STATE UNIVERSITY OF MOLDOVA DOCTORAL SCHOOL OF SOCIAL SCIENCES

CONSORTIUM: State University of Moldova (USM), —Alecu Russoll State University of Bălți (USARB), —Bogdan Petriceicu Hașdeull State University of Cahul (USC)

Manuscript

CZU: 159. 944. 4: 159. 922. 63 (043.2)

POPESCU MONICA-ANDREEA

COGNITIVE SCHEMAS AND COPING MECHANISMS IN ELDERLY PEOPLE

SPECIALTY 511.01 - GENERAL PSYCHOLOG

Summary of the Doctoral Thesis in Psychology

The thesis was developed within the Doctoral School of Social Sciences at the State University of Moldova.

Scientific Supervisor:

POTÂNG Angela, PhD in Psychology, Associate Professor

Members of the Advisory Committee:

COJOCARU Natalia, Habilitated Doctor in Psychology, Associate Professor, USM PALADI Oxana, Habilitated Doctor in Psychology, University Professor, USM TOLSTAIA Svetlana, PhD in Psychology, University Professor, USM

Doctoral Committee:

CERLAT Raisa, PhD in Psychology, Associate Professor, State University of Moldovapresident

POTÂNG Angela, PhD in Psychology, Associate Professor, State University of Moldovascientific supervisor

COJOCARU Natalia, Habilitated Doctor in Psychology, Associate Professor, State University of Moldova- *reviewer*

MUNTELE Daniela, PhD in Psychology, Associate Professor, —Alexandru Ioan Cuzal University, Iași- *reviewer*

PRIȚCAN Valentina, PhD in Psychology, Associate Professor, —Alecu Russoll State University of Bălți – *reviewer*

The presentation will take place on October 3, 2025, at 12:00 PM, during the public session of the Doctoral Committee within the Doctoral School of Social Sciences at the State University of Moldova, at the following address: Republic of Moldova, Chişinău, M. Kogălniceanu Street 65 A, Study Building No. 3, Room 419.

The doctoral thesis and its summary can be consulted at the National Library of the Republic of Moldova, the Central Library of the State University of Moldova, and on the website of the National Agency for Quality Assurance in Education and Research (https://anacec.md/).

The summary of the thesis was sent on August 29, 2025.

President of the Doctoral Committee,

CERLAT Raisa, PhD in Psychology, Associate Professor

Scientific Supervisor,

POTÂNG Angela, PhD in Psychology, Associate Professor

Author

POPESCU Monica-Andreea

© Popescu Monica Andreea, 2025

CONTENTS

CONCEPTUAL FRAMEWORK OF THE RESEARCH	4
CONTENT OF THE DOCTORAL THESIS	8
GENERAL CONCLUSIONS AND RECOMMENDATIONS	23
BIBLIOGRAPHY	25
LIST OF THE AUTHOR'S PUBLICATIONS ON THE THESIS TOPIC	27
ANNOTATION	28
	29

CONCEPTUAL FRAMEWORK OF THE RESEARCH

Relevance and importance of the studied topic. In countries around the world, population aging represents a global trend that requires a thorough understanding of the factors supporting the mental and emotional health of older adults. The fastest-growing segment of the global population consists of people over 65 years old. In this context, research on maladaptive cognitive schemas and coping mechanisms is essential to promote the psychological well-being of the elderly and to harness their social potential. The third age brings significant changes in physical, psychological, and social health. Difficulties in adapting to physical and cognitive decline, as well as social isolation, can negatively affect mental health.

Considering the psychological characteristics of older adults, maladaptive cognitive schemas play an important role in how the elderly understand and adapt to changes associated with aging. Schemas are irrational and negative thinking patterns that influence how individuals perceive themselves and their environment. These patterns may include feelings of helplessness, a lack of life meaning, and pessimism, as well as thoughts that can exacerbate symptoms of depression and anxiety, leading to a significant decline in psychological well-being [16].

To manage stress and life challenges, people use coping mechanisms that are vital for the mental and emotional health of older adults. Adaptive coping, which manifests through positive reframing, seeking social support, and accepting changes, correlates with reduced stress and increased overall satisfaction [19]. Maladaptive coping, such as avoidance, social withdrawal, or denial, leads individuals to isolate themselves and become depressed and anxious. Studies show that predominant use of maladaptive strategies increases the likelihood of older adults experiencing severe psychological disorders [28; 30].

The interaction between maladaptive cognitive schemas and the coping mechanisms used by older adults has consequences for individuals experiencing feelings of helplessness and lack of purpose, making them more likely to employ ineffective coping strategies, such as avoiding social activities or ignoring problems. These two psychological aspects also influence overall well-being. For instance, in 1999, researchers E. Diener and M. E. Suh found that optimism and the perception of control over one's life impact subjective well-being. Higher levels of satisfaction and well-being are observed in older adults who maintain an optimistic outlook and believe they have control over how they live [20].

Studying maladaptive cognitive schemas and coping mechanisms in older adults is crucial in the context of global aging, as it significantly impacts mental health and well-being. Identifying and addressing these factors contributes to healthy aging. The concept of —active aging, introduced by the World Health Organization in the 1990s, refers to promoting not only physical health but also the social, psychological, and spiritual dimensions of the third age, through access to healthcare services, physical and intellectual activity, social participation, and a stimulating environment. In 2016, the World Health Organization adopted the —Global strategy and action plan on aging and health, which provides a framework for addressing challenges related to population aging and promoting health and active participation among seniors [35].

Through another program, —Active ageing through preventing falls: Falls prevention is everyone's business, aging is promoted as a positive process, encouraging an active lifestyle through social participation and community engagement to maintain health and well-being. The World Health Organization has established an action plan that includes recommendations and directions for member states regarding the promotion of health and community inclusion. The European Union's strategy for health and active aging was created to encourage people to become more engaged in their communities, participate in physical and intellectual activities, and ensure access to adequate health and care services [37].

In Romania and Eastern Europe, population aging has become a major concern, prompting numerous institutions to focus on researching mental health and well-being in older adults, such as the The National Institute of Gerontology and Geriatrics —Ana Aslan. At the national level, research on maladaptive cognitive schemas is relatively new, but there is growing interest in understanding how these schemas contribute to worsening mental health problems in older adults. The national strategy for promoting active aging (2015-2020) marked an important step in recognizing the needs of older adults and developing policies that support both physical and mental health [38]. The strategy promotes active participation of older adults in the community and the creation of accessible mental health services tailored to their needs.

In Romania, several programs and policies are dedicated to seniors, such as the —National public health strategy, which addresses aspects of active aging and health with the overall objective of promoting a healthy lifestyle, preventing diseases, improving access to medical services, providing adequate care, and enhancing quality of life. Another national program, —Home community services for dependent older adults, provides home care services for citizens over 65 who need additional support to maintain independence and autonomy. Services include assistance with personal hygiene, medical and social care, as well as counseling and emotional support [38].

Demographic changes, such as declining birth rates and increased life expectancy, as well as social changes, including urbanization and migration, influence the population structure and require innovative approaches to managing aging. Challenges of the third age have been studied to prevent marginalization, promoting an integrated approach to medical, community, and social services. In this context, the approach to older adults is multidisciplinary, involving social workers, doctors, and psychologists.

This work aligns with the —National program for active and healthy aging in the Republic of Moldova (2023-2027), which targets health, education, and sports. Research in the field of psychology of older adults in Moldova has highlighted low levels of happiness and an increased sense of loneliness [37]. The proposed research supports improving well-being through interventions for specialists, focusing on psychological factors such as maladaptive cognitive schemas and adaptive coping mechanisms.

Framing of the topic within international, national, regional concerns, the research team, and in an inter- and transdisciplinary context, presentation of previous research results related to the chosen topic.

Despite numerous studies in the field of gerontology, the essence of the aging process remains unknown at the current stage in several fields, including psychology. From the perspective of situating the present research topic within current concerns, it represents a rapidly developing research domain with implications for public health, psychogerontology, social services, and public policies. A better understanding of how older adults adapt to cognitive and emotional changes contributes to improving their quality of life and implementing effective intervention strategies [5]. At the international level, research on healthy aging and the factors influencing well-being in older adults has expanded, given the increase in life expectancy and population aging. Aspects regarding cognitive schemas and their impact on well-being and coping mechanisms are of global interest for promoting an active lifestyle and maintaining mental health [44].

The World Health Organization, in its 2015 <code>Global</code> report on aging and health, highlighted the urgent need for public health actions to support healthy aging, emphasizing the importance of developing mental health strategies for older adults, as cognitive decline and emotional problems are major challenges for healthy aging. Maladaptive cognitive schemas, such as pessimism or lack of life meaning, are associated with depression and anxiety in older adults [33].

In Europe, Eurostat research has focused on developing integrated health and well-being strategies for older adults, exploring the role of social networks, digital technologies, and community support in reducing maladaptive cognitive schemas and promoting adaptive coping [34].

At the national level, according to the National Institute of Statistics, the proportion of the elderly population (over 65 years) is continuously increasing, necessitating a reconfiguration of public policies and social and medical care services. The National Institute of Gerontology and Geriatrics —Ana Aslan highlights the impact of social isolation, poverty, and limited access to healthcare services on the psychological well-being of older adults, within the context of aging stigmatization in Romania [36].

Interdisciplinary studies reveal the influence of cognitive schemas and coping mechanisms on adaptation to the challenges of old age and overall life satisfaction. R.S. Lazarus and S. Folkman (1984) highlighted the role of emotional coping in stress regulation [25], while P.B. Baltes and M.M. Baltes (1990) associated adaptive coping with the maintenance of well-being [14]. M.F. Scheier and C.S. Carver (1992) demonstrated the link between optimism, positive cognitive schemas, and effective coping [31]. G.M. Wagnild and H.M. Young (1993) emphasized the importance of cognitive and emotional resilience in maintaining well-being through cognitive flexibility and positive reappraisal [32].

L. Carstensen, in 1999, developed the —Socioemotional selectivity theory, which posits that human motivations change with age, emphasizing the role of positive emotions and close relationships. As people age, cognitive schemas adjust to maintain a positive emotional state, and coping mechanisms

become more oriented toward stress avoidance and maximizing well-being. Research results have shown that older adults are more likely to choose emotion-focused coping strategies rather than problem-focused strategies [17].

As individuals age, threats to health, personal independence, and well-being arise; however, differences exist in how individuals respond to these threats. According to analyzed studies, the importance of coping mechanisms used by older adults lies in enabling them to face age-related changes, with the aim of improving mental health and becoming more resilient [27]. In 2009, research was conducted on the role of cognitive stimulation activities on psychological well-being. C. Hertzog, A. Kramer, R.S. Wilson, and U. Lindenberger found that older adults who maintain mental activity have better well-being and greater stress-coping capacity. Cognitive stimulation contributes to maintaining cognitive plasticity, providing older adults with more effective coping mechanisms and a higher overall sense of well-being [22]. Positive cognitive schemas are important for healthy aging, facilitating adaptation to age-related changes; thus, schema-focused therapy helps older adults identify and modify their thinking patterns, improving quality of life. Research on old age requires a multidisciplinary approach, and correcting maladaptive schemas and using effective coping mechanisms are fundamental for mental health. Training specialists in clinical psychology, with an emphasis on the specificities of old age and crisis interventions, is essential.

The aim of the research lies in identifying the types of early maladaptive cognitive schemas, coping mechanisms, and well-being in older adults, as well as implementing a psychological intervention program aimed at changing early maladaptive cognitive schemas and developing adaptive coping mechanisms, in order to increase the level of perceived psychological well-being.

The objectives established for achieving the aim were:

- **O 1:** Analysis of the specialized literature in the field of psychology of older adults in order to delineate the theoretical aspects relevant for the design and implementation of the experimental study regarding early maladaptive cognitive schemas, coping mechanisms, and well-being.
- **O 2:** Identification of early maladaptive cognitive schemas and coping mechanisms occurring at different stages of older adulthood.
- **O** 3: Identification of differences in early maladaptive cognitive schemas and coping mechanisms depending on demographic aspects (gender, stage of older adulthood, living environment, family status) and the level of perceived well-being.
- **O 4**: Establishing the relationship between early maladaptive cognitive schemas and coping mechanisms in older adults.
- **O** 5: Development of psychological profiles of older adults regarding maladaptive cognitive schemas from the perspective of coping mechanisms and psychological well-being.
- **O** 6: Design and implementation of a psychological intervention program aimed at remediating early maladaptive cognitive schemas and developing adaptive coping mechanisms, in order to improve psychological well-being.

