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SUMAR

STUDII ȘI CERCETĂRI

OANA CORINA MICHAEL, LAVINIA ȚÂNCULESCU-POPA, The moderating effect of resilience and social support on the relationship between post-migration stress and psychological well-being among ukrainian refugees in Romania	75
MARIA CENUȘĂ, MARIA NICOLETA TURLIUC, Parental stress, inconsistent discipline and children's emotion regulation: A dyadic analysis	97
ANDREEA-BIANCA POPA, ALEXANDRA MAFTEI, What makes us more emotionally vulnerable? Emotional, behavioral, and physical predictors of adults' psychological distress.....	117
OGAMDI EMMANUEL CHIMDIEBERE, OCTAV SORIN CANDEL, The relationship between religious orientation and personality in LGBTQI individuals	133
LUCIA SAVCA, CRISTINA VLAICU, Explorarea dimensiunii singurătății în rândul persoanelor vârstnice: Analiza unor factori socio-demografici și psihologici.....	151

PUNCTE DE VEDERE

ANA DRAGU, Contribuții românești în problematica tulburărilor din spectrul autist.....	167
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REVISTA DE PSIHOLOGIE

(JOURNAL OF PSYCHOLOGY)

Vol. 70

2024

No. 2

CONTENTS

STUDIES AND RESEARCHES

OANA CORINA MICHAEL, LAVINIA ȚÂNCULESCU-POPA, The moderating effect of resilience and social support on the relationship between post-migration stress and psychological well-being among ukrainian refugees in Romania	75
MARIA CENUȘĂ, MARIA NICOLETA TURLIUC, Parental stress, inconsistent discipline and children's emotion regulation: A dyadic analysis	97
ANDREEA-BIANCA POPA, ALEXANDRA MAFTEI, What makes us more emotionally vulnerable? Emotional, behavioral, and physical predictors of adults' psychological distress.....	117
OGAMDI EMMANUEL CHIMDIEBERE, OCTAV SORIN CANDEL, The relationship between religious orientation and personality in LGBTQI individuals	133
LUCIA SAVCA, CRISTINA VLAICU, Exploring the dimension of loneliness among elderly individuals: Analysis of socio-demographic and psychological factors	151

POINTS OF VIEW

ANA DRAGU, Romanian contributions to the issue of spectrum disorders autism.....	167
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REVISTA DE PSIHOLOGIE

(REVUE DE PSYCHOLOGIE)

Vol. 70

2024

No. 2

SOMMAIRE

ÉTUDES ET RECHERCHES

OANA CORINA MICHAEL, LAVINIA ȚÂNCULESCU-POPA, The moderating effect of resilience and social support on the relationship between post-migration stress and psychological well-being among ukrainian refugees in Romania	75
MARIA CENUȘĂ, MARIA NICOLETA TURLIUC, Parental stress, inconsistent discipline and children's emotion regulation: A dyadic analysis	97
ANDREEA-BIANCA POPA, ALEXANDRA MAFTEI, What makes us more emotionally vulnerable? Emotional, behavioral, and physical predictors of adults' psychological distress.....	117
OGAMDI EMMANUEL CHIMDIEBERE, OCTAV SORIN CANDEL, The relationship between religious orientation and personality in LGBTQI individuals	133
LUCIA SAVCA, CRISTINA VLAICU, Exploration de la dimension de la solitude chez les personnes âgées: Analyse des facteurs socio-démographiques et psychologiques	151

POINTS DE VUE

ANA DRAGU, Contributions roumaines à la question des troubles du spectre autisme	167
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THE MODERATING EFFECT OF RESILIENCE AND SOCIAL SUPPORT
ON THE RELATIONSHIP BETWEEN POST-MIGRATION STRESS
AND PSYCHOLOGICAL WELL-BEING AMONG UKRAINIAN
REFUGEES IN ROMANIA

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Abstract

This study explores the connection between Post-migration Stress and Psychological Well-Being among Ukrainian refugees in Romania, with a focus on the moderating roles of Resilience and Social Support. Using scales for stress, well-being, resilience, and social support, data was collected from Ukrainian refugees (N = 84), mostly women aged 18 to 68. The analysis, conducted before significant changes in government support, revealed a negative correlation between post-migration stress and psychological well-being. Both resilience and social support showed moderating effects in the relationship between post-migration stress and environmental mastery (a facet of psychological well-being construct). The study also examined demographic variations within the refugee community in relation to stress, well-being, social support, and resilience, highlighting potential impacts of subsequent changes in refugees' circumstances on research outcomes.

Cuvinte-cheie: Refugiați ucraineni, stres postmigrare, reziliență, bunăstare psihologică, sprijin social.

Keywords: Ukrainian Refugees, Post-migration stress, Resilience, Psychological Well-Being, Social Support, Environmental mastery.

1. INTRODUCTION

Within a year since the outbreak of war in Ukraine on February 24, 2022, more than 3.2 million refugees from Ukraine have crossed the border into Romania. As of January 13, 2023, a total of 107,000 refugees from Ukraine were in Romanian territory, with women and children making up 80% of the total refugee population (Romanian Government Report, 2023). Emergency Decree No. 15/2022 regulated social support for Ukrainian refugees in Romania, granting each refugee

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10 euros per day for accommodation and 4 euros per day for food. In April 2023, significant changes were made with Regulation No. 22/2023, which reduced support for each refugee to a fixed monthly amount for accommodation and food. These changes have led to a significant proportion of refugees leaving Romania, creating insecurity and impacting their integration into the labour market and education.

The aim of this article is to examine the relationship between post-migration stress and psychological well-being among Ukrainian refugees in Romania, as well as their social environment factors such as social support or personal factors such as resilience influence this relationship. Although numerous studies have been conducted on refugee populations, the literature is particularly strong, especially in the last decade (Alemi & Stempel, 2018; Blackmore *et al.*, 2020; Bogic *et al.*, 2012; Brough *et al.*, 2003; Fadhlia *et al.*, 2022; Gebresilassie *et al.*, 2022; Georgiadou *et al.*, 2020; Hynie, 2018, Li *et al.*, 2016, Nissen *et al.*, 2021) and the topic is particularly timely as the conflict in Ukraine is still ongoing, published studies on Ukrainian refugees in Romania are currently underrepresented.

In the present study, we aim to examine how post-migration stressors contribute to explaining the variance in the occurrence of aspects of psychological well-being reported by Ukrainian refugees in Romania, and how resilience, acting as an internal factor, and social support, acting as an external factor, influence this relationship.

The ultimate aim of the paper is to contribute to the development of current research on forcibly displaced populations by highlighting certain elements of the post-migration living conditions of the Ukrainian refugee population in Romania and their impact on mental health.

1.1. POST-MIGRATION STRESS, RESILIENCE, AND SOCIAL SUPPORT AMONG EVOLVING CONFLICT REFUGEES

After the two world wars, researchers have been increasingly concerned with studying the impact of military conflict on people's psychological well-being. Initially, many of these studies focused on the effects of armed conflict on those directly affected by it. However, with the emergence of increasingly complex forms of warfare, from the Cold War to the hybrid warfare we see taking place in Ukraine today, modern conflict has increasingly expanded from the battlefield as a geographically bounded space into the psychological field. As a result, even a very localised armed conflict can have an impact on a much larger territory through displacement of populations, disruption of communication and supply chains and psychological warfare. Research on the effects of war on civilians outside the conflict zone and the intensity of these effects is becoming increasingly important due to the growing exposure of civilians to conflict (Osiichuk & Shepotylo, 2019).

On 28 July 1951, in a special conference, the United Nations approved the "Convention relating to the Status of Refugees" in Geneva. From 1951 to the

present, the Geneva Convention has been the foundation of international law on international protection and provides a definition of a refugee: “a person with a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinion who is outside his or her State of origin and is unable or unwilling, owing to such fear, to avail himself or herself of the protection of that country” (Geneva Convention, 1951). Romania acceded to the Geneva Convention relating to the Status of Refugees in 1991.

Post-migration stress has begun to be studied more closely with the waves of forced migration over the past decade and it has been found that, although it has fewer associations with traumatic events and the development of PTSD, by its more subtle but persistent nature, post-migration stress can have an even greater potential negative impact on the mental health and psychological well-being of refugees (Porter & Haslam, 2005).

The multidimensional construct of post-migration stress, as delineated by the authors of the homonym scale (Malm *et al.*, 2020), encompasses seven domains. Four of these facets pertain to the host society environment, namely ‘perceived discrimination,’ ‘lack of competences’ specific to host country, ‘economic strain’ and ‘social strain.’ The remaining three are more closely linked to family and home country stress: ‘loss’ (of home country, social life, status), ‘family separation’ and concern for family members who stayed back in the home country and ‘conflict within the family.’

On the other hand, Ryff and Keyes (1996) outlined six components of psychological well-being: ‘autonomy,’ ‘environmental mastery,’ ‘personal growth,’ ‘positive relationships with others,’ ‘purpose in life,’ and ‘self-acceptance’. Psychological well-being, denoting an individual’s positive evaluation of their own life, is included in this study as a dependent variable or criterion.

An extensive meta-analysis of the concept of resilience, which reviewed 270 articles and studies on the construct, proposes to define resilience as “the process of negotiating, managing, and adapting to significant sources of stress or trauma” and notes that both personal qualities and resources and the individual’s environment and life context facilitate or, conversely, undermine this ability to adapt and bounce back from adversity (Windle *et al.*, 2010).

Resilience plays a significant role in explaining why some people manage better in traumatic situations than others. Therefore, those with more resilience-related traits are more likely to adapt to a stressful event successfully, while people with fewer resilience-related traits won’t adapt as well (White *et al.*, 2010).

Harandi, Taghinasab and Nayeri (2017) note that “social support is the amount of support a person perceives and reports receiving. Also, social support was defined as a phenomenon that involves people’s interactions, so when a person gives and receives social interaction, it plays an important role in their health”. Concurrent to these findings, social support was proven to provide physical and

psychological benefits to individuals who experience stressful physical and psychosocial events and is considered a factor in reducing psychological distress when individuals experience stressful events (Brummett *et al.*, 2005).

Participants in several studies conducted on refugee populations reported feeling a sense of acceptance, security, belonging, and being able to avoid isolation due to social connections (Walther *et al.*, 2021; Siriwardhana *et al.*, 2014).

Also, the presence of family members in the host country can be a major emotional resource. Social support is a major theme in most studies on refugee resilience (Siriwardhana *et al.*, 2014) and social networks provide emotional and informational support and promote a sense of belonging (Chung, Hong & Newbold, 2013).

2. METHODOLOGY

2.1. OBJECTIVE

The overarching objective of this study is to examine the intricate correlations between post-migration stress and psychological well-being among Ukrainian refugees in Romania, encompassing both global and nuanced facets. To support this overarching goal, the secondary objectives include assessing demographic-based variations in the studied variables, determining which specific factors of post-migration stress most significantly predict facets of psychological well-being in Ukrainian refugees, and investigating the potential impact of external social support and personal resilience on the interplay between post-migration stress factors and psychological well-being in this refugee population. These subsidiary objectives collectively contribute to a comprehensive understanding of the complex dynamics shaping the psychological experiences of Ukrainian refugees in Romania.

2.2. HYPOTHESES

Previous studies in refugee populations have shown that a number of post-migration stressors are negatively associated with refugees' psychological well-being (Nissen *et al.*, 2021, Hynie, 2018). In the literature (Bruwer *et al.*, 2008), stress has also been found to be negatively correlated with resilience, i.e. resilience and social support (Lee, Nam & Kim, 2013). Based on these theoretical considerations, we formulated the following hypotheses:

H1: We hypothesize that post-migration stress as an overall factor is correlated with *H1a*) psychological well-being as an overall factor and *H1b*) its subfactors (autonomy, environmental mastery, personal growth, positive relationships, purpose in life, self-acceptance).

H2: We expect that post-migration stress at the facet level (discrimination, lack of skills, financial stress, loss, family separation, social stress, family conflict) correlates with psychological well-being as a general factor.

H3: We expect a connection between stress after migration and *H3a*) resilience, *H3b*) social support and psychological well-being.

Separation from family is an important factor in the mental health of refugees (Bogic *et al.*, 2012), and separation, particularly from partners, is a common aspect of forced migration. Often the partner remaining in the conflict zone finds themselves in risky and violent situations, which increases the stress associated with the separation. Based on the above premise, we proposed the following hypothesis:

H4: We hypothesize that there are statistically significant differences between the facets of psychological well-being depending on the presence or absence of the partner in Romania.

Since the integration process of refugees in the new country presents many challenges in terms of environmental mastery and requires a high level of functioning, resilience and social support are of utmost importance for research on forcibly displaced populations (Walther *et al.*, 2021). Given the above theoretical premises, we hypothesized:

H5: We hypothesize that *H5a*) social support as an external resource and *H5b*) resilience as an internal factor shape the relationship between post-migration stress and environmental mastery as a facet of psychological well-being among the Ukrainian refugees.

2.3. PARTICIPANTS

The present study was carried out on a sample of 84 participants from the conflict zone in Ukraine who were in Romania at the time of data collection ($M_{age} = 38.50$, $SD = 8.58$), 86.9% women.

The recruitment of participants and their inclusion were made on a voluntary, snowball basis, with confidentiality assurance. The questionnaire was translated into Ukrainian by an authorized native translator and sent to respondents in their mother tongue, with the help of staff from the Malva Ukrainian Refugee Community Centre in Bucharest. Initially, 124 respondents completed the questionnaire distributed in groups on social platforms dedicated to Ukrainian refugees in Romania. Incomplete responses ($N = 39$) and one response that did not meet the minimum age criterion of 18 years were excluded. Only the data collected from the respondents aged over 18 who provided valid and complete answers ($N=84$), were included in the study.

Although the gender distribution of respondents is not balanced, with the percentage of female respondents being over 80%, this percentage reflects the statistical share of women in the total adult refugee population in Romania at the time of data collection (Romanian Government Report, 2023).

2.4. MEASURES

Post-migration stress was assessed by using the 21-item Refugee Post-migration Stress Scale (RPMS) (Malm, *et al.*, 2020). The scale has seven subscales: *Perceived Discrimination* (4 items, $\alpha = .74$, with items such as: “I felt disrespected because of my nationality”), *Lack of Competences* (3 items, $\alpha = .74$, with items such as “I experience annoying difficulties communicating in the language of the host country”), *Economic Strain* (3 items, $\alpha = .83$, with items such as “I worry because of unstable financial situation”), *Loss* (3 items, $\alpha = .82$, with items such as: “I miss my country”), *Family Separation & Concerns* (2 items, $\alpha = .88$, with items such as: “I worry about family members from whom I am separated”), *Social Strain* (3 items, $\alpha = .67$, with items such as “I feel excluded or isolated in the host country”) and *Family Conflicts* (3 items, $\alpha = .78$, with items such as “I feel disrespected in my family”). A 5-point Likert scale was used for all items, ranging from 1 (“Never”) to 5 (“Very often”).

The Post-migration Stress Scale for Refugees (RPMS) is the most recent instrument validated and developed specifically for refugee populations to measure the Post-migration stress experienced by this social group. For the purpose of this research we considered the RPMS Scale as the most appropriate instrument to measure the variable of post-migration stress experienced by Ukrainian refugees in Romania because it is a concise, multi-dimensional, structured and up-to-date instrument with good psychometric results on other refugee populations (Nissen, Sengoelge & Solberg, 2021).

Psychological Well-Being was assessed using the 42-item Psychological Well-Being Scale (Ryff and Keyes, 1996). The measure has six subscales: *Autonomy* (7 items, $\alpha = .71$, with items such as: “I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people”), *Environmental mastery* (7 items, $\alpha = .67$, with items such as “In general, I feel I am in charge of the situation in which I live”), *Personal growth* (7 items, $\alpha = .70$, with items such as “I have the sense that I have developed a lot as a person over time”), *Positive relations with others* (7 items, $\alpha = .66$, with items such as “People would describe me as a giving person, willing to share my time with others”), *Purpose in life* (7 items, $\alpha = .80$, with items such as “I have a sense of direction and purpose in life”), *Self-Acceptance* (7 items, $\alpha = .79$, with items such as: “I like most aspects of my personality”). For all items, a 6-point Likert scale was used, ranging from 1 (“Strongly disagree”) to 6 (“Strongly agree”).

Resilience was measured using the Brief Resilience Scale (BRS) (Smith *et al.*, 2008), which includes 6 items such as “I tend to bounce back quickly after hard times”. The measure had, on this study, a very good internal consistency coefficient: $\alpha = .83$. A 5-point Likert scale was used for all items, ranging from 1 (“Strongly disagree”) to 5 (“Strongly agree”).

Unlike previous instruments for measuring resilience, which assessed more personal resources that could increase resilience, the BRS was developed to measure a person’s ability to recover from stress and their ability to adapt to difficult or stressful situations. For the purpose of the present research, we considered the BRS Resilience Scale to be the most appropriate instrument as it was also used in other recent studies on refugee populations (Yildirim *et al.*, 2022).

Social support was measured using the short version of the ENRICH Social Support Inventory (Mitchell *et al.*, 2003), which consists of 5 items such as “Do you have someone around whom you can counsel when you have a problem?”. The measure had an internal consistency index $\alpha = .83$. A 5-point Likert scale was used, ranging from 1 (“Never”) to 5 (“Always”).

2.5. DATA ANALYSIS

The statistical analysis was carried out in SPSS.

Exploratory descriptive analysis showed a normal distribution on the large post-migration stress, psychological well-being and resilience scales (Shapiro-Wilk test results were not statistically significant) and an abnormal distribution on the social support scale ($p < .05$). At the facet level, all post-migration stress sub-facets showed an abnormal distribution ($p < .05$), with the exception of the absence of skills subscale which showed a normal distribution ($p = .213$). As for the distribution at the level of psychological well-being facets, they showed a normal distribution, with the exception of the purpose in life subscale which did not showed a normal distribution ($p < .05$).

The post-migration stress subscales (discrimination, financial stress, loss, family separation, social stress and family conflict) were not normalized by the *Log10* function, therefore non-parametric tests were used.

Correlational analyzes were conducted to examine the associations between post-migration stress and various aspects of psychological well-being of the Ukrainian refugee population in Romania. Regression analyzes were then used to identify the specific factors of post-migration stress that most reliably predicted specific dimensions of psychological well-being. To examine the moderation effects, particularly the interaction between post-migration stress and external factors such as social support and personal resilience, 5000 bootstrap samples were used. These analyzes were performed using IBM SPSS Statistics v.21. Additionally, to evaluate

the moderation models, we used Process v.3, developed by Andrew F. Hayes, specifically implementing Model 1.

3. RESULTS

3.2. CORRELATION ANALYSIS

Spearman correlations between post-migration stress, psychological well-being, resilience and social support, as global factors and at the sub-factor level, where appropriate, for the entire sample are presented in Table no. 1.

Post-migration stress is significantly and negatively correlated with psychological well-being as macro-factors reported by Ukrainian refugees in Romania ($r = -.47$, $p < .01$), confirming hypothesis H1a).

General post-migration stress showed strong negative significant correlations with three aspects of psychological well-being, namely: environmental mastery ($r = -.60$, $p < .001$), purpose in life ($r = -.41$, $p < .001$), and self-acceptance ($r = -.44$, $p < .001$), and a weaker correlation with personal growth ($r = -.28$, $p < .001$). No significant correlations were found between post-migration and autonomy ($r = -.21$, $p = .052$) and positive relations with others ($r = -.05$, $p = .664$). This partially confirms hypothesis H1b) as it correlates with only four of the six facets of psychological well-being.

Analysing the correlations between post-migration stress at the facet level and psychological well-being as a macro-factor, the strongest negative significant correlation was found with the family conflict facet ($r = -.43$, $p < .001$), followed by financial difficulties ($r = -.32$, $p < .001$) and social stress ($r = -.29$, $p < .001$). Lower correlations were observed with discrimination ($r = -.26$, $p < .05$) and lack of competencies ($r = -.23$, $p < .05$). The country loss ($r = -.14$, $p = .222$) and family separation ($r = -.04$, $p = .688$) did not correlate with psychological well-being. Therefore, hypothesis H2 is partially confirmed, as there is a correlation between four of the post-migration stress factors and psychological well-being.

Consistent with the literature, resilience displayed a significant negative correlation with post-migration stress ($r = -.44$, $p < .001$) and a positive correlation with psychological well-being ($r = .46$, $p < .001$), confirming hypothesis H3a). Social support showed a good positive correlation with psychological well-being ($r = .33$, $p < .001$), confirming hypothesis H3a). Even if lower in intensity, the negative significant correlation between social support and post-migration stress ($r = -.24$, $p < .05$), confirming hypothesis H3b), is consistent with previous studies on refugee populations that identified social support as an important element in alleviating the effects of post-migration stress (Siriwardhana *et al.*, 2014).

Table no. 1

Descriptive statistics and Spearman correlations for the variables in study

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 POST-MIGRATION STRESS	2.71	.50	-																
2 Perceived Discrimination	1.36	.50	.49	-															
3 Lack of competences	2.94	.93	.60	.31	-														
4 Economic strain	3.09	1.05	.71	.31	.39	-													
5 Loss of home country	3.96	.97	.58	.06	.06	.19	-												
6 Family Separation & Concerns	4.10	.96	.33	-.08	.10	.11	.48	-											
7 Social Strain	2.88	.97	.83	.36	.37	.57	.55	.17	-										
8 Family Conflict	1.54	.72	.46	<u>.25</u>	.33	.22	.04	-.06	<u>.25</u>	-									
9 PSYCHOLOGICAL WELL-BEING	4.17	.55	-.47	-.26	-.23	-.32	-.14	-.04	-.29	-.43	-								
10 Autonomy	4.10	.68	-.21	-.03	-.20	-.12	-.01	-.07	.03	-.36	.70	-							
11 Environmental mastery	3.83	.69	-.60	-.36	-.39	-.43	-.19	-.15	-.39	-.36	.77	.53	-						
12 Personal growth	4.39	.67	-.28	-.20	-.18	-.14	-.08	-.05	-.14	-.21	.73	.48	.48	-					
13 Positive relations with others	4.40	.67	-.05	-.09	.08	-.07	.15	.05	-.01	-.28	.59	<u>.26</u>	.35	.29	-				
14 Purpose in life	4.19	.87	-.41	-.24	-.15	-.29	-.16	.02	-.37	-.30	.80	.40	.58	.49	.47	-			
15 Self-acceptance	4.09	.81	-.44	-.18	-.15	-.25	-.22	-.09	-.27	-.37	.86	.59	.64	.60	.44	.60	-		
16 RESILIENCE	2.86	.76	-.44	-.26	-.27	-.19	-.20	-.25	-.33	-.35	.46	.39	.39	.31	<u>.23</u>	<u>.28</u>	.48	-	
17 SOCIAL SUPPORT	3.75	.92	-.24	-.32	-.23	-.19	.13	.08	-.08	-.34	.33	.11	<u>.27</u>	.19	.42	.21	.29	.31	-

Note. N = 84; Significant correlations at the $p = 0.001$ (bilateral) are shown in bold. Correlations with the Spearman's rank correlation coefficient (ρ) at the $p = 0.01$ are shown in italics. Underlined figures represent correlations significant at the $p = 0.05$.

