethnicity, sexual orientation, religion, and other cultural features can influence how events are conceptualized, interpreted, and understood. Cultural context appears to be crucial in some decisions to act or seek help (Berger, 2015). "We create the meaning of events. The meaning is and always was artificial. We make it." (Jung, 2009, p. 152)

Factors contributing to resilience

The variety of traumatic events that can destabilize an individual and influence their reactions necessitate the identification of ways to mitigate the negative effects of stressors and promote the development of resilience. Long-term observations of trauma survivors and resilient groups and individuals have led to a consensus on defining psychological factors that contribute to resilience. These factors are clearly divided into three categories: *cognitive, behavioral,* and *existential*: 1) The cognitive component refers to patterns of thinking, basic beliefs, and life philosophy; 2) The behavioral component emphasizes actions; 3) The existential component points to finding meaning in life and existence itself.

Existential crisis and social support

Social support could be defined as assistance that is available and directed toward an individual through their social connections with other individuals, groups, and wider communities. Social support can be viewed as both structural and functional. *Structural support* refers to the size of the supportive environment and the frequency of meaningful relationships, while *functional support* focuses on emotions, creating a sense of beneficial social impact, integrating instrumental support, and providing a sense of understanding and comfort.

Adequate and stable social support can significantly alleviate the impact of stress at both individual and group levels. The reduction in mental and physical reactivity is associated with higher levels of mental and physical health and is the basis for building resilience.

Chapter 2. POSTTRAUMATIC GROWTH (PTG)

As previously mentioned, stress has a dual nature that can transform its negative aspects into challenges, leading to personal growth and creativity.

This section explores a process that extends beyond resilience, paving the way for the emergence of the posttraumatic growth phenomenon. It involves facing highly traumatic events and finding ways to cope with and overcome them, ultimately leading to posttraumatic transformation. The goal of chapter two is to depict the thoughts, actions, and profound experiences that accompany an individual on this challenging journey.

Posttraumatic stress as an opportunity for personal growth

The phenomenon of posttraumatic growth (PTG) was first theoretically structured by psychologists Tedeschi and Calhoun in the mid-1990s (Tedeschi & Calhoun, 1995; Tedeschi & Calhoun, 1996). Tedeschi describes it this way: "People develop new understandings of themselves, the world they live in, how to relate to other people, the kind of future they might have and a better understanding of how to live life" (Collier, 2016, p. 48).

To understand posttraumatic growth, it is compared to the more commonly observed outcome of crisis, posttraumatic stress disorder (PTSD).

Causes, symptoms, and treatment of posttraumatic stress disorder

PTSD can be defined as "a disorder that is a reaction to the experience of a traumatic event. Key elements are unwanted recurring memories of the event, often in the form of 'flashbacks,' attempts to avoid such memories, and an overall increased level of physical arousal" (Morrison, 2013,

p. 362). These distressing states may also affect sleep. Memories of the event are transformed into nightmares and cause increased anxiety in various forms.

The memory of the horror experienced, along with the resulting hypervigilance, may linger for a lifetime. Denis Charney (2004) suggests that without sufficient mechanisms to foster resilience, individuals who have faced extreme events may exhibit permanent changes in biological functions that differ from that of most people.

Judith Herman (quoted in Goleman, 2004) outlines three key stages that lead to alleviating symptoms caused by life-threatening trauma: gaining a sense of safety, recalling the details of the event, including complaining about the loss and damage caused by it, and finally restoring normal life. There is a clear biological rationale behind the sequence of steps outlined above. These three stages follow a path and sequence that are necessary to retrain the brain's emotional perception. It learns once more that life should not be viewed as a series of impending threats waiting to overcome us.

Posttraumatic growth (PTG) as a multidisciplinary concept

PTG is a complex phenomenon that requires a comprehensive, multidisciplinary approach. From the perspective of *cognitive psychology* (Tedeschi et al., 2018), PTG is understood as a transformation in an individual's cognitive processes. *Developmental psychology*, on the other hand, focuses on providing insights into human development as a continuous process spanning from birth to death. This field of study also encompasses a thorough analysis of both the positive and negative changes that occur within an individual's life as well as their underlying causes. PTG has been identified as an example of positive change resulting from a psychological struggle to maintain inner stability in the face of highly stressful events.

In *existential psychology*, the concept of posttraumatic growth has been extensively investigated by Viktor Frankl and Irvin Yalom. They examined various aspects of the meaning and purpose of existence and the methods for uncovering them in times of adversity. By grasping the importance of persevering in the face of challenges, individuals can overcome, make sense of, and outlive them.

In *humanistic psychology*, as defined by two of its most eminent founders, A. Maslow and C. Rogers, individuals can set goals and search for meaning and values in their lives. Some individuals also strive for self-improvement. If this process occurs during a traumatic event and leads to the reconstruction of one's personality, the resulting goals, meaning, and values could be considered posttraumatic growth and self-actualization.

In the context of an individual's health, trauma, within the field of *health psychology,* is regarded as a consequence of life-changing events, overwhelming mental or physical suffering, and influences that challenge established stereotypes (Tedeschi et al., 2018). Severe stress and traumatic events are known to have a negative effect on health. However, studies on PTG show that certain individuals undergo positive changes and psychological growth during such hardships. Extensive research in health psychology focuses on PTG in patients diagnosed with different types of cancer. Positive attitudes and healthy behaviors often contribute to favorable treatment outcomes, accompanied by significant positive structural-cognitive changes.

PTG is also of great interest to *personality psychology* as it involves profound personality changes, which is a key focus of this field. In 2014, Jayawickreme and Blackie conducted research on how the study of PTG could enrich the concept of personality psychology as a science.

Research in *clinical psychology* primarily focuses on developing methods to measure the outcome of clinical interventions for managing symptoms that require such interventions. Researchers often find that when the cause of symptoms and the need for specialized help is not clearly defined and linked to a highly stressful event, it is likely due to the accumulation of negativity over a prolonged period in the victim's life.