The research hypotheses established within the study were four, namely:

Hypothesis 1: It is assumed that there are differences in maladaptive cognitive schemas and coping mechanisms among older adults, depending on the stage of older adulthood, gender, living environment, family status, and psychological well-being.

Hypothesis 2: It is assumed that there is a relationship between early maladaptive cognitive schemas and coping mechanisms in older adults.

Hypothesis 3: It is assumed that there are differences in the use of coping mechanisms depending on older adults' early maladaptive cognitive schemas and the level of perceived well-being.

Hypothesis 4: It is assumed that if older adults participate in the psychological intervention program aimed at changing early maladaptive cognitive schemas and developing adaptive coping mechanisms, they will achieve an increase in the level of psychological well-being.

The research methodology involves theoretical and empirical methods through the use of the following instruments: the "Mini-Mental State Examination – MMSEI, created by M. Folstein; the "Young Schema Questionnaire – YSQ-S3I, developed by J. E. Young; the multidimensional "Strategic Approach to Coping Scale – SACSI, constructed by S. E. Hobfoll, C. L. Dunahoo, J. Monnier, M. R. Hulsizer, and R. Johnson; and the IRyff scale of psychological well-beingI, developed by C. D. Ryff. The

instruments used are standardized, validated, and applied in various population contexts, thus strengthening the validity and reliability of the collected data. The obtained data were statistically processed through descriptive statistics of frequencies and percentages, One-Way ANOVA, independent samples T-test, pre/post-test analyses, and the determination of Pearson correlation coefficients. Data processing was performed using SPSS version 20.0 to support the validity of the results.

The novelty and scientific originality consist in identifying the cognitive and behavioral psychological factors that determine the perception of well-being and successful aging; the development of a psychological intervention program for older adults, based on the identification and understanding of the origin of early maladaptive cognitive schemas, their remediation, and the improvement of adaptive coping styles.

The scientific problem addressed consists in determining the particularities of the behavioral and affective dimensions of older adults from the perspective of early maladaptive cognitive schemas; identifying demographic differences regarding cognition and behavior in seniors; creating psychological profiles based on the relationship between coping mechanisms and their manifestations in correlation with maladaptive cognitive schemas; and implementing a psychological intervention program for identifying and educating early maladaptive cognitive schemas and adaptive coping strategies, thereby improving the psychological well-being of older adults.

The theoretical significance of the work lies in clarifying the theoretical framework regarding the concept of cognitive schemas from the perspective of their interrelation with coping mechanisms, highlighting the psychological factors that determine psychological well-being and, consequently, optimal aging. Research on maladaptive cognitive schemas and coping mechanisms in older adults makes a significant contribution to understanding changes in the way individuals respond to life challenges as they age. It provides theoretical perspectives on how past experiences and adaptations to life changes may influence cognitive and emotional development over time.

The practical value of the research lies in the fact that the obtained results serve as a basis for best practices for the mental health of older adults, through the validation of a psychological intervention program that will act on maladaptive cognitive schemas and coping mechanisms, enabling older adults to adapt their thinking and behavior to achieve successful aging. Moreover, it may serve as a starting point for integrating advanced technologies such as neuroimaging, which brings novelty to the study of cognitive schemas in older adults by offering more detailed insights into changes in brain activity related to these schemas and the relationships between psychological factors and well-being.

Thesis structure. The thesis contains annotations in romanian and english, an introduction, three chapters, general conclusions and recommendations, 137 pages of main text, 258 bibliographic sources, 7 appendices, 37 tables, and 14 figures. The results obtained are reflected in 12 published scientific papers.

Keywords: early maladaptive cognitive schemas, coping mechanisms, psychological well-being, older adulthood, psychological intervention program.

Approval of Scientific Results. The results obtained in the research were presented, discussed, and approved during the evaluation meetings of the supervisory committee within the Doctoral School of Social Sciences. Additionally, the results were presented at national and international professional meetings, such as informational sessions for staff in the non-governmental sector (NGOs) and governmental institutions (nursing homes subordinated to the Iași City Hall).

The results were also shared at scientific forums and events, including international scientific conferences such as <code>"Current Affairs"</code> and Perspectives in Psychological Research: International Conference of Applied Psychology, 2022, and the proceedings of the international scientific conference <code>"The Sixth International Conference on Adult Education: Education for Peace and Sustainable Development, 2023. Furthermore, they were presented at scientific conferences with international participation, including <code>"Integration through Research and Innovation: Social Sciences, 2021; "Applied Psychology from the Perspective of Contemporary Societal Approaches, 2021; "Integration through Research and Innovation: Educational Sciences, 2022–2023; and the national conference "Contemporary Methodologies of Research and Evaluation: Social Sciences and Education, April 22–23, 2021. The findings have also been disseminated through publications in specialized journals, such as Studia Universitatis Moldavia and the Journal of Romanian Literary Studies.</code></code>

CONTENT OF THE DOCTORAL THESIS

Introduction. The Introduction argues the relevance and importance of the research topic, determined by global decisions regarding the elderly population, thereby identifying the research problem. Subsequently, the research aim, objectives, hypotheses, and methodology are presented along with the rationale for their selection. Finally, a summary of the thesis chapters is provided.

Chapter 1. Theoretical approaches to cognitive schemas, coping mechanisms, and psychological well-being in older adults contains four subchapters and aims to analyze the specialized literature regarding the psychological concepts addressed in the research.

In the first subchapter, **1.1. Specificity of cognitive schemas in older adults**, the historical development of the notion of "schema" and its use across various fields of interest is analyzed, assigning it multiple meanings [4; 6]. The term has a long-standing tradition dating back to Antiquity, and the concept of "cognitive schema" was first introduced by Immanuel Kant in 1781. The theoretical approach is presented chronologically, starting from the general concept of "schema," then "cognitive schema", and finally presenting the theories on which the current research is based, namely the ||Cognitive theory of depression|| (1967), which posits that cognitive schemas are basic beliefs of the individual [15].

This theory was later expanded by J. Young, who developed the Early maladaptive schema theory in the 1990s. According to this theory, maladaptive schemas form as a result of adverse childhood experiences and can underlie personality problems or disorders. These schemas are reactivated in adulthood in situations similar to those experienced in early life, with the individual unconsciously treating them as truths that influence the processing of current experiences, recreating in adulthood the emotionally painful situations from childhood [23]. F. Nazari, A. Kakavand, and M. Farahani define early maladaptive schemas as dysfunctional cognitive and emotional patterns formed in childhood, particularly within the context of parental relationships. These schemas arise from negative experiences such as rejection, neglect, or overprotection and subsequently influence long-term behaviors and perceptions. Maladaptive schemas are associated with inadequate parenting styles, which contribute to the development of behavioral disorders in children (e.g., aggression, hyperactivity) and affect emotional self-regulation [26]. Over the past century, schema theories have been applied in various research areas, providing valuable insights into cognitive, emotional, and behavioral functioning.

For the purposes of this research, a working definition of cognitive schemas was developed: they represent a mental collection of information and beliefs about an individual's environment and facilitate efficient functioning. Once activated, a schema allows the human brain to make assumptions about events and people encountered, thereby guiding subsequent behavior in relation to external stimuli.

In **subchapter 1.2. Particularities of coping mechanisms in older adults**, the literature review continues with the identification and definition of the term "coping" and its theoretical models. Coping is a key concept in psychological research, with R. Lazarus and S. Folkman recognized as pioneers in the study of this psychological factor [2; 3].

The research focused on older adults is grounded in the Multiaxial model of coping developed by S. E. Hobfoll, C. L. Dunahoo, L. Monnier, M. R. Hulsizer, and R. Johnson, which includes general directions of coping organized along three axes: prosocial—antisocial, active—passive, and direct—indirect [21].

Aging itself involves physical, social, and psychological changes, making it essential for older adults to possess appropriate strategies to minimize the emotional consequences of stressful situations and adapt effectively. According to J. C. Cavanaugh and F. Blanchard-Fields, coping strategies differ depending on age, with individuals over 65 using strategies distinct from those of younger adults, primarily due to stressors specific to this life stage, including unforeseen social, familial, and personal changes [18].

Two theoretical models specific to older adults were developed: ||The selective optimization with compensation model|| by P. B. Baltes and M. M. Baltes (1990) [14] and ||The preventive and corrective proactivity model|| by E. Kahana and B. Kahana (2014) [24]. || The selective optimization with compensation model|| was designed to better understand the strategies older adults use for successful aging, aiming to maximize positive aspects and minimize losses typical of this life stage. It comprises three strategies: selection, optimization, and compensation. Another theoretical model for individuals over 65, ||The preventive and corrective proactivity model||, explains successful aging as a process by

which older adults experiencing age-specific stressors overcome them using internal and external resources [24].

The working definition of —coping mechanism adopted in this research describes it as a behavior employed to overcome challenges, specifically the adaptation to changes associated with aging.

In subchapter 1.3. Characteristics of psychological well-being in older adults, theories explaining the third psychological factor, namely —well-being are analyzed. This area is of interest for research but requires further theoretical elaboration. Literature synthesis indicates that well-being is related to areas in which an individual functions optimally—cognitively, emotionally, socially, physically, and spiritually—while interindividual differences exist in the experience of emotional well-being across contexts [8].

- C. D. Ryff pioneered well-being research, emphasizing the importance of optimal psychological functioning for individual development and self-realization. She proposed six dimensions of well-being: self-acceptance, positive relations with others, personal development, purpose in life, autonomy, and environmental control, which refers to functioning in conditions that satisfy personal needs and respect individual values [29].
- E. Diener's theory of subjective well-being (1984) posits that it represents the sum of cognitive and emotional evaluations an individual makes regarding their existence, composed of life satisfaction and balance [20].

The working definition of —well-being adopted in this research refers to a holistic condition of emotional, social, and mental balance, characterized by personal satisfaction and fulfillment, accompanied by optimal individual functioning.

Chapter 1 concludes with **1.4. Conclusions**, which presents a summary of the theoretical aspects investigated:

- 1. In the field of psychology, theories regarding the concept of —cognitive schemal specific to older adulthood are numerically limited, although there is a growing interest in research among individuals over 65 years old, with our study focusing on the —Early maladaptive schemas theory created by J. E. Young in 2003.
- 2. The working definition for the term —early maladaptive cognitive schemal was based on the definitions provided by A. Beck and J. E. Young; thus, this notion represents the beliefs of the individual formed during childhood through interaction with attachment figures, patterns useful throughout life that provide a sense of consistency and control over the self and the surrounding environment, which are reactivated in situations similar to those experienced in childhood, ultimately involuntarily recreating the painful situations from that period.
- 3. Theories regarding the notion of —cognitive schemal emphasize the essential role that thinking patterns play in the way individuals interpret and respond to daily experiences, which can influence self-perception, interpersonal relationships, and the ability to cope with difficulties. In the case of maladaptive cognitive schemas, these can lead to distortions in thinking, dysfunctional behaviors, and emotional difficulties; for this reason, awareness and reduction of their activation generate healthy and balanced psychological functioning.
- 4. Regarding the second psychological factor evaluated within the group of older adults, namely the —coping mechanism, the present research will focus on the theory of S. E. Hobfoll, C. L. Dunahoo, L. Monnier, M. R. Hulsizer, and R. Johnson, who created the —Multiaxial model of coping revised version in 1998 [22].
- 5. The concept of —coping has been widely debated and utilized in multiple studies, resulting in the development of the notion and the identification of numerous facets of the term. Researchers have been interested in studying coping across different subject groups characterized by varied demographic aspects such as gender, age, education level, living environment, profession, and health status, and regarding older adults, the concept has attracted interest in correlation with two other notions, namely —successful aging and —well-being.
- 6. The definition of the term —coping mechanism that aligns with the present research is represented by the behaviors adopted by older adults in order to overcome the problems they face and, more specifically, the actions of adapting to the changes that occur with advancing age.
- 7. Theories of coping mechanisms highlight the importance of the individual's capacity to manage stress

and life challenges, these strategies adopted to cope with difficulties playing a crucial role in the optimal functioning of the individual. Adaptive coping mechanisms contribute to the reduction of anxiety, depression, and other negative reactions, while maladaptive ones amplify suffering and personal and social difficulties.