3.2. T-TEST

To test hypothesis *H4*, a T-test for two independent samples was used to analyze the differences between respondents who are in Romania with their partner (N=59) and those whose partners stayed in Ukraine (N=25). The results are provided in Table 2.

Table no. 2

Post-Migration Stress and Psychological Well-being
for participants with and without their partner in Romania

Variable	With partner in Romania		With partner in Ukraine		<i>t</i> (84)	<i>p</i>	Cohen's <i>d</i>
	M	SD	M	SD			
PSYCHOLOGICAL WELL-BEING	4.21	.55	4.06	.56	-1.20	.234	.271
Autonomy	4.12	.67	4.04	.73	-.50	.620	.116
Environmental mastery	3.95	.69	3.56	.62	-2.55	.014	.581
Personal growth	4.48	.58	4.18	.81	-1.66	.106	.457
Positive relations with others	4.44	.68	4.32	.67	-.72	.475	.177
Purpose in life	4.16	.94	4.27	.67	-.59	.559	-.126
Self-acceptance	4.14	.81	3.96	.82	.92	.364	.221

Note: Mean and standard deviation variable values for each of the groups are shown for participants reported to be "with life partner in Romania" (N=59) and "with life partner remaining in Ukraine" (N = 25), as well as the results of *t* tests (assuming unequal variance) comparing the variable estimates between the two groups. In bold significant correlation at $p < .001$

The analysis of the data reveals several insights into the psychological well-being of individuals with partners in Romania compared to those with partners in Ukraine. The *t*-tests conducted for each psychological well-being variable indicate specific patterns. Notably, participants with partners in Romania scored slightly higher in psychological well-being ($M = 4.21$, $SD = .55$) compared to those with partners in Ukraine ($M = 4.06$, $SD = .56$), although the difference was not statistically significant ($t(84) = -1.20$, $p = .234$). The effect size, as measured by Cohen's *d*, was found to be 0.271, suggesting a small effect. However, when examining individual dimensions of psychological well-being, significant differences emerge in environmental mastery ($t(84) = -2.55$, $p = .014$, Cohen's *d* = .581), indicating that participants with partners in Romania scored higher in this specific aspect. Other dimensions, such as autonomy, personal growth, positive relations with others, purpose in life, and self-acceptance, did not exhibit statistically significant differences between the two groups, with Cohen's *d* values ranging

from -.126 to .457, suggesting small to moderate effect sizes. In light of these results, we partially reject hypothesis *H4*.

3.3. MODERATION ANALYSIS

To test the *H5* that the relationship between post-migration stress and environmental mastery as a facet of psychological well-being among Ukrainian refugees is moderated by either Social Support (*H5a*) or Resilience (*H5b*), two moderation analyses were conducted. To avoid potentially problematic multicollinearity, the variables were centered (Aiken & West, 1991). The results of the two generated models are included in Table no. 3.

Table no. 3

Moderation Analysis with Social Support and Resilience as moderators
of the relationship between Post-migration stress and Environmental mastery

Hypothesis	Predictors	β	se	t	ΔR^2	F for ΔR^2
<i>H5a</i>	Post-migration stress	-.88	.13	-6.78		
	Social Support	.06	.07	.87		
	Post-migration stress * Social Support	-.35	.11	-3.24	.39	17.28
	Model R^2	.39				
<i>H5b</i>	Post-migration stress	-.62	.13	-4.65		
	Resilience	.21	.09	2.41		
	Post-migration stress * Resilience	-3.57	.17	-2.16	.38	16.47
	Model R^2	.38				

Note. N = 84; in bold significant correlation at $p < .001$, in italics significant correlation at $p < .05$

Model 1: Moderation by Social support

In the first step of the analysis, the variables Post-migration stress and Social Support were included, explaining a significant amount of variance in environmental mastery, $R^2 = .39$, $F(3, 80) = 17.28$, $p < .001$.

Although post-migration stress has a significant effect on environmental mastery ($\beta = -.88$, $p < .001$) and social support does not have a significant effect on environmental mastery ($\beta = .06$, $p = .385$), the interaction between the post-migration stress and social support significantly contributed to the variance in environmental mastery, $\Delta R^2 = .08$, $\Delta F(1, 80) = 10.491$, $p < .01$. The interaction plot (Figure 1) indicated that the higher the Post-migration stress is, the lower the environmental mastery is at lower social support levels. The moderation effect was particularly pronounced at higher levels of social support, where individuals experienced enhanced environmental mastery in the face of elevated post-migration stress.

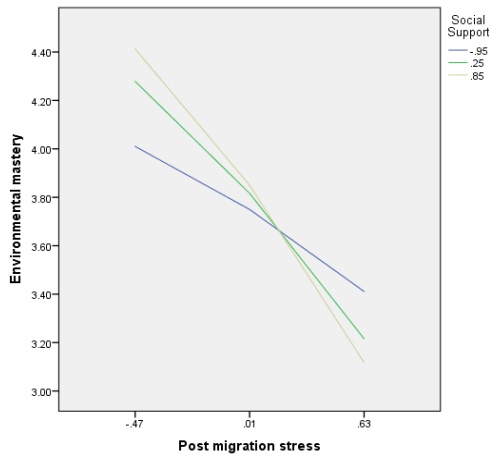


Figure 1

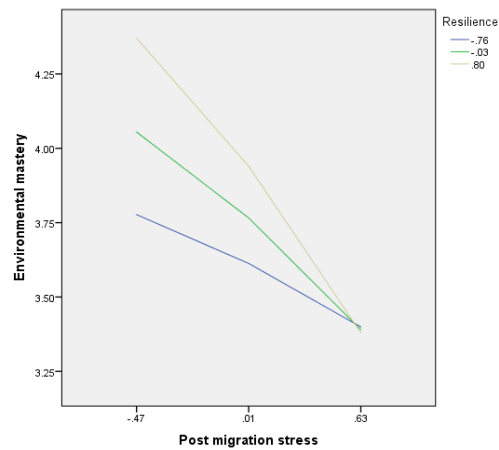


Figure 2

Model 2: Moderation by Resilience

In the second model, the variables post-migration stress (Post-migration stress) and Resilience were included in the model, accounting for a significant amount of variance in environmental mastery, $R^2 = .38$, $F(3, 80) = 16.475$, $p < .001$.

The interaction between Post-migration stress and Resilience significantly contributed to the variance in environmental mastery, $\Delta R^2 = .04$, $\Delta F(1, 80) = 4.644$, $p < .05$, while both post-migration stress ($\beta = -.62$, $p < .001$) and resilience ($\beta = .21$, $p < .05$) had a significant effect on environmental mastery. The interaction plot (Figure 2) revealed that as Post-migration stress and Resilience increased, Environmental mastery also increased. At low Post-migration stress levels, resilience did not substantially impact environmental mastery ($p = .061$). However, among individuals facing high post-migration stress, those with elevated levels of Resilience exhibited better Environmental mastery as facets of psychological well-being.

In summary, both Resilience and Social Support were found to moderate the relationship between post-migration stress and environmental mastery among Ukrainian refugees, highlighting the importance of these factors in buffering the impact of stress on psychological well-being.

3.4. DISCUSSIONS

It was found that refugees in general face many challenges and obstacles associated with the post-migration environment, including limited financial resources, acculturation, discrimination and the social policies of the host country. Furthermore, these stressors related to the post-migration environment and uprooting cumulatively have a stronger negative impact on refugees' psychological well-being and mental health than the pre-migration traumatic experience (Malm, Tinghög & Narusyte, 2020).

The results of our study are guided by these considerations, with applied statistical tests showing a clear negative correlations between post-migration stress, both at a facet and overall level, and psychological well-being with its facets.

Social support was positively associated with psychological well-being, reinforcing the results of previous research (Walther *et al.*, 2021) conducted on refugee populations, a result also confirmed in our research with a statistically significant correlation with post-migration stress.

As expected, resilience also showed positive correlations with psychological well-being and negative correlations with post-migration stress. The existing literature provides particularly robust results to demonstrate positive associations between resilience and psychological well-being (Lee, Nam & Kim, 2013; Fredrickson, 2001) and negative correlation with stress (Ong *et al.*, 2006, Xing *et al.*, 2013).

Regarding the separation of families, especially of life partners, our study did not find statistically significant differences in various aspects of psychological well-being between refugees currently living with their life partners in Romania and those with partners in Ukraine. Overall psychological well-being scores showed no significant differences, suggesting a similar impact on well-being regardless of partner location. However, a closer look at individual dimensions revealed differentiated findings. Participants with partners in Romania showed higher levels of environmental mastery, indicating possible differences in certain aspects of well-being influenced by the geographical separation of life partners. This results contradict findings from other studies of refugee populations and consistently shows that partner separation has a significant negative impact on psychological well-being (Georgiadou, Schmitt & Erim, 2020) Although existing literature suggests negative impacts, our research did not find statistically significant differences on most dimensions of psychological well-being between refugees currently living with their life partners in Romania and those separated from their partners in Ukraine. Three possible explanations could be formulated (one cultural, one social and one psychological) for the unexpected results of the present study regarding the lack of a significant statistical difference between the two samples for most aspects of well-being. Of all ethnic groups of Slavic origin, Ukrainians are most descended from the Cossack population, considered by many historians to be the forerunners of the modern Ukrainian nation. Cossacks were considered warriors and defenders of the borders against attacks from migrant populations and other invaders.

In recent history, the Cossack army on the Don was the main resistance force against the Bolshevik army. In Cossack culture, unlike other Slavic cultures, including Russian culture, women played a central role in the family and lived far more independent lives from men than was common at the time. Of course, this was also a necessity in a warrior population where men were often away at war and away from the family. Cossack women were known to be very independent and

used to holding the reins of the family at a time when this was very unusual in most other cultures. Cossack women were known for their strong character. The ethnographer G. B. Gubarev characterized them as follows: “Centuries of hardship and adversity have given rise to a fearless determination among Cossack women. The Cossack woman was also a boatman and a skilled horseman and wielder of weapons. The Cossack woman was perfectly capable of defending her children and her home. Thus the Cossack period, with its wars, its Mongol-Tatar invasions and its constant uprisings, gave rise to a new type of woman, who ran the domestic economy and defended her home and family while her husband was away at war.” (Encyclopedia of Ukraine).

Since the current research participant group consists of 86.9% women (representative of the gender distribution of the Ukrainian refugee population in Romania), the Kazakh ancestry of contemporary Ukrainians could be a possible cultural explanation for the difference between the result obtained in this study and the studies conducted to other refugee populations and could be a direction for further research. An alternative explanation for the results obtained can be associated with the fact that in Romania a large number of Ukrainian refugees live in a few large urban centers and therefore social support is ensured intra-ethnically through relationships with other members of the community that take place there family relationships. In fact, in a study examining the psychological well-being of military spouses, social support was found to have an important moderating effect on the relationship between stress and psychological well-being of respondents and may counteract elements associated with the stress of separation from a partner (Green *et al.*, 2013). A third possible explanation, psychological in nature, could also explain the results of our research and also suggest a direction for future research. When wives who have been separated from their partners attribute to the partner left behind in Ukraine the role of a heroic defender of the homeland, they may feel a sense of pride or duty fulfilled that is similar to the natural reactions of sadness and grief that accompany family separation partially counteracted. A study of a sample of wives of Israeli soldiers who had been taken prisoner of war found that despite the loneliness and pain associated with the separation, respondents to the separation also experienced positive emotions such as a sense of personal growth and development attributed. The personal and social perspective of active and courageous men fighting for the defense of the homeland, on the one hand, has a positive effect on the self-esteem of their wives, who are proud of their partner, and on the other hand, they themselves have found out that they are in difficult situations cope alone and that separation from their partner has allowed them to exercise autonomy, which is an important aspect of psychological well-being (Lieblich, 1997). The linear regression analysis carried out in this study revealed family conflict as the main factor for post-migration stress, with a negative predictive role for all aspects of psychological well-being. This finding supports the results of other studies conducted on refugee populations. For example, a 2022

study of Syrian refugees in the Netherlands showed that positive relationships within the family are central to refugees' well-being and adaptation, as family harmony is a motivating factor in building their new life and planning for the future in their new land despite adversity (Fadhli *et al.*, 2022). This is also consistent with other previous research (Veronese *et al.*, 2021) that has shown that the presence of strong family ties gives refugees a sense of ability to cope with difficulties. Forced migration due to unforeseen circumstances, such as the war in Ukraine, leads to a significant deterioration in environment mastery as refugees have to adapt to a completely new and unfamiliar environment.

As expected, of all aspects of psychological well-being, environment mastery was the most negatively correlated with factors associated with post-migration stress and, also, shown the only difference between the two analyzed groups (with and without partner with them in Romania). This can be explained by the urgent requirements for refugees to function in new social coordinates, from important aspects of life such as the need to communicate without knowing the language (often without a foreign language) to understanding how to access medical provision or social assistance system, up to more mundane things such as filling out a form, using the public transport system or going shopping. These results confirm the results of other previous studies that have shown that refugees have many problems adapting to the new environment (Carswell *et al.*, 2011) and that this is one of the aspects of well-being that is most influenced by it become stress factors after migration.

It is interesting to note that social stress, which in the case of refugees is interpreted as social isolation in the new culture, plays a stronger negative predictive role than family conflict. This highlights the importance of efforts to socially integrate the refugee population and create a framework in which they can interact not only intra-ethnically but also with the general population of the host country. Results from a large meta-analysis on resilience (Lee *et al.*, 2013) showed that resilience is closely linked to optimism and good affect, which are favorably correlated with self-efficacy. Thus, resilience can be considered a protective factor against PTSD and other psychiatric disorders. Not surprisingly, our research showed that higher levels of resilience lead to a weaker association between post-migration stress and environment mastery. Social support has generally been identified as an important predictor in the relationship between post-migration stress and psychological well-being in many studies (Walther *et al.*, 2021, Van der Boor *et al.*, 2020). There are also studies in which social support did not play a moderating role on the relationship between acculturative stress and psychological well-being and did not predict a significant increase in variance in psychological well-being (Alemi & Stempel, 2018). A possible explanation could relate to a migrant-specific process that involves a clear compartmentalization or separation of the external and private aspects of life. This separation could explain the lack of a clear relationship between social support (associated with family and intra-ethnic

community) and post-migration stress (associated with external factors in the new environment). For migrants, intra-community and family environment and greater social environment are perceived as non-overlapping aspects that are connected to different areas of their lives and are not integrated into a unified perspective on personal existence. Still, in our study both resilience and social support were found to be moderating the relationship between post-migration stress and environment mastery.

3.5. LIMITATIONS AND FUTURE RESEARCH SUGGESTIONS

A limitation of this study could be seen in the transversal design, which makes it difficult to draw causal conclusions. Additionally, results were obtained exclusively through self-report questionnaires, increasing the possibility of common method variance contaminating the reported associations.

The integration process in the host country is characterized by many difficulties and requires a high level of functionality from the refugees. Therefore, it is particularly important to examine their impact on psychological well-being and the internal and external resources that can facilitate this integration at the level of the refugee community and at the social level of the host country. A limitation of the study is the number of participants included in the study ($N = 84$).

As previously mentioned, difficult access to respondents is also a common problem in research on refugee populations. A second limitation of the research concerns the circumstances of the research population, which changed significantly very soon after data collection. Financial support has decreased, conditions for obtaining it have become more stringent and uncertainty about the near future has increased. It can only be assumed that these significant changes in the conditions of the study population would have affected the measurement results if the questionnaires had been administered after the date of the announcement of these changes in the law.

While at the time of the arrival of the waves of refugees the general focus was on meeting basic needs such as shelter and food, as time passes and the refugees' stay in the new country extends, more subtle but longer-term aspects come to the fore and impact on issues such as psychological well-being and the need to facilitate the adaptation and social integration of a numerically significant population. For this reason, we believe that this study, carried out a year after the outbreak of war and the arrival of the first waves of refugees in our country, can be a starting point for further research to determine the directions of intervention, social support programs and public actions to support the integration of refugees.

Another direction for future research is to conduct a comparative analysis with groups of Ukrainian refugees in other countries who have benefited from other forms of support and to draw conclusions of a more general nature relevant to formulating a set of best practices in their integration into the receiving countries.

Lastly, this study could be integrated into broader comparative research between different refugee populations to identify commonalities in their experiences as well as ways in which different levels of external support have an impact on counteracting the negative effects of post-migration stressors and improving psychological well-being and ultimately to facilitate the successful integration of the refugee population.

4. CONCLUSIONS

Despite numerous studies on refugee populations, with a particularly extensive literature in the last decade, we are not aware of any published studies that specifically address Ukrainian refugees' post-migration stress and well-being, a topic of significant relevance given the ongoing conflict in the country Ukraine. The effort to scientifically investigate and document aspects of unfolding history in real time is consistent with a broader goal in the social sciences.

The crisis triggered by the armed conflict in Ukraine and the presence of an unprecedented refugee population in our country should not be ignored in psychological research. Research on populations belonging to traumatized ethnic communities, such as refugees, is inherently challenging. Overcoming barriers extends beyond language and cultural barriers to include community members' reluctance to participate in studies and, more generally, limited access to respondents. Significant efforts were made to recruit a strong group of participants for this research to ensure the scientific relevance of the data collected.

This study contributes to the growing interest in studying the effects of armed conflict on civilians outside the war zone. The forced displacement of large populations affects a much larger area than that lying between the borders of the States directly involved in the conflict and results in increasing civilian exposure to the conflict.

This research is consistent with the paradigm of recent studies on changing refugee populations of focusing from pathology and deficit to resources and resilience, without negating the existence of traumatic experiences and the importance of clinical approaches. Post-migration stress and its factors are cumulative and encompass a range of experiences, living conditions and challenges that refugees face upon arrival in the host country. This construct, more subtle than the traumatic events preceding migration, proved difficult to define. Not surprisingly, even among Ukrainian refugees, the variable "post-migration stress" showed a strong negative correlation with psychological well-being and its facets. This result is not surprising for a population in a completely new environment in which it must quickly learn to navigate various aspects of life in the host country. Mastering the environment encompasses almost all aspects of life in the host country, from accessing health services to understanding the transportation system, administrative organization, local customs, and more.

Resilience, viewed as a set of qualities and personal abilities that enable healthy functioning or adaptation in the face of significant adversity or a disruptive life event, played a moderating role in the relationship between post-migration stress and environmental mastery as a facet of the psychological well-being. This aspect is particularly relevant because environmental mastery is the facet of psychological well-being most predicted by post-migration stressors and most influenced by displacement.

Social support also acted as a moderator of environmental mastery in relation to post-migration stressors. We explained this result by the likelihood that respondents compartmentalize aspects of life in their ongoing effort to adapt not only to the new environment but also to conditions of uncertainty and stress. Positive relationships and social support are associated with the immediate family and intra-ethnic community, while post-migration stress is exclusively related to external environmental factors. This disconnect may result in a lack of association between social support and post-migration stress.

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Data Availability Statement

The raw data supporting the conclusions of this article are made available by the authors without undue reservation.

Authors' Contributions

Both authors contributed equally to the conception and design of the main objective of the study, the analysis of the data, and the writing of the manuscript.

Conflict of interest

The authors declare that the research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest.

REZUMAT

Acest studiu explorează legătura dintre stresul postmigrare și bunăstarea psihologică în rândul refugiaților ucraineni din România, cu accent pe rolul moderator al rezilienței și al sprijinului social. Folosind scale pentru stres, bunăstare, reziliență și sprijin social, au fost colectate date de la refugiați ucraineni (N = 84), majoritatea femei cu vârste cuprinse între 18 și 68 de ani. Analiza, efectuată înainte de schimbări semnificative în sprijinul guvernamental, a relevat o corelație negativă între stresul postmigrare și bunăstarea psihologică. Reziliența și sprijinul social au acționat ca moderator ai relației dintre stresul postmigrare și bunăstarea psihologică. Studiul a examinat, de asemenea, variațiile demografice din cadrul comunității de refugiați în legătură cu stresul, bunăstarea, sprijinul social și reziliența, evidențiind impactul potențial al schimbărilor ulterioare în circumstanțele refugiaților asupra rezultatelor cercetării.

PARENTAL STRESS, INCONSISTENT DISCIPLINE AND CHILDREN'S EMOTION REGULATION: A DYADIC ANALYSIS

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Abstract

The preschool period is one in which parents experience high levels of stress, with one of the main tasks of parenting being related to promoting children's emotion regulation through appropriate parental practices. Previous studies focused mainly on investigating the effects of parental stress on children's broader socio-emotional outcomes (Chazan-Cohen *et al.*, 2009; Neece *et al.*, 2012). Therefore, our study aims to explore the association between parental stress and children's emotion regulation within a dyadic context, gathering data from both parents, while investigating the mechanisms underlying this association. This cross-sectional study involved 103 parental dyads, with at least one typically developed preschool children aged between three to six years. Parents completed self-reported scales regarding parental stress, inconsistent discipline as a parental practice, and children's emotional regulation. Dyadic analysis was conducted using the Actor-Partner Interdependence Mediation Model (APIMeM). Results showed that mothers' and fathers' stress had a direct negative effect on their perceptions of children's emotion regulation (the actor effects), and mothers' stress had a direct negative effect on fathers' perceptions of children's emotion regulation (the partner effect). Also, the results of mediation analysis revealed that only in fathers' case, parental stress exerts an indirect actor effect on children's emotional regulation through their inconsistent discipline. Fathers' stress was positively related to fathers' inconsistent discipline, which, in turn, decreased levels of mothers' perception of children's emotional regulation. Future intervention programs should focus on parents' self-awareness regarding the damaging impact of inconsistent discipline. Also, reducing parents' stress should constitute one of the main goals of parental-based interventions.

Cuvinte-cheie: stres parental, inconsistența disciplinei parentale, reglarea emoțională.