In *social psychology*, the PTG model has a strong interpersonal aspect and can only be described and understood by taking into account the person's interaction with their environment.

Criteria for posttraumatic growth

Psychologists use various self-assessment scales to evaluate the presence and extent of PTG. One such scale is the Posttraumatic Growth Inventory (PTGI) developed by Tedeschi and Calhoun (Collier, 2016). The PTGI measures positive responses across five categories:

1. Appreciation of life

2. Relating to others

3. New possibilities

4. Personal strength

5. Spiritual change

The dimension of *spiritual change* was later incorporated in place of *religiosity* to acknowledge individuals who are not overtly religious. This adjustment allows for a more accurate representation of the cultural variations in the understanding of spirituality.

Collective resilience and collective posttraumatic growth

Social support plays a crucial role in influencing the emergence and development of posttraumatic growth (PTG). It is important to note that the significance of this support for PTG varies depending on its source. In this context, it is appropriate to highlight collective resilience as a pathway and stage toward potential collective posttraumatic growth (CPTG). For instance, in the aftermath of a disaster, all members of the community, including workers, administrators, family members, and friends, come together to help each other and overcome difficulties. This phenomenon of mutual assistance is often described as a "democracy of distress," "post-disaster utopia," or "altruistic society." Similarly, as an extension of the collective resilience mentioned earlier, collective posttraumatic growth (CPTG) may emerge. Bonanno and colleagues (Eachus, 2014) suggest that the most distinctive signs of CPTG are increased social solidarity, the dissolution of collective conflicts, and a utopian mood.

Chapter 3. STUDY OF CHANGES IN ATTITUDES TOWARD THE WORLD AND ONESELF, EMOTIONAL REGULATION, AND THE ROLE OF SOCIAL SUPPORT IN EXISTENTIAL CRISES

The purpose of this study was to examine the progression and outcomes of experienced existential crises. The analysis focused on three main categories of issues. The **first category** explored **potential changes in attitudes toward the world and oneself** during and after an existential crisis. This study aimed to shed light on the cognitive processing of the crisis and the resulting shifts in the participants' overall worldview and personality characteristics. **The second** category focused on **the emotional attitudes toward** the experience during and after an existential crisis, as well as changes in the overall emotional background of the participants. **The third** category examined **the role of social support** in dealing with such crises and their cognitive interpretation.

Methodology

The study used semi-structured interviews to gather data from 71 adult participants. Gender and age (except for legal adulthood) were not determining factors in the selection process. The selection criteria were based on the experience of an existential crisis, such as a life-threatening illness, financial collapse, job loss resulting in a prolonged period of unemployment, significant changes in quality of life, the loss of a parent during childhood or adolescence, or a traumatic divorce.

Each interviewee was informed of the study's purpose, assured of confidentiality, and agreed to participate.

The subjects' narratives underwent conceptual cluster analysis, and the resulting semantic themes for each question were grouped as main meaning statements.

Main questions

The study consisted of three sections, each containing a specific number of questions selected according to the specific focus of the topic. The answers in each section can be used to clarify or deepen the analysis of the others.

I. Exploring changes in attitudes toward the world and oneself during existential crises

1. Have your experiences altered your attitudes toward the world or yourself? If so, how have they changed?
2. What advice would you give yourself if you could go back before the event?
3. What did you learn as a result of these events?
4. Did the event change your worldview?
5. Have you changed?

II. Emotions and emotional regulation in existential crises

1. Can you remember what you felt during that time?
   a) Have you felt the same or a similar way at other points in your life?
2. How do you experience difficulties in your life?
3. Some people tend to focus on the negative, while others focus mostly on the positive. How do you see yourself?
4. What emotions did you feel most frequently during the crisis?
5. Are you generally a pessimistic or optimistic person?

III. Social support and coping with existential crises

1. What did you do to get through the crisis?
   a) What measures did you take?
   b) What helped you the most to get through the difficulties?
2. What were the consequences for you of what happened?
3. Did anyone support you during this tough time?
   a) How did they help you?
   b) What do you think was the role played by this support?

Results

I. Exploring changes in attitudes about the world and oneself during existential crises

The main changes the participants reported regarding their attitudes about the world were: 1. *Increased sense of relatedness to others*; 2. Increased *tolerance* and acceptance of more than one good way of doing things; 3. More *critical judgment*; 4. The need for more *courage and initiative*; 5. *Listening to the advice of close people.*

Reflection on what happened highlighted the following clusters: 1. *Valuing my loved ones and spending more time with them* ("We need to spend more time with our loved ones and not neglect them… the person is important"); 2. *Increased tolerance* ("There is no right or wrong decision… life is meandering"; "… accepting mistakes…").

The following changes were observed in relation to the subjects themselves: 1. *Emergence of a deeper self-knowledge and overall satisfaction; 2. Appreciation of what I have* ("… yes, I am a better person and I enjoy the little things"; "… to appreciate every moment"; "If I hadn't experienced this suffering… I wouldn't have appreciated life so much and… I would have taken it more for granted"; "I've developed a sense of empathy and compassion"); 3. *Spirituality and willingness to change* ("More spiritually oriented life, not so materially dependent"; "I think I'm at a higher state of consciousness. Everything that happens in our lives is for the better"; "… very calm… you understand the world very calmly"); 4. *More self-confidence* ("… you are the active, responsible force in your own life, not the State"; "You realize that only you are responsible for yourself. We should give to others, not only demand… and actively participate in what we want to receive").

II. Emotions and emotional regulation in existential crises

Emotions experienced during an existential crisis

The answers often contained complex and nuanced emotions and feelings. The common element among them was *suffering*, which is caused by a combination of experiences and interpretations. It appeared that pain, whether mental or physical, had become the new reality. During the traumatic event, one of the important elements accompanying the emotional state of the participants was the *temporary alienation* from the previously familiar reality. This feeling of separation is one aspect of the pain, regardless of whether it involves anger, insecurity, fear, surprise, or separation.