- 8. Regarding the term —psychological well-being, I have created a definition that reflects the integration of approaches proposed by other specialists such as C. D. Ryff and M. Seligman; accordingly, this concept represents a holistic condition of emotional, social, and mental balance, characterized by a sense of satisfaction and personal fulfillment, accompanied by optimal individual functioning.
- 9. According to theories regarding the concept of —psychological well-being, it results from the harmonious integration of emotional, cognitive, and social factors, which allow the individual to live an authentic and fulfilling life.

Chapter 2. Research on early maladaptive cognitive schemas, coping mechanisms, and well-being in older adults. Following the study of the specialized literature and research in the field of lifespan psychology, we observed the need to conduct empirical research, considering the limited number of studies among elderly individuals. Understanding the manifestations of early maladaptive cognitive schemas and coping mechanisms in seniors is essential, as it allows us to better comprehend how the aging process affects the thoughts, emotions, and behaviors of people over 65 years of age.

Thus, **the aim** was directed toward identifying the types of early maladaptive cognitive schemas, coping mechanisms, and well-being in older adults.

The objectives proposed to achieve this aim are:

- O 1: Identification of early maladaptive cognitive schemas and coping mechanisms encountered at different stages of older adulthood.
- O 2: Identification of differences in early maladaptive cognitive schemas and coping mechanisms according to demographic aspects (gender, stage of older adulthood, living environment, family status) and the level of perceived well-being.
- **O** 3: Establishing the relationship between early maladaptive cognitive schemas and coping mechanisms in older adults.
- **O** 4: Development of psychological profiles of older adults regarding maladaptive cognitive schemas from the perspective of coping mechanisms and psychological well-being.

Based on the analysis of specialized literature and preliminary observations, the following **hypotheses** were formulated:

Hypothesis 1: We assume that there are differences in maladaptive cognitive schemas and coping mechanisms among elderly individuals, depending on the stage of older adulthood, gender, living environment, family status, and psychological well-being.

Hypothesis 2: We assume that there is a relationship between early maladaptive cognitive schemas and coping mechanisms in older adults.

Hypothesis 3: We assume that there are differences in the use of coping mechanisms depending on the cognitive schemas of older adults and the level of perceived well-being.

Experimental sample. The research sample initially consisted of 213 individuals over the age of 65 residing in Iaşi county, either at home or in the —Sf. Cuvioasă Parascheval retirement home, all of whom provided written consent to participate. Using a randomization method, the diversity of living environments was respected. In the first stage, subjects were administered the Mini Mental State Examination (MMSE), and due to cognitive impairment, 28 subjects were excluded. Ultimately, 174 research protocols remained for statistical analysis, as 11 protocols were invalidated due to incomplete information provided by participants, either by omitting responses to items or by refusing to complete the assessment.

Psychometric instruments used in the research

To achieve the proposed objectives and test the hypotheses, the following psychological assessment tools were utilized:

- 1. **Mini Mental State Examination (MMSE)**, created by M. Folstein used to assess the alteration of cognitive functions in adults by testing spatial-temporal orientation, attention, immediate and short-term memory, motor skills, language, and the ability to perform concrete and abstract operations.
- 2. Young's Schema Questionnaire YSQ-S3, developed by J. E. Young designed to identify 18 dysfunctional cognitive schemas grouped into five domains: —disconnection and rejection, —impaired

autonomy and performance, impaired limits, —other directedness and —overvigilance and inhibition [13].

- 3. **Strategic Approach to Coping Scale SACS**, developed by S. E. Hobfoll, C. L. Dunahoo, J. Monnier, M. R. Hulsizer, and R. Johnson used to identify behavioral coping strategies in a social context, considering the dimensions of active- passive, prosocial- antisocial, and direct- indirect approaches.
- 4. **Ryff's psychological well-being scale**, developed by c. d. ryff measures the construct of psychological well-being across six subscales: —self-acceptance, —positive relations with others, "personal development, "purpose in life, "autonomy and "environmental control.

In subchapter 2.2, The specificity of early maladaptive cognitive schemas and coping mechanisms at different stages of older adulthood, the empirical analysis of the Young's Schema Questionnaire – YSQ-S3 revealed the manifestation of three early maladaptive cognitive schemas in older adults: —disconnection and rejection ||, —impaired autonomy and performance ||, and — impaired limits || [6; 9].

Regarding the activation of these schemas across the three stages of older adulthood, it was observed that individuals aged 65–75 perceive others as indifferent and lacking empathy, feeling unwanted and inferior, with the — disconnection and rejection schema active. Those aged 75–85 show activation of both the — disconnection and rejection and — impaired limits schemas, whereas individuals over 85 display the — impaired autonomy and performance schema.

The statistical analysis continued by identifying differences in the manifestation of early maladaptive cognitive schemas according to demographic variables (gender, living environment, family status). Percentage-level results revealed overall differences in the manifestation of cognitive schemas by gender, with all five schemas more prevalent among women compared to men.

Analysis of differences between means highlighted significant gender-based differences in the manifestation of three cognitive schemas: women predominantly exhibit the —disconnection and rejection and —impaired limits schemas, whereas men predominantly exhibit the —other directedness schema (*Table 1*).

Table 1. Results of the independent samples T-Test for "early maladaptive cognitive schemas" by "gender"

Early maladaptive cognitive schemas	M		σ		Testul T	p
	M	F	M	F		
Disconnection and rejection	78,66	85,07	18,77	23,61	-1,880	0,049
Impaired autonomy and performance	49,85	52,56	17,39	18,76	-,970	0,342
Impaired limits	35,06	31,16	10,95	12,09	2,195	0,033
Other directedness	71,01	78,54	22,19	23,91	-2,112	0,039
Overvigilance and inhibition	105,12	108,66	34,36	33,19	-,671	0,500

Statistical percentage data, focused on establishing differences between subjects living at home and those residing in residential centers, regarding the manifestation of early maladaptive cognitive schemas, reveal overall differences; all five schemas are manifested in a higher percentage among elderly people living in nursing homes compared to those at home.

Following the application of the Independent Samples T-Test, significant differences appear between the two living environments in the manifestation of four maladaptive cognitive schemas, with those living at home predominantly exhibiting the early maladaptive schemas of —disconnection and rejection , —impaired autonomy and performance , —other-directedness, and —overvigilance and inhibition.

The factorial analysis continued with the identification of differences in the manifestation of early maladaptive cognitive schemas according to family status. Elderly widowers differ significantly from divorced individuals regarding the manifestation of the cognitive schemas of —impaired autonomy and performance \mathbb{I} , with the mean of the first group being M = 56.99 compared to M = 46.03, and —other-directedness \mathbb{I} , the mean of widowers being M = 81.32, and that of divorced individuals M = 70.47. Elderly people without a partner feel helpless, unable to take care of themselves, allowing themselves to

be dominated by others to whom they prioritize their needs in order to gain attention.

Subsequently, the statistical data reflect the percentage distribution regarding the coping mechanisms identified based on the responses of the elderly to the multidimensional instrument —Strategic Approach to Coping Scale — SACSI, on two levels — presence and absence of mechanisms in late adulthood. It was observed that all nine mechanisms are used by individuals over 65 years old.

According to the three stages of late adulthood, a change in coping is observed with aging, from prosocial coping between 65–75 years (—social interaction», —seeking social support»), to antisocial coping between 75–85 years (—social interaction», —assertive action», —antisocial action», —aggressive action»), and indirect coping, used to overcome stressful situations in individuals over 85 years old (—indirect action», —antisocial action», —aggressive action»).

The factorial analysis continued with the identification of differences in the manifestation of coping mechanisms according to demographic data. Regarding gender, women exhibit aggressive coping, while men exhibit prosocial coping, aspects explained by the fact that social support strengthens men's sense of control over the situation, while women adopt rapid problem-solving strategies in response to perceived stress to minimize the feeling of insecurity and vulnerability.

Through the analysis of differences between means, significant differences appeared between women and men in the manifestation of the categories of —social interaction, —prudent action, —avoidance, and —aggressive action with the first three types of coping predominantly manifested among elderly men, and —aggressive action coping among women (*Table 2*).

Table 2. Results of the independent samples T-Test for "coping mechanisms" according to "gender"

Coping mechanisms		M	σ		Testul T	р
	M	F	M	F		
Assertive action	33,57	32,14	6,57	5,07	1,608	0,132
Social interaction	18,79	16,66	5,36	5,01	2,611	0,009
Seeking social support	18,88	19,24	8,38	6,49	-,320	0,763
Prudent action	20,33	16,71	3,85	4,04	5,912	0,000
Instinctive action	22,10	22,05	4,55	4,14	,084	0,932
Avoidance	22,46	18,01	4,47	6,64	4,841	0,000
Indirect action	12,58	13,37	4,37	3,40	-1,335	0,210
Antisocial action	12,36	13,07	4,38	4,17	-1,055	0,288
Aggressive action	13,52	15,03	3,69	4,14	-2,494	0,016

The percentage-based statistical data, focused on establishing differences between elderly individuals living at home and those in residential centers regarding the manifestation of coping mechanisms, show that all mechanisms occur at higher percentages among seniors residing in the residential center; however, there are no significant differences in their manifestation depending on the living environment.

Regarding **marital status**, widowed individuals primarily resort to —antisocial coping mechanisms, divorced individuals emphasize the —instinctive aspect, and married individuals focus on —aggressive action.

The present research highlighted that the —defective limits schema positively correlates with eight coping mechanisms, the schemas of — other directedness, — overvigilance and inhibition, and —impaired autonomy and performance correlate with five mechanisms, while the —disconnection and rejection schema correlates with the —aggressive action mechanism (*Table 3*).

Table 3. Pearson correlation coefficient between "early maladaptive cognitive schemas" and "coping mechanisms"

	E	EARLY MALADAPTIVE COGNITIVE SCHEMAS						
COPING	Disconnection	Impaired	Impaired	Other	Overvigilance			
MECHANISMS	and rejection	autonomy and	limits	directedness	and inhibition			
		performance						
Assertive action	p=0,880	p=0,267	p= 0,000	p= 0,004	p= 0,420			
	r=,012	r=,085	r= ,361	r= ,214	r=,061			

Social interaction	p=0,132	p=0,233	p= 0,000	p= 0,000	p= 0,000
	r=-,115	r=-,091	r= ,278	r= ,347	r= ,387
Seeking social support	p=0,325	p=0,395	p= 0,000	p= 0,000	p= 0,000
	r=-,075	r=,065	r= ,357	r= ,349	r= ,351
Prudent action	p=0,982	p= 0,000	p= 0,000	p= 0,022	p= 0,002
	r=,002	r= ,367	r= ,269	r= ,174	r= ,233
Instinctive action	p=0,568	p=0,602	p= 0,000	p=0,932	p= 0,001
	r=-,044	r=-,040	r= ,453	r=-,007	r= ,261
Avoidance	p=0,955	p= 0,018	p=0,883	p=0,227	p=0,463
	r=,004	r= -,179	r=-,011	r=-,092	r=,056
Indirect action	p=0,064	p= 0,001	p= 0,014	p=0,328	p= 0,820
	r=-,141	r= ,248	r= ,187	r=,075	r=-,017
Antisocial action	p=0,175	p= 0,032	p= 0,000	p= 0,000	p= 0,000
	r= -,103	r=,163	r= ,487	r= ,236	r= ,323
Aggressive action	p= 0,011	p= 0,042	p= 0,000	p=0,644	p=0,582
	r= ,192	r= ,154	r= ,300	r=-,035	r=-,042

In subchapter 2.3, Manifestations of the affective dimension according to cognitive and behavioral factors, we evaluated the emotional dimension using the Ryff Scale for Psychological Well-Being and, in an initial stage, analyzed the differences in the manifestation of early maladaptive cognitive schemas according to psychological well-being (Table 4).