Keywords: parental stress, parental inconsistent discipline, emotion regulation.

1. INTRODUCTION

Recent research show that parenting is more stressful today than in prior decades (Nomaguchi & Milkie, 2020). The day-to-day demands of caregiving and raising children put pressure on caregivers, researchers indicating that parents frequently experience high levels of stress, which is relatively stable during the preschool period (Anthony *et al.*, 2005; Crnic *et al.*, 2005; Mak *et al.*, 2020).

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Research on the relationship between parental stress and children's emotion regulation is limited, and its explanatory variables are poorly investigated, especially at preschool age. Also, most studies evaluated only mothers and, less often, fathers. Therefore, studies analyzing data at dyadic levels are almost lacking, the previous research presenting data mainly at the individual level (Barry *et al.*, 2009; Bater & Jordan, 2017). Addressing these gaps in the literature, the objectives of this study are to investigate the relationship between parental stress and preschool children's emotion regulation at the parental dyadic level, and to test whether inconsistent discipline can explain the link between these variables. To the best of our knowledge, this is the first study investigating the dyadic effects of parental stress and parental inconsistent discipline, on children's emotion regulation in parental dyads having at least one preschool child.

1.1. PARENTAL STRESS AND PARENTAL PERCEPTION OF CHILDREN'S EMOTION REGULATION

Parenting stress has been defined as a psychological reaction to discrepancy between parenthood demands and parents' expectations, to their perception that they do not have the resources to meet these demands, to the mismatch between their children's demands and their ability to meet them (Anthony *et al.*, 2005; Deater-Deckard, 1998; Holly *et al.*, 2019; Luster & Okagaki, 1993).

Parenting stress has a salient role in the development of regulatory abilities of young typically developing children (Chazan-Cohen *et al.*, 2009; Liu *et al.*, 2021). The development of effective emotion regulation is an important task for preschool children as they enter gradually into a social environment and they become more aware of cultural and social display rules (Carlson & Wang, 2007; Thompson, 1994). Even so, to date, most of the studies focused on investigating the relation between parental stress and children's socio-emotional adjustment, such as social skills, internalization problems and externalization problems (Carapito *et al.*, 2020; Cenușă & Turliuc, 2023; Crnic *et al.*, 2005; Mak *et al.*, 2020; Matalon *et al.*, 2022), and less on emotion regulation.

Emotion regulation explains the affective dimension of mental functioning and the strategies used in the emotion management process (Turliuc & Bujor, 2013). Considering that children's emotion regulation is a precursor of children's socio-emotional adjustment (Eisenberg *et al.*, 2010), investigating the relationship between parental stress and children's emotion regulation is required for preventing the development of socio-emotional problems (Carlson & Wang, 2007; Eisenberg *et al.*, 2001). Indeed, the preschool period can be considered as a favourable time to identify and address early signs of problems, before they transform into permanent problematic patterns (Poulou, 2015).

Family system theory (FST, Minuchin, 1974) provides a theoretical framework for understanding the relationship between parental variables and children behavior,

including the emotional one, within the family system. In this perspective, family is composed of individual members and several subsystems, each of which being better understood in the context of the specific family system as a whole, and in the interactions between its subsystems (Matalon & Turliuc, 2023). Moreover, Tripartite Model of Family Impact on Children's Adjustment and Emotion Regulation (Morris *et al.*, 2007) indicates that parental characteristics influence children's socio-emotional outcomes, including their emotion regulation skills (Morris *et al.*, 2007).

Studies on the association between parental stress and children's emotion regulations are rare, especially for preschool children. Also, the associations between parenting stress and children's socio-emotional adjustment have been predominantly found across samples which included only mothers (Chazan-Cohen *et al.*, 2009; Neece *et al.*, 2012). The few studies that have explored this association have found a negative relationship between stress and emotion regulation in preschool children. For example, one longitudinal study found that higher levels of parenting stress when – children were 14 months old predicted higher levels of emotional dysregulation in children four years later (Chazan-Cohen *et al.*, 2009). Previous research has suggested that the impact of parental stress on child outcomes is mediated by parenting behaviour, and that parental stress and parental practices might have a cumulative influence on child's emotion regulation (Deater-Deckard, 1998; Morris *et al.*, 2007).

1.2. INCONSISTENT DISCIPLINE AS A MEDIATOR

Inconsistent parental discipline is defined by some degree of control and responsiveness in following children's undesirable behaviors, which includes alternating parental reactions, in which parents may occasionally respond with high behavioral control, and other time they may not respond at all, depending on their moods; they can use the threat of punishment without doing so or waive it in the process of carrying out the punishment (Cheung *et al.*, 2018; Otto *et al.*, 2016).

Parental Stress Model (Abidin, 1992) indicated that parental stress is a key determinant of parenting practices, especially dysfunctional parenting. Research indicated that, of five parenting practice (e.g. poor monitoring, corporal punishment, positive parenting practices), only inconsistent discipline among mothers was significantly positively related to maternal distress, and partially mediates the relation between maternal distress and child aggression (Barry *et al.*, 2009). Further, the impact of inconsistent discipline on children's socio-emotional adjustment, especially on children's emotion regulation, is less unclear than in the case of positive and negative parental practices, and calls for deeper investigation.

Regardless of the contribution of other parenting variables, inconsistent parental discipline was found to be a significant positive predictor of child negative behaviors

and emotional dysregulation (Duncombe *et al.*, 2012). Previous studies showed that inconsistent parental discipline can facilitate children's emotion dysregulation, anxiety, sadness and depression (Laskey & Cartwright-Hatton, 2009; Otto *et al.*, 2016). Indeed, higher inconsistent and punitive discipline practices, predicted lower self-regulatory skills through less frequent child routines, structure and predictability (Bater & Jordan, 2017). Conversely, through consistent and positive parenting discipline, children internalize parental requests, and become more able to self-regulate emotional arousal (Liu *et al.*, 2021). A contradictory result suggested that, inconsistent parenting behavior is a positive predictor of children's self-regulatory emotion regulation (Kim & Holloway, 2018).

Although inconsistent parenting appears to be a harmful practice due to the dysregulated behavior of parents (Elizur *et al.*, 2017), it could be adopted by parents driven by positive loving intentions, but facing levels of high stress resulting from the increased pressure of parental responsibility (Shirani *et al.*, 2012; Turner *et al.*, 2023). Therefore, despite the fact that the parents' inconsistent discipline is intended to mitigate the consequences of their misbehavior in children and to avoid negative emotions resulting from punishment, it can also negatively reinforce children, showing them that they cannot regulate their negative emotions (Turner *et al.*, 2023). As such, these parents tend to perceive in their children lower levels of emotion regulation, their parental inconsistent discipline may encourage this negative perception toward children's emotion regulation.

Family systems theory (Cox & Paley, 1997), and fathering research (Phares & Compas, 1992), indicated that mothers' and fathers' behaviors make different contributions to child development. For example, mothers', but not fathers', discipline inconsistency was related to more externalizing behaviors in both boys and girls (Gryczkowski *et al.*, 2010). Also, previous studies showed that mothers', but not fathers' parental variables, were related to children's socio-emotional outcomes (Aznar & Tenenbaum, 2013; Van Der Pol *et al.*, 2016). Thus, parenting stress influence negatively parenting behaviours (Deater-Deckard & Scarr, 1996), parenting stress and child functioning, such as children's emotion regulation (Masten & Coatsworth, 1998), and parental behaviors (inconsistent discipline) is a mediator in the relationship between stress and child adjustment.

1.3. THE PRESENT STUDY

Previous studies indicated that parenting stress is associated with child functioning, such as children's emotion regulation (Masten & Coatsworth, 1998), that parenting stress is negatively associated with parenting behaviours (Deater-Deckard & Scarr, 1996), and that parenting behaviors (inconsistent discipline) is a mediator in the relationship between stress and child adjustment (Deater-Deckard, 1998).

This study aimed to investigate the dyadic effects of parental stress on children's emotion regulation, following the directions of previous studies using the both mothers and fathers, as participants (Barry *et al.*, 2009; Bater & Jordan, 2017). In addition, the inclusion of parental inconsistent discipline as explanatory mechanism of this link is important for providing an additional perspective that could draw intervention development for both parents individually, but also among dyads (Bater & Jordan, 2017; Tavassolie *et al.*, 2016).

Based on previously mentioned studies, we hypothesize that mothers' and fathers' parental stress would be negatively and directly related with their, as well as, with their partner's perception of children's emotion regulation (H1). Specifically, mothers' parental stress and fathers' stress would be negatively associated with their own perception of children's emotion regulation – actor effect (H1a) and, mothers' parental stress and fathers' parental stress would be negatively associated with their partner perception of children's emotion regulation – partner effect (H1b). In addition, parents' stress would be negatively and indirectly related to their own and to their partner's perception of children's emotion regulation through parental inconsistent discipline (H2). Specifically, mothers' parental stress would be negatively and indirectly related to their perception of children's emotion regulation through maternal, respectively paternal inconsistent discipline (H2a), mother's parental stress would be negatively and indirectly related to fathers' perception of children's emotion regulation through maternal, respectively paternal inconsistent discipline (H2b). Further, fathers' parental stress would be negatively and indirectly related to their children's emotion regulation through maternal, respectively paternal inconsistent discipline (H3a). Finally, fathers' parental stress would be negatively and indirectly related to mothers' perception of children's emotion regulation through maternal, respectively paternal inconsistent discipline (H3b).

2. METHOD

2.1. PARTICIPANTS

Our sample comprises 103 dyads of married parents, residents in the northeastern Romania city of Suceava, who completed the questionnaire. The mothers had a mean age of 34.93 years (SD = 4.7) and the fathers had a mean age of 37.53 (SD = 4.53). The ages of each couple's child ranged from 3 years to 6 years (M=4.72, SD=1.22). Regarding the child's gender, 56% are female and 44% male. The average number of children per household was 1.55 (SD=0.6; range 1- 4). The total monthly household income was assessed by the following item: "The total household income of your family is: (a) <2,500 lei; (b) between 2,500

and 5,000 lei; (c) between 5,000 and 10,000 lei; (d) more than 10,000 lei.” Nearly half of the families (48%) reported a monthly household income between 5,000 and 10,000 lei.

2.2. MEASURES

Mothers’ and fathers’ parental stress were measured using the Parental Stress Scale (Berry & Jones, 1995). The scale includes 18 items, 10 direct items (e.g., “Caring for my child(ren) sometimes takes more time and energy than I have to give.”) and 8 items (1,2,5,6,7,8,17,18) reversed scored items (e.g., “*I am happy in my role as a parent.*”). Parental Stress Scale is appropriate for parents of children with and without special needs. Parents’ responses are rated on a 5-point Likert scale (1 = totally disagree, 5 = strongly agree) and scores range from 18 to 90, higher scores reflect higher parental stress. The internal consistency of the scale in this study was 0.95 for mothers and 0.96 for fathers.

Inconsistent discipline was measured using the Alabama Parenting Questionnaire Short Form for parents (APQ-9; Elgar *et al.*, 2007). It includes 9 items that measure positive parenting (3 items; e.g., “*You let your child know when he/she is doing a good job with something.*”), poor monitoring (3 items; e.g., “*Your child stays out in the evening after the time he/she is supposed to be home.*” and inconsistent discipline (3 items; e.g., “*You let your child out of a punishment early (like lift restrictions earlier than you originally said).*”) The 9-item APQ subscales assesses how often situations described are typically occurs in their home, using a 5 point Likert scale (1 = never, 5 = always). In this study, only the inconsistent discipline subscale was used. The internal consistency of the subscale in this study was 0.87 for mothers and 0.78 for fathers.

Mothers and fathers filled out *The Emotion Questionnaire for parents* (EQP; Rydell *et al.*, 2003) which measures the parental perception of children’s ability to regulate their emotions. Parents assessed children’s ability to regulate themselves or with the help of others different emotions, such as sadness, anger, fear, and exuberance. The scale contains 20 items aimed at measuring emotion regulation (e.g., “*He/she has difficulties finding something to make him/herself feel better*”; “*It is easy for others, for instance a parent, to make him/her feel better (e.g., by comforting, distracting or talking things through)*”) and 20 items aimed at measuring emotionality. In this present study only the emotion regulation subscale was used. The parents rated the statements on a scale from 1 = does not apply at all to my child to 5 = applies very well to my child. The internal consistency of the subscale in this study was 0.92 for mothers and 0.93 for fathers.

Additionally, we assessed the following socio-demographic variables: parent’s age, monthly household income, number of children, child’s age and gender.

2.3. PROCEDURE

Before conducting the study, the Ethics Committee of the authors' University approved the study protocol (no. 1013/17.05.2022). After that, the informed consent was received and signed by all the participants. The data were collected using a self-reporting questionnaire addressed to the parents of the children. The questionnaire was disseminated through the parents' kindergarten and social-media (WhatsApp and Facebook personal pages), and then completed anonymously through Google Forms software. Participation was voluntary and the parents could withdraw from the study anytime. The parents were told to fill the questionnaire independently. They only had to agree on reporting on the same child if they had more than one child. The participants were asked to fill in a password (city/town and day/month/year of marriage) to identify dyads. As for the inclusion criteria to participate in the study, we used the following: be married and have a minimum of one child typically developed between the ages of 3 and 6.

2.4. STATISTICAL ANALYSIS

First, we performed the descriptive statistics and Paired-Sample *T*-tests to examine the mean differences between mothers and fathers related to parental stress, inconsistent discipline and children's emotion regulation. Then, Pearson and Spearman correlation analysis were performed. Further, we used Amos 26.0 programs (Arbuckle, 2019) to compute a series of direct and indirect effects of mediation at the dyadic level, The Actor Partner Interdependence Mediation Model (APIMeM) (Kenny *et al.*, 2006) being conducted to test the hypotheses. Mediation effects were performed using 5000 bootstrapping samples with 95% confidence interval.

3. RESULTS

3.1. PRELIMINARY ANALYSIS

Our findings show that there were no significant differences between the mothers' and fathers' reports on their stress and on perception of children's emotion regulation. Although previous studies showed that due to the existence of traditional roles, mothers' stress is higher than fathers' stress (Crnic *et al.*, 2005; Oyarzún-Farías *et al.*, 2021), studies that investigated parenting stress in both parents, besides the fact that both parents levels of parental stress among mothers and fathers were correlated, mothers and fathers are quite similar in their levels of parenting stress within each family (Deater-Deckard, 1998; Deater-Deckard &

Scarr, 1996; Neece *et al.*, 2012). However, the fathers reported higher levels of parental inconsistent discipline compared to the mothers (see Table no.1).

Table no. 1

Means, standard deviations, and paired-samples t-test

Variables	Mothers		Fathers			
	M	SD	M	SD	T	d
1. Parental stress	38.33	14.45	38.41	15.98	-.07	-.01
2. Inconsistent discipline	8.51	3.49	9.24	3.00	-2.23*	-.22
3. Parent's report of child's ER	3.19	.71	3.13	.76	.99	.09

Note: * $p < .05$. ER-emotion regulation

Further correlations among the study variables and the intercorrelations between the mothers' and fathers' reports were computed. The results (Table 2) show mothers' and fathers' parental stress was positively correlated with their own parental inconsistent discipline (mothers: $r = 0.66$, $p < 0.001$; fathers: $r = 0.50$, $p < 0.001$) and their partners' parental inconsistent discipline (mothers: $r = 0.39$, $p < 0.001$; fathers: $r = 0.55$, $p < 0.001$), and negatively correlated with their own perception of children's emotion regulation (mothers: $r = -0.60$, $p < 0.001$; fathers: $r = -0.70$, $p < 0.001$) and their partners' perception of children's emotion regulation (mothers: $r = -0.62$, $p < 0.001$; fathers: $r = -0.50$, $p < 0.001$). Mothers' and fathers' parental inconsistent discipline was negatively related to own's perception of children's emotion regulation (mothers: $r = -0.43$, $p < 0.001$; fathers: $r = -0.54$, $p < 0.001$) and their partner's perception of children's emotion regulation (mothers: $r = -0.45$, $p < 0.001$; fathers: $r = -0.43$, $p < 0.001$).

To control for the socio-demographic variables, we conducted analyses using Pearson and Spearman's correlations. We found that only the child's gender is significantly correlated with the mothers' report of children's emotion regulation ($r = -0.20$, $p < 0.05$), the mothers indicating less emotion regulation among girls, compared to boys. Further, Pearson's correlations revealed that, for the mothers, the children's number is significantly correlated with their their stress ($r = -.27$, $p < .01$), with children's emotion regulation ($r = .32$, $p < .01$). Regarding the fathers, the children's number is significantly correlated with their stress ($r = .27$, $p < .01$). The child's age was not significantly correlated with the main variables of the study. The total monthly household income was significantly correlated with mothers' parental stress ($r = .24$, $p < .05$), fathers' parental stress ($r = .27$, $p < .01$) and with fathers' perception of children's emotion regulation ($r = -.22$, $p < .05$). Thus, the child's gender, number of children, and the total monthly household income were included in the model as covariates.

Table no. 2

Bivariate Coefficients among study variables

Variable	1	2	3	4	5	6	7	8	9
1. Maternal stress									
2. Paternal stress	.72***								
3. Maternal inconsistent discipline	.66***	.55***							
4. Paternal inconsistent discipline	.39***	.50***	.49***						
5. Mother's report of child's ER	-.60***	-.50***	-.43***	-.43***					
6. Father's report of child's ER	-.62***	-.70***	-.45***	-.54***	.67***				
7. Number of children	-.27**	-.17	-.15	-.09	.32***	.27**			
8. Child's age	.15	.11	.15	-.10	.04	.04	.09		
9. Child's gender ^a	.19	.11	.13	.03	-.20*	-.10	-.09	-.15	
10. The total household income	.24*	.27**	.14	.07	-.12	-.22*	-.20*	.08	.14

Note: ^a Gender, 1 – male, 2 – female; *p < .050, **p < .010, ***p < .001.

3.2. ACTOR-PARTNER INTERDEPENDENCE MEDIATION MODEL ANALYSIS

The APIMeM revealed the dyadic effects of parental stress, parental inconsistent discipline on parental perception of children's emotion regulation, the model showed good fit to the data ($\chi^2(6) = 1.82$; $p = 0.93$; GFI = 0.99; AGFI = 0.97; NFI = 0.99; CFI = 1.00; RMSEA = 0.000).

3.2.1. Direct and indirect effects of parental stress on children's emotion regulation

Regarding direct effects of parental stress on children's emotion regulation, the results showed that for mothers, there was a significant actor effect of maternal stress on maternal perception of children's emotion regulation, indicating that a higher level of maternal stress is related to lower level of maternal perception of children's emotion regulation ($B = -0.022$; $p = 0.001$; CI: -0.034; -0.010). Also, among fathers, the actor effect between parental stress and perception of children's emotion regulation was significant, meaning that a higher level of paternal stress is related to lower levels of paternal perception of children's emotion regulation ($B = -0.021$; $p = 0.000$; CI: -0.029; -0.012). Regarding partner effect, among fathers, there was a significant direct partner effect of maternal stress on paternal perception of children's emotion regulation ($B = -0.013$; $p = 0.021$; CI: -0.023; -0.003). Among mothers, there was not a significant direct partner effect of paternal stress on maternal perception of children's emotion regulation ($B = -0.002$; $p = 0.673$; CI: -0.012; 0.008) (see Figure 1 and Table no. 3).

Regarding indirect effects of parental stress on children's emotion regulation, the results showed that both mothers' and fathers' actor effects of stress on inconsistent discipline were significantly positive, which revealed that their stress positively predicted their inconsistent discipline (mothers: $B = 0.134$; $p < 0.001$; CI: 0.084; 0.181; fathers: $B = 0.089$; $p < 0.001$; CI: 0.041; 0.137). No significant partner effects of stress on inconsistent discipline were obtained for mothers and fathers (mothers: $B = 0.033$; $p = 0.165$; CI: -0.013; 0.076; fathers: $B = 0.009$; $p = 0.712$; CI: -0.038; 0.058). Further, only father's inconsistent discipline predicted directly and negatively their own paternal children's emotion regulation ($B = -0.068$; $p = 0.008$; CI: -0.114; -0.017). It was also a significant partner effect for mothers, as fathers' inconsistent discipline was negatively related to mother's perception of children's emotion regulation ($B = -0.058$; $p = 0.009$; CI: -0.101; -0.016). The partner effect of inconsistent discipline on children's emotion regulation, for fathers, was not significant ($B = 0.020$; $p = 0.275$; CI: -0.017; 0.056).

The mediation analysis found a significant actor-actor effect only on fathers ($B = -0.006$; $p = 0.004$; CI: -0.014 ; -0.002). Specifically, fathers' stress was associated with more fathers' inconsistent discipline, which in turn is associated with lower levels of children's emotion regulation. Moreover, there was a significant actor-partner for mothers, indicating that fathers' stress had a negative effect on mothers' perception of children emotion regulation due to higher levels of father's inconsistent discipline ($B = -0.005$; $p = 0.005$; CI: -0.012 ; -0.002) (see Figure 1 and Table no. 3).

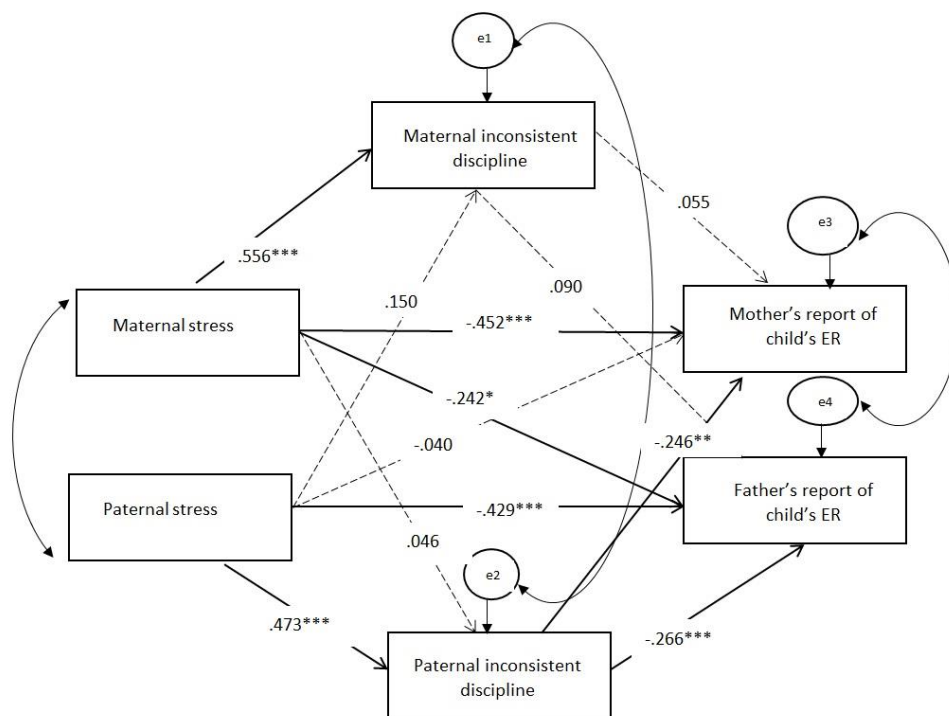


Figure 1. APIMeM results of mothers' and fathers' stress, parental inconsistent discipline on parent's report of child's emotion regulation.