The present study suggests that the feeling of separation, as a component of suffering, takes on the form of an initiation or ritual that leads to an uncertain future with unclear outcomes. Successfully passing through this prepares the initiated for what lies ahead.

In this context, the primary clusters of experiences arising from the initial question were: 1) *Feelings of uncertainty, disorientation, and helplessness*; 2) *Feelings of sadness and emptiness*; 3) *Anger and resentment*; 4) *Fear and horror*; 5) *Surprise and astonishment*; 6) *Denial of what happened*; 7) *Disgust*; 8) *Feelings of guilt and shame*; and 9) *Feelings of relief.*

It is important to note that in this case, we are not dealing with clear distinctions, but rather with formulations that overlap. However, there was a greater concentration of emotional charge and cognitive meaning-making in each respective category.

Emotional dispositions

When participants were asked if they were more pessimistic or optimistic, their responses were grouped into three categories: 1) Optimistic; 2) Mixed attitude; and 3) Pessimistic. The study found that most participants described themselves as optimistic.

III. Social support and coping with existential crises

Actions taken to overcome the existential crisis

The responses were categorized into three main themes: 1) *Seeking emotional and instrumental social support*; 2) *Struggling to cope or survive*; and 3) *Engaging in self-reflection and evaluation.*

The role of social support in coping with an existential crisis

The third set of questions pertained to the features of social support and highlighted the significance of support from others. The overall narrative outlined the following themes:

1) Emphasis on emotional social support

2) Emphasis on institutional social support

3) Emphasis on personal potential

The first theme, emotional social support, was predominant, with affirmations such as: "My parents and my friends... through moral support... helped me not to think of the worst... I would even say tremendous [support]"; "My family, children, and friends provided support—not financial, but moral"; "My husband, my father, my friends..."

Out of 71 participants, 62 provided answers associated with this meaning cluster, indicating the significant role of emotional social support in coping with an existential crisis. A close circle of loved ones plays an indispensable role in emotional regulation and maintaining a sense of relatedness to others.

The institutional support itself, in the form of doctors, medicines, or the State, is delivered through the agency of this circle.

It is important to note that despite the intensity and variety of negative emotions expressed, the responses indicated *an overall positive attitude* toward the present and *a positive integration of the experience into the updated autobiographical narrative*. This situation is similar to *resilience*, which is defined as successful adaptation despite risk and hardship (Fröhlich, 1997).

The current study demonstrated that posttraumatic growth (PTG) or the conditions that may lead to it is present in a significant portion of participants. The meaning statements previously listed bear a striking resemblance to the five factors used to establish PTG: 1) personal strength; 2) relating to others; 3) new opportunities; 4) spiritual change; and 5) appreciation of life (Tedeschi et al., 2018).

The obtained data could have practical applications in therapeutic practice, self-improvement, and resilience building. Considering the possible applications of the discussed study, it would be beneficial to expand the sample size and address the topics in greater depth. This can be achieved by combining interviews with questionnaires to confirm the presence of resilience and posttraumatic growth, as well as their potential relationships with specific coping styles during an existential crisis.

Chapter 4. THEORETICAL FRAMEWORK FOR EMPIRICAL RESEARCH ON THE ROLE OF PERSONALITY TRAITS AND SOCIAL SUPPORT IN COPING WITH EXISTENTIAL CRISES

1. Aims and objectives of the study

The purpose of the present study was to examine the relationship between a set of personality characteristics and indicators of social support with coping strategies and possible posttraumatic growth in individuals who have experienced existential crises.

The personality characteristics include the Big Five model (extraversion/introversion, neuroticism, conscientiousness, agreeableness, and openness to new experiences), resilience, and self-esteem according to the two-factor model—self-liking and self-competence (Tafarodi & Swann, 2001). Social support is expressed through a tendency to show trust toward individuals, a sense of belonging to groups where a person feels accepted and supported, and the presence of people with whom one desires and has the opportunity to share. Strategies for coping can be divided into three types: passive coping (denial, mental disengagement, behavioral disengagement), active coping (acceptance, active coping behaviors, suppression of competing activities and planning), and emotional coping (emotional reaction). These coping types were introduced by Carver and colleagues. Posttraumatic growth is viewed through the model proposed by Tedeschi and Calhoun (1996) as a combination of increased

relatedness to others, the discovery of new possibilities, increased personal strength, greater appreciation of life compared to before the crisis, and strengthened religiosity (spiritual and existential change).

To achieve the objectives of the study, the following main tasks had to be performed:

- To examine in depth the concepts of posttraumatic growth, resilience, and coping strategies as aspects of adaptation and functioning of the individual during an existential crisis.
- To identify **personality characteristics** that might be considered predictors of certain **coping strategies** and the occurrence of **posttraumatic growth**.
- To determine whether components of **self-esteem** (self-competence and self-liking) and resilience might, together or separately, be associated with certain **coping strategies** and with the occurrence of **posttraumatic growth**.
- To investigate the relationship between **social support, coping strategies**, and the development of **posttraumatic growth**.
- To determine whether the **coping strategies** listed above could be considered predictors of **posttraumatic growth**.
- To translate and adapt the selected instruments for use in a Bulgarian context.

2. Hypotheses

The theoretical framework of this dissertation research led to the following hypotheses:

2.1 Certain personality characteristics, types of social support, and forms of self-esteem are associated with certain coping strategies

Our hypothesis was that certain personality traits from the Big Five model would have varying relationships with different coping strategies. Specifically, we predicted that conscientiousness would have a positive correlation with planning, while extraversion and openness to new experiences would have a negative correlation with planning and a positive correlation with emotional expressivity.

Regarding the relationship between coping strategies and self-esteem, it was assumed that high levels of self-competence and self-liking correlate positively with strategies such as active coping and planning, and negatively with passive coping.