Table 4. Results of the independent samples T-Test for "early maladaptive cognitive

schemas" according to the dimensions of "psychological well-being"

Early maladaptive	Psychological well-being	Mean low level	Mean	σ low level	σ	T Test	p
cognitive schemas		levei	high level	low level	high level	Test	
Disconnection and	Personal development	90,14	77,99	17,078	23,491	3,650	,000
rejection	Positive relations with	89,61	79,44	18,068	22,990	2,874	,005
.,	others	89,01	79,44	16,006	22,990	2,074	,003
	Purpose in life	90,43	77,07	17,601	23,233	4,116	,000
	Self-acceptance	96,63	77,25	12,205	22,628	5,621	,000
Impaired autonomy and performance	Environmental control	74,17	49,84	8,674	17,651	4,723	,000
·	Positive relations with others	55,72	49,63	21,904	16,086	2,058	,041
	Self-acceptance	56,81	49,50	21,065	16,706	2,395	,018
Impaired limits	Autonomy	20,33	34,63	6,98	11,20	-6,059	,000
	Positive relations with others	27,11	35,16	10,595	11,484	-4,514	,000
	Purpose in life	29,78	34,70	11,757	11,441	-2,748	,007
Other directedness	Environmental control	59,25	76,86	6,384	23,849	-2,545	,012
	Personal development	66,08	81,49	22,572	22,179	-4,400	,000
	Positive relations with others	67,19	79,45	24,437	22,121	-3,274	,001
	Purpose in life	62,44	84,96	23,496	18,587	-7,048	,000
Overvigilance and inhibition	Environmental control	133,08	105,39	11,477	33,921	2,810	,006
	Positive relations with others	92,41	114	31,924	32,267	-4,114	,000
	Purpose in life	98,19	113,73	35,540	30,736	-3,076	,002
	Self-acceptance	131,54	98,06	27,954	30,931	6,547	,000

Early maladaptive cognitive schemas based on the unmet needs for healthy relating with others, establishing a secure attachment that allows for autonomy and personal identity, are associated with low levels of perceived well-being.

On the other hand, schemas formed as a result of unmet needs for the free expression of emotions and desires without violating the rights of others are associated with high levels of psychological wellbeing.

Statistical analysis provides information regarding the differences in the manifestation of coping mechanisms according to psychological well-being, divided into two levels — —low levell and —high levell (*Table 5*).

Table 5. Significant statistical results of the independent samples T-Test for "coping mechanisms" according to the dimensions of "psychological well-being"

Coping mechanisms	Psychological well-being	Mean low level	Mean high level	σ low level	σ high level	T Test	p
Assertive action	Autonomy	23,75	34,12	5,076	4,372	-9,463	0,000
	Environmental control	36	32,44	2,089	5,832	2,097	0,037
	Self-acceptance	28,5	34,29	5,604	4,920	-6,668	0,000
Social interaction	Positive relations with others	12,67	19,65	5,730	3,164	-10,323	0,000
Seeking social	Personal development	16,73	20,56	8,796	5,705	-3,483	0,001
support	Positive relations with others	11,44	22,55	3,780	5,622	-13,222	0,000
	Purpose in life	17,08	20,53	8,227	6,138	-3,164	0,002
	Self-acceptance	17,13	19,86	7,964	6,854	-2,245	0,026
Prudent action	Environmental control	15	18,33	3,133	4,334	-3,449	0,004
	Positive relations with others	17	18,6	5,013	3,920	-2,077	0,041
	Self-acceptance	19,88	17,43	3,694	4,388	3,701	0,000
Instinctive action	Autonomy	17,5	22,8	3,648	3,932	-6,537	0,000
	Personal development	20,73	22,89	3,917	4,326	-3,394	0,001
	Environmental control	27,50	21,67	2,611	4,122	7,110	0,000
	Purpose in life	20,92	22,88	4,586	3,898	-3,044	0,003
Avoidance	Autonomy	24,25	19	1,824	6,434	3,963	0,000
	Self-acceptance	22,88	18,52	6,031	5,965	4,288	0,000
Indirect action	Autonomy	10,75	13,44	3,179	3,787	-3,742	0,001
	Positive relations with others	14,33	12,5	2,733	4,098	2,999	0,003
	Self-acceptance	14	12,71	2,989	4,041	2,004	0,047
Antisocial action	Autonomy	8,25	13,52	3,492	3,913	-6,211	0,000
	Personal development	10,64	14,11	4,037	3,846	-5,675	0,000
	Environmental control	15,5	12,59	1,567	4,328	2,311	0,022
	Purpose in life	10,75	14,24	4,195	3,689	-5,797	0,000
Aggressive action	Autonomy	10,5	15,08	3,022	3,817	-6,627	0,000
	Environmental control	19	14,11	3,133	3,893	4,246	0,000
	Positive relations with others	16,56	13,5	3,780	3,791	4,929	0,000
	Self-acceptance	13,38	14,86	3,272	4,229	-2,190	0,030

From the perspective of significant differences in the manifestation of coping mechanisms according to psychological well-being, it is observed that high levels of well-being are experienced by older adults who employ active coping mechanisms (—assertive action) and prosocial mechanisms (—social interaction), —seeking social support, —prudent action). Additionally, a high level of the —autonomy dimension and a low level of —environmental control are found in seniors who

predominantly rely on antisocial coping mechanisms (—aggressive action», —antisocial action», —instinctive action»).

In subchapter 2.4. Manifestations of coping mechanisms and psychological well-being according to cognitive schemas in older adults, five psychological profiles of older adults were created for the five early maladaptive cognitive schemas, in correlation with coping mechanisms and psychological well-being, as well as a general psychological profile [12]. These profiles provide an overview of the functioning of older adults in whom one of the five cognitive schemas manifests, the coping mechanisms that are activated with the onset of the schema, and the impact on the main dimensions of psychological well-being.

The first psychological profile consists of the early maladaptive cognitive schema of —disconnection and rejection | and the absence of three coping mechanisms (—assertive action |, —prudent action |, —instinctive action |), along with low levels in six dimensions of psychological well-being (—self-acceptance |, —positive relationships with others |, —environmental control ||, —autonomy ||, —personal development ||, —purpose in life ||).

The second psychological profile includes older adults with an active cognitive schema of —impaired autonomy and performance in which two coping mechanisms are activated (—antisocial action, —indirect action) and two mechanisms are absent (—instinctive action, —avoidance), predisposing them to low levels in three dimensions of psychological well-being (—self-acceptance, —positive relationships with others, —environmental control).

The third profile is of older adults with an active maladaptive cognitive schema of —impaired limits, which also involves the presence of six coping mechanisms (—seeking social support, —indirect action, —antisocial action, —social interaction, —instinctive action, —assertive action, two absent mechanisms (—avoidance, —prudent action), and four dimensions of psychological well-being, of which three show high levels (—purpose in life, —positive relationships with others, —autonomy) and one shows a low level (—environmental control).

The fourth profile consists of the maladaptive cognitive schema of —overvigilance and inhibition , with five present coping mechanisms (—assertive action , —seeking social support , —social interaction , —indirect action , —antisocial action), two dimensions of psychological well-being at low levels (—environmental control , —self-acceptance), and two dimensions at high levels (—purpose in life , —positive relationships with others).

The fifth psychological profile is formed by the maladaptive cognitive schema of —other directedness, six present coping mechanisms (—social interaction, —seeking social support, —instinctive action, —avoidance, —prudent action, —antisocial action, and four dimensions of psychological well-being with high levels of manifestation (—environmental control, —positive relationships with others, —personal development, —purpose in life.

Finally, based on the previously presented results, **a general profile** was created comprising early maladaptive cognitive schemas, coping mechanisms, and dimensions of psychological well-being, to support the framework of the psychological intervention program. The general profile includes the early maladaptive cognitive schemas and the following psychological factors: presence of the coping mechanisms —antisocial action||, —positive relationships with others||, —seeking social support||, and —indirect action||, and absence of —instinctive action||, —prudent action||, and —avoidance.||

Regarding the dimensions of psychological well-being, —environmental control and —self-acceptance are predominantly present at high levels, while —positive relationships with others and —purpose in life are at low levels. This can be explained by the psychological complexity and dynamic nature of human development in late adulthood.

The figure illustrates the organization of these characteristics, highlighting the dynamics of the psychological factors involved (*Figure 1*).

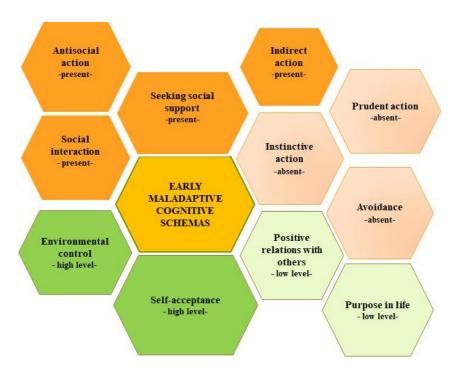


Fig. 1 General psychological profile composed of "early maladaptive cognitive schemas" "coping mechanisms" and "psychological well-being"

Based on the results obtained from the conducted research, the following ideas were formulated in **subchapter 2.5**, **Conclusions**, of Chapter 2:

- 1. The results highlight the general manifestation of three cognitive schemas among older adults, namely —disconnection and rejection —impaired autonomy and performance —and —other-directedness —Regarding the activation of these schemas in elderly individuals according to the three age stages, among those aged 65–85, the schemas —other-directedness and —disconnection and rejection are activated, while in individuals over 85 years, the schemas —other-directedness —impaired autonomy and performance —and —impaired limits are predominant. Concerning gender, women predominantly manifest maladaptive cognitive schemas. Regarding the living environment, maladaptive cognitive schemas are more strongly activated in individuals residing in care facilities compared to those living at home. According to marital status, widowed seniors predominantly activate two cognitive schemas: —impaired autonomy and performance and —other-directedness.
- 2. Concerning coping mechanisms, statistical data demonstrated that older adults employ all nine mechanisms. Seniors aged 65–75 primarily use —social interaction and —seeking social support coping strategies; those aged 75–85 use —assertive action, —antisocial action, —social interaction, and —aggressive action, and individuals over 85 rely on —indirect action, —antisocial action, and —aggressive action. With respect to gender, all nine coping mechanisms are used more frequently by women, while no significant differences were observed for the variable of living environment. Regarding marital status, widowed individuals predominantly adopt antisocial coping strategies, divorced individuals emphasize —instinctive action in problem-solving, and married participants favor —aggressive action.
- 3. Following the analysis of differences in the manifestation of maladaptive cognitive schemas and coping mechanisms according to psychological well-being, it can be concluded that specific differences exist for each early maladaptive cognitive schema individually. Statistical analysis also aimed to observe significant differences in coping mechanisms according to the two levels of psychological well-being dimensions, yielding significant results for each coping mechanism.
- 4. Understanding the correlation between maladaptive cognitive schemas and coping mechanisms is essential for establishing the foundation of personalized psychological interventions, which aim to

promote mental health and individual well-being, prevent relapses, improve self-awareness, enhance emotional regulation, and develop effective coping strategies.

- 5. Furthermore, exploring the relationship between early maladaptive schemas, coping mechanisms, and perceived well-being may enhance self-awareness. On one hand, older adults gain insight into how their thoughts, emotions, and behaviors influence their well-being, thereby increasing their confidence in making changes and taking control of their mental health. On the other hand, identifying psychological profiles composed of these three dimensions provides the basis for effective psychological interventions aimed at promoting mental health and well-being in the elderly.
- 6. The specific manifestation patterns of cognitive schemas, coping mechanisms, and perceived well-being in older adults necessitate the creation and implementation of a psychological intervention program designed to modify maladaptive cognitive schemas and improve coping mechanisms to enhance perceived psychological well-being.

Chapter 3. Psychological intervention for remediation of early maladaptive cognitive schemas and development of adaptive coping mechanisms

In subchapter 3.1, Methodology for implementing the psychological intervention program, the program is presented, targeting older adults with the aim of increasing perceived psychological well-being through the modification/inactivation of early maladaptive cognitive schemas and the development of adaptive coping mechanisms.

The objective of the psychological intervention was: to design and implement a psychological intervention program for the remediation of early maladaptive cognitive schemas and the development of adaptive coping mechanisms in order to improve psychological well-being.