Note: Values are standardized coefficients. Solid lines indicate significant paths, and dashed lines indicate non-significant paths. Child's gender and number of children, the total monthly household income, were controlled. * $p < .050$. ** $p < .010$. *** $p < .001$

Table no. 3

Unstandardized Total effects, Indirect effects, and direct effects of mothers' and fathers' parental stress on perception of children's emotion regulation through inconsistent discipline in the APIMeM

Effect			Estimate	P	95% CI
Actor effect (Individual's parental stress) → Individual Report of Child's ER					
M	Total effect		-0.021	0.000	[-0.032; -0.011]
	Total IE		0.001	0.710	[-0.006; 0.008]
	Actor-actor simple IE	M stress →M inconsistent discipline→M report of child's ER	0.002	0.572	[-0.005; 0.008]
	Partner – partner simple IE	M stress →F inconsistent discipline→M report of child's ER	-0.001	0.602	[-0.004; 0.002]
	Direct effect	M stress →M report of child's ER	-0.022	0.001	[-0.034; -0.010]
F	Total effect		-0.026	0.000	[-0.035; -0.018]
	Total IE		-0.005	0.013	[-0.013; -0.001]
	Actor-actor simple IE	F stress →F inconsistent discipline→F report of child's ER	-0.006	0.004	[-0.014; -0.002]
	Partner – partner simple IE	F stress →M inconsistent discipline→F report of child's ER	0.001	0.184	[0.000; 0.003]
	Direct effect	F stress →F report of child's ER	-0.021	0.000	[-0.029; -0.012]
Partner effect (Individual's parental stress) → Partner's Report of Child's ER					
M	Total effect		-0.007	0.142	[-0.017; 0.002]
	Total IE		-0.005	0.021	[-0.011; -0.001]
	Actor-partner simple IE	F stress →F inconsistent discipline→M report of child's ER	-0.005	0.005	[-0.012; -0.002]
	Partner – actor simple IE	F stress →M inconsistent discipline→M report of child's ER	0.000	0.401	[-0.001; 0.004]
	Direct effect	F stress →M report of child's ER	-0.002	0.673	[-0.012; 0.008]
F	Total effect		-0.011	0.029	[-0.020; -0.002]
	Total IE		0.002	0.459	[-0.004; 0.009]
	Actor- partner simple IE	M stress →M inconsistent discipline→F report of child's ER	0.003	0.249	[-0.002; 0.008]
	Partner – actor simple IE	M stress →F inconsistent discipline→F report of child's ER	-0.001	0.608	[-0.005; 0.003]
	Direct effect	M stress →F report of child's ER	-0.013	0.021	[-0.023;-0.003]

Note: APIMeM: Actor Partner Interdependence Mediation Model; IE: indirect effect; CI: confidence interval; ER – emotion regulation; M-mothers'; F-fathers'.

4. DISCUSSION

Previous few studies focused mainly on the actor effect between parental stress and parent's perception of children's emotion regulation (e.g., Chazan-Cohen *et al.*, 2009). The correlation analysis revealed the dynamic associations between parental stress, parental inconsistent discipline, and parents' report of children's emotion regulation. Specifically, mothers' and fathers' parental stress was positively correlated with their own and their partners' parental inconsistent discipline and negatively correlated with their own and their partner's perception of children's emotion regulation. Also, the mothers' and fathers' parental inconsistent discipline was negatively related to their and their partner's perception of children's emotion regulation. Therefore, considering these significant correlational results, the present

study further explored the dynamic interaction of parental stress on children's emotion regulation, the actor and the partner effects, through the mediating role of parental inconsistent discipline.

First, we tested the actor and partner effects. Mothers' and fathers' stress had negative direct effects on their perception of children's emotion regulation (the actor effects). These results support previous research showing that higher levels of parental stress predicted lower levels of children's emotion regulation (Chazan-Cohen *et al.*, 2009), that a higher parental stress leads to a more negative evaluation of children's socio-emotional outcomes (Beckerman *et al.*, 2020; Mouton *et al.*, 2022; Nelson *et al.*, 2013). Our findings also give a new empirical validation of the Tripartite Model of Family (Morris *et al.*, 2007), which indicate that parent's characteristics, such as parental stress, influence children's socio-emotional outcomes, including their emotion regulation. If previous studies insisted on parental stress in low-income parents (Chazan-Cohen *et al.*, 2009; Masarik & Conger, 2017; Ward & Lee, 2020), we have controlled for the influence of household income on parents' perception of children's emotion regulation.

Further, mothers' stress had a negative partner direct effect on fathers' perception of children's emotion regulation. This partner direct effect suggest that higher mothers' stress is associated with fathers' more negative perception of children's emotion regulation. This result is in line with the process of emotions' transmissions, which showed evidence regarding the contagion of negative emotions and distress from one family member to the other (Larson & Almeida, 1999). Also, this result support previous research which found that mothers' parental stress is negatively related to father-children interaction (e.g., fathers' engagement with children, father sharing in child – related chores) (Nomaguchi *et al.*, 2017).

We also tested the mediating role of inconsistent discipline. First, our findings indicate that mothers' and fathers' stress were directly and positively associated with their inconsistent discipline. These findings are consistent with previous studies (Faith *et al.*, 2023; Rodgers, 1998), suggesting that parents' discipline practices are shaped by parenting stress. Also, parental stress could be amplified toward preschool young children who are perceived more vulnerable by parents (Mullins *et al.*, 2007; Thomasgard, 1998). Therefore, parents could become overprotective, a behavior associated with parental inconsistent discipline (Faith *et al.*, 2023; Turner *et al.*, 2023). Although the parental stress had a positive actor effect on mothers' and fathers' parental inconsistent discipline, the partner effect of parental stress on parental inconsistent discipline was not statistically significant in our study. Further, contrary to the results of previous studies, which found that inconsistency in mothers' discipline, but not fathers', was related to more behavioral problems in children (Gryczkowski *et al.*, 2010), this study found the

parental inconsistent discipline had a negative actor effect only on fathers' perception of children's emotion regulation. Paired samples t-test result showed significant difference between mothers and fathers regarding their inconsistent discipline, with fathers exercising more inconsistent discipline on their children. In addition, fathers' inconsistent discipline has a strong impact on fathers' perception of children's emotion regulation. Still, this result needs deeper investigation, previous studies exploring the inconsistent discipline predominantly among mothers (e.g., Bater & Jordan, 2017). In addition, fathers' inconsistent discipline negatively predicted maternal children's emotion regulation (partner negative effect), but not vice versa, meaning the maternal inconsistent discipline did not predict paternal children's emotion regulation. This result could be explained through the framework of Family systems theory (Cox & Paley, 1997), which underlines the interdependence between family members and the mutual influence between them regarding family members' outcomes. Specifically, according to this theory the extent to which fathers are consistent in discipline toward their children is salient for the way in which mothers perceive children's emotion regulation.

The results of mediation analysis revealed that only for fathers, parental stress has an indirect actor effect on children's emotion regulation, through their parental inconsistent discipline. Further, it is noteworthy that fathers' stress was positively related to fathers' inconsistent discipline, which in turn, decreases levels of mothers' perception of children's emotion regulation. Previous findings test showed that fathers' stress is more strongly related to satisfaction in the marital relationship, whereas mothers' parental stress is more strongly related to attributes of the children. Therefore, fathers, but not mothers reported they were more inconsistent as parents when they were less satisfied with their marital relationships (Deater-Deckard, 1998; Stoneman *et al.*, 1989). Also, the fathering vulnerability hypothesis (Cummings *et al.*, 2004) showed the fathers, comparative with mothers are less able to separate the marital subsystem from the parental subsystem (Stover *et al.*, 2016). Further, the negative impact of fathers' inconsistent discipline on both paternal and maternal perception of children's emotion regulation through is explainable if we take into account the results of a recent systematic review of the differences between mothers and fathers in parenting practices which showed that fathers show less concern regarding children than mothers (Yaffe, 2023). Although, from a traditional viewpoint, fathers were considered to exert more discipline toward their children, recent study showed that mothers disciplined their children more frequently than fathers (Hallers-Haalboom *et al.*, 2016). As such, mothers are expected to play an active role in raising their children, being more responsible for children's socio-emotional outcomes, the paternal role in children rearing being less prescribed (McBride *et al.*, 2002). Therefore, for mothers, fathers' inconsistent discipline, means what fathers do or not do (Nomaguchi *et al.*,

2017), could be more salient, leading to negative perception of children's emotion regulation. Conversely, fathers' inconsistent discipline has a strong negative impact on mothers' perception on children's emotion regulation (partner effect), fathers' perception of children's emotion regulation being negatively influence by their own parental stress and their own parental inconsistent discipline (actor effect).

4.1. LIMITATIONS AND FUTURE DIRECTIONS

This study's findings should be interpreted in light of some limitations. First, all data were collected from both parents through Google Forms software. Therefore, we could not control the conditions under which the participants filled the questionnaire. Although the results provide many complex findings, future studies should include onsite assessments, and obtaining data also from teacher, given that children behave differently depending on their setting (Bater & Jordan, 2017; Lanza & Drabick, 2011). In addition, including direct external observation of parent-child interaction could better confirm the findings of this study. Second, the cross-sectional study design does not allow for establishing causal relationships between variables. Therefore, future studies with longitudinal design are required to draw causal relationships. Third, based on the fact marital satisfaction is an important variable in the association between parental stress and children's outcomes (Liu & Wang, 2015; Robinson & Neece, 2015), futures studies could investigate the mediator, respectively the moderator role of marital satisfaction toward parental dyads.

5. CONCLUSION

Considering the interdependence in parental dyads, our findings indicate that greater mothers' and fathers' parental stress is associated with their perception of children's lower emotion regulation (the actor effects). Also, higher maternal stress is associated with fathers' perceptions of children's lower emotion regulation (the partner effect). Moreover, our results indicate that only in fathers' case, their parental stress has an indirect actor effect on children's emotional regulation, through their inconsistent discipline. Thus, greater fathers' stress was associated with increased fathers' inconsistent discipline, which in turn was associated with mothers' perceptions of children's lower emotional regulation. Consequently, within parental intervention programs, parents should learn new positive parenting skills, become more aware of the negative impact of inconsistent discipline on children's emotional adjustment, and different types of techniques to reduce parental stress.

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REZUMAT

Perioada preșcolară este una în care părinții experimentează niveluri ridicate de stres, una dintre principalele sarcini ale părinților, referitoare la parenting, fiind aceea de susținere a reglării emoționale a copiilor, prin practici parentale adecvate. Studiile anterioare (Chazan-Cohen *et al.*, 2009; Neece *et al.*, 2012) s-au axat în principal pe investigarea efectelor stresului parental asupra dezvoltării socio-emoționale, în general. Prezentul studiu își propune să investigheze asocierea dintre stresul parental și reglarea emoțională a copiilor, la nivel diadic, colectându-se date de la ambii părinți. Acest studiu transversal a inclus 103 diade parentale, cu cel puțin un copil preșcolar, tipic dezvoltat, cu vârsta cuprinsă între 3 și 6 ani. Părinții au completat scale de autoraportare referitoare la stresul parental, inconsistența disciplinei ca practică parentală și reglarea emoțională a copiilor. Analizele diadice au fost realizate utilizându-se Modelul interdependenței actor-partener prin mediere (Actor-Partner Interdependence Mediation Model, APIMeM). Rezultatele au arătat că stresul mamelor și al taților are un efect direct negativ asupra propriilor percepții privind reglarea emoțională a copiilor (efectul actor) și stresul mamelor are un efect direct, negativ asupra percepției de către tați a reglării emoționale a copiilor (efectul partener). De asemenea, rezultatele analizei de mediere au arătat că numai în cazul taților, stresul parental exercită un efect indirect, de tip actor, asupra reglării emoționale a copiilor prin inconsistența disciplinei a taților. Stresul taților corelează pozitiv cu inconsistența disciplinei taților, care, mai departe, influențează negativ percepția mamelor asupra reglării emoționale a copiilor. Viitoarele programe de intervenție ar trebui să se axeze pe susținerea părinților în efortul lor de a conștientiza impactul dăunător al inconsistenței parentale. De asemenea, reducerea stresului ar trebui să constituie unul dintre principalele obiective ale programelor de intervenție parentală.

WHAT MAKES US MORE EMOTIONALLY VULNERABLE? EMOTIONAL, BEHAVIORAL, AND PHYSICAL PREDICTORS OF ADULTS' PSYCHOLOGICAL DISTRESS

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Abstract

A multilevel approach to studying psychological distress is essential to better understand the interaction between psychological and contextual factors and to identify the early signs of psychological distress. The present cross-sectional study used a multi-dimensional perspective to examine adults' psychological distress. We were interested in exploring the roles of emotional (i.e., rejection sensitivity), behavioral (i.e., smartphone addiction), and physical (i.e., sleep quality) predictors of psychological distress among adults. Our sample comprised 236 Romanian adults aged 18 to 58 ($M = 24.58$, $SD = 7.10$, 82.2% females). Inclusion criteria were related to age (> 18) and the use of a smartphone. Participants completed a web-based survey at the beginning of 2023. Correlation analyses suggested that high smartphone addiction, low sleep quality, and high rejection sensitivity were significantly associated with high psychological distress. Age was not significantly associated with psychological distress, and no significant gender-based differences were found in this regard. Multiple hierarchical regression analysis results suggested that psychological distress was best predicted by sleep quality and rejection sensitivity. Smartphone addiction was not a significant predictor in the proposed models. We discuss the present findings concerning their practical implications regarding the potential interventions to reduce adults' psychological distress.

Cuvinte-cheie: sensibilitatea la respingere, dependența de smartphone, calitatea somnului, distresul psihologic.

Keywords: rejection sensitivity, smartphone addiction, sleep quality, psychological distress.

1. INTRODUCTION

Psychological distress encompasses a wide range of characteristics, from specific symptoms of depression and anxiety to personality traits and behavioral disorders (Drapeau *et al.*, 2011).

Anxiety and depression are the most representative forms of psychological distress, often associated with somatic symptoms such as insomnia, decreased ability to concentrate, and loss of energy (Drapeau *et al.*, 2011; Preville *et al.*, 1995). The World Health Organization (2017) stated that depression is the leading

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cause of impaired health and emotional functioning (with 4.4% of the world's population suffering from depression; Alhassan *et al.*, 2018), and contributes to the onset and maintenance of several illnesses (Stanković *et al.*, 2021).

Furthermore, depression also contributes to loss of pleasure, feelings of guilt, decreased self-worth, and disturbance of appetite and sleep (Alhassan *et al.*, 2018). In addition to depression and anxiety, stress is also an important facet of psychological distress (Lovibond & Lovibond, 1995). Stress comprises individuals' inability to relax, the presence of alertness, nervousness (Brown *et al.*, 1997), and excessive worry (Szabo', 2010).

The study of psychological distress is important because it has significant health implications, predicting the development of cognitive and physical disorders, as well as reduced quality of life (Zhang *et al.*, 2022). Poor sleep quality reduces individuals' cognitive resources when they face stress and leads them to resort to inappropriate strategies, such as avoidance and rumination (Zhang *et al.*, 2020). Individuals with heightened rejection sensitivity tend to use avoidance strategies when they sense the possibility of social exclusion (Lesnick & Mendle, 2021). The experience of social exclusion can exacerbate rejection sensitivity, leading to the activation of dysfunctional cognitions that predispose individuals to social stress and emotional distress (Niu *et al.*, 2022). Additionally, they may employ various methods to distract attention from negative emotions; previous studies indicate that smartphone usage is one way individuals attempt to reduce negative emotions and distress (Stanković *et al.*, 2021).

Therefore, we consider it relevant to study sleep quality, rejection sensitivity, and smartphone addiction in the context of adults' psychological distress. However, a multilevel approach to studying psychological distress is important to better understand the interaction between psychological and contextual factors and to identify the early signs of psychological distress (Horn *et al.*, 2021). The ecological perspective supports the need for an inter-sectoral approach to analyze the emotional, behavioral, and physical factors that act together when discussing psychological distress (Horn *et al.*, 2021). Furthermore, examining these factors can contribute to establishing effective intervention methods to prevent and manage psychological distress. Thus, in the present study, we used a multi-dimensional perspective to examine adults' psychological distress.

1.1. REJECTION SENSITIVITY AS A RISK FACTOR FOR PSYCHOLOGICAL DISTRESS

Rejection sensitivity is a cognitive-affective bias characterized by the tendency to expect rejection and involves an exaggerated emotional or behavioral response (Gao *et al.*, 2017). This concept was initially defined as a personality disposition that would explain why certain individuals perceive rejection more easily and experience distress when confronted with it (Yu *et al.*, 2021). Researchers generally believe that rejection sensitivity arises as a result of early experiences characterized by neglect and rejection (Gao *et al.*, 2017; Yu *et al.*,

2021). Previous studies have shown that rejection sensitivity is influenced by social exclusion, and the experience of exclusion within the family or peer group contributes to the tendency to expect rejection in the future and is associated with the risk of developing depression (Niu *et al.*, 2022).

According to the cognitive-affective processing systems (CAPS; Ayduk & Gyra, 2008) model, individuals with a high level of rejection sensitivity may misinterpret the actions of others, which is why they are more prone to feelings of loneliness, depression, and anger (Gao *et al.*, 2017). Furthermore, people with high rejection sensitivity may engage in behaviors designed to protect them from it but often end up being excluded (Lesnick & Mendle, 2021), which further contributes to negative beliefs about their abilities to initiate and maintain social contacts (Niu *et al.*, 2022). Once these expectations are activated, they trigger emotional responses such as anger, anxiety, and depression that lead to behaviors of withdrawal, reassurance-seeking, or acceptance-seeking, perceived by others as disturbing (Lesnick & Mendle, 2021). Because these reactions from others reinforce the initial belief about exclusion, individuals with a high level of rejection sensitivity perceive a higher degree of stress in interpersonal relationships and act in ways aimed to reduce the negative emotions associated with rejection (Lesnick & Mendle, 2021). Furthermore, according to Beck's cognitive model of depression (2002), the association between potentially negative events and personal cognitions contributes to the development of depression (Niu *et al.*, 2022). In other words, the experience of social exclusion increases rejection sensitivity and decreases perceived self-efficacy, which ultimately leads to the development of depressive symptoms.

At the same time, some studies suggested that rejection sensitivity can also be preceded by depressive symptoms (Beeson *et al.*, 2020). Also, the anxious anticipation of rejection increases depression risk through interpretation biases, and challenging negative interpretations may reduce depression risk in those who anticipate rejection (Normansell *et al.*, 2017). Given the mixed findings related to the relationship between rejection sensitivity and psychological distress, there is still a need for research investigating this relationship. Thus, the present study aims to add to the literature examining this link by exploring the predictive role of rejection sensitivity for adults' psychological distress.

1.2. SMARTPHONE ADDICTION AND ADULTS' PSYCHOLOGICAL DISTRESS

Due to the rapid development of technology, the potential risks of excessive use of technological means in the emergence of health disorders have been considered in a growing number of studies (Chen *et al.*, 2020). The American Psychiatric Association (2013) highlighted the potential harm of excessive technology use on various aspects of one's health (Chen *et al.*, 2020). Muscle pain, reduced sleep quality, and depressive symptoms are common consequences of problematic technology use (Chen *et al.*, 2020; Lei *et al.*, 2020).

Furthermore, the current literature suggests that addiction is not limited to substance abuse but can also involve behavioral addictions (Matar Boumosleh & Jaalouk, 2017). Behavioral addictions are persistent over time and contribute to negative emotional outcomes (Squires *et al.*, 2021). Smartphone addiction (SA) falls under the category of behavioral addiction (Demirci *et al.*, 2015), though this category can be difficult to conceptualize because it is associated with a multitude of physical, social, and psychological factors (Demirci *et al.*, 2015). SA has been defined as excessive smartphone use, despite awareness of negative consequences, associated with discomfort when access is limited and disruption of daily tasks due to inability to self-control (Squires *et al.*, 2021). Although information regarding SA is not sufficient to classify it as a disorder in the Diagnostic and statistical manual of mental disorders (American Psychiatric Association, 2013), researchers noted the existence of similar mechanisms found in substance addictions (Matar Boumosleh & Jaalouk, 2017). More specifically, these behaviors involve preoccupation, high tolerance, inability to control desire, impairment of daily life, indifference to harmful effects, and withdrawal (Matar Boumosleh & Jaalouk, 2017).

When comparing the effect of Internet addiction on emotional states with that of SA, previous studies have noted a stronger impact of SA (Kim *et al.*, 2018). People seem to be more inclined to use computers when they are required to perform complex tasks, while the use of smartphones has more of a purpose of maintaining social relationships, which can trigger the fear of missing out (Kim *et al.*, 2018). In addition, portability, direct communication, and quick access to the Internet are features that could explain why SA is more common (Demirci *et al.*, 2015; Kim *et al.*, 2018). Thus, an increasing number of studies suggested a significant association between SA and psychological distress (Pourafshari *et al.*, 2022; Squires *et al.*, 2021; Wan Ismail *et al.*, 2020). The need to be easily accessible all the time, the fear of missing out, and the disruption of daily activities are possible explanations of how excessive smartphone use leads to negative emotional outcomes (Oraison *et al.*, 2020).