It was assumed that higher levels of social support would result in increased use of active and emotional coping strategies, and decreased use of passive coping strategies. On the other hand, it was

expected that individuals with low social support, particularly emotional support, would report more frequent use of strategies such as mental and/or behavioral disengagement.

2.2 The emergence of posttraumatic growth is linked to specific personality characteristics, types of social support, forms of self-esteem, and coping strategies

It was assumed that certain personality traits of the Big Five model have a stronger correlation with one or more aspects of posttraumatic growth. Despite the mixed results of published research, there was an expectation of a positive relationship between agreeableness, conscientiousness, openness to new experiences, and extraversion with the presence of posttraumatic growth (Karanci et al., 2012; Owens, 2016). It was expected that higher values of openness to new experiences and extraversion may be predictors of posttraumatic growth (Staugaard et al., 2015; Zerach, 2015).

It was hypothesized that high levels of both aspects of self-esteem—self-competence and self-liking—would positively correlate with one or more components of posttraumatic growth, such as appreciation of life, personal strength, and new possibilities. It was also assumed that neuroticism would negatively relate to some elements of posttraumatic growth, particularly with appreciation of life.

It was hypothesized that positive expressions of social support would correlate positively with the components of posttraumatic growth, particularly relating to others and new possibilities.

Active and emotional coping would be positively associated with posttraumatic growth, while a passive coping style would be negatively associated with it.

2.3 Certain coping strategies and aspects of posttraumatic growth are associated with the emergence of resilience

Higher levels of active coping were expected to be associated with the emergence of resilience. Conversely, it was assumed that positive values of passive coping strategies would have a negative correlation with the development of resilience.

Additionally, the presence of posttraumatic growth was expected to be positively associated with the emergence of resilience.

3. Theoretical model of the study

After providing a comprehensive theoretical overview and considering the goals and objectives of this dissertation, a theoretical model was developed.

In today's fast-paced global society, high levels of stress have become an unavoidable aspect of modern life. The resulting effects, such as chronic fatigue, depression, anxiety, and even existential

crises, are prevalent. The interest in resilience, posttraumatic growth, and their accompanying behavioral strategies has grown among scholars and ordinary people as an antidote to current events. Research has explored the relationships between these phenomena and constructs such as personality characteristics, social support, and self-esteem. It appears that resilience and posttraumatic growth are positively associated with social support, openness to new experiences, and extraversion. Part of the explanation is that the supportive environment is an adaptation-enhancing factor, and the two personality traits mentioned above facilitate communication with representatives of this environment.

Taking this into account, the theoretical model of this dissertation comprised six groups of variables:

- Personality characteristics, including resilience
- Self-esteem
- Social support
- Coping strategies
- Posttraumatic growth
- Demographic characteristics

The theoretical model presented below outlines the key relationships that this study examined.

1. Personality characteristics and coping strategies
2. Personality characteristics and posttraumatic growth
3. Self-esteem and coping strategies
4. Self-esteem and posttraumatic growth
5. Social support and coping strategies
6. Social support and posttraumatic growth
7. Coping strategies and posttraumatic growth

The specialized literature has addressed each of these interactions to varying degrees. The contribution of this work lies in presenting a model that seeks to demonstrate the relationship between personality characteristics, social support, self-esteem, certain coping strategies, and the presence of posttraumatic growth. The approach presented here aimed to uncover new relationships between the variables under consideration.

Personality characteristics

1) Extroversion/Introversion
2) Neuroticism
3) Conscientiousness
4) Agreeableness
5) Openness to new experiences

Resilience

Self-esteem

1) Self-competence
2) Self-liking

Social support

1) Trust
2) Belonging
3) Sharing

Coping strategies

1) Passive coping (mental disengagement, behavioral disengagement, denial)
2) Emotional coping (ventilation of emotions)
3) Active coping (acceptance, active actions, suppression of competing activities, planning)

Posttraumatic growth

1) Personal strength
2) Relating to others
3) New possibilities
4) Appreciation of life
5) Spiritual change

Fig. 1 Theoretical model of the empirical study of individuals

who have experienced an existential crisis

4. Instruments

To determine the interdependencies between coping strategies, posttraumatic growth, and their personal and social determinants, the following scales were used in line with our objectives and hypotheses:

- Personality traits–The Big Five model (Mini IPIP; Donnellan et al., 2006)
- Social Support Scale (Peirce et al., 1996); adapted for Bulgaria by Nikolova and Zinovieva (Nikolova, 2022)
- Two-dimensional Self-Esteem Scale (Tafarodi & Swann, 2001)
- Coping Strategies (Carver et al., 1989)
- Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996)
- Resilience Scale (adapted from Wagnild & Young, 1993)

4.1 *Personality traits–The Big Five model (Mini IPIP; Donnellan et al., 2006)*

The instrument assessed 5 personality traits using 4 items for each of the following:

- Extroversion/Introversion
- Neuroticism
- Agreeableness
- Conscientiousness
- Openness to new experiences

The scale has been shown to have very good internal consistency.

4.2 *Social Support Scale (Peirce et al., 1996); adapted for Bulgaria by Nikolova and Zinovieva (Nikolova, 2022)*

The statements were organized around the following two factors:

- Emotional support
- Support from others

Scoring was based on a five-point Likert scale. The instrument can be administered to a non-clinical sample. For the purposes of this study, the Bulgarian adaptation of Nikolova and Zinovieva (Nikolova, 2022) was included in the scale.

4.3 *Two-dimensional Self-Esteem Scale (Tafarodi & Swann, 2001)*

The instrument takes into account the fact that people evaluate both their own qualities and what others think of their competence and value. It was introduced in 2001 and consists of two parts, each measuring either self-competence or self-liking:

- Self-competence refers to a person's evaluation of their own self-empowerment and effectiveness;
- Self-liking refers to a person's opinion of themselves in a social context.