Hypothesis 4 refers to the program and posits that if older adults participate in the psychological intervention program focused on modifying early maladaptive cognitive schemas and developing coping mechanisms, they will experience an increase in their level of psychological well-being.

Participants of the program: The study was conducted on a sample of 20 individuals aged over 65, residing either at the —Sf. Cuvioasă Parascheval retirement home or at their own homes. The research sample included subjects exhibiting at least one maladaptive cognitive schema, identified through the pretest using the —Young Schema Questionnaire — YSQ-S3. This instrument constituted the primary criterion for selecting and dividing participants into two groups: the control group (CG) and the experimental group (EG). Each group consisted of 10 subjects with at least one active maladaptive cognitive schema. Participants were also administered the —Ryff scale for psychological well-being to assess the dimensions of perceived well-being. Participants were informed about the purpose of the intervention program and provided consent through completion of the —Informed consent form for participation in the psychological intervention program.

The homogeneity of the two groups—experimental and control—during the pretest phase was demonstrated by inferential statistics regarding the differences between means for independent samples concerning maladaptive cognitive schemas and dimensions of perceived well-being, with no significant differences observed. Consequently, the results presented in Table 6 and Table 7 allowed the implementation of the formative experiment, consisting of an intervention program with the experimental group of older adults.

Table 6. Comparative table of the manifestation of "early maladaptive cognitive schemas" between the experimental and control groups during the pretest phase

Research variables	Research groups	m	σ	t	р
Early maladaptive cognitive schemas					_
1	2	3	4	5	6
Disconnection and rejection	Control group	75,70	17,12	,122	
	Experimental group	74,90	11,78		
Impaired autonomy and performance	Control group	51,70	14,26	,992	
	Experimental group	45,90	11,76		
Impaired limits	Control group	34,50	7,45	,081	
	Experimental group	34,20	9,02		
Other directedness	Control group	87,10	17,18	1,937	,069
	Experimental group	72,60	16,29		
Overvigilance and inhibition	Control group	108,40	19,05	,633	,535
	Experimental group	102,90	19,81		

Table 7. Comparative table of the manifestation of "psychological well-being" between the experimental and control groups during the pretest phase

Research variables Psychological well-being	Research groups	m	σ	t	р
1	2	3	4	5	6
Autonomy	Control group	26,80	3,73	-1,825	,089
	Experimental group	31,20	6,64		
Environmental control	Control group	29,80	5,30	,048	,963
	Experimental group	29,70	3,97		
Personal development	Control group	28,90	7,89	,374	,713
	Experimental group	27,60	7,66		
Positive relations with others	Control group	26,40	9,16	,240	,814
	Experimental group	25,60	5,21		
Purpose in life	Control group	27,90	8,69	-,218	,830
	Experimental group	28,60	5,21		
Self-acceptance	Control group	34,30	4,54	-,114	,911
	Experimental group	34,50	3,17		

Organization of the intervention program. The intervention program was conducted at a frequency of one session per week, during the period January 15, 2024 – April 10, 2024, for a duration of three months, at the —Sf. Cuvioasă Parascheval retirement home or at the subjects' homes. The format of the sessions was both individual and group-based, and after certain meetings, the subjects received homework assignments. A total of two individual sessions, seven group psychological intervention sessions, and a final session dedicated to evaluating the effectiveness of the psychological intervention program were carried out. The duration of an intervention session was 1 hour for individual sessions, while group sessions had an average duration of 2 to 3 hours.

The topics addressed in each meeting and the related activities are presented below:

- The first session focused on building the therapeutic relationship, setting the objectives of the intervention, and educating about early maladaptive cognitive schemas. Activities included: introduction and setting of objectives, initial assessment, exploration of history and context, education about schemas, identification of early maladaptive cognitive schemas, planning of the intervention, closing the session, and assigning homework. This session used an adaptation of the —Case conceptualization form focused on cognitive schemas created by J. Young, and the homework consisted of completing the —Cognitive schema journal an instrument developed by the mentioned psychologist in 1993 [13].
- The second session (individual session), which continued the process of exploring and working on thought patterns, provided strategies and techniques for managing and changing them, and included the following activities: recap and setting of objectives, review of homework, exploration of thoughts and beliefs, identification and exploration of dominant cognitive schemas, development of management strategies, planning of homework, and closing the session. To achieve the objectives set for this session, the —Guided imagery technique and the —Evidence reframing technique specific to early maladaptive cognitive schema therapy were used [13].
- The third session (individual session) involved learning a breathing and progressive relaxation technique, developed by american physician E. Jacobson in the 1920s, and included the following activities: recap and setting of objectives, review of homework, presentation of the progressive muscle relaxation technique, and homework assignment.
- The fourth session (group session) focused on developing conflict prevention skills through assertive communication practice and involved: recap and setting of objectives, review of homework, conflict management, assertive expression, practical applications, providing feedback, and assigning homework. Practical exercises were created during this meeting to achieve the set objectives.
- The fifth session (group session) focused on developing problem-solving skills and involved the following activities: recap and setting of objectives, review of homework, identification and definition of the problem, generation of potential solutions, evaluation and analysis of solutions, selection of the best solution, development of an action plan, and providing feedback. This session used brainstorming as a creative thinking method and included the following stages: problem identification, goal setting,

generation of possible solutions and consequences of the chosen solution, and evaluation.

- The sixth session continued the topic of problem-solving, teaching the elderly how to implement the identified solutions. The following activities were carried out: recap and setting of objectives, implementation of the solution, evaluation of results, learning from experience, frequent practice, and providing feedback. To achieve the objectives of this psychological intervention session, the concepts of —assertion and —I- messages were used in order to address the elderly's problems.
- The seventh session (group session) focused on psychoeducation and included the following activities: recap and setting of objectives, review of homework, introduction to emotional regulation, review of emotions, the impact of unmanaged emotions, highlighting the benefits of emotional regulation, understanding triggers, developing awareness, managing failures, providing feedback, and homework. The concept of the —witness posture was introduced during this meeting.
- The eighth session addressed the development of resilience in older adults regarding the changes that occur after the age of 65, involving the improvement of their ability to adapt and cope with adversity, failures, and challenges. The following activities were implemented: recap and setting of objectives, review of homework, development of awareness, setting realistic goals, promoting positive thinking, cultivating social support, providing a supportive environment, encouraging problem-solving skills, implementing coping strategies, and providing feedback.
- The ninth session focused on self-care practices and included the following activities: recap and setting of objectives, identification of stress factors, encouraging self-care, promoting physical activity, medication management, personal hygiene, nutrition and hydration, and health monitoring.
- The tenth session involved the evaluation of the intervention program through the application of a scale adapted from the —Cognitive Therapy Rating Scale CTRSI, developed by J. E. Young and A. Beck in 1980 [1], and the application of measurement instruments for the psychological factors addressed during the nine sessions. This session took place two weeks after the completion of the intervention.

The personal contribution to the design of the intervention involved the selection of counseling, learning, and implementation methods for the program aimed at older adults, taking into account the needs and specific characteristics of this population, and included:

- a) Practical demonstrations and applied exercises for learning
- b) Support and learning groups
- c) Feedback sessions and personalized guidance
- d) Creation and implementation of exercises
- e) A mixed program format, consisting of individual and group sessions
- f) An interdisciplinary teamwork approach, involving the nurse in the session dedicated to healthy living

The staging of activities in the training program followed the structure below:

- a) Introduction: presentation of the intervention program, the intended purpose, and obtaining participants' consent to take part, with mention of the observance of name and image confidentiality.
- b) Intervention on early maladaptive cognitive schemas
- c) Development of coping mechanisms
- d) Psychoeducation
- e) Evaluation of the intervention program

Each meeting included the following steps: presentation of the session objective, actual implementation of the activities, provision of feedback from the psychologist and other participants (for group sessions), and homework assignments.

Subchapter 3.3. Presentation and interpretation of the results regarding the intervention program, presents the evaluation of the impact of the psychological intervention program on early maladaptive cognitive schemas and perceived well-being. The evaluation was conducted by retesting the twenty participants, using the ||Young Schema Questionnaire - YSQ-S3|| and the ||Ryff psychological well-being scale||.

The statistical analysis of the post-test data, using the Independent Samples t-Test and the test-retest method, revealed significant changes in the variables investigated.

Following the retesting of the older adults who benefited from the psychological intervention, at the post-test stage, the following results were obtained (*Table 8*).

Table 8. Comparisons of the means of the psychological variable obtained by the experimental group before and after the implementation of the psychological intervention program

Research variables Early maladaptive cognitive schemas	Research groups	m	σ	t	p
1	2	3	4	5	6
Disconnection and rejection	Testing / Assessment Phase	74,90	11,78	2,785	0,004
	Retest / Control Phase	48,20	19,25		
Impaired autonomy and	Testing / Assessment Phase	45,90	11,76	2,507	0,033
performance	Retest / Control Phase	34,20	13,99		
Impaired limits	Testing / Assessment Phase	34,20	9,02	,271	0,793
	Retest / Control Phase	32,90	12,18		
Other directedness	Testing / Assessment Phase	72,60	16,29	3,934	0,003
	Retest / Control Phase	48,60	18,68		
Overvigilance and inhibition	Testing / Assessment Phase	102,90	19,81	2,580	0,030
	Retest / Control Phase	79,60	20,38		

Research variables Psychological well-being	Research groups	m	σ	t	р
1	2	3	4	5	6
Autonomy	Testing / Assessment Phase	31,20	6,64	-4,163	0,002
	Retest / Control Phase	35,40	4,11		
Environmental control	Testing / Assessment Phase	29,70	3,97	-5,489	0,000
	Retest / Control Phase	34,20	3,79		
Personal development	Testing / Assessment Phase	27,60	7,66	-5,168	0,001
	Retest / Control Phase	35,90	4,67		
Positive relations with others	Testing / Assessment Phase	25,60	5,21	-5,000	0,001
	Retest / Control Phase	35,60	2,91		
Purpose in life	Testing / Assessment Phase	28,60	5,21	-5,064	0,001
	Retest / Control Phase	35,70	3,33		
Self-acceptance	Testing / Assessment Phase	34,50	3,17	-3,944	0,003
	Retest / Control Phase	39,10	1,52		

Following a visual inspection of Table 8, significant changes can be observed in the dimensions of the psychological factor —early maladaptive cognitive schemas specifically for — disconnection and rejection —impaired autonomy and performance —overvigilance and inhibition —other directedness.

No significant differences were found regarding the cognitive schema of —impaired limits. Measurements conducted at both stages—baseline and posttest—confirmed changes in the four maladaptive cognitive schemas, indicating that participation in the intervention program effectively prevented the activation of these cognitive patterns among the elderly participants.

Regarding the dimensions of perceived well-being, significant differences were recorded between the two measurement points for all six dimensions: —autonomyl, — environmental controll —personal developmentl, —positive relations with others,l —purpose in life,l and —self-acceptance.l Participation in the intervention program contributed to an improvement in the elderly participants' perceived well-being.

Another method of validating the psychological intervention program involved comparing the retest results of the experimental group with those of the control group at the posttest stage, following the

completion of the therapy sessions (Table 9).