SA has been examined in previous studies from multiple perspectives (Geng *et al.*, 2021). On the one hand, SA was often considered a predictor of psychological distress (Ismali *et al.*, 2020; Kim *et al.*, 2018; Matar Boumosleh & Jaalouk, 2017), and on the other hand, as a consequence of it (Demirci *et al.*, 2015; Stanković *et al.*, 2021). For the second perspective, research suggests that individuals seem to use smartphones as a way of distracting attention from negative emotions and reducing psychological distress (Squires *et al.*, 2021; Stanković *et al.*, 2021). A previous study found that self-control mediates the relationship between digital dependence, depression, and anxiety (Geng *et al.*, 2021). Thus, the more individuals exercise control over the time spent using the smartphone, the less likely they are to experience depression and anxiety (Geng *et al.*, 2021). Conversely, individuals who do not exhibit self-control over their smartphone

usage time are at high risk of developing depression and anxiety symptoms (Geng *et al.*, 2021). Another study noted that excessive smartphone use is related to stress generated by information overload (Samaha & Hawi, 2016). A high level of stress predisposes individuals to the risk of problematic smartphone use, but at the same time, problematic smartphone use contributes to the onset of stress (Samaha & Hawi, 2016). It has also been observed that SA predicts a reduced quality of life by increasing stress levels (Samaha & Hawi, 2016).

1.3. SLEEP QUALITY – WHY IS IT IMPORTANT FOR ONE’S EMOTIONAL STATE?

Previous research has analyzed sleep quality both from a qualitative perspective, referring to the extent to which individuals feel rested after waking up, and quantitatively, involving the actual duration of sleep (Lemma *et al.*, 2012). The literature suggests that the decrease in sleep quality is associated with the emergence of technology and lifestyle changes (Alrashed *et al.*, 2022; Lemma *et al.*, 2012). Sleep disorders have been considered a result of repeated sleep deprivation due to insufficient sleep hours or fragmentation throughout the night (Lee *et al.*, 2013). Some authors described sleep-related difficulties as the inability to initiate or maintain sleep and the feeling of being unrested upon waking up (Banglioni *et al.*, 2011). Moreover, poor sleep has been associated with experiencing daytime sleepiness (Alhared *et al.*, 2022), difficulties with concentration, risk-taking behaviors, unsatisfactory social relationships (Postans & Pidgeon, 2016), and physical, psychological, and emotional consequences (Seun-Fadipe & Mosaku, 2017). Poor sleep can also be conceptualized as insomnia (Alrashed *et al.*, 2022; Banglioni *et al.*, 2011; Rezaei *et al.*, 2018), which is often considered both a symptom and a predictor of depression (Banglioni *et al.*, 2011), and is significantly associated with anxiety and stress (Alrashed *et al.*, 2022; Rezaei *et al.*, 2018).

High stress is often associated with poor sleep quality (Lemma *et al.*, 2012). For instance, some researchers argued that low sleep quality reduces one’s cognitive resources when facing stressors; individuals with poor sleep respond to stress by using avoidance strategies, rumination, and acceptance of negative emotions, instead of problem-focused strategies (Zhang *et al.*, 2020). A prolonged period of insufficient rest increases the likelihood of experiencing stress, which is considered a risk factor for developing depression and anxiety (da Estrela *et al.*, 2021; Zhang *et al.*, 2020). Studies have also shown that individuals with poor sleep quality reported high levels of stress, daytime sleepiness, depression, and physical symptoms (Lee *et al.*, 2013).

Other authors investigated bedtime procrastination as a feature of poor sleep quality (Ma *et al.*, 2022; Guo *et al.*, 2020), which increases the risk of developing depression and anxiety symptoms (Demirici *et al.*, 2015; Geng *et al.*, 2021), as well as health-related problems (Guo *et al.*, 2020). It has also been observed that

depression predicts a reduced number of hours of sleep, waking up during the night, and a feeling of tiredness during the day (Geng *et al.*, 2021). However, it is not certain whether depression is a predictor or a result of bedtime procrastination (Alvaro *et al.*, 2013; Geng *et al.*, 2021).

Moreover, previous research also suggested that bedtime procrastination could be an explanation for the effect of SA on depression and anxiety (Geng *et al.*, 2021). Exposure to blue light generated by the phone screen during the night contributes to the decrease in cerebral blood flow, and brain electrical activity, delays the onset of melatonin secretion, and reduces the quality of REM sleep (Demirci *et al.*, 2015). Moreover, since smartphones offer various applications that positively stimulate the psychological state of users, likely, they are no longer aware of the passage of time (Geng *et al.*, 2021). Since individuals addicted to social networks have poor sleep and are less involved in physical activities, they are at increased risk of experiencing psychological distress (Wong *et al.*, 2020). The study conducted by Wong *et al.* (2020) showed that time spent on social networks was associated with sleep difficulties, insomnia, and feeling tired during the day. For some people, social media platforms often represent a way of reducing negative emotions or coping with difficult situations (Maftei *et al.*, 2023). However, in an exaggerated attempt to eliminate negative emotions, individuals are more predisposed to unsatisfactory sleep, which contributes to the experience of depression and stress (Wong *et al.*, 2020).

However, it is difficult to identify whether psychological distress is a cause or a predictor of sleep quality (Lemma *et al.*, 2012; Rezaei *et al.*, 2018), due to the various and mixed findings in this area. In the present research, we focused on the predictive role of low sleep quality regarding adults' psychological distress.

2. THE PRESENT STUDY

The current literature highlights the need to further examine the links between rejection sensitivity, smartphone addiction, and sleep quality on adults' psychological distress. The selected variables we chose to examine psychological distress in the present study, i.e., rejection sensitivity, smartphone addiction, and sleep quality, reflect a comprehensive approach rooted in contemporary psychological theories and empirical research. Rejection sensitivity proposes that individuals high in rejection sensitivity are prone to interpreting ambiguous social cues as signs of rejection, which can lead to heightened emotional distress (Lesnick & Mendle, 2021). Thus, it may serve as a valuable predictor of psychological distress in interpersonal contexts.

Next, the Cognitive-Behavioral Model of Problematic Internet Use suggests that excessive smartphone use can disrupt daily routines, impair social functioning, and exacerbate negative mood states, contributing to psychological distress (Davis, 2001).

Finally, when discussing sleep quality, the Biopsychosocial Model of Insomnia proposes that sleep disturbances can disrupt emotional regulation processes, increase stress reactivity, and compromise cognitive functioning, all of which contribute to psychological distress (Becker *et al.*, 2015).

Previous studies demonstrated that poor sleep quality predisposes individuals to adopt inadequate strategies in coping with stressors, which contributes to the development of depression and anxiety (Zhang *et al.*, 2020). Additionally, the adoption of dysfunctional strategies in the context of emotional regulation is a specific aspect for individuals with heightened sensitivity to rejection (Niu *et al.*, 2022). We can presume that poor sleep quality and the predisposition to rejection sensitivity might accentuate the tendency to use inadequate emotional regulation strategies, such as avoidance, rumination, and acceptance-seeking, which in turn could worsen psychological distress. Additionally, understanding how rejection sensitivity and sleep quality interact could be useful in studying psychological distress and developing useful interventions to address it.

On the one hand, the mixed findings in this area call for further examinations regarding the potential predictive role of these variables. On the other hand, examining the risk factors of psychological distress from multiple perspectives (i.e., examining emotional, behavioral, and physical factors) is highly important given the rise of depression, anxiety, and stress among the general population and its devastating consequences in various aspects of one's life. Thus, the current study aimed to answer the following research question: Which of these factors (i.e., emotional, behavioral, or physical) contributes the most to adults' psychological distress? To answer this question, we conducted the present cross-sectional study, assuming the following:

H1. Rejection sensitivity, smartphone addiction, and low sleep quality would be significantly related to adults' psychological distress.

H2. Rejection sensitivity, smartphone addiction, and low sleep quality would significantly predict adults' psychological distress.

3. METHOD

3.1. PARTICIPANTS AND PROCEDURE

The convenience sample in the present study comprised 236 Romanian adults aged 18 to 58 ($M = 24.58$, $SD = 7.10$, 82.2% females). Inclusion criteria were related to age (> 18) and the use of a smartphone. Participants – who voluntarily took part in the study – were assured of the anonymity and confidentiality of their answers, and the fact that they could withdraw from the research at any time without any consequences. We used a web-based survey, advertised through various social media platforms and e-mail invitations, to collect participants' answers. The time needed to answer all the survey items was around 12 minutes. The research followed the 2013 Helsinki Declaration guidelines and was approved by the Ethical Committee from the faculty where the authors are affiliated.

3.2. MEASURES

Psychological distress. We used the 21-item Depression, Anxiety, and Stress Scale (DASS 21), which is a short version of the 42-item Depression, Anxiety, and Stress Scale (DASS 42) developed by Lovibond and Lovibond in 1995. The scale consists of three subscales measuring depression, anxiety, and stress symptoms in non-clinical populations (example items: “I couldn't seem to experience any positive feeling at all” – depression; “I was aware of dryness of my mouth” – anxiety; “I found it hard to wind down” – stress). Answers were provided on a 4-point Likert scale ranging from 0 (did not apply at all) to 3 (very applicable). Each statement refers to how respondents felt during the last week. Higher scores indicated higher depression, anxiety, and stress symptoms (Foti *et al.*, 2023). In the present study, we used the overall score, with a Cronbach's α of 0.94.

Rejection sensitivity. We used the Tendency to Expect Rejection Scale (TERS) developed by Jobe in 2003. The instrument examines the tendency to feel anxious in situations involving negative evaluations from others. The questionnaire consists of 18 items such as “It is important for me to be accepted by those around me”, “I get angry quickly”. Participants responded using a 5-point Likert scale, where 1 indicated strong disagreement and 5 indicated strong agreement. The total score ranged between 18 and 90, with a high score indicating increased rejection sensitivity. Cronbach's α in the present study was 0.89.

Smartphone Addiction. We used the SAS-SV questionnaire (Lei *et al.*, 2020), which is the short 10-item version of the Smartphone Addiction Scale (SAS) developed by Kwon *et al.* (2013). The scale consists of items such as “I miss planned work due to smartphone use”, “I am not able to stand not having a smartphone”. The instrument was developed to measure smartphone addiction among adolescents, but previous studies also demonstrated its effectiveness among adults (Luk *et al.*, 2018; Hamamura *et al.*, 2023). Participants answered on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree), with higher scores indicating problematic smartphone use. In the present study, Cronbach's α was 0.86.

Sleep Quality. We used the Sleep Quality Scale (SQS) developed by Yi *et al.* in 2006, which comprises 28 items such as “I have difficulty falling asleep”, “I wake up during sleep” and measures sleep quality from the last month. The instrument can be applied to a sample aged between 18 and 59 years (Yi *et al.*, 2006). The scale comprises several dimensions, such as reduced functioning during the day, recovery from sleep, difficulty falling asleep, difficulty getting out of bed, rest satisfaction, and ability to maintain sleep. Responses were given on a 4-point Likert scale, ranging from 0 (indicating the occurrence of the aspects described as being 1–3 times a month or very rarely) to 3 (indicating their occurrence 6–7 times a week or very often). The total score ranges from 0 to 84, with higher values suggesting poor sleep quality. Cronbach's α in the present study was 0.89.

A demographic scale assessed participants' age and self-reported gender. The consistency of the quality of the translated research instruments (which were presented in Romanian) was checked using the back-translation technique (Tyupa, 2011), and we did not find any discrepancies.

4. RESULTS

4.1. PRELIMINARY ANALYSIS

Descriptive statistics for the primary variables are presented in Table 1. All variables were normally distributed, with Skewness and Kurtosis values ranging from -1 to $+1$. We conducted preliminary analyses to investigate whether demographic variables (gender and age) were related to adults' psychological distress. Independent T-test results suggested no significant differences, $t(234) = -1.73$, $p = .08$. Participants' age was not significantly related to psychological distress ($r = -.12$, $p = .06$).

Table no. 1

Descriptive statistics of the main variables (N = 236)

Variable	M	SD	Min	Max	Skewness	Kurtosis
Psychological distress	26.30	14.64	0	61	.14	-.69
Rejection sensitivity	55.18	13.47	19	90	.47	-.62
Smartphone addiction	27.28	10.36	10	54	.47	-.62
Sleep quality	40.64	14.70	3	81	.19	-.10

4.2. ASSOCIATIONS OF MAIN STUDY VARIABLES

The results of the correlational analysis are presented in Table 2. Psychological distress was positively related to rejection sensitivity ($r = .49$, $p < .001$), SA ($r = .39$, $p < .001$), and low sleep quality ($r = .64$, $p < .001$). All the considered predictors were significantly associated with each other (all p -s $< .001$).

Table no. 2

Correlation analyses (N = 236)

Variable	1	2	3
1. Psychological distress	-		
2. Rejection sensitivity	.49**	-	
3. Smartphone addiction	.39**	.34**	-
4. (Low) Sleep quality	.64**	.37**	.40**

** $p < .001$

4.3. REGRESSION ANALYSIS SUMMARIZING HOW REJECTION SENSITIVITY, SMARTPHONE ADDICTION, AND SLEEP QUALITY PREDICT PSYCHOLOGICAL DISTRESS

To examine how much variance in participants' psychological distress was explained by rejection sensitivity, smartphone addiction, and sleep quality, we conducted a multiple regression analysis. The results showed that psychological distress was positively predicted by rejection sensitivity and low sleep quality. Smartphone addiction did not significantly predict psychological distress. The model was significant, $F(3, 232) = 77.37$, $p < .001$, and explained 49.4% of the variance in psychological distress. The strongest predictor was low sleep quality, $\beta = .50$, $p < .001$ (see Table 3).

Table no. 3

Linear regression analyses for psychological distress (N = 236)

Variable	B (SE)	β
Rejection sensitivity	.29 (.05)	.27**
Smartphone addiction	.12 (.07)	.08
(Low) Sleep quality	.50 (.05)	.50**
R ²		.50**
ΔR^2		.49**

** $p < .001$

5. DISCUSSIONS

The current study examined the predictive role of rejection sensitivity, smartphone addiction, and sleep quality on adults' psychological distress. In line with previous studies (Geng *et al.*, 2021; Wan Ismail *et al.*, 2020), our results suggested a positive association between smartphone addiction and psychological distress. Furthermore, the current findings highlighted the significant and positive association between sleep quality and psychological distress. These results are in line with previous studies that support the idea that a decrease in sleep quality involves insufficient sleep duration and daytime fatigue, which is associated with an increase in psychological distress (Geng *et al.*, 2021; Postans & Pidgeon, 2016; Zhang *et al.*, 2022). Also, the present results also suggested a positive correlation between rejection sensitivity and psychological distress. Previous studies suggested that individuals with a high level of rejection sensitivity presented a low level of perceived self-efficacy, which predisposes them to experience depression (Niu *et al.*, 2022). Our findings are congruent with previous studies, demonstrating that a high level of rejection sensitivity is associated with a high level of psychological distress (Yu *et al.*, 2022).

However, our results suggested that only sleep quality and rejection sensitivity (and not smartphone addiction) significantly predicted psychological distress. One explanation might be related to the positive effects of smartphone use, which might overwrite the harm caused by excessive use. For instance, a study conducted by Stanković *et al.* (2021) suggested that increased smartphone use was associated with lower levels of stress, which contributed to a decrease in depression levels. According to this perspective, smartphone use might have a compensatory function by generating pleasure, contributing to the reduction of stress factors (Stanković *et al.*, 2021). The authors also suggested that the main function of the smartphone is to maintain communication with others and, for this reason, observing the purpose of smartphone use is important before establishing the degree of problematic use. However, Stanković *et al.* (2021) also underlined that this beneficial effect might be temporary and may not prevent long-term depression. Additionally, previous studies using multiple hierarchical regression suggested that, in association with other variables, such as Internet addiction, smartphone dependence may not have a significant impact on psychological distress (Wan Ismail *et al.*, 2020). However, adding it to the prediction model contributed to the increase in the variance of the psychological distress variable, as in previous studies (Wan Ismail *et al.*, 2020).

In line with previous studies (Lesnick & Mendle, 2021; Mellin, 2008), the present results suggested that rejection sensitivity significantly and positively predicted psychological distress. Lesnick and Mendle (2021, p. 3) proposed the term “self-fulfilling prophecy” to argue the process by which individuals with a high level of rejection sensitivity tend to behave in accordance with their own beliefs, behaviors that end up attracting aversive attitudes from others and contributing to the confirmation of initial beliefs, and ultimately to the experience of psychological distress. Additionally, low levels of self-efficacy and high levels of insecurity can influence individuals’ beliefs about their abilities to make social connections (Niu *et al.*, 2022; Yu *et al.*, 2021). The prolonged activation of such beliefs associated with the expectation of rejection contributes to the experience of psychological distress (Yu *et al.*, 2021).

However, the most important finding in the present study relates to the fact that, among the three investigated factors (emotional, behavioral, and physical), sleep quality, i.e., the physical factor contributed the most to adults’ psychological distress. On the one hand, the positive links (highlighted both in the previous literature and the current study) between low sleep quality and smartphone addiction highlight the need for extended programs aimed to reduce maladaptive smartphone use, which includes the use of a smartphone before bedtime (Geng *et al.*, 2021; Krishnan *et al.*, 2020) and, generally, prolonged use during the day (Wacks & Weinstein, 2021). On the other hand, this specific result highlights the importance of sleep for preventing and managing psychological distress (Glozier *et al.*, 2010). Nevertheless, the answer to the primary question of our study – *what*

makes us more emotionally vulnerable? – seems to lie within the physical area of the potential predictors, at least among the research sample that we examined. However, the positive link between rejection sensitivity, smartphone addiction, and low sleep quality also highlights the various mechanisms that contribute to these findings, and the need to examine psychological distress using a multi-level, extended perspective.

Various limitations need to be accounted for in the present research. The first limitation is related to the small number of participants and the unequal gender distribution. Additionally, the use of self-reported scales is a second limitation of the study. By completing self-report scales, participants could be tempted to provide desirable responses. However, we can consider that, by maintaining the anonymity of the participants and using scientifically validated instruments, we have managed to reduce possible errors in the results. Furthermore, future studies might benefit from using experimental measures to increase the generalizability of the present findings. Longitudinal studies might better reflect the nature of the examined relationships.

6. CONCLUSION

Despite its limitations, the present study contributes to a better understanding of the risk factors for adults' psychological distress. The most important result of this research is related to the significant role of low sleep quality in predicting psychological distress, which seems to contribute to a higher level of adults' depression, anxiety, and stress symptoms, compared to emotional (rejection sensitivity) and behavioral (smartphone addiction) factors. Nevertheless, future experimental and longitudinal studies are needed to better understand these relationships.

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REZUMAT

O abordare multinivelară în studiul distresului psihologic este esențială pentru a înțelege mai bine interacțiunea dintre factorii psihologici și contextuali și pentru a identifica semnele timpurii ale distresului psihologic. Studiul transversal prezent a utilizat o perspectivă multidimensională pentru a examina distresul psihologic al adulților. Ne-am interesat să explorăm rolurile predictorilor emoționali (adică sensibilitatea la respingere), comportamentali (adică dependența de smartphone) și fizici (adică calitatea somnului) ai distresului psihologic în rândul adulților. Eșantionul nostru a inclus 236 de adulți români cu vârste cuprinse între 18 și 58 de ani ($M = 24,58$, $SD = 7,10$, 82,2% femei). Criteriile de includere au fost legate de vârstă (> 18 ani) și de utilizarea unui smartphone. Participanții au completat un sondaj online la începutul anului 2023. Analizele de corelație au sugerat că dependența crescută de smartphone, calitatea scăzută a somnului și sensibilitatea crescută la respingere au fost asociate semnificativ cu un distres psihologic ridicat. Vârsta nu a fost asociată semnificativ cu distresul psihologic și nu s-au găsit diferențe semnificative bazate pe gen în acest sens. Rezultatele analizei multiple de regresie ierarhică au sugerat că distresul psihologic a fost cel mai bine prezis de calitatea somnului și sensibilitatea la respingere. Dependența de smartphone nu a fost un predictor semnificativ în modelele propuse. Discutăm descoperirile prezente cu privire la implicațiile lor practice referitoare la potențialele intervenții pentru reducerea distresului psihologic în rândul adulților.

THE RELATIONSHIP BETWEEN RELIGIOUS ORIENTATION AND PERSONALITY IN LGBTQI INDIVIDUALS

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Abstract

The links between personality and religious orientation have been studied in various religions and populations across the globe. However, an important limitation is that the relationship was not researched in LGBTQI populations. With this study, we aimed to fill this gap. 128 LGBTQI individuals responded to two questionnaires measuring the Big Five personality factors and the bi-dimensional model of Intrinsic and Extrinsic Religious Orientation. Our results show that men reported higher levels of Religious Orientation than women and non-binary participants. Neuroticism and Conscientiousness were significantly related to Intrinsic religious orientation, but only the former was a significant predictor of it. The results are discussed in terms of theoretical and practical implications.

Cuvinte-cheie: Personalitate, Big Five, orientare religioasă, LGBTQI

Keywords: Personality, Big Five model, Religious orientation, LGBTQI

1. INTRODUCTION

Over the years, the struggle for greater representation and more rights for LGBTQI individuals has increased. Many improvements were made as a result of legislative changes, whereas others have been forced by judicial rulings (Helfer & Voeten, 2014). As a result, there has been a lot of progress on the legal status of LGBTQI individuals, notwithstanding the pockets of setbacks and stagnation (Corrales, 2015). Historically, it has been difficult to reach LGBTQI individuals (Fredriksen-Goldsen & Kim, 2017), making scientific research on this community a daunting task. The legal progress and the increasing acceptance of LGBTQI individuals therefore present an opportunity to investigate various aspects, such as the interaction of religion and personality factors in these individuals, who make up a substantial part of our societies (Fredriksen-Goldsen & Kim, 2017; Gary, 2012).

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Since the interaction between these variables has been studied in the non-LGBTQI population (Aghababaei, 2013; Francis *et al.*, 2010a; Taylor & MacDonald, 1999), the omission of a study investigating these variables in the LGBTQI population makes this paper important.

Previous research has investigated the relationship between religious orientation and personality differences (Aghababaei, 2013; Buzdar *et al.*, 2018; Laher, 2010; Moltafet *et al.*, 2010; Robbins *et al.*, 2010). The designs of these studies differ, as do the specific variables measured, as well as the populations studied. However, we could not find any studies on the relationship between religious orientation and personality in LGBTQI+ individuals. Consequently, this paper set out on an important task to explore the nature of the relationship between personality and religious orientation in the LGBTQI population.