The study used a Bulgarian adaptation of the five-point Likert scale for evaluation (Karaivanova, 2016).

4.4 *Coping strategies (Carver et al., 1989)*

The scale is a multi-layered tool used to assess an individual's reactions in stressful situations. The results are evaluated on a four-level Likert scale: "I usually don't do this at all," "I usually do this a little bit," "I usually do this a medium amount" and "I usually do this a lot." Due to the specificity of the study, only 8 out of the total 14 scales were selected. The present study included the following components:

- Mental disengagement
- Emotional expressiveness
- Active coping
- Denial
- Behavioral disengagement
- Acceptance
- Suppression of competing activities
- Planning

4.5 *Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996)*

The instrument determines the extent to which the individual has experienced positive outcomes as a result of the trauma. It also assesses how successfully the individual who has gone through a serious crisis copes with the consequences of what has happened by reconstructing their experiences and finding meaning in them. The scale consists of 21 questions that measure the following 5 factors:

- Personal strength
- Relating to others

- New possibilities

- Appreciation of life (more pronounced than before the trauma)

- Spiritual change

The benefit of using this scale was that it allows for the categorization of scores based on the five factors, enabling us to identify the dominant category and the underestimated category with potential for improvement. The assessment employed a five-point Likert scale ranging from "0 – I did not experience this change as a result of my crisis" to "4 – I experienced this change to a very great degree as a result of my crisis."

4.6 Resilience Scale (adapted from Wagnild & Young, 1993)

The instrument measures an individual's level of resilience, which is considered a stable and positive personal resource that includes competence, self-acceptance, understanding, and interaction with the environment. The results are evaluated using a five-point Likert scale.

For the purposes of the study, the participating experts discussed and agreed upon a translation of the questionnaire and an initial adaptation to Bulgarian conditions. However, due to the specificity of the sample, a full adaptation was not possible.

5. Data processing

To verify the hypotheses and achieve the goals of this dissertation, procedures were conducted to adapt some of the research instruments described earlier.

The hypotheses outlined above were tested using a series of statistical procedures:

- The internal consistency of the instruments was verified by Cronbach's Alpha reliability coefficient.

- A frequency analysis of the items and scales was conducted to establish the specificity of the sample.

- Hypotheses about the relationships between different groups of variables were tested by correlation analyses using the Pearson linear correlation method. Multiple linear regression analysis was used to determine the direction of the relationships.

6. Procedure

The survey was conducted online using the free Google Forms platform. Participation was voluntary, anonymous, and unpaid. All participants were informed that the study was conducted

on behalf of Sofia University St. Kliment Ohridski and that the data would be used for scientific purposes only, without specifying the nature of the instruments used. The purpose of the study was to investigate what individuals think of themselves and how they react in difficult situations. The requirement for participants was to have gone through a traumatic experience of an existential nature. Gender-equal distribution was not prioritized. A total of 130 respondents were instructed to answer the questions honestly, with an emphasis on the fact that there were no right or wrong answers. The survey was conducted between March 2022 and August 2023.

Chapter 5. RESULTS OF THE EMPIRICAL STUDY

1. Study sample

The data was collected between March 2022 and August 2023.

Table 1 shows the number and corresponding percentages of participants by gender. A total of 130 individuals were surveyed, of which 40 were males and 88 were females. Two participants did not disclose their gender.

Table 1. Gender distribution of study subjects

Gender	Number	Percentage
Men	40	31.3
Women	88	68.8
Total	128	100

Table 2 presents the age distribution of the surveyed individuals. One participant did not provide this information. For the study, the age distribution was divided into six groups: 18–25 years, 26–30 years, 31–35 years, 36–40 years, 41–50 years, and over 50. The first and last age groups had the highest number of participants, with 35.7% and 20.9%, respectively. The age group with the least participants was 36–40 years old, with only six individuals or 4.7%. In the other age groups, the distribution was relatively even. It is noteworthy that the 26–30-year-olds and the 41–50-year-olds had almost identical values, at 14.0% and 14.7%, respectively.

Table 2. Age distribution of survey respondents

Age	Number	Percentage
18–25	46	35.7
26–30	18	14
31–35	13	10.1
36–40	6	4.7
41–50	19	14.7
Over 50	27	20.9
Total	129	100

Table 3 shows the distribution of surveyed individuals by education level. One participant did not indicate their education. The largest group consisted of respondents with secondary education, numbering 56 or 43.4%. Following them were those with a master's degree, totaling 35 or 27.1%. The group with a bachelor's degree came next, with 31 individuals or 24%. Finally, there were six individuals with a doctoral degree, representing 4.7% of the surveyed population. Only one respondent reported having primary education, which accounts for 0.8%.

Table 4 displays the distribution of surveyed individuals based on their place of residence. One participant did not provide their data. The largest group of respondents, comprising 82 individuals or 63.6% of the sample, lives in the capital. The second-largest group, totaling 26 individuals or 20.2% of the sample, resides in a small town. The third-largest group, totaling 13 individuals or 10.1% of the sample, lives in a large city. Only 8 participants, or 6.2%, identified as living in a village.

Table 3. Distribution of surveyed individuals by level of education

Education	Number	Percentage
Primary	1	0.8
Secondary	56	43.4
Bachelor's degree	31	24
Master's degree	35	27.1
Doctoral degree	6	4.7
Total	129	100

Table 4. Distribution of survey respondents by place of residence

Place of residence	Number	Percentage
Capital city	82	63.6
Large city	13	10.1
Small town	26	20.2
Village	8	6.2
Total	129	100

Table 5 shows the distribution of surveyed individuals based on their marital status. The smallest group was composed of divorced individuals, comprising only 8 or 6.3% of the sample. The remaining three categories had similar values. The most numerous group was composed of married individuals, totaling 41 or 32% of the sample. They were followed by those living with a partner on a family basis—40 or 31.3%. Singles are 39—30.5%.