Table 9. Comparisons of the means of psychological factors obtained by the experimental group and the control group after the completion of the intervention program

group and the control group after the completion of the intervention program							
Research variables	Research groups	m	σ	t	p		
Early maladaptive cognitive							
schemas							
1	2	3	4	5	6		
Disconnection and rejection	Control group	94	6,939	4,961	0,000		
	Experimental group	48,20	19,25				
Impaired autonomy and	Control group	78,80	13,93	7,143	0,000		
performance	Experimental group	34,20	13,99				
Impaired limits	Control group	40,80	6,49	1,809	0,087		
	Experimental group	32,90	12,18				
Other directedness	Control group	96,20	7,74	7,444	0,000		
	Experimental group	48,60	18,68				
Overvigilance and inhibition	Control group	126,70	13,81	6,048	0,000		
	Experimental group	79,60	20,38				

Research variables Psychological well-being	Research groups	m	σ	t	р
1	2	3	4	5	6
Autonomy	Control group	26,80	3,73	-4,893	0,000
	Experimental group	35,40	4,11		
Environmental control	Control group	29,80	5,30	-2,132	0,049
	Experimental group	34,20	3,79		
Personal development	Control group	28,90	7,89	-2,412	0,029
	Experimental group	35,90	4,67		
Positive relations with others	Control group	26,40	9,16	-3,024	0,007
	Experimental group	35,60	2,91		
Purpose in life	Control group	27,90	8,69	-2,648	0,016
	Experimental group	35,70	3,33		
Self-acceptance	Control group	18,50	4,67	-6,990	0,000
	Experimental group	34	5,22		

Analyzing the data from Table 9, significant differences can be observed for both the dimensions of the psychological variable —early maladaptive cognitive schemas and —psychological well-being, supporting the effectiveness of the intervention program experienced by the elderly. The variance analysis of the two investigated variables across both groups—the control and the experimental—highlights the positive impact of the psychological intervention sessions on individuals over 65 years of age in terms of modifying cognitive patterns and improving the well-being experienced by older adults. Elderly participants who benefited from the three-month psychological intervention sessions obtained favorable results compared to those in the control group, who did not receive the intervention.

Significant differences between the control and experimental groups were obtained in the following dimensions: —disconnection and rejection || (t = 4.961, p = 0.000), —impaired autonomy and performance || (t = 7.143, p = 0.000), — other directedness || (t = 7.444, t = 0.000), and —overvigilance and inhibition || (t = 6.048, t = 0.000).

Significant results in the T-Test were also obtained for the dimensions of perceived well-being, indicating that elderly participants who received the psychological intervention achieved higher scores in all six dimensions of the variable, namely: —autonomy $\|$ (t = -4.893, p = 0.000), —environmental control $\|$ (t = -2.132, p = 0.049), —personal development $\|$ (t = -2.412, p = 0.029), —positive relations with others $\|$ (t = -3.024, p = 0.007), —purpose in life $\|$ (t = -2.648, p = 0.016), and —self-acceptance $\|$ (t = -6.990, p = 0.000).

Thus, the intervention program contributed to an increase in psychological well-being—seniors learned how to regulate their behavior and rely on their own judgment in decision-making.

To evaluate the effectiveness of the developed program, the ten elderly participants who received the intervention completed, at the final session, the —Psychological intervention program evaluation scale for the elderly||, adapted from the instrument developed by J. E. Young and A. Beck in 1980, namely the —Cognitive Therapy Rating Scale — CTRS||[1]|.

This instrument was employed because it assesses the following aspects: session planning, feedback provision, participant comprehension, interpersonal effectiveness, collaboration, work pace and efficient use of time, homework assignments, the psychologist's ability to address problems arising during the sessions, the specialist's overall performance, and the overall evaluation of the program.

In **subchapter 3.4, Conclusions** of Chapter 3, the conclusions drawn from the results obtained following the implementation of the psychological intervention program for the elderly are identified and presented. The pre-test/post-test analysis confirmed the effectiveness of the sessions, demonstrating that the primary objective of the research was successfully achieved.

- 1. The design and implementation of the psychological intervention program for the elderly in the experimental group, including the structure and content of the activities, were based on theories concerning early maladaptive schemas and coping mechanisms, considered as responses to the activation of cognitive patterns. Additionally, the program was informed by findings from the non-experimental research phase, which provided insights into the relationships between the variables —early maladaptive schemas , —coping mechanisms , and —well-being , as well as demographic aspects analyzed within the elderly population.
- 2. Data analysis, through the comparison of scores on the two variables—early maladaptive schemas and —well-being—before and after participation in the intervention program, revealed significant changes across the dimensions of both variables. Measurements conducted at the retest/control stage within the experimental group confirmed both a reduction in maladaptive cognitive schemas and an improvement in participants' experienced well-being.
- 3. Elderly participants who underwent the psychological intervention over the three-month therapy period achieved better results compared to those in the control group, who did not receive individual or group therapy sessions. By exploring and challenging limiting thoughts and beliefs, the elderly improved their life perspective and developed healthy skills for interpreting and coping with life experiences. Continued therapy provides a safe and supportive framework and can consolidate prior efforts to replace negative thinking patterns with constructive and adaptive ones. Ultimately, participation in therapy sessions helps the elderly maintain and enhance their well-being and can serve as a tool for promoting a healthy and balanced approach to life as they age.
- 4. The implementation of a psychological intervention program for older adults, which resulted in changes to early maladaptive schemas and improvements in well-being, demonstrates that a careful and sustained focus on cognitive, behavioral, and emotional aspects enables the elderly to discover internal resources and redefine life perspectives. By addressing their psychological needs holistically, this program illustrated that positive changes in thinking and self-perception can have a significant impact on overall quality of life. In a society increasingly valuing active and meaningful aging, this intervention serves as a model of best practice, highlighting the importance of adequate psychological support for older adults in their efforts to maintain and enhance life satisfaction and well-being.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

Following the theoretical analysis of early maladaptive schemas, coping mechanisms, psychological well-being, and the results obtained during the research, the following conclusions can be formulated:

- 1. Reviewing the specialized literature regarding the three psychological factors—cognitive, behavioral, and emotional—contributed to achieving the first objective. Based on this analysis, working definitions for the concepts of —early maladaptive schemal, —coping mechanisml, and —psychological well-beingl were identified or developed.
- 2. Early maladaptive schemas that are activated in later life represent complex and deep cognitive structures that influence both behavior and perceptions of events, as well as affective responses. These cognitive schemas often become less susceptible to change as individuals age, reflecting early experiences with significant figures in their lives, particularly attachment figures. Nevertheless, older adults are capable of adapting to change and reevaluating their ideas and perspectives based on new experiences and information. This supports the need for developing a psychological intervention program, based on research findings regarding how early maladaptive schemas are activated in older adults, influenced by gender, living environment, and family status. Cognitive aspects can also impact the coping mechanisms employed to manage these cognitive patterns, which in turn affect the level of well-being experienced by older adults (Chapter 1).
- 3. Depending on the three stages of later life, specific maladaptive schemas and coping mechanisms were identified for each stage: individuals aged 65–75 predominantly exhibited the schemas of —other-directedness and —disconnection and rejection and coping strategies of social interaction and —seeking social support; individuals aged 75–85 manifested schemas of —other-directedness and —disconnection and rejection with coping strategies including —assertive action, —social interaction —antisocial action, and —aggressive action; individuals over 85 activated the schemas of —other-directedness, disconnection and rejection, and —impaired limits, along with coping mechanisms of —indirect action, —antisocial action, and —aggressive action (Chapter 2).
- 4. Five specific psychological profiles for older adults, as well as one general profile, were developed, comprising three dimensions essential for optimal individual functioning: the cognitive dimension—early maladaptive schemas, the behavioral dimension—coping mechanisms, and the emotional dimension—well-being. Identifying the specific dynamics between early maladaptive schemas and coping mechanisms in older adults can aid in assessing their specific needs regarding stress management, adaptation to life changes, and maintenance of psychological well-being (Chapter 2).
- 5. Knowledge of older adults' maladaptive schemas and coping mechanisms informed the creation of the psychological intervention program. This information was used to select and implement effective psychological techniques aimed at modifying dysfunctional thinking, developing adaptive coping mechanisms, and promoting adaptability and resilience among the elderly. Techniques were drawn from cognitive-behavioral therapy, schema therapy, group therapy, and psychosocial intervention. The program's effectiveness was demonstrated using two evaluation methods: pre-test/post-test comparisons within the experimental group and comparisons between the experimental and control groups. The results confirm the credibility, applicability, and validity of the psychological intervention program for the elderly population. The program, designed to remediate early maladaptive schemas and strengthen adaptive coping mechanisms to improve psychological well-being in older adults, can be utilized by professionals working in elderly care (physicians, social workers, counselors, psychologists) in medical institutions or community integration programs. Specialists are responsible for improving policies and programs for this population segment to promote mental health and support psychological well-being (Chapter 3).

Synthesizing the theoretical aspects and empirical results obtained through the scientific endeavor, it can be concluded that the initially established goals and objectives were achieved, and the stated scientific problem—identifying the manifestation of early maladaptive schemas and coping mechanisms at different stages of later life, and their impact on experienced well-being—was effectively addressed.

Recommendations for older adults

- 1. Participation in group therapy sessions can provide older adults with opportunities to share personal experiences, learn from one another, and receive support and encouragement from fellow participants.
- 2. Developing and practicing problem-solving skills can help older adults identify constructive solutions to the difficulties and challenges they encounter in daily life.
- 3. Engaging in regular physical exercise, which has been shown to have a positive impact on the well-being of older adults, contributes to improving both physical and emotional health. Recommending and facilitating participation in such exercise programs, tailored to the medical condition and individual needs of older adults, can be beneficial in promoting their overall well-being.
- 4. Educating and counseling older adults on proper nutrition, healthy sleep habits, and effective stress management can contribute to improving quality of life and promoting healthy and active aging.
- 5. Supporting and encouraging older adults to maintain and develop positive social relationships, which significantly contribute to their emotional and mental well-being. This can be implemented through the organization of social activities and support groups that provide opportunities for connection and social interaction.
- 6. Providing resources and support materials, such as books, brochures, or online materials, can help older adults continue their progress and maintain the skills and strategies learned even after the completion of an intervention program.

Recommendations for specialists

- 1. Training professionals in the identification and mitigation of automatic negative thoughts, as well as in cognitive restructuring techniques, in order to support older adults in modifying maladaptive cognitive schemas and developing more balanced, realistic perspectives on their lives.
- 2. Providing individual counseling and ongoing support from specialists can be essential in helping older adults cope with challenges and difficulties as they arise, both during and after the completion of an intervention program.
- 3. Specialists should recognize the essential role of cultivating the humanistic component, which involves showing respect toward older adults and understanding their cognitive, behavioral, and emotional specificities, rather than merely performing a work-related task in a procedural manner.

Recommendations for family members

1. The involvement and support of family members and close relatives play a crucial role in promoting the well-being of older adults. Careful monitoring of their health status, along with providing emotional and practical support, can have a positive impact on their overall quality of life.

Policy suggestions concerning this population group

- 1. Their adoption at the national or global level should be grounded in the psychological characteristics specific to this stage of life. Personnel involved in delivering medical, social, and community services require theoretical, methodological, and practical support, as well as an institutional and regulatory framework that encourages the adoption of relevant and effective professional practices for this population group.
- 2. The development of a psychological intervention should be based on research conducted within the aging population, aiming to identify needs and the psychological factors that determine specific thought patterns and correlate with inadequate behaviors for meeting those needs. Ultimately, the psychological intervention addressed maladaptive cognitive schemas and coping mechanisms, enabling older adults to adapt their thinking and behavior to benefit from active, high-quality aging and an elevated level of well-being. The results obtained through this research and the psychological intervention represent a contribution to the field of psychogerontology—a domain currently in development, given the global interest in promoting active aging among the population aged 65 and over.