1.1 RELIGIOUS ORIENTATION

The bi-dimensional model of Intrinsic and Extrinsic Religious Orientation proposed by Allport and Ross (1967) has gained significant recognition. Allport and Ross (1967) explained that persons who score high on Extrinsic religious orientation are characterized by a higher tendency to use religion as a means to an end, to facilitate their personal goals. Religion to these individuals is utilitarian. According to Francis (2007), individuals who score high on Extrinsic religious orientation place their economic and social well-being above their religious beliefs and see religion as a means to facilitate the former. Intrinsic religious orientation is characterized by a true belief in religion, not as a means to an end, but as an end in itself. Individuals with this orientation internalize religion and every other thing becomes secondary to their religion (Allport & Ross, 1967). Intrinsically religiously oriented individuals value their religion as a way of developing a closer relationship with God for the sake of it. These individuals don't pursue religion as a means for personal or social gains. Although other models, such as the three-dimensional model of religious orientation (Intrinsic Religiosity, Extrinsic Religiosity, and Quest Religiosity) have been proposed (Batson, 1976; Batson & Ventis, 1982), they aren't without criticisms. Research has suggested that the conceptualization of Quest Religiosity is erroneous (Hood Jr & Morris, 1985). Others have suggested that Quest Religiosity is not a construct of religious orientation but rather measures non-religiosity as expressed by agnosticism or anti-orthodoxy (Kojetin *et al.*, 1987). It is the validity of these criticisms, as well as the wider acceptance of the bifactorial model that informed the decision to employ this model in this research.

Some studies have suggested that there is a difference between the male and female genders in religious orientation, especially regarding Christianity (Francis, 1997). The difference between males and females in religious orientation was also

found to be statistically significant when investigated in a multid denominational context, with women being more religiously oriented than men (Flere, 2007).

1.2. PERSONALITY

It can be argued that the five-factor personality model has established itself as the dominant personality inventory in psychology. Taken together, these five factors – Agreeableness(A), Openness (O), Neuroticism (N), Conscientiousness (C), and Extraversion (E) – do a good job of capturing the essence of personality, as well as personality differences in individuals, and have been tested over time and on diverse populations (Terracciano *et al.*, 2006). Multiple studies on diverse populations (Hee, 2014; Morsunbul, 2014), using different versions of the five-factor questionnaire (Thalmayer *et al.*, 2011) have proven the validity of the five-personality model. Owing to its proven reliability over time and across multiple populations, the decision was made to employ the five-factor model for this paper.

2. THE CURRENT STATE OF THE LITERATURE (A MINI LITERATURE REVIEW)

This review serves to give the reader an overview of what other studies have done, as well as provide a detailed understanding of what is known about the relationships between personality and religious orientation. This section presents the findings of the literature review.

2.1. INCLUSION CRITERIA

A decision was made to only include peer-reviewed studies because they are an invaluable source of current knowledge in science (Spencer *et al.*, 2013). In addition, for a study to be included, it had to: (1) Be peer-reviewed and published in a peer-reviewed journal; (2) Be published in English; (3) Discuss religious orientation in the context of the Intrinsic-Extrinsic religious dimensions; (4) Discuss personality in the context of the five-dimension personality model.

2.2. RESULTS

Nine studies were selected for this review (Aghababaei, 2013; Buzdar *et al.*, 2018; Francis, 2010; Henningsgaard & Arnau, 2008; Hills *et al.*, 2004; Laher, 2010; Moltafet *et al.*, 2010; Robbins *et al.*, 2010; Taylor & MacDonald, 1999). A summary of the reviewed articles is presented in Table no. 1. The studies reviewed explored religious orientation and personality using self-reported questionnaires. A total of 3630 participants were included in the studies, mostly university students.

Table no. 1

Characteristics of the studies

SN	Study	Country	Design	Sample characteristics	Measures	Result
1	Aghababaei, 2013	Iran	Cross-sectional, correlational.	n= 481. Two different samples of Iran University students. The samples numbers are 300 (65.3% female), 181 (66.9% female)	The IPIP-Big Five (Goldberg, 1999). Religious Orientation Scale Revised (Tiliopoulos <i>et al.</i> , 2007), and the single item indicators of religious orientation (Aghababaei, 2012).	In the first sample, Intrinsic religious orientation had positive relationships with A, C and N. Extrinsic personal religious orientation had positive relationships with A and C. Extrinsic social religious orientation had a negative relationship with O. In the second sample, Intrinsic religious orientation had positive relationships with A and C. Extrinsic social religious orientation did not correlate significantly with personality.
2	Buzdar <i>et al.</i> , 2018	Pakistan	Cross-sectional, correlational	N=400. Students of public sector university in Punjab, Pakistan	Questionnaire containing Religious Orientation Scale (Gorsuch & McPherson, 1989), and Big Five Inventory (John & Srivastava, 1999).	Intrinsic religious orientation had positive relationships with E, A, C and O. Extrinsic personal religious orientation had positive relationships with E, A and C. Extrinsic social religious orientation had a negative relationship with E, A, C, N, and positive with O.
3	Francis, 2010	Wales	Cross-sectional	n=517 (134 males, 383 females). 70% were aged 18–19; 12% were aged 20–21; 6% were 30–39; 4% were aged above 40	Revised Eysenck Personality Questionnaire (B.G. Eysenck <i>et al.</i> , 1985), and New Indices of Religious Orientation Questionnaire (Francis, 2007).	Extrinsic religious orientation is positively associated with N, but had no relationship with E. Intrinsic religious orientation showed independence from E and N.

Table no. 1 (continued)

SN	Study	Country	Design	Sample characteristics	Measures	Result
4	Henningsgaard & Arnau, 2008	United States	Cross-sectional, correlational	n=230 psychology students at the University of Southern Mississippi (USM)	The Big Five Inventory (John <i>et al.</i> , 1991), Revised religious life inventory (RLI-R) (Hills <i>et al.</i> , 2005)	Intrinsic religious orientation had positive relationships with A and C and a negative relationship with N. Extrinsic religious orientation had no significant associations with personality
5	Hills <i>et al.</i> , 2004	Wales	Cross-sectional, correlational	n=400 (110 males, 290 women). 65% under 20 years old, 17% between 20–30	Religious Life Inventory (Batson & Schoenrade, 1991) and Eysenck Personality Profiler (H.J. Eysenck <i>et al.</i> , 1992).	Extrinsic religious orientation is negatively associated with N, but had no relationship with E. Intrinsic religious orientation showed independence from E and N.
6	Lahey, 2010	South Africa	Cross-sectional, correlational	n=91 (17 to 24 years old). The participants were 80.21%	The NEO-PI-R (Costa & McCrae, 1992) and the Religious Orientation Scale (Genia, 1993).	Intrinsic religious orientation had positive relationships with A and a negative relationship with O. Extrinsic religious orientation had a negative relationship with O.
7	Moltafet <i>et al.</i> , 2010	Iran	Cross-sectional, correlational	n = 301 (110 males and 191 females).	The NEO-FFI (Hoekstra <i>et al.</i> , 1996), Intrinsic-Extrinsic Religious Orientation Scale (IEROS) (Allport & Ross, 1967)	Intrinsic religious orientation had a negative relationship with N. Extrinsic religious orientation had negative relationships with A and C.

Table no. 1 (continued)

SN	Study	Country	Design	Sample characteristics	Measures	Result
8	Robbins <i>et al.</i> , 2010	England	Cross-sectional	n=198 undergraduate students (100 female and 98 male). Mean age = 42.4 years, sd = 18.4	Allport and Ross (1967) measures of Intrinsic and Extrinsic religiosity, and Goldberg's lexicon approach to personality assessment (Goldberg, 1990, 1992).	No association between extrinsic religious orientation and any of the five factors of personality. Intrinsic religious orientation was only correlated with A, showing a positive correlation.
9	Taylor & MacDonald, 1999	Canada	Cross-sectional, correlational	n=1129 first and second-year psychology students at the University of Windsor. 302 males and 827 females, Mean age = 20.98 years, sd = 4.13	NEO-PI-R (Costa & McCrae, 1992), Intrinsic-Extrinsic Religious Orientation Scale (IEROS) (Allport & Ross, 1967), and a demographic sheet.	A and C showed positive and significant relation to Intrinsic religious orientation. O showed a negative relationship with Extrinsic religious orientation and N showed a positive relationship with Extrinsic religious orientation

2.2.1 Conscientiousness and religious orientation

Most studies that investigated the relationship between conscientiousness and religious orientation found a positive relationship between the variables (Aghababaei, 2013; Henningsgaard & Arnau, 2008; Taylor & MacDonald, 1999).

These results are contrary to Robbins *et al.* (2010), who found no association between Extrinsic and Intrinsic religious orientations and Conscientiousness. Also, Moltafet *et al.* (2010), found a negative association between Extrinsic Religious orientation and conscientiousness.

2.2.2 Agreeableness and Religious Orientation

The analysis of the relationship between Agreeableness and religious orientation was significant in seven studies (Aghababaei, 2013; Buzdar *et al.*, 2018; Henningsgaard & Arnau, 2008; Laher, 2010; Moltafet *et al.*, 2010; Robbins *et al.*, 2010; Taylor & MacDonald, 1999).

Some studies found a significant and positive correlation between Agreeableness and Intrinsic Religious orientation (Henningsgaard & Arnau, 2008; Laher, 2010; Robbins *et al.* 2010; Taylor & MacDonald, 1999). Moltafet *et al.* (2010a) found a negative correlation between Agreeableness and Extrinsic religiosity. Both Aghababaei (2013) and Buzdar *et al.*, (2018) found a positive relationship between Agreeableness and Extrinsic Religious orientation.

2.2.3 Openness and Religious Orientation

Laher (2010) found a significant negative correlation between Extrinsic religious orientation and Openness, as well as between Openness and Intrinsic religious orientation. The former finding was also replicated by Aghababaei (2013).

Buzdar *et al.* (2018) found that Openness has a positive relationship with Intrinsic and Extrinsic religious orientation. Taylor and MacDonald (1999) concluded that low Intrinsic orientation is associated with high Openness.

2.2.4 Neuroticism and Religious Orientation

Moltafet *et al.* (2010) found a negative correlation between Neuroticism and Intrinsic religious orientation. Similarly, Henningsgaard and Arnau (2008) indicate that individuals who score low on Intrinsic religious orientation have high scores on Neuroticism. A reversed relationship was found by Aghababaei (2013).

Buzdar *et al.*, 2018, Francis (2010), and Hills *et al.* (2004) showed a negative association between Neuroticism and Extrinsic religiosity. Taylor and MacDonald (1999) found a positive relationship with Extrinsic Religious orientation.

2.2.5 Extraversion and Religious Orientation

Buzdar *et al.* (2018) found a significant and positive association with Intrinsic and Extrinsic personal religious orientations and a significant and negative association with Extrinsic social orientation.

2.3 CONCLUSION AND DIRECTION FOR FUTURE RESEARCH

As can be seen from the above analysis, many scholars have tried to do justice to the subject matter, with different degrees of success. Analyzing the available literature, however, there is a glaring gap in the literature. While some studies have investigated personality differences and religious orientation, as well as other aspects of religion in samples of university students (Laher, 2010; Robbins *et al.*, 2010), or national representative samples (Stronge *et al.*, 2020), to our knowledge, no study has been done to examine the links in the LGBTQI community. As a result, the relationship of personality and religion in this population is unknown. This is the gap this paper seeks to fill.

3. THE PRESENT STUDY

The omission of LGBTQI individuals in the literature exploring the variables we are concerned with is not an omission of inconsequential proportions. A survey of adults across 30 countries revealed that 1 in 10 adults identify as LGBTQI (Ipsos & Advisor, 2023; Moreau, 2023). This is 9% of the world's adult population. It is not difficult to see why omitting 9% of the population in the available knowledge on the relationship between personality differences and religious orientation creates a glaring knowledge gap.

Together, these observed faultlines have created the need for this research as well as inspired its objectives. To distill these objectives into clear and concise statements, they are (1) to explore the gender differences between genders on the religious orientation scale; (2) to explore the relationship between personality based on the Big Five personality traits and religious orientation based on the bi-dimensional (Intrinsic/Extrinsic religious orientation) model in LGBTQI individuals; (3) to answer the question of how much a person's religious orientation is determined by their personality.

4. METHOD

4.1. PROCEDURE

Questionnaires measuring religious orientation and personality were used in this study. The questionnaires were administered in English and online, between 1st April and 12th June 2023. They could be completed in about 5–10 minutes, and

completion is a straightforward process as the questionnaires were digitized in Google Forms. The questionnaire was divided into three sections; the first section collected basic data about the respondents including age, gender, and location. The second and third sections contained the religious orientation and personality questionnaires respectively. The questionnaire was distributed on social media platforms, especially Facebook. All information in the form was collected under conditions that guaranteed the anonymity of the respondents, and this was made clear at the beginning of the form. The introduction of the form also informed the respondents of the reason for the research, informed them of their right(s) to withdraw from the study at any time, as well as provide a contact email address for use in the case that any respondent(s) wished to get in contact with the researcher due to any concern(s) arising from the use of the questionnaires. The questionnaire was engineered so that all the respondents confirmed their understanding and provided consent at the beginning before they could proceed with the rest of the form.

4.2. PARTICIPANTS

A total of 143 respondents filled out the form. 15 respondents had to be excluded from use in the final analysis because they responded “NO” to the question “Are you a member of the LGBTQI community?” In the end, 128 respondents were included in the final analysis. 47.7 % (n=61) of the respondents resided in Romania, 33.6 % (n=43) resided in Nigeria, 5.5 % (n=7) in Ghana, 3.9 % (n=5) in the United Kingdom, and the rest in various countries including Turkey, The United States, Poland, Cyprus, Kenya, Belgium, The Netherlands, Uganda, Greece, Canada, and Germany. 56.3 % (n=72) of respondents identified as male, 30.5 % (n=39) identified as female, and the rest (13.3 %, n=17) identified as non-binary. Their ages ranged from 18 to 55 ($M = 26.29$, $SD = 7.61$). 57 % (n = 73) of the respondents were Christians, 3.1 % (n = 4) were Muslims, and 39.8 % (n = 51) were included in the “other” category (this included the Atheist/Agnostic individuals).

4.3. MEASURES

4.3.1. The Intrinsic-Extrinsic Religious Orientation Scale-Revised(I/E-R)-(Gorsuch & McPherson, 1989)

This scale is a revised version of the Intrinsic-Extrinsic Religious Orientation Scale, which was created by Gordon Allport and Michael Ross (Allport & Ross, 1967). As the name implies, the scale measures religious orientation based on the bi-dimensional construct of religion; Intrinsic and Extrinsic religious orientations. The revised scale is made up of 14 items, with 3 reversed scored items. All the

reversed scored items form the subscale that specifically measures Intrinsic religious orientation. The scale utilizes a five-point response system, ranging from strongly disagree (1) to strongly agree (5). In total, eight items measure Intrinsic religious orientation, and six items make up the Extrinsic religious orientation measure of the scale. For this study, the psychometric properties of each subscale were analyzed. The Extrinsic religiosity subscale yielded a good Cronbach's α of .818. Initially, the Extrinsic religiosity factors produced a Cronbach's α of .511. After further analysis, items 10 and 14 were eliminated. After the removal of these items, Cronbach's α of the Extrinsic religiosity subscale improved to .797.

4.3.2. The Big Five Inventory (BFI) (John & Srivastava, 1999)

The BFI is a 44-item inventory created to measure an individual on their personality dimensions based on the Big Five Personality model (Goldberg, 1992; John & Srivastava, 1999). Its 44 items are short sentences or phrases, based on personality traits descriptions that are considered to describe the Big-Five personality (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness). These items are scored on a 5-point scale, from strongly disagree (1) to strongly agree (5), with some of the items being reversed scored. For this study, the psychometric properties of the scale were analyzed. The reliability of each subscale was good: Extraversion subscale (Cronbach's α = .759), Agreeableness subscale (Cronbach's α = .717), Conscientiousness subscale (Cronbach's α = .757), Neuroticism subscale (Cronbach's α = .767), and Openness subscale (Cronbach's α = .751).

The English-language versions of each scale were validated and were used according to the instructions.

5. RESULTS

We first present three relevant case studies for each category regarding the participants's religion (Christian, Muslim and other). For this, we randomly selected three participants, one from each category, and created profiles from their answers to the Intrinsic-Extrinsic Religious Orientation Scale-Revised (excluding items 10 and 14 which were removed from all the further analyses) and the total scores for Extrinsic and Intrinsic Religious Orientation (please see Figure no. 1). Participant A was included in the other category and was 27 years old, from Nigeria, and identified as a man. Participant B was Muslim, 32 years old, from Nigeria, and, in regards to gender, identified as other. Finally, Participant C was Christian, 22 years old, from Poland, and identified as a man. Participant A generally scored lower on the individual items and in total scores. Participant C scored the highest in both total scores.

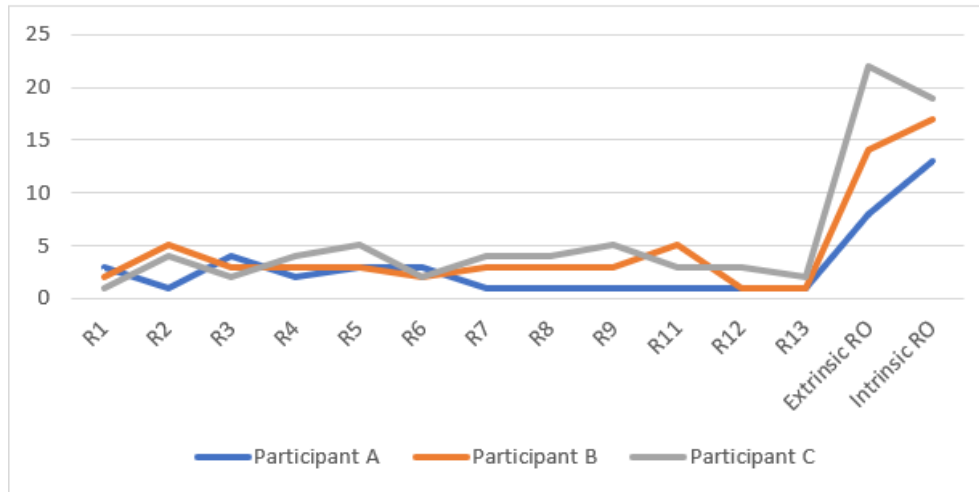


Figure no. 1. Religious orientation profile for three randomly selected participants

A One-Way ANOVA was used to determine if there are any differences in religious orientation, based on gender. The results were significant for both Extrinsic religious orientation ($F(2,125) = 9.89, p = .001$), and Intrinsic religious orientation ($F(2,125) = 16.98, p = .001$). The Post Hoc analyses shows that men have significantly higher scores than women on Extrinsic religious orientation ($MD = 4.16, p < .001$). There were no differences between men and non-binary participants and between women and non-binary participants on this religious dimension. On Intrinsic religious orientation, there was a significant difference between men and women ($MD = 5.33, P = 0.00$), with men displaying higher scores than women. There was a statistically significant difference between men and non-binary participants, with men reporting higher scores ($MD = -5.04, p < .001$). We found no significant differences between women and non-binary participants.

Next, we used Pearson correlations to test the association between the variables. No statistically significant relationship was observed between Extrinsic religious orientation and any of the personality factors. In terms of Intrinsic religious orientation, the results were somewhat different. A statistically significant relationship was observed between Intrinsic religious orientation and 2 of the 5 Big Five factors. Specifically, Intrinsic religious orientation correlates significantly with Conscientiousness (Pearson's correlation = .210, $p = .017$) and Neuroticism (Pearson's correlation = -.241, $p = .006$). The results show no statistically significant relationship between Intrinsic religion and either Extraversion, Agreeableness, or Openness. The results are presented in Table no. 2.

Table no. 2

Means, standard deviations and correlations between the study's variables

	M	SD	1	2	3	4	5	6
1. Extraversion	23.16	5.49	-					
2. Agreeableness	32.71	5.52	.17*	-				
3. Conscientiousness	29.72	5.83	.18*	.32**	-			
4. Neuroticism	25.57	5.76	-.37**	-.25**	-.39**	-		
5. Openness	37.20	6.02	.14	.38**	.19*	.06	-	
6. Exrrinsic RO	12.34	5.22	.15	.03	.07	-.10	-.14	-
7. Intrinsic RO	14.16	5.66	.11	.05	.21*	-.24**	-.13	.67**

Note. RO = religious orientation; ** $p < .01$; * $p < .05$

Lastly, a regression analysis was done to test whether personality traits can predict one's religious orientation. Because significant correlations were only observed between Intrinsic religious orientation and 2 of the personality factors, only these 2 factors (Conscientiousness and Neuroticism) were loaded into the regression analysis along with Intrinsic religious orientation. As per the result, the independent variables significantly predict religious orientation, $F(2,125) = 4.990$, $p = .008$ (see Table no. 3). Moreover, the adjusted $R^2 = .059$ shows that the model explains 5.9% of the variance in Intrinsic religious orientation.

Table no. 3

Regression analysis

Predictors	b	S.E.	β	t	p	Fit
Intercept	14.89	4.23		3.51	.001	
Conscientiousness	.13	.09	.13	1.47	.144	
Neuroticism	-.18	.09	-.18	-2.00	.047	
						$R^2_{aj} = .059$

When analyzing the model, the result showed that conscientiousness does not have a significant relationship with Intrinsic religious orientation ($\beta = .13$, $t = 1.47$, $p = .14$). However, neuroticism has a significant but negative link with Intrinsic religious orientation ($\beta = -.18$, $t = -2.00$, $p = .04$).

6. DISCUSSION

The first objective was to test the gender differences in religious orientation. The results show that male LGBTQI individuals score higher than females on both Extrinsic and Intrinsic Religious Orientation. This result was contradicted by previous studies in which women scored higher Extrinsic religious orientation (Flere, 2007; Francis, 1992; Pierce *et al.*, 2007). LGBTQI individuals show a different pattern than that observed in non-LGBTQI populations. One explanation for the findings in non-LGBTQI samples was that the women had higher levels of death anxiety, which made them more religious (Pierce *et al.*, 2007). However, LGBTQI men suffer from significantly more stigmatization, self-stigmatization, victimization and identity concealment than women (Bariola *et al.*, 2016; Bettinsoli *et al.*, 2020; Fasoli *et al.*, 2021). Thus, they can develop higher levels of death anxiety (Sarfraz *et al.*, 2022) which will reflect in stronger religious orientation.