Table 5. Distribution of surveyed individuals by marital status

Marital status	Number	Percentage
Single	39	30.5
I live with a partner as an unmarried couple	40	31.3
Married	41	32
Divorced	8	6.3
Total	128	100

Table 6 shows the distribution of participants based on whether or not they have children. The results indicated a 10% difference in favor of those without children, with a total of 71 participants. The number of participants with children is 57.

Table 6. Distribution of survey respondents based on whether they have children

With/without children	Number	Percentage
Without children	71	55.5
With children	57	44.5
Total	128	100

2. Psychometric characteristics of the scales used

Statistical procedures were conducted to determine the mean values of the responses, standard deviation, and Cronbach's Alpha for internal reliability in order to investigate the psychometric characteristics of the scales used. The results are presented in Tables 7, 8, 9, and 10.

Table 7 presents the results of the three groups of scales: personality traits based on the **Big Five model**, the **Self-Esteem Scale** (with two sub-scales: **self-competence and self-liking**) and the **Resilience Scale**. These scales were combined based on the objectives and requirements of the present study, following a consensus reached among the participating specialists. The Alpha values indicated stable average validity levels, ranging from 0.639 to 0.782. An exception was the data from the Self-Esteem Scale in the **self-liking** section, where the value was the highest at 0.83. It is noteworthy that this section had the largest number of items, with a total of 8. The value of Cronbach's Alpha in the self-competence section on the same scale was 0.777.

The factors of the Big Five model were found to have the following Cronbach's Alpha coefficients: extraversion—0.639; neuroticism—0.669; conscientiousness—0.782; agreeableness—0.662; and openness to new experiences —0.728. The similar results may be attributed to the equal number of items for each factor.

The Alpha value for resilience was 0.685. Despite the generally average validity values, it was concluded that the scale had acceptable psychometric characteristics and a stable structure.

Table 7. Psychometric characteristics of the personality traits scales

Scale	Number of items	Average	Standard deviation	Cronbach's Alpha
Extraversion	4	12.062	3.205	0.639
Neuroticism	4	12.438	3.304	0.669
Conscientiousness	4	14.147	3.941	0.782
Agreeableness	4	15.992	2.667	0.662
Openness to new experiences	4	15.215	3.416	0.728
Self-competence	7	21.155	4.878	0.777
Self-liking	8	26.512	6.355	0.83
Resilience	6	23.277	13.628	0.685

Table 8 presents the results of the **Social Support Scale**, which was previously introduced in the instrument description. The scale comprises three parts: 1. **Social support—trust**, emotional support based on trust; 2. **Social support—belonging**, often referred to as instrumental; 3. **Sharing**, a separate scale that highlights an individual's inclination to trust others and share with them. The Alpha values of all three components indicated stable average levels of reliability, ranging from 0.685 for Sharing to 0.718 for Social support—Belonging. The median value of 0.705 on Social support—Trust (Emotional)—was closer to the instrumental—2.

Table 8. Psychometric characteristics of the social support scales

Scale	Number of items	Average	Standard deviation	Cronbach's Alpha
Social support—trust	5	19.233	4.084	0.705
Social support—belonging	5	19.646	3.479	0.718
Sharing	6	23.227	3.691	0.685

Table 9 presents the results of the **Coping Strategies Scale**, which was divided into three sections for the study. The specialists involved reached a full consensus on this division. The first section was **Passive (avoidant) coping**, consisting of four parts. Each of the first three—**Denial**,

Inaction (disengagement from action), and **Disinterest** (mental disengagement)—contained four items. The Cronbach's Alpha values for the Denial and Inaction parts were 0.703 and 0.823, respectively, placing them in the middle and high end of the validity range. However, the Mental disengagement part scored only 0.208, failing the validity test. This low score may be attributed to the ambivalence of the coping strategy in question. In certain cases, this behavior is viewed as a mechanism that prevents distress from overwhelming the emotional background, allowing the individual to function in a hostile environment for some time (Dubow & Rubinlicht, 2011). **The fourth scale**, which has an Alpha coefficient of 0.737, synthesizes the data from the three previously mentioned scales.

The second section, **Active coping**, consisted of four scales. The first scale, **Active coping**, had a Cronbach's Alpha value of 0.772. The second scale was **Acceptance**, with a reliability coefficient of 0.747. The third scale, **Suppression of competing activities**, had a coefficient of 0.508, which was below the average validity values. This lower score could be explained, at least in part, by the possibility that this strategy could also be used outside the framework of Active coping. While each part consisted of four items, the **general scale** of Active coping comprised 15 items instead of 12. This discrepancy arose from the incorporation of three items from the **Planning strategy**. The reliability coefficient of the **general scale** was average, at 0.759.

Table 9's final section relates to **Emotional coping** and consists of one component: **Focusing on emotions and venting of emotions**, which includes four items. The reliability of Cronbach's Alpha was high, at 0.803.

Based on the reliability values presented in Table 9 (**Coping strategies**) and disregarding the Cronbach's score of 0.208 for the Disinterest (Mental disengagement) section in the **Passive (avoidant) coping** category, it can be concluded that the scale had a stable structure and good psychometric characteristics.

Table 9. Psychometric characteristics of the coping strategy scales

Indicators	Number of items	Average	Standard deviation	Cronbach's Alpha
Passive (avoidant) coping				
Denial	4	7.233	2.793	0.703
Inaction (behavioral disengagement)	4	6.742	2.68	0.823
Disinterest (mental disengagement)	4	10.426	2.178	0.208
Passive coping (general scale)	12	24.422	5.678	0.737
Active coping				
Active coping	4	12.797	2.651	0.772
Acceptance	4	11.891	2.894	0.747
Suppression of competing activities	4	10.984	2.154	0.508
Active coping (general scale)	15	45.57	6.351	0.759
Emotional coping				
Focusing on emotions and venting of emotions	4	10.791	3.111	0.803

Table 10 presents the results of the **Posttraumatic Growth Scale**, which was divided into six components. The first five components were named after the different aspects of the phenomenon. The first component, **Relating to others**, contained seven items and had the highest coefficient Alpha of 0.796. The second component, **New possibilities in life**, contained five items and had a reliability of 0.741. The third component, **Personal strength**, included four items and had a reliability of 0.769. The fourth component, **Appreciation of life**, contained three items and had a Cronbach level of 0.753. So far, stable average levels of validity had been observed.