BIBLIOGRAPHY

- 1. DAVID, D. Tratat de psihoterapii cognitive și comportamentale. Iași: Poliron, 2006. 368 p. ISBN 978-973-46-6819-9.
- 2. **POPESCU, M. A.** Specificul strategiilor de coping la persoanele de vârsta a treia. In: *Metodologii contemporane de cercetare și evaluare.*: *Ştiințe Sociale și ale Educației*. Chișinău: Centrul Editorial-Poligrafic al USM, 22-23 aprilie 2021, pp. 171-175. ISBN 978-9975-159-16-6 https://ibn.idsi.md/vizualizare_articol/154575
- 3. **POPESCU, M. A., POTÂNG, A.** Abordări teoretice ale mecanismelor de coping în psihologie. In: *Integrare prin cercetare și inovare.: Științe sociale.* Chișinău: Centrul Editorial-Poligrafic al USM, 10-11 noiembrie 2021, SS, pp. 3-5. ISBN 978-9975-158-55-8.
- 4. **POPESCU, M. A.** Natura psihologică a schemelor cognitive. In: *Psihologia aplicativă din perspectiva abordărilor societale contemporane*, Ed. 1. Chişinău: FPC "PRIMEX-Coml SRL, 3 decembrie 2021, pp. 88-93. ISBN 978-9975-159-01-2. https://ibn.idsi.md/vizualizare_articol/185178
- 5. **POPESCU, M. A., POTÂNG, A**. Teoriile psihologice ale îmbătrânirii. In: *Studia Universitatis Moldaviae (Seria Științe ale Educației)*. 2022, nr. 5 (155), pp. 115-119. ISSN 1857-2103. DOI: https://doi.org/10.5281/zenodo.6619337
- 6. **POPESCU, M. A**. Particularitățile schemelor cognitive la vârtnici. In: *Integrare prin cercetare și inovare.: Științe ale educației.*, Chișinău: Centrul Editorial-Poligrafic al USM, 10-11 noiembrie 2022, SE, pp. 40-42. ISBN 978-9975-62-471-8. https://ibn.idsi.md/vizualizare_articol/174590
- 7. **POPESCU, M. A.** Well-being particularities and coping mechanisms among elderly population. In: *Journal of Educational Sciences*. 2023, nr. 2(48), pp. 169-178. ISSN -. DOI: https://doi.org/10.35923/JES.2023.2.12
- 8. **POPESCU, M. A., POTÂNG, A**. The impact of cognitive schemes on the well-being of the elderly. In: *Journal of Romanian Literary Studies*. 2023, nr. 33, pp. 118-122. ISSN 2248-3004.
- 9. **POPESCU, M. A**. Influenta stadiului vârstei a treia asupra schemelor cognitive la vârstnici. In: *Integrare prin cercetare și inovare.*: *Ştiințe sociale*. Chișinău: Centrul Editorial-Poligrafic al USM, 9-10 noiembrie 2023, SS, pp. 53-60. ISBN 978-9975-62-688-0. https://ibn.idsi.md/vizualizare_articol/201171
- 10. **POPESCU, M. A.** The influence of gender on coping mechanisms of the elderly. In: *Journal Of Romanian Literary Studies*. 2023, nr. 34, pp. 972-977. ISSN 2248-3004.
- 11. **POPESCU, M. A**. Well-being particularities and coping mechanisms among elderly population. In: *Materialele Conferinței științifice internationale "The sixth international conference on adult education. Education for Peace and Sustainable Development"*. Chișinău, 9-11 noiembrie 2023. https://ibn.idsi.md/vizualizare articol/194991
- 12. **POPESCU, M. A.** Manifestările mecanismelor de coping în funcție de schemele cognitive la vârstnici. In: *Journal Of Romanian Literary Studies. Institutul de Studii Multiculturale ALPHA*. Editura Arhipelag XXI, 2023, nr. 35.
- 13. YOUNG, J.E, KLOSKO, J. S., WIESHAAR, M.E. *Terapia centrată pe scheme cognitive. Manualul practicianului. Colecția psihologului expert.* Cluj Napoca: ASCR, 2015. 470 p. ISBN 9786068244921
- 14. BALTES, P. B., BALTES, M. M. Psychological Perspectives on Successful Aging: The Model of Selective Optimization with Compensation. In: *Successful Aging: Perspectives from the Behavioral Sciences*. New York: Cambridge University Press, 1990, pp. 1-34. ISBN 978-0521435826.
- 15. BECK, A. T. *Cognitive therapy and the emotional disorders*. New York: International Universities Press, 1976. 368 p. ISBN-10: 9781101659885, ISBN-13: 1101659882
- 16. CARLUCCI, L., et. al. Co-rumination, anxiet, and maladaptive cognitive schemas: when friendship can hurt. In: *Psychology Research and Behavior Management* [on-line], 2018, vol. 11, pp. 133-144 [citat 13 dec. 2023]. Disponibil: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5903493/
- 17. CARSTENSEN, L. L., FUNG, H. H., CHARLES, S. T. Socioemotional selectivity theory and the regulation of emotion in the second half of life. In: *Motivation and Emotion* [on-line], 2003, vol. 27(2), pp. 103-123 [citat 20 nov. 2023].
- https://www.researchgate.net/publication/226836581_Socioemotional_Selectivity_Theory_and_the_Regulation_of_Emotion_in_the_Second_Half_of_Life
- 18. CAVANAUGH, J. C., BLANCHARD-FIELDS, F. Adult development and aging. 6^a ed. USA: Cengage Learning [on-line], 2011 [citat 11 dec. 2022]. ISBN-10: 0-495-60174-8, ISBN-13: 978-0-495-60174-6. Disponibil: https://repository.poltekkes-kaltim.ac.id/1169/1/8.%20Adult%20Development%20and%20Aging.pdf
- 19. CHANG, Y., LU, Y., ZHANG, X. Subjective Well-Being. In: *Encyclopedia of Gerontology and Population Aging* [on-line], 2021. Springer, Cham [citat 20 nov. 2023] Disponibil: https://www.researchgate.net/publication/337184494 Subjective Well-Being
- 20. DIENER, E.; SUH, E. Measuring quality of life: Economic, social, and subjective indicators. In: *Social Indicators Research* [on-line], 1997, vol. 40(1–2), pp. 189–216 [citat 10 sept. 2021]. ISSN 0303-8300. Disponibil: https://lemosandcrane.co.uk/resources/RISE%20Measuring%20quality%20of%20life.pdf
- 21. DUNAHOO, C. L., et.al. There's more than rugged individualism in coping. Part 1: Even the Lone Ranger had Tonto. In: *Anxiety, Stress, & Coping: An International Journal* [on- line], 1998, vol. 11(2), pp. 137–165 [citat 14]

- nov. 2022]. ISSN 1061-5806, eISSN 1477-2205. Disponibil: https://www.researchgate.net/publication/247496570 There's more than rugged individualism in coping Part 1

 <u>Even_the_Lone_Ranger_had_Tonto</u>
- 22. HERTZOG, C., et. al. Enrichment effects on adult cognitive development: Can the functional capacity of older adults be preserved and enhanced?. In: *Psychological Science in the Public Interest* [on-line], 2009, vol. 9(1), pp. 1-65 [citat 08 oct. 2023] Disponibil: https://journals.sagepub.com/doi/10.1111/j.1539-6053.2009.01034.x?url ver=Z39.88-2003&rfr id=ori:rid:crossref.org&rfr dat=cr pub%20%200pubmed
- 23. JESINOSKI, M.S. Young's Schema Theory: Exploring the direct and indirect links between negative childhood experiences and temperament to negative affectivity in adulthood: tz. de disertație. Utah, SUA. Disponibil: https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1841&context=etd
- 24. KAHANA, E., KAHANA, B. Conceptual and empirical advances in understanding aging well through proactive adaptation. In: *Adulthood and Aging: Research on Continuities and Discontinuities* [on-line], 1996. pp. 18–40, New York: Springer [citat 21 nov. 2022]. ISBN-10: 082619270X, ISBN-13: 978-0826192707. Disponibil: https://www.researchgate.net/publication/232522002 Conceptual and empirical advances in understanding aging well through proactive adaptation
- 25. LAZARUS, R.S., FOLKMAN, S. *Stress, Appraisal, and Coping* [on-line]. New York: Springer, 1984, nr. 1, 456 p. [citat 13 nov. 2022]. ISBN 9780826141927, 0826141927. Disponibil: https://books.google.ro/books/about/Stress Appraisal and Coping.html?id=i-ySQQuUpr8C&redir_esc=y
- 26. NAZARI, F, KAKAVAND, A, FARAHANI, M. The relationships between early maladaptive schemas and mothers parenting styles and children's external disorders. In: *Applied Psychology*. 2015, 9, 2(34), pp. 115–135. ISSN: 0021-9010, eISSN: 1939-1854
- 27. PTACEK, J. T., SMITH, R. E., ZANAS, J. Gender, appraisal, and coping: A longitudinal analysis. In: *Journal of Personality*. 1992, vol. 60(4), pp. 747–770. ISSN 0022-3506.
- 28. RAFAELI, E., et. al. The self in schema therapy. In: *The self in understanding and treating psychological disorders*. 2016, pp. 59-70, Cambridge University Press. ISBN-10: 1107079144, ISBN-13: 978-1107079144
- 29. RYFF, C.D., SINGER, B. Know thyself what you are: a eudaimonia approach to psychological well-being. In: *Journal of Happiness Studies* [on-line], 2008, vol 9, pp. 13-39 [citat 12 sept. 2021]. ISSN 1389-4978. Disponibil: https://www.researchgate.net/publication/23545616 Know Thyself and Become What You Are A Eudaimonic Approach to Psychological Well-Being
- 30. SAADATI, H., et.al. Predicting depression among the elderly by stressful life events and coping strategies. In: *Journal of Family Medicine and Primary Care* [on-line], 2021, vol. 10, nr. 12, pp. 4542-4547 [citat 16 nov. 2021]. ISSN: 2249-4863. Disponibil:
- https://www.researchgate.net/publication/357792247 Predicting depression among the elderly by stressful life events and coping strategies
- 31. SCHEIER, M. F., CARVER, C. S. Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. In: *Cognitive Therapy and Research* [on-line], 1992, vol. 6, nr. 2, pp. 201-228 [citat 14 nov. 2023]. Disponibil: https://is.muni.cz/el/med/podzim2020/aVLMH011/105374407/Effects_of_optimism_on_psychological_and_physic_al_wellbeing.pdf?lang=cs
- 32. WAGNILD, G. M., YOUNG, H. M. Development and psychometric evaluation of the resilience scale. In: *Journal of Nursing Measurement* [on-line], 1993, vol. 1(2), pp. 165-178 [citat 04 nov. 2023]. Disponibil: https://www.academia.edu/6675361/Development and Psychometric Evaluation of the Resilience Scale
- 33. World report on aging and health. WHO Library Cataloguing-in-Publication Data [on-line]. ISBN N 978-92-4-156504-2 [citat 07 nov. 2023]. Disponibil: https://iris.who.int/bitstream/handle/10665/186463/9789240694811_eng.pdf?sequence=1
- 34. EUROSTAT. Ageing Europe looking at the lives of older people in the EU [on-line]. 2020 [citat 02 dec. 2023] ISBN 978-92-p76-21520-2. Disponibil: https://ec.europa.eu/eurostat/documents/3217494/11478057/KS-02-20-655-ENN.pdf/9b09606c-d4e8-4c33-63d2-3b20d5c19c91?t=1604055531000
- 35. Global Strategy and Action Plan on Ageing and Health [on-line]. Disponibil: https://api.swissacademies.ch/site/assets/files/15675/whoglobal_strategy_and_action_plan_on_ageing_and_health.p
- 36. Institutul Național de Gerontologie și Geriatrie "Ana Aslanl. Revista română de gerontologie și geriatrie [online]. Disponibil: https://rjgg.ro/ro/archive_2022-3.html
- 37. Programul național privind îmbătrânirea activă și sănătoasă pentru perioada 2023-2027 [on- line]. Disponibil: https://social.gov.md/wp-content/uploads/2022/05/concept Program IAS mai 2022.pdf
- 38. Strategia națională de sănătate 2023-2030 "Pentru sănătate împreunăl [on-line]. Disponibil: https://ms.ro/media/documents/Anexa_1_-_SNS.pdf

LIST OF THE AUTHOR'S PUBLICATIONS ON THE THESIS TOPIC

Articles in scientific journals

- 1. **POPESCU, M. A., POTÂNG, A**. Teoriile psihologice ale îmbătrânirii. In: Studia Universitatis Moldaviae (Seria Științe ale Educației), 2022, nr. 5(155), pp. 115-119. ISSN 1857-2103, ISSNe 2345-1025. DOI: https://doi.org/10.5281/zenodo.6619337
- 2. **POPESCU, M. A., POTÂNG, A**. The impact of cognitive schemes on the well-being of the elderly. In: Journal of Romanian Literary Studies, 2023, nr. 33, pp. 118-122. ISSN 2248-3004.
- 3. **POPESCU, M. A.** The influence of gender on coping mechanisms of the elderly. In: Journal Of Romanian Literary Studies, 2023, nr. 34, pp. 972-977. ISSN 2248-3004.
- 4. **POPESCU, M.** A. Manifestările mecanismelor de coping în funcție de schemele cognitive la vârstnici. In: Journal Of Romanian Literary Studies. Institutul de Studii Multiculturale ALPHA; Editura Arhipelag XXI, 2023, nr. 35. ISSN 2248-3004.
- 5. **POPESCU, M. A.** Well-being particularities and coping mechanisms among elderly population. In: Journal of Educational Sciences. 2023, nr. 2(48), pp. 169-178. ISSNe 2457-8673. DOI: https://doi.org/10.35923/JES.2023.2.12