The second objective of this study concerned the exploration of the associations between the bi-dimensional model of religious orientation (Intrinsic and Extrinsic religious orientations) and the five-factor model of personality (Extraversion, Neuroticism, Conscientiousness, Openness and Agreeableness) among LGBTQI individuals. Our results show that Conscientiousness has a positive correlation, and Neuroticism has a negative correlation with Intrinsic Religious Orientation. This result is supported by the available literature (Aghababaei, 2013; Moltafet *et al.*, 2010). Aghababaei (2013) considers that the link with Conscientiousness, which can be viewed as a moral character trait, and highlights one of religion's main functions, namely promoting personal stability. When Neuroticism is concerned, our results show that people who develop a true belief in religion and value their religion as a way of developing a closer relationship with God also tend to be more emotionally stable, and less anxious and self-doubting. It is, however, important to note that the links between Neuroticism and religious orientation were volatile in previous studies (please see Gabauer *et al.*, 2014 and Saroglou, 2002), and the current results can be an outcome of the particular sample. There was no correlation found between Intrinsic Religious orientation and the other factors of personality, nor between personality and Extrinsic Religious Orientation.

The last objective was to test whether personality can predict religious orientation. The results show that only Neuroticism has a significant effect on Intrinsic religious orientation, in the negative direction. In our LGBTQI sample, Neuroticism proved to be the stronger predictor of Intrinsic religious orientation, compared to Conscientiousness. Again, this can be a particular outcome for this sample. Previous research found that organized religion can make LGBTQI individuals experience significant psychological and emotional harm (Beagan & Hattie, 2015). Thus, more neurotic individuals are less inclined to develop an Intrinsic orientation towards the religion that can be oppressive towards them. However, the more emotionally stable individuals might be less affected by the negative experiences with the organized religion and still be intrinsically oriented toward the religion (but not necessarily toward the organization).

6.1. LIMITATIONS AND CONCLUSIONS

As has been mentioned earlier, this study is the first to investigate the relationship between the Big Five personality factors and religious orientation in LGBTQI individuals. Participants from over 10 different countries were included in this study. This diversity in cultures ensures that the differences observed in the variables are not just a cultural trait of LGBTQI individuals in a particular culture or country.

The current study has some limitations. The first limitation is the sample size. Due to the closed nature of the LGBTQI community based on safety and anonymity concerns, we could only get 128 participants for this study. The participants were majorly Christian, and other religions were not adequately represented. Future studies with more participants might increase the validity of the results. From a theoretical standpoint, other conceptualizations for the main variables could have been used. Batson *et al.* (1993) proposed a third dimension of religion – Quest religious orientation. Future research should consider this broader dimension, as well as other models of religious orientation. Also, other models of personality, such as HEXACO or Eysenck's three-factor models can be used (Ashton & Lee, 2007; Eysenck *et al.*, 1992).

The study can be useful to both practitioners and policymakers alike. The results here linking personality to religious orientation, provide a useful tool in the practitioner's set of knowledge to manage individuals who are having challenges defining their sexual orientation in a way that is compatible or least not antagonistic to their religious beliefs. With regards to policymakers, the results showing that certain personality profiles correlate with certain religious orientations show that religion can be important for LGBTQI individuals. Therefore, policies made to ostracize or punish non-heterosexual individuals based on religious grounds are poorly informed.

In conclusion, our results show that personality traits including Neuroticism and Conscientiousness are related to Intrinsic religious orientation in LGBTQI individuals. This can have noteworthy implications both in therapy, as well as in social policy development.

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REZUMAT

Legăturile dintre personalitate și orientarea religioasă au fost studiate pentru diferite religii și populații de pe tot globul. Cu toate acestea, o limitare importantă este că relația nu a fost cercetată la populațiile LGBTQI. Prin acest studiu ne-am propus să acoperim golul existent în literatură. 128 de persoane LGBTQI au răspuns la două chestionare care măsoară modelul Big Five al personalității și modelul bidimensional al orientării religioase intrinseci și extrinseci. Rezultatele noastre arată că bărbații au raportat niveluri mai ridicate de orientare religioasă decât femeile și participanții non-binari. Nevrotismul și conștiinciozitatea au corelat în mod semnificativ cu orientarea religioasă intrinsecă, dar nevrotismul a fost un predictor semnificativ al acesteia. Rezultatele sunt discutate în termeni de implicații teoretice și practice.

EXPLORAREA DIMENSIUNII SINGURĂȚII ÎN RÂNDUL PERSOANELOR VÂRSTNICE: ANALIZA UNOR FACTORI SOCIO-DEMOGRAFICI ȘI PSIHOLOGICI

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Abstract

The problem of loneliness among the elderly has a negative impact on their quality of life and well-being. The aim of the study is to explore theoretically and applied the influence of socio-demographic factors and quality of life on loneliness in the elderly, highlighting the complex interactions between these determinants. The following dimensions were evaluated: a) the residential context - institutionalized versus family; b) gender; c) state of health; d) marital status; e) professional sector; f) level of education; g) degree of personal satisfaction; h) the quality of life associated with old age and i) the intensity of feelings of loneliness among the elderly. The research sample consists of 200 people aged between 65–95 years ($m=71.89$): 100 institutionalized respondents and 100 non-institutionalized respondents. The data were collected by applying two instruments: the UCLA Loneliness Scale, developed by Russell in 1996, and the Quality of Life Inventory (QOLI), designed by Frisch in 1992 (Russell, 1996; Frisch, 1992). Data analysis reveals a significant correlation between socio-demographic factors (sex, age, marital status, level of education) and the perceived intensity of loneliness, as well as statistically significant and negative correlations between loneliness and all assessed areas of quality of life.

Cuvinte-cheie: singurătate, vârstnici, determinanți ai singurătății, bunăstare, calitatea vieții.

Keywords: loneliness, elderly, determinants of loneliness, well-being, quality of life.

1. INTRODUCERE

În contextul societății contemporane, caracterizată de o prețuire intensificată a legăturilor interpersonale, singurătatea, mai ales în rândul populației de vârstnici, a început să fie recunoscută ca o problemă de sănătate publică de importanță majoră, atrăgând atenția atât a comunității academice, cât și a societății în general.

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Secolul XXI a fost scena unor dezbateri ample în legătură cu apariția unei „creșteri a izolării sociale” sau a unei „epidemii de singurătate”, cu o prevalență semnificativă în cadrul societăților occidentale (Drennan *et al.*, 2008).

În lumina schimbărilor demografice contemporane, care indică un proces accelerat de îmbătrânire a populației la nivel global, fenomenul îmbătrânirii reprezintă o provocare semnificativă pentru sistemele de sănătate publică și pentru serviciile de asistență socială (Newmyer, Verdery, Wang & Margolis, 2022). Unul dintre aspectele critice ale acestei dinamici îl constituie creșterea prevalenței singurătății în rândul persoanelor vârstnice, recunoscută ca un determinant al izolării sociale, precum și ca un factor de risc pentru deteriorarea stării de sănătate mintale și fizice. Această tendință este amplificată de transformările sociale actuale, care includ o mobilitate geografică extinsă și o diminuare a coeziunii comunitare, factori ce pot facilita izolarea socială a seniorilor (Luhmann, Buecker & Rüsberg, 2023).

Prezentul studiu se angajează să exploreze natura complexă și variată a singurătății în rândul seniorilor, investigând factorii contributivi, precum și dinamica dintre singurătate și calitatea vieții. Accentul studiului este pus pe singurătate ca o experiență subiectivă profund personală, care transcende constrângerile demografice, cum ar fi vârsta, genul și statutul socio-economic (Rokach & Bacanli, 2001). Aceasta a fost istoric etichetată drept o experiență predominant negativă, iar nomenclatura specifică, incluzând termeni precum „singurătate”, „percepția singurătății” și „starea de izolare”, este frecvent utilizată în mod interschimbabil, aducând astfel provocări în înțelegerea sa complexă (Karnick, 2005).

Analiza fenomenului dezvăluie complexitatea și pluralitatea dimensiunilor sale, de la sentimente profunde de goliciune și abandon, până la evaluări subiective ale calității relațiilor sociale. Această lucrare își propune să exploreze în profunzime dinamica care stă la baza experienței singurătății, cu obiectivul de a identifica intervenții și strategii de sprijin eficiente pentru îmbunătățirea bunăstării demografiei vârstnice.

Abordarea metodologică aleasă îmbină tehnici de analiză cantitativă și calitativă pentru a oferi o perspectivă cuprinzătoare asupra factorilor determinanți ai singurătății și a impactului acesteia asupra sănătății fizice și psihologice, funcționării sociale și percepției generale asupra calității vieții în rândul populației în vârstă. În plus, complexitatea singurătății la populația vârstnică este amplificată de diversitatea cauzelor și formelor sale de manifestare, ilustrând astfel prezența unor aspecte contradictorii și a unor paradoxuri inerente.

Analiza fenomenului singurătății dezvăluie o complexitate surprinzătoare. Pe de o parte, singurătatea este frecvent abordată ca o condiție existențială individuală, unde subiectul își asumă responsabilitatea integrală pentru propriul parcurs de viață în etapa maturității. Această dimensiune existențială a singurătății poate conduce la percepția de izolare profundă a individului în contextul unui univers extins. În contrast cu această perspectivă, pe parcursul vieții, individul este continuu în relație cu alte entități umane, implicându-se într-un spectru variat de legături și conexiuni, fie ele de natură familială, socială, profesională sau emoțională, ceea ce sugerează

că niciun individ nu este complet izolat, indiferent de preferințele personale (Taylor, Cudjoe, Bu *et al.*, 2023).

Perspectivile teoretice asupra singurătății variază de la abordări existențiale, la sociale și cognitive. Abordarea existențială consideră singurătatea ca o componentă inevitabilă a condiției umane, în timp ce abordarea socială o interpretează ca rezultat al lipsei de relații interpersonale satisfăcătoare (Moustakas, 1961; Weiss, 1989). În contrast, abordarea cognitivă descrie singurătatea ca o experiență subiectivă negativă, născută din discrepanța între relațiile aspiraționale și cele efective (Perlman & Peplau, 1982). Indiferent de perspectivă, singurătatea este asociată cu impacturi negative asupra sănătății fizice și mentale.

Pentru a decodifica, în mod exhaustiv, complexitatea singurătății pe parcursul vieții, este esențial să se examineze influența determinantă a factorilor contextuali, cum ar fi specificitățile culturale, restricțiile funcționale și transformările rețelelor sociale, asupra modului în care indivizii percep și răspund la așteptările relaționale (Wong, Chau, Fang & Woo, 2017).

Senectutea constituie o etapă complexă și intrinsecă a ciclului de viață uman, marcând transformări semnificative la nivel social, biologic și psihologic. Această perioadă implică modificări fizice, mentale, emoționale și sociale, care necesită individului să adopte noi strategii de adaptare. Totodată, această etapă aduce provocări distincte, inclusiv declinul stării de sănătate cognitivă și fizică, retragerea din activitățile socio-economice, modificări ale statutului social și diminuarea suportului interpersonal, elemente ce pot contribui la experiența singurătății. Aceste provocări sunt amplificate de factori suplimentari, cum ar fi pierderea membrilor familiei și prietenilor, deteriorarea stării de sănătate, limitările de mobilitate și scăderea veniturilor, accentuând riscul de izolare socială (Victor, Scambler, Bond, & Bowling, 2000).

Persoanele vârstnice se confruntă cu vulnerabilități accentuate în contextul singurătății, exacerbate de factorii asociați cu procesul de îmbătrânire. În contextul actual, caracterizat prin mobilitate geografică crescută și coeziune comunitară diminuată, persoanele vârstnice pot experimenta izolarea socială într-o măsură mai mare, contribuind la o creștere a numărului de seniori care trăiesc singuri în ultimii ani de viață. Această tendință poate fi influențată de migrarea tinerilor și decesul partenerilor de viață.

Studiile academice subliniază impactul profund al singurătății asupra sănătății și bunăstării persoanelor vârstnice, evidențiind consecințe serioase, precum depresia, tendințele de suicidare și abuzul de substanțe, care degradează semnificativ calitatea vieții (Lindgren *et al.*, 2014). Factori precum îmbătrânirea biologică, creșterea incidenței problemelor de sănătate și scăderea funcționalității accentuează deteriorarea calității vieții în rândul acestei populații (Karnick, 2005). În plus, variația nivelurilor de stres și anxietate, în funcție de contextul rezidențial al vârstnicilor, a fost extensiv investigată, cu descoperiri variabile.

Cercetări precum cele realizate de Singh, Lohia și Chand (2017) și de Hassan (2017) indică faptul că vârstnicii instituționalizați experimentează niveluri mai

ridicate de anxietate și stres, comparativ cu cei neinstituționalizați. Această diversitate a rezultatelor poate fi atribuită multiplilor factori ce influențează starea psihologică a vârstnicilor, inclusiv diferențele culturale, datorită naturii internaționale a studiilor. O constatare interesantă a fost făcută de Singh, Lohia și Chand (2017), care au notat că vârstnicii instituționalizați, ce mențin legături de comunicare cu familia lor, raportează niveluri mai scăzute de anxietate, punând în evidență rolul esențial al suportului social în mitigarea efectelor negative ale singurătății și stresului asupra acestei demografii.

Variabilele socio-demografice, cum ar fi genul, vârsta, nivelul de educație, starea civilă și condițiile de locuire, au o influență semnificativă asupra experienței singurătății și calității vieții, evidențiind necesitatea unei înțelegeri detaliate a acestor factori în abordarea eficientă a provocărilor întâmpinate de populația vârstnică (Chow, Wong & Choi, 2021). Această abordare subliniază necesitatea adoptării unei strategii integrate și adaptate contextului specific, în scopul îmbunătățirii condițiilor de viață ale seniorilor. Acest cadru conceptual subsumează o perspectivă holistică asupra intervențiilor sociale și de sănătate, accentuând rolul esențial al variabilelor socio-demografice în configurarea experiențelor de viață ale persoanelor în vârstă și, prin extensie, în optimizarea strategiilor de suport.

O investigație mai aprofundată a literaturii de specialitate indică faptul că determinanții primari ai singurătății în rândul persoanelor vârstnice includ genul feminin, vârsta avansată, nivelul redus de educație, starea civilă de necăsătorit sau văduv, condițiile de sănătate precare, pierderea partenerului de viață, șomajul, veniturile insuficiente și condițiile de locuire izolate (Mansfield *et al.*, 2021). Acești factori joacă un rol esențial în manifestarea singurătății și în efectele sale asupra sănătății și calității vieții vârstnicilor.

Singurătatea în rândul populației vârstnice constituie un fenomen complex și multidimensional, având consecințe considerabile asupra stării de sănătate și calității vieții. Acest studiu urmărește să examineze în detaliu dinamica asociată experienței singurătății, cu obiectivul de a identifica intervenții și strategii de sprijin eficiente pentru îmbunătățirea bunăstării demografiei vârstnice. O perspectivă multidisciplinară este esențială pentru abordarea adecvată a fenomenului singurătății în rândul seniorilor și pentru promovarea unei stări de bine optimale în această etapă crucială a vieții.

2. METODOLOGIE

Scopul acestui studiu este de a explora teoretic și aplicativ influența factorilor socio-demografici și calitatea vieții asupra singurătății la senectuți, evidențiind interacțiunile complexe dintre acești determinanți. Premisa centrală, care a orientat conceptualizarea și implementarea studiului, postulează că singurătatea în rândul persoanelor în vârstă este influențată semnificativ de variabile socio-demografice, precum și de calitatea vieții percepute.

În acest cadru de cercetare, ne propunem să examinăm existența unei corelații statistice semnificative între nivelul de singurătate experimentat de persoanele vârstnice și o serie de factori, atât socio-demografici, cât și psihologici. Printre acești factori se numără locația rezidențială, genul, starea civilă, starea de sănătate, nivelul educațional și domeniul profesional.

Designul metodologic al investigației se bazează pe un cadru corelațional, destinat analizei interrelațiilor dintre multiple variabile. În acest context, au fost evaluate următoarele dimensiuni: a) contextul rezidențial – instituționalizat *versus* familial; b) genul; c) starea de sănătate; d) starea civilă; e) sectorul profesional; f) nivelul de educație; g) gradul de satisfacție personală; h) calitatea vieții asociată vârstei înaintate și i) intensitatea sentimentelor de singurătate în rândul persoanelor vârstnice. Această abordare metodologică intenționează să clarifice influența factorilor menționați asupra percepției singurătății în cadrul populației vârstnice.

Populația vizată de acest studiu include seniori atât din mediul instituționalizat, cât și din cel comunitar. Eșantionul selectat pentru cercetare este alcătuit din 200 de indivizi, cu vârste cuprinse în intervalul 65–95 de ani (media de vârstă fiind 71,89 de ani), împărțiți în mod egal între cele două medii de rezidențializare, pentru a facilita o analiză comparativă între subgrupuri. Distribuția eșantionului a fost structurată astfel încât fiecare grup – 100 de participanți instituționalizați și 100 de participanți non-instituționalizați – să fie reprezentat în mod echitabil, selecția fiind efectuată pe baza eșantionării aleatorii, cu vârsta ca variabilă principală de selecție.

Procedura de recrutare a implicat identificarea și selecția seniorilor dintr-o gamă variată de contexte, folosindu-se o strategie de eșantionare stratificată bazată pe criterii bine definite. Consimțământul informat a fost solicitat în mod individual de la toți participanții, care au avut opțiunea de a completa chestionarele fie imediat după acordarea consimțământului, fie la domiciliul propriu, cu o perioadă de returnare variabilă. Această metodologie a fost concepută pentru a respecta principiile etice fundamentale ale cercetării, asigurând protecția drepturilor și autonomiei fiecărui participant. Angajamentul față de o abordare etică și metodologică riguroasă a permis obținerea de date relevante și precise, contribuind semnificativ la înțelegerea singurătății în rândul seniorilor. Prin adoptarea acestor proceduri detaliate în recrutarea și colectarea datelor, studiul a reușit să asigure validitatea și fiabilitatea constatărilor, oferind o perspectivă cuprinzătoare asupra impactului singurătății asupra bunăstării populației vârstnice.

Recrutarea populației pentru acest studiu s-a bazat pe criterii de includere rigurose stabilite, astfel: a) vârsta, distribuită în trei categorii: 65–74 ani, 75–84 ani și peste 85 de ani; b) genul, cu o repartitie egală în eșantion, 50% femei și 50% bărbați; c) domiciliul, majoritatea respondenților (70%) rezidând în mediul urban; d) starea civilă, unde prevalența a fost reprezentată de văduvie (37% din totalul participanților), urmată de starea de căsătorit (25% din eșantion); e) starea de sănătate, cu 11% din eșantion raportând o stare de sănătate bună; f) implicarea în

activități religioase, cu 34% dintre participanți identificându-se ca practicanți; g) nivelul de educație, evidențiindu-se o diversitate: 5% fără educație formală (cu o incidență mai mare în rândul grupului instituționalizat), 30% cu educație primară, 10% cu finalizarea gimnaziului, 6% cu educație liceală, 14,5% cu finalizarea școlii profesionale, 16% cu studii postliceale și 8,5% cu studii superioare; h) ocupația, majoritatea participanților (74%) fiind pensionari, 22,5% dintre respondenți neavând o ocupație în cursul vieții lor, iar 3,5% din eșantion fiind încă activi pe piața muncii.

În scopul colectării datelor necesare pentru realizarea obiectivelor de cercetare stabilite, studiul a inclus utilizarea a două instrumente metodologice principale: Scala de Singurătate UCLA, dezvoltată de Russell în 1996, și Inventarul Calității Vieții (QOLI), conceput de Frisch în 1992 (Russell, 1996; Frisch, 1992).

Pentru evaluarea nivelului de singurătate în rândul populației vârstnice, am optat pentru Scala de Singurătate UCLA, recunoscută ca fiind un instrument predominant utilizat în cercetare pentru măsurarea singurătății la adulți. Alegerea variantei a treia a acestei scale s-a fundamentat pe considerente legate de adecvarea la particularitățile populației vârstnice. Deși absența unui standard specific pentru populația românească este notabilă, Scala de Singurătate UCLA a fost subiectul unor traduceri și adaptări în diverse limbi, inclusiv limba română, cu succesul evidențiat de cercetători precum Plămădeală V., Marian A.L., Ștefan V., Nedelcu M., Bucur A. și Boza M. (Plămădeală, 2018; Marian, 2018; Ștefan, 2013; Nedelcu, 2011; Bucur & Boza, 2008). Această scală, compusă din 20 de itemi, abordează aspecte atât pozitive, cât și negative ale singurătății, conform modelului propus de Russell (Russell, 1996). Pentru evaluarea răspunsurilor, se utilizează o scală Likert cu valori între 1 și 4, iar itemii cu conținut negativ sunt scorati invers pentru a reflecta cu acuratețe intensitatea sentimentelor de singurătate raportate de participanți.

Inventarul Calității Vieții (QOLI), elaborat de Frisch, evaluează satisfacția generală în viață, un construct ce sintetizează diferite dimensiuni ale satisfacției personale (Frisch, 1992). Instrumentul include 16 domenii de viață identificate în literatura de specialitate ca fiind corelate pozitiv cu satisfacția de viață generală, fiecare domeniu fiind evaluat în mod distinct.

Aceste instrumente metodologice au fost selectate datorită capacității lor de a oferi date relevante și complexe cu privire la experiența singurătății, stărilor emoționale negative și calitatea vieții în rândul populației vârstnice, oferind astfel o bază solidă pentru atingerea obiectivelor de cercetare propuse.

3. REZULTATE

Acest studiu a abordat influența determinantilor socio-demografici asupra percepției singurătății în rândul populației de vârstnici, prin implementarea Scalei de Singurătate UCLA și colectarea de date demografice relevante. Obiectivul a fost de a verifica ipoteza conform căreia singurătatea este modulată de variabile

specifice, inclusiv mediul rezidențial, starea de sănătate, situația maritală, ocupația, nivelul de educație și vârsta. Analiza efectuată pe un eșantion de 200 de subiecți, utilizând Scala de Singurătate UCLA, a evidențiat un scor moderat de 50,13, reflectând o tendință de la singurătate moderată la înaltă în rândul participanților. Examinarea distribuției scorurilor a ilustrat că aproape jumătate din eșantion (49%) manifestă niveluri înalte sau foarte înalte de singurătate.