The **Spiritual change** section of the Posttraumatic Growth Scale had the lowest Alpha value (0.566) and the fewest number of items (2), which may explain this result. The **general scale** included all 21 items and had a high reliability of 0.885.

Table 10. Psychometric characteristics of the posttraumatic growth scales

Scale	Number of items	Average	Standard deviation	Cronbach's Alpha
Relating to others	7	14.425	6.687	0.796
New possibilities	5	10.188	4.18	0.741
Personal strength	4	11.102	3.989	0.769
Appreciation of life	3	8.57	3.06	0.753
Spiritual change	2	4.417	2.589	0.566
Posttraumatic growth (general scale)	21	52.222	15.659	0.885

3. Psychological portrait of individuals who have experienced an existential crisis

As previously stated, the participants in this study had experienced various types of existential crises. The results were analyzed in light of this information.

The analysis started with a descriptive overview of the personal characteristics of individuals who had undergone existential crises, using a frequency analysis of the responses on the corresponding scales. Two-thirds of the participants reported scores significantly above average on the resilience scale, indicating adaptive and durable coping with the consequences of experienced difficulties. In terms of self-esteem assessment, the examined individuals scored above average levels in self-liking (about 80% of them) and self-competence. For social support, two components stood out with very high values: interpersonal trust and sharing, and belonging to a group.

Regarding preferred coping styles, four out of five people surveyed exhibited an orientation toward active coping, while the use of passive and emotional coping styles was relatively uncommon.

The study placed special emphasis on posttraumatic growth. Overall, the subjects studied who experienced an existential crisis demonstrated values above the average for the general scale. About three-quarters of the participants exhibited personal strength and a tendency to appreciate life more. Additionally, over half of the participants stated that the crisis had presented them with new opportunities.

4. Relationships between the studied variables

Correlation and multiple linear regression analysis were used to analyze the relationships between the variables studied.

Relationships between personality traits, self-esteem, and social support with coping styles in individuals who have experienced an existential crisis

The selection of a coping style can be linked to the following personality characteristics. Self-liking was the only established predictor for choosing an active coping style in situations of existential crisis. People who accept and like themselves were more likely to take active action. Orientation toward a passive coping style was prevented by resilience and confidence in one's own self-competence. The only predictor for an emotional coping style was resilience, with a moderately strong predictive capacity.

The impact of social support on coping style choice was most significant for sharing with close individuals. This effect was moderated for passive and emotional coping, with both coefficients being negative. The relationship with active coping was weak but positive. Additionally, active coping displayed a weak relationship with belonging to a group in which one feels accepted.

These results suggest that individuals with lower levels of sharing tend to resort to passive and emotional coping, while those with higher levels prefer active coping, although the relationship is weaker. Having stable personal relationships with others can often lead to active coping. Therefore, having people to share with in difficult situations and a general inclination to share with others are essential for choosing a coping style in existential situations. In such cases, the inclination is to choose an active coping style and avoid a passive or emotional one. Having a stable affiliation with a group or groups can also facilitate the use of an active coping style.

Relationships between personality traits, self-esteem, social support, and styles of coping with posttraumatic growth in individuals who have experienced an existential crisis

Personality traits, self-esteem, and resilience had limited explanatory power for posttraumatic growth. However, individuals with high self-esteem may have greater opportunities for posttraumatic growth, particularly in terms of personal strength and to some extent, new opportunities in life. Additionally, resilience can contribute to the development of personal strength.

Surprisingly, the investigated aspects of social support—trust, belonging to a stable group, and the tendency to share—showed little contribution to posttraumatic growth in existential situations, as established in our sample.

Although active coping was found to contribute the most to the possibility of posttraumatic growth, the effects were weak for both the general scale and subscales. Interestingly, when passive coping appeared as a predictor in the regression analysis, it had virtually the same effect as active coping.

Chapter 6. DISCUSSION OF THE RESULTS

The results of the correlation analysis and multiple linear regression partially support the **first hypothesis**, *which suggests that certain personality traits, types of social support, and forms of self-esteem are associated with the use of specific coping strategies*.

Upon analysis of the relationship between the personality traits defined by the Big Five model and the three components of the Coping Style Scales (passive coping, active coping, and emotional coping), certain correlational dependencies emerged. The most significant correlation was observed between neuroticism and emotional coping. Additionally, this trait was negatively correlated with active coping and weakly positively correlated with passive coping. In sum, emotional coping mechanisms are usually preferred by individuals exhibiting high levels of neuroticism. There was also a relationship between agreeableness and emotional coping, although it was notably weaker.

However, the data did not support the hypothesis that there is a correlation between conscientiousness and active coping, or between extraversion and imagination (openness to new experiences) on the one hand, and emotional coping on the other.

The study confirms our hypothesis regarding the relationship between self-esteem components, self-competence, and self-liking. There was a moderate positive correlation between the self-esteem components and active coping, and a moderate negative correlation with passive coping.

The relationship between coping strategies and social support (trust, belonging, sharing) partially confirmed our hypothesis. The study showed a correlation between high degrees of social

support (in terms of belonging, sharing, and trust) and a preference for active coping. However, individuals with lower levels of sharing tended to prefer passive and emotional coping strategies.

Individuals who have experienced existential crises exhibited varying coping strategies, which can be predicted by certain personality traits in the Big Five model. Specifically, neuroticism and agreeableness were positively correlated with an emotional coping style, while openness to new experiences and conscientiousness were negatively correlated. The study did not find any predictive capabilities of personality traits for active and passive coping.