Articles in the proceedings of international scientific conferences

- 6. **POPESCU, M. A**. Aspecte psihologice ale atitudinii și comportamentului persoanelor vârstnice față de serviciile medico- socio- comunitare In: Current Affairs and Perspectives in Psychological Research: International conference of applied psychology, Ed. 2, 29-30 noiembrie 2022, Chisinau. Chișinău, Republic of Moldova: Centrul Editorial-Poligrafic al USM, 2022, Ediția 2, pp. 115-119. ISBN 978-9975-159-97-5. DOI: https://doi.org/10.5281/zenodo.7354761
- 7. **POPESCU, M. A**. Well-being particularities and coping mechanisms among elderly population. In: Materialele Conferinței științifice internationale "The sixth international conference on adult education. Education for Peace and Sustainable Development ||, Ed. 6, 9-10 octombrie 2023, Chișinău. Chișinău, Republica Moldova. pp. 104-105. ISBN 978-9975-62-593-7. https://ibn.idsi.md/vizualizare_articol/194991

Articles in the proceedings of scientific conferences with international participation

- 8. **POPESCU, M. A., POTÂNG, A.** Abordări teoretice ale mecanismelor de coping în psihologie. In: Integrare prin cercetare și inovare.: Științe sociale, 10-11 noiembrie 2021, Chișinău. Chișinău, Republica Moldova. ISBN 978-9975-152-48-8. https://ibn.idsi.md/sites/default/files/imag_file/3-5_25.pdf
- 9. **POPESCU, M. A.** Natura psihologică a schemelor cognitive. In: Psihologia aplicativă din perspectiva abordărilor societale contemporane, Ed. 1, 3 decembrie 2021, Chişinău. Chişinău: FPC "PRIMEX-Coml SRL, 2021, pp. 88-93. ISBN 978-9975-159-01-2. https://ibn.idsi.md/vizualizare_articol/185178
- 10. **POPESCU, M. A.** Particularitățile schemelor cognitive la vârtnici. In: Integrare prin cercetare și inovare.: Științe ale educației, 10-11 noiembrie 2022, Chișinău. Chișinău, Republica Moldova: Centrul Editorial-Poligrafic al USM, 2022, SE, pp. 40- 42. ISBN 978-9975-62-471-8. https://ibn.idsi.md/vizualizare_articol/174590
- 11. **POPESCU, M. A.** Influenta stadiului vârstei a treia asupra schemelor cognitive la vârstnici. In: Integrare prin cercetare și inovare.: Științe sociale, 9-10 noiembrie 2023, Chișinău. Republica Moldova: Centrul Editorial-Poligrafic al USM, 2023, SS, pp. 53-60. ISBN ISBN 978-9975-62-688-0. https://ibn.idsi.md/vizualizare_articol/201171

Articles in the proceedings of national scientific conferences

12. **POPESCU, M. A.** Specificul strategiilor de coping la persoanele de vârsta a treia. In: Metodologii contemporane de cercetare și evaluare.: Științe Sociale și ale Educației, 22-23 aprilie 2021, Chișinău. Chișinău: Centrul Editorial-Poligrafic al USM, 2021, pp. 171-175. ISBN 978-9975-159-16-6 https://ibn.idsi.md/vizualizare_articol/154575

ANNOTATION

Popescu Monica-Andreea. Cognitive schemes and coping mechanisms in elderly people. PhD thesis in psychology, Chişinău, 2025

Thesis structure. The thesis consists of introduction, 3 chapters, general conclusions and recommendations, bibliography with 258 titles and 7 appendices. The volume of the thesis has 159 pages of basic text, 37 tables and 14 figures. The results obtained during the research are published in 12 scientific works.

Keywords: early maladaptive cognitive schemes, coping mechanisms, psychological well-being, third age, psychological intervention program.

The aim of the paper is to identify the types of early maladaptive cognitive schemas, coping mechanisms and well-being in older people and to implement a psychological intervention program in order to change early maladaptive cognitive schemas and develop adaptive coping mechanisms, in order to increase the level of perceived psychological well-being.

Research objectives: Analyzing the specialized literature in the field of psychology of the elderly in order to delineate the relevant theoretical aspects for the development and conduct of the experimental study on early maladaptive cognitive schemes, coping mechanisms and well-being; Identifying early maladaptive cognitive schemes and coping mechanisms that occur at different stages of the elderly; Identifying differences in early maladaptive cognitive schemes and coping mechanisms, depending on demographic aspects (gender, stage of the elderly, living environment, family status) and the level of perceived well-being; Establishing the relationship between early maladaptive cognitive schemes and coping mechanisms in the elderly; Developing psychological profiles of the elderly regarding maladaptive cognitive schemes from the perspective of coping mechanisms and psychological well-being; Developing and implementing a psychological intervention program to remediate early maladaptive cognitive schemas and develop adaptive coping mechanisms, in order to improve psychological well-being.

The novelty and scientific originality of the research results consist in identifying the cognitive and behavioral psychological factors that determine the feeling of well-being and successful aging; developing a psychological intervention program for the elderly, based on identifying and understanding the origin of early maladaptive cognitive schemas, on remediating them and improving adaptive coping styles.

The obtained results contribute to solving the important scientific problem: Determining the peculiarities of the behavioral and affective dimensions of the elderly from the perspective of early maladaptive cognitive schemes. Identifying demographic differences in cognition and behavior in older adults. Creating psychological profiles based on the relationship between coping mechanisms and early maladaptive cognitive schemas. Implementation of a psychological intervention program to identify and educate maladaptive cognitive schemes and coping strategies, which will also improve the psychological well-being of the elderly.

The theoretical significance of the paper is represented by the clarification of the theoretical framework regarding the concepts of cognitive schema from the perspective of the interrelationship with coping mechanisms, highlighting the psychological factors that determine psychological well-being and, respectively, optimal aging. Research on maladaptive cognitive schemas and coping mechanisms in the elderly makes a significant contribution to understanding changes in the way individuals respond to life's challenges as they age. This provides theoretical insights into how prior experiences and adaptations to life changes can influence cognitive and emotional development over time.

The applied value of the research lies in the fact that the results obtained serve as a basis for good practices for the mental health of the elderly, by validating a psychological intervention program that will act on maladaptive cognitive schemas and coping, so that the elderly manage to adapt the way they think and behave in order to benefit from successful aging. It can also be a starting point in the integration of advanced technologies such as neuroimaging, which brings novelty to the research of cognitive schemas in the elderly, providing more detailed insights into the changes in brain activity related to these schemas and the relationships between psychological factors and well-being.

Implementation of scientific results. The results of this study can be used in the process of continuous training of specialists who are in charge of providing medical, social and community services and who need theoretical, methodological and practical support, as well as an institutional normative context that encourages them to adopt relevant and effective professional practices for this population category.

АННОТАШИЯ

Попеску Моника-Андрея. Когнитивные схемы и копинг-механизмы у лиц пожилого возраста

Диссертация на соискание ученой степени доктора психологии, Кишинев, 2025

Структура диссертации. Диссертация состоит из введения, 3 глав, общих выводов и рекомендаций, библиографии из 258 источников и 7 приложений. Объем диссертации составляет 137 страниц основного текста, 37 таблиц и 14 рисунков. Результаты, полученные в ходе исследования, опубликованы в 12 научных работах.

Ключевые слова: ранние дезадаптивные когнитивные схемы, копинг-механизмы, психологическое благополучие, пожилой возраст, программа психологического вмешательства.

Цель работы заключается в выявлении типов ранних дезадаптивных когнитивных схем, копингмеханизмов и состояния благополучия у лиц пожилого возраста, а также в реализации программы психологического вмешательства с целью изменения ранних дезадаптивных когнитивных схем и развития адаптивных копинг-механизмов для повышения уровня субъективно переживаемого психологического благополучия.

Задачи исследования: Анализ специальной литературы в области психологии лиц пожилого возраста с целью выделения теоретических аспектов, релевантных для разработки и проведения экспериментального исследования по ранним дезадаптивным когнитивным схемам, копинг-механизмам и благополучию; выявление ранних дезадаптивных когнитивных схем и копинг-механизмов, встречающихся на различных стадиях пожилого возраста; выявление различий в уровне ранних дезадаптивных когнитивных схем и копинг-механизмов в зависимости от демографических характеристик (пол, стадия пожилого возраста, среда проживания, семейный статус) и уровня субъективного благополучия; установление взаимосвязи между ранними дезадаптивными когнитивными схемами и копинг-механизмами у лиц пожилого возраста; разработка психологических профилей пожилых людей в отношении дезадаптивных когнитивных схем с позиции копинг-механизмов и психологического благополучия; разработка и применение программы психологического вмешательства, направленной на коррекцию ранних дезадаптивных когнитивных схем и развитие адаптивных копинг-механизмов с целью улучшения психологического благополучия.

Научная новизна и оригинальность результатов исследования заключаются в выявлении когнитивных и поведенческих психологических факторов, определяющих переживание состояния благополучия и успешное старение; разработке психологической программы вмешательства для пожилых людей, основанной на выявлении и понимании происхождения ранних дезадаптивных когнитивных схем, их коррекции и улучшении стилей адаптивного копинга.

Полученные результаты, способствующие решению важной научной проблемы: определение особенностей поведенческих и аффективных измерений пожилых людей с точки зрения ранних дезадаптивных когнитивных схем; выявление демографических различий в проявлении когниций и поведения у пожилых лиц; создание психологических профилей, основанных на взаимосвязи копингмеханизмов и ранних дезадаптивных когнитивных схем; реализация программы психологического вмешательства для выявления и коррекции дезадаптивных когнитивных схем и копинг-стратегий, посредством которых возможно добиваться улучшения психологического благополучия пожилых людей.

Теоретическая значимость работы состоит в уточнении теоретических оснований относительно концептов когнитивной схемы с позиции взаимосвязи с копинг-механизмами, выявляя психологические факторы, определяющие психологическое благополучие и, соответственно, оптимальное старение. Исследование дезадаптивных когнитивных схем и копинг-механизмов у пожилых людей вносит значительный вклад в понимание изменений в способах реагирования индивидов на жизненные вызовы по мере старения. Это определяет теоретические перспективы относительно того, как прошлый опыт и адаптация к жизненным изменениям могут со временем влиять на когнитивное и эмоциональное развитие.

Практическая ценность исследования заключается в том, что полученные результаты служат основой для улучшения практик в области психического здоровья пожилых людей посредством апробации программ психологического вмешательства, воздействующих на дезадаптивные когнитивные схемы и копинг, с тем чтобы пожилые люди могли адаптировать свои способы мышления и поведения для достижения успешного старения. Помимо того, исследование может стать отправной точкой для интеграции передовых технологий, таких как нейровизуализация, вносящая новизну в изучение когнитивных схем у лиц пожилого возраста, предоставляя более детальные перспективы относительно изменений мозговой активности, связанных с этими схемами, и взаимосвязей между психологическими факторами и состоянием благополучия.

Внедрение научных результатов. Результаты данного исследования могут быть использованы в процессе непрерывного профессионального обучения специалистов, оказывающих медицинские, социальные и коммунальные услуги и нуждающихся в теоретической, методологической и практической поддержке, а также в институциональном нормативном контексте, побуждающем их к применению релевантных и эффективных профессиональных практик для данной категории населения.

POPESCU MONICA-ANDREEA

COGNITIVE SCHEMAS AND COPING MECHANISMS IN ELDERLY PEOPLE

SPECIALTY 511.01 – GENERAL PSYCHOLOG

Summary of the Doctoral Thesis in Psychology

Approved for printing: August 25, 2025

Offset paper. Offset printing.

Printing sheets: 2.0

Paper size: 60 x 84 1/16 Print run: 50 copies

Order no.: 100

Editorial and Printing Center of the State University of Moldova Alexei Mateevici Street, 60, Chişinău, MD-2012