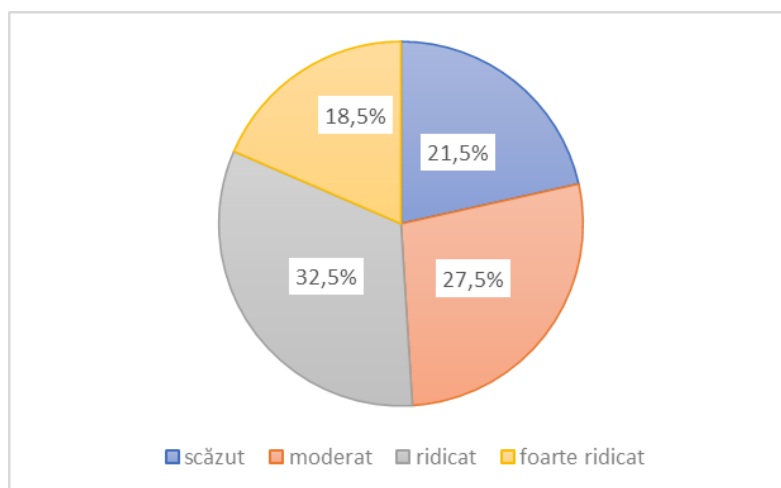


Figura nr. 1. Nivelul de singurătate la vârstnici

Studiul a investigat impactul mediului rezidențial asupra gradului de singurătate în rândul persoanelor vârstnice, prin compararea indivizilor instituționalizați cu cei din cadrul familial. Implementarea analizei de varianță (ANOVA) a relevat o diferență semnificativă din punct de vedere statistic între cele două categorii, evidențiind o incidență sporită a singurătății printre vârstnicii instituționalizați ($p < 0,05$).

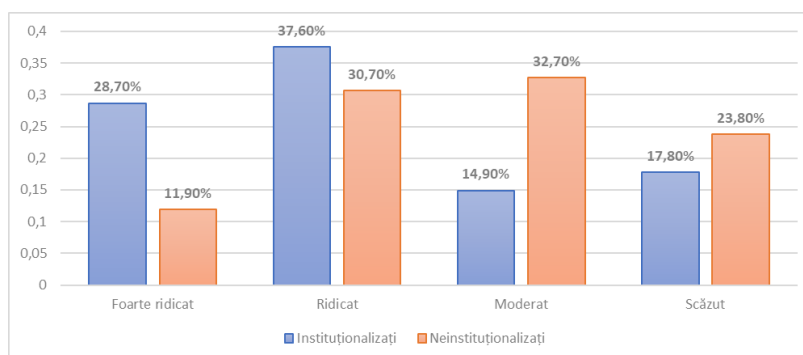


Figura nr. 2. Nivelul de singurătate al vârstnicilor în funcție de mediu

Investigația asupra dimorfismului de gen în contextul singurătății la populația vârstnică a relevat o absență a diferențelor statistice semnificative între sexe. Scorurile medii ale femeilor au fost ușor inferioare comparativ cu cele ale bărbaților; totuși, analiza de varianță (ANOVA) nu a evidențiat o influență semnificativă a genului asupra gradului de singurătate. În contrast, evaluarea impactului stării civile asupra experienței singurătății a indicat diferențe notabile: indivizii necăsătoriți, divorțați sau văduvi au manifestat niveluri superioare de singurătate în comparație cu cei căsătoriți sau într-o relație de concubinaj. Aceste descoperiri accentuează rolul esențial al legăturilor interpersonale în atenuarea percepției de singurătate în rândul seniorilor.

Starea de sănătate a reprezentat un factor esențial în determinarea nivelurilor de singurătate, constatându-se că indivizii vârstnici afectați de afecțiuni cronice au raportat niveluri superioare ale acestei stări afective. Această constatare subliniază semnificația stării de bine fizic și psihic în percepția și confruntarea cu singurătatea. Pe de altă parte, variabile precum ocupația și implicarea religioasă nu au indicat diferențe statistice semnificative privind intensitatea singurătății, sugerând că acești factori nu au o influență directă semnificativă asupra experienței de singurătate în rândul populației vârstnice. Contrar acestor tendințe, nivelul de educație a demonstrat un efect palpabil, cu indivizi având un nivel educațional superior care au prezentat niveluri mai reduse de singurătate. Aceasta evidențiază rolul educației în facilitarea unei bunăstări psihosociale îmbunătățite și în diminuarea riscului de a experimenta singurătate.

Investigația privind influența vârstei asupra gradului de singurătate în rândul populației vârstnice a dezvăluit o corelație pozitivă între înaintarea în vârstă și intensificarea sentimentelor de singurătate, identificând o variație semnificativă statistic între diferitele categorii de vârstă, cu o valoare p de 0,003, conform analizei de varianță (ANOVA). Rezultatele au demonstrat nivelul cel mai redus de singurătate în cadrul grupului de vârstă 65–74 de ani, cu o medie de 48,86, urmat de un nivel intermediar pentru categoria de vârstă 75–84 de ani, cu o medie de 56,43, și cel mai elevat nivel de singurătate observat la participanții cu vârsta peste 85 de ani, având o medie de 62,50.

În concluzie, rezultatele prezentului studiu validează ipoteza formulată inițial, evidențiind că gradul de singurătate în rândul populației vârstnice este determinat în mod semnificativ de factori socio-demografici precum condițiile de locuit, statutul marital, starea generală de sănătate și nivelul de educație. Aceste constatări subliniază imperativul dezvoltării și implementării de intervenții specifice și suport personalizat pentru a combate fenomenul de singurătate în acest segment demografic, punând în relief rolul esențial al relațiilor sociale, al stării de bine fizice și psihice, precum și al accesului la educație în facilitarea unei existențe împlinite și satisfăcătoare pentru vârstnici.

Tabelul nr.1

Relația dintre singurătate și caracteristicile sociodemografice

		Sum of Squares	df	Mean Square	F	Sig.
MEDIU						
Singurătate	Between Groups	3386,64	1	3386,64	15,4	0
	Within Groups	43530,15	198	219,85		
	Total	46916,79	199			
GEN						
Singurătate	Between Groups	528,13	1	528,13	2,25	0,135
	Within Groups	46388,67	198	234,29		
	Total	46916,79	199			
VÂRSTĂ						
Singurătate	Between Groups	2726,19	2	1363,1	6,08	0,003
	Within Groups	44190,6	197	224,32		
	Total	46916,79	199			
DOMICILIU						
Singurătate	Between Groups	286,8	1	286,8	1,22	0,271
	Within Groups	46629,99	198	235,51		
	Total	46916,79	199			
STARE CIVILĂ						
Singurătate	Between Groups	7130,02	5	1426	6,95	0
	Within Groups	39786,78	194	205,09		
	Total	46916,79	199			
STARE DE SĂNĂTATE						
Singurătate	Between Groups	9402,66	2	4701,33	24,69	0
	Within Groups	37514,14	197	190,43		
	Total	46916,79	199			
AFLILIERE RELIGIOASĂ						
Singurătate	Between Groups	178,78	4	44,7	0,19	0,945
	Within Groups	46738,01	195	239,68		
	Total	46916,79	199			
CREDINȚĂ						
Singurătate	Between Groups	136,05	1	136,05	0,58	0,449
	Within Groups	46780,75	198	236,27		
	Total	46916,79	199			
STUDII						
Singurătate	Between Groups	8402,22	6	1400,37	7,02	0
	Within Groups	38514,58	193	199,56		
	Total	46916,79	199			
OCUPAȚIE						
Singurătate	Between Groups	313,29	2	156,64	0,66	0,517
	Within Groups	46603,51	197	236,57		
	Total	46916,79	199			

În cadrul acestei cercetări a fost examinată și ipoteza conform căreia calitatea vieții exercită o influență determinantă asupra nivelului de singurătate în rândul populației vârstnice. Acest obiectiv a fost explorat prin colectarea și analiza datelor provenite din aplicarea Inventarului Calității Vieții (QOLI) și a Scalei de Singurătate UCLA, pe același eșantion de 200 de subiecți. Testul Kolmogorov-Smirnov a fost utilizat pentru a confirma normalitatea distribuției scorurilor obținute la cele două instrumente, facilitând analiza statistică subsecventă. Rezultatele obținute prin intermediul QOLI au relevat o tendință generală către o calitate a vieții scăzute, cu un procentaj de 59,5% din participanți clasându-se în această categorie.

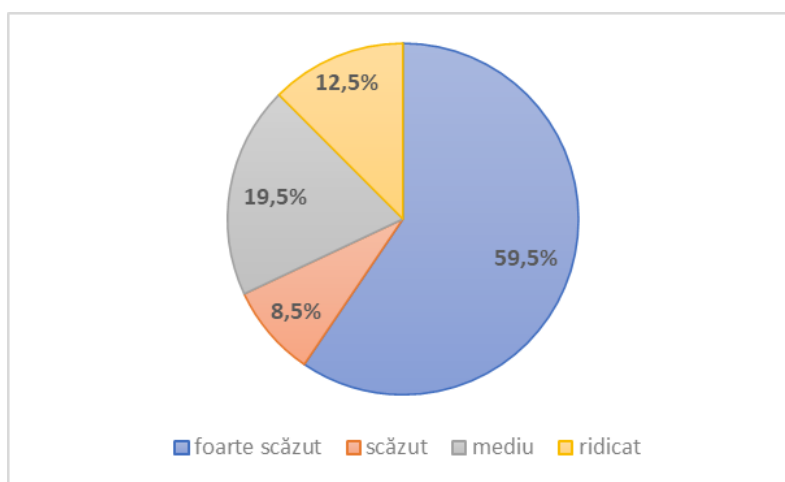


Figura nr. 3. Categoriile de calitate a vieții pentru eșantionul studiat

În cadrul acestei cercetări, compararea condițiilor de viață ale persoanelor vârstnice, prin intermediul analizei de varianță (ANOVA), a dezvăluit o diferență statistic semnificativă între calitatea vieții individuale în cazul seniorilor instituționalizați, comparativ cu cei rezidenți în comunitate, indicând o calitate percepută a vieții inferioară pentru primul grup menționat. De asemenea, analiza corelației Pearson a identificat o legătură semnificativă și invers proporțională între calitatea vieții și gradul de singurătate, evidențiind că o singurătate accentuată este corelată cu o diminuare a calității vieții percepute.

Analiza efectuată a evidențiat o corelație semnificativă și negativă între calitatea vieții și nivelul de singurătate în rândul populației vârstnice, cu un coeficient de corelație de $-0,657$. Această asocieră indică o interdependență între cele două variabile, sugerând că îmbunătățirea calității vieții ar putea contribui la reducerea nivelului de singurătate în această cohortă. Conform testului Kolmogorov-Smirnov, distribuția datelor este normală, cu o valoare p de $0,415$, ceea ce susține validitatea analizei.

Utilizarea Inventarului Calității Vieții (QOLI) a permis evaluarea detaliată a diferitelor domenii ale vieții individuale. Conform manualului de utilizare al instrumentului, scala de evaluare variază între - 6, indicând un grad de insatisfacție extrem de înalt, și + 6, reprezentând un nivel de satisfacție maxim. Analiza rezultatelor obținute evidențiază predominanța insatisfacției în toate domeniile evaluate, cu scoruri medii situate în intervalul negativ. Cel mai ridicat scor mediu, semnificând un grad relativ superior de satisfacție în raport cu celelalte domenii, a fost observat în dimensiunea referitoare la copii, având o valoare de $M_{12} = -0,23$. Cu toate acestea, acest scor este considerat a fi încă foarte scăzut, plasându-se într-un interval între - 6,0 și 0,8. Cele mai scăzute niveluri de satisfacție au fost identificate în domeniile legate de comunitate ($M_{16} = -0,67$), relații afective ($M_{10} = -0,65$) și sănătate ($M_1 = -0,61$), indicând astfel arii critice în percepția calității vieții printre respondenți.

Tabelul nr.2

Ariile calității vieții (QOLI) – statistici descriptive

	N	Mean	S.E. Mean	Std Dev	Var.	Kurt.	S.E. Kurt	Skew.	S.E. Skew	Range	Min.	Max.	Sum
Sănătate	200	-0,61	0,29	4,1	16,79	-1,34	0,34	0,19	0,17	12	*	6	-122
Stima de sine	200	-0,54	0,3	4,25	18,1	-1,38	0,34	0,22	0,17	12	*	6	-107
Țeluri	200	-0,44	0,27	3,88	15,02	-1,17	0,34	0,17	0,17	12	*	6	-88
Bani	200	-0,38	0,3	4,27	18,21	-1,44	0,34	0,11	0,17	12	*	6	-75
Munca	200	-0,53	0,3	4,2	17,63	-1,38	0,34	0,19	0,17	12	*	6	-106
Joc	200	-0,46	0,3	4,19	17,58	-1,36	0,34	0,21	0,17	12	*	6	-92
Învățare	200	-0,6	0,29	4,08	16,63	-1,25	0,34	0,23	0,17	12	*	6	-120
Creativitate	200	-0,37	0,29	4,17	17,37	-1,42	0,34	-0,02	0,17	12	*	6	-73
Ajutor	200	-0,55	0,3	4,29	18,42	-1,45	0,34	0,17	0,17	12	*	6	-109
Iubire	200	-0,65	0,31	4,34	18,83	-1,44	0,34	0,11	0,17	12	*	6	-130
Prieteni	200	-0,53	0,29	4,15	17,24	-1,37	0,34	0,13	0,17	12	*	6	-105
Copii	200	-0,23	0,29	4,13	17,04	-1,39	0,34	0,05	0,17	12	*	6	-45
Rude	200	-0,53	0,29	4,17	17,36	-1,42	0,34	0,17	0,17	12	*	6	-106
Acasă	200	-0,42	0,29	4,1	16,79	-1,36	0,34	0,13	0,17	12	*	6	-83
Cartier	200	-0,3	0,26	3,68	13,57	-1,15	0,34	0,2	0,17	12	*	6	-59
Comunitate	200	-0,67	0,27	3,83	14,64	-1,17	0,34	0,35	0,17	12	*	6	-133

Analiza evidențiază existența unor corelații statistic semnificative și negative între singurătate și toate ariile evaluate ale calității vieții, unele dintre acestea fiind deosebit de pertinente pentru prezentul studiu. Specificații notabile includ o corelație semnificativă și negativă între singurătate și satisfacția față de sănătate

($r = -0,497$, $p < 0.001$), indicând că niveluri crescute de singurătate sunt asociate cu o satisfacție redusă față de sănătate. Această tendință invers proporțională se regăsește și în corelațiile dintre singurătate și satisfacția în alte domenii relevante, precum stima de sine ($r = -0,558$, $p < 0.001$), iubirea ($r = -0,482$, $p < 0.001$), activitățile recreative ($r = -0,562$, $p < 0.001$), relațiile de prietenie ($r = -0,482$, $p < 0.001$), relațiile cu copiii ($r = -0,560$, $p < 0.001$), relațiile cu rudele ($r = -0,506$, $p < 0.001$) și integrarea în comunitate ($r = -0,408$, $p < 0.001$). În toate aceste cazuri, se constată corelații negative statistic semnificative. În ceea ce privește magnitudinea efectului, corelațiile dintre singurătate și domeniile sănătății, iubirii, prieteniei și comunității prezintă o intensitate medie, în timp ce în relația cu stima de sine, activitățile recreative, copiii și rudele se observă o intensitate mai mare a efectului.

Rezultatele subliniază existența unei legături semnificative între calitatea vieții și singurătatea vârstnicilor, punctând necesitatea de a dezvolta strategii de intervenție centrate pe ameliorarea calității vieții. Aceste constatări accentuează importanța calității vieții în promovarea sănătății psihologice și a bunăstării în rândul populației vârstnice, evidențiind rolul său pivot în combaterea singurătății.

Interpretarea rezultatelor studiului este condiționată de constrângerile metodei de autoraportare și generalizare, influențată de biasuri precum stereotipurile, reticenta la dezvăluire și conformitatea socială, precum și de limitările designului transversal și efectul vârstei în analiza datelor, cerând o abordare circumspectă în evaluarea și extrapolarea concluziilor.

4. DISCUȚII ȘI CONCLUZII

Prezentul studiu și-a propus să exploreze în mod exhaustiv factorii ce influențează percepțiile singurătății și izolării în rândul populației vârstnice, contribuind astfel la extinderea corpusului de cunoștințe existente și la sublinierea caracterului complex și multidimensional al acestei probleme. Prin analiza detaliată a factorilor precum mediul de trai, starea civilă, condițiile de sănătate, nivelul de educație și vârsta, cercetarea de față dezvăluie impactul semnificativ al acestora asupra gradului de singurătate percepută. Importanța acestui studiu este subliniată prin identificarea nivelurilor variate de singurătate în rândul persoanelor vârstnice, în funcție de contextul lor de viață, și prin evidențierea discrepanțelor în calitatea vieții între vârstnicii instituționalizați și cei care trăiesc în comunitate.

În contextul îmbătrânirii demografice globale, înțelegerea factorilor ce influențează singurătatea și izolarea socială devine imperativă. Studii anterioare au început să contureze impactul mediului de viață, al stării de sănătate și nivelului socio-economic asupra experiențelor de singurătate și izolare în rândul populației vârstnice (Ashish & Ghufra, 2016). Prezentul studiu extinde aceste cercetări prin analiza amănunțită a modului în care diverși factori contribuie la percepția singurătății și izolării, marcând o etapă importantă în înțelegerea fenomenului în toată complexitatea sa.

Adoptând o metodologie calitativă bazată pe interviuri structurate, studiul oferă o perspectivă profundă asupra influenței variabilelor socio-demografice și psihologice asupra sentimentelor de singurătate și izolare, demonstrând capacitatea acestui cadru metodologic de a captura nuanțe complexe și detalii fine ale experiențelor personale ale respondenților. Analiza datelor sugerează că persoanele vârstnice care locuiesc în instituții resimt un nivel mai ridicat de singurătate comparativ cu cele care trăiesc în comunitate, datorită limitărilor de interacțiune socială caracteristice mediilor instituționalizate. De asemenea, starea de sănătate precară și un nivel scăzut de educație sunt asociate cu niveluri mai ridicate de singurătate, subliniind rolul crucial al acestor factori în experiența singurătății.

Studiul aduce o contribuție valoroasă la literatura de specialitate în domeniul gerontologiei, extinzând cunoașterea privind corelațiile și impactul diferiților determinanți socio-demografici și psihologici asupra percepțiilor de singurătate în rândul persoanelor vârstnice (Singh, Srivastava, 2014; Jamwal, 2016). Prin sublinierea caracterului complex și a dimensiunii multidimensionale ale singurătății, studiul adaugă valoare semnificativă la corpul existent de cunoaștere în acest câmp de studiu. În plus, rezultatele subliniază o necesitate imperativă de politici și programe direcționate spre îmbunătățirea calității vieții și reducerea singurătății în această grupă demografică.

În ciuda beneficiilor sale considerabile, acest studiu întâmpină anumite limitări care pot influența generalizabilitatea și relevanța practică a constatărilor sale. Absența unei abordări longitudinale restricționează capacitatea de a urmări schimbările în percepția singurătății și a factorilor asociați de-a lungul timpului, ceea ce ar putea oferi o înțelegere mai profundă a dinamicii fenomenului. În continuare, se sugerează extinderea domeniului de variabile examinate în cercetările ulterioare, încorporând o gamă mai diversificată de contexte socio-demografice și culturale. Aceasta ar permite o evaluare mai precisă și mai cuprinzătoare a particularităților contextuale care influențează experiențele de singurătate, îmbunătățind astfel aplicabilitatea și relevanța descoperirilor în diferite medii și populații.

Se recomandă adoptarea unei abordări mai cuprinzătoare în cercetările viitoare, inclusiv utilizarea unor metodologii longitudinale și integrarea unei varietăți mai largi de contexte socio-demografice și culturale. Importanța investigării aprofundate a factorilor psihologici și a dezvoltării strategiilor de intervenție bine definite și eficiente este esențială pentru ameliorarea condițiilor de viață ale populației vârstnice. Strategiile de intervenție avansate se concentrează pe încurajarea interacțiunii sociale prin implicarea în activități comunitare și adoptarea tehnologiei, promovarea bunăstării prin exerciții fizice personalizate, furnizarea de suport psihologic și consiliere, facilitarea accesului la servicii, sensibilizarea și educația comunității, precum și consolidarea colaborărilor între guvern, organizații non-guvernamentale, sectorul privat și comunitate. Aceste inițiative subliniază necesitatea unei cooperări extinse pentru a asigura un suport durabil, care să recunoască și să valorifice contribuțiile persoanelor vârstnice, îmbunătățind în mod semnificativ calitatea vieții acestora. Implementarea unei abordări holistice și multidisciplinare

este imperativă pentru abordarea eficace a nevoilor complexe ale seniorilor, contribuind astfel la diminuarea fenomenului de singurătate și la promovarea unui standard de viață superior.

În concluzie, cercetarea reprezintă o avansare valoroasă în înțelegerea complexă a singurătății în rândul populației vârstnice, marcând o etapă importantă în domeniul gerontologiei.

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REZUMAT

Problema singurătății în rândul persoanelor în etate are un impact negativ asupra calității vieții și bunăstării acestora. Scopul studiului este de a explora teoretic și aplicativ influența factorilor socio-demografici și calitatea vieții asupra singurătății la senectute, evidențiind interacțiunile complexe dintre acești determinanți. Au fost evaluate următoarele dimensiuni: a) contextul rezidențial – instituționalizat versus familial; b) genul; c) starea de sănătate; d) starea civilă; e) sectorul profesional; f) nivelul de educație; g) gradul de satisfacție personală; h) calitatea vieții asociată vârstei înaintate și i) intensitatea sentimentelor de singurătate în rândul persoanelor vârstnice. Eșantionul de cercetare este alcătuit din 200 persoane cu vârste cuprinse în intervalul 65–95 de ani ($m=71,89$): 100 respondenți instituționalizați și 100 respondenți non-instituționalizați. Datele au fost colectate prin aplicarea a două instrumente: Scala de Singurătate UCLA, dezvoltată de Russell în 1996, și Inventarul Calității Vieții (QOLI), conceput de Frisch în 1992 (Russell, 1996; Frisch, 1992). Analiza datelor relevă o corelație semnificativă între factorii socio-demografici (sex, vârstă, stare civilă, nivel de educație) și intensitatea percepută a singurătății, precum și corelații statistice semnificative și negative între singurătate și toate ariile evaluate ale calității vieții.

CONTRIBUȚII ROMÂNEȘTI ÎN PROBLEMATICA TULBURĂRILOR DIN SPECTRUL AUTIST

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Spectrul autist desemnează un grup de tulburări eterogene (TSA), cu grade diferite de severitate, cu o componentă genetică accentuată, în care recuperarea vizează atingerea potențialului maxim al copiilor afectați. Demersul depinde în mod direct de diagnosticarea promptă și de începerea timpurie a terapiilor, de situațiile financiare ale familiilor, de sănătatea psihică a părinților și de calitatea vieții lor, ca și de integrarea copiilor în