The relationship between self-esteem and coping styles shows that high self-competence negatively affects the preference for a passive coping style. This result partially confirms our hypothesis, since the described trend is weak.

We partially confirmed our hypothesis on self-esteem (self-liking) as a positive *predictor* of active coping, and sharing (social support) as a negative *predictor* of passive coping. Additionally, sharing was found to be a negative *predictor* of emotional coping.

Two components of social support, sharing and belonging, were found to be predictors of a similar index for active coping. These results support our original hypothesis, although with low values.

The second hypothesis assumes that *posttraumatic growth is associated with certain personality traits, types of social support, forms of self-esteem, and coping styles.*

The correlation analysis partially confirmed the assumptions made, showing a moderate correlation of personal strength from the posttraumatic growth scale with extraversion, as well as with self-liking, and a weak correlation with self-competence.

Our hypotheses regarding the relationships between posttraumatic growth (PTG) and social support were partially confirmed due to the low scores. The highest correlation was observed between personal strength as an aspect of PTG and sharing with others.

The correlation between belonging, a component of social support, and personal strength, a component of posttraumatic growth (PTG), was weak. Trust and sharing, the other two subscales of social support, have almost identical correlation scores with relating to others (PTG). There was no correlation between any aspect of social support and two other aspects of PTG: new possibilities and spiritual change.

The hypothesis that there is a correlation between PTG and certain coping strategies was partially confirmed. A weak relationship was found between active coping and the general PTG

scale, as well as with the emergence of new possibilities in life subscale and personal strength. Additionally, a weak negative correlation was found between passive coping and personal strength as an aspect of PTG.

To establish the predictive potential of personality traits from the Big Five model, the components of self-esteem, social support, and coping styles toward facets of posttraumatic growth, a multiple linear regression analysis was conducted. The study *did not find evidence* to support the hypothesis of a predictive relationship between the traits of the Big Five model and PTG (general scale). However, it did find partial support for a relationship between self-esteem and the general PTG scale. Additionally, self-liking was found to be associated with an increased appreciation of life and personal strength as aspects of PTG. It is important to note that the model's explanatory power was weak.

Our hypotheses regarding social support as a predictor of PTG were *partially confirmed*, mainly due to the low beta levels and the explanatory capabilities of the regression models obtained. The strongest relationship was observed between sharing and personal strength. Belonging was a predictor of the general scale of PTG, but with weak values. The same held true for trust as a predictor of relating to others.

The hypotheses regarding coping styles as predictors of posttraumatic growth (PTG) were *partially confirmed*, but the links were weak. As expected, active coping is most strongly associated with the PTG general scale. Among the PTG subscales, active coping is most strongly associated with new opportunities in life and less strongly associated with gaining personal strength. Passive coping was a negative predictor of personal strength and increased appreciation of life, but the effects were weak.

The **third hypothesis** *examines the association between coping styles, aspects of posttraumatic growth, and resilience*. We obtained partial confirmation again. The results confirmed our hypothesis that resilience is related to all aspects of coping, with the most significant negative correlations found with passive and emotional coping. A weaker positive correlation was found with active coping. There was a moderately strong relationship between resilience and personal strength as a subscale of PTG. No other significant correlations were found with the other PTG components.

In terms of predictors, the multiple linear regression analysis showed a negative association between resilience and emotional and passive coping. The results revealed weak positive

predictability of resilience to personal strength (PTG). No significant predictors of resilience or active coping were found for any of the other components of PTG.

DISSERTATION CONTRIBUTIONS

This work aims to provide a psychological understanding of existential crises and how individuals experience them. The study includes both qualitative and quantitative research, focusing exclusively on individuals who have survived such crises. This type of research is rare in Bulgarian psychological literature.

The main contribution of the dissertation is the design of a theoretical model that combines the relationship between personality traits, social support, and self-esteem with specific coping styles and the presence of posttraumatic growth. This approach allowed us to identify new relationships between the variables considered.

Another significant aspect of the dissertation is its *focus on the constructive overcoming of crises and the potential for achieving resilience and/or posttraumatic growth*. The results indicate that these phenomena were present in the majority of participants in both studies. Approximately three-quarters of the participants exhibited personal strength and a tendency to appreciate life more. Over half of the participants reported that new opportunities had opened up for them as a result of the crisis. Self-esteem was highly valued, both in terms of self-liking (in about 80% of those surveyed) and self-competence. Four out of five participants chose active coping strategies, with passive and emotional coping being used to a much lesser extent.

The data gathered from this study suggest that the constructive foundation of human nature is more significant than commonly assumed. The obtained results have implications for psychotherapeutic practices and the development of preventive strategies to address posttraumatic disorders, both at the individual and societal levels.

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1. Panchev, B. Crisis and resilience, Doctoral readings 2023 of the Faculty of Philosophy, Sofia University St. Kliment Ohridski, Sofia, 2023.

2. Panchev, B. Member of the Organizing Committee—International Scientific Conference on the occasion of the 50th anniversary of the specialty "Psychology" at Sofia University St. Kliment Ohridski, Sofia, 1–3 June 2022.

3. Panchev, B. Changes in attitudes about the world and oneself during existential crises—scientific conference, Doctoral readings 2022 of the Faculty of Philosophy, Sofia University St. Kliment Ohridski, Sofia, 2022.

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5. Panchev, B., Zinovieva, I. (2023). Social support and coping with existential crises. *Applied psychology: Opportunities and perspectives.* Varna Free University Chernorizets Hrabar, Varna, 30 June–1 July 2023.

PARTICIPATION IN SCIENTIFIC PROJECTS

Moral and pro-social behavior: Sympathy and helping. Supervisor: Prof. Ph.D. Irina Zinovieva, Sofia University St. Kliment Ohridski Scientific Research Fund, Project number 80-10-32/20.04.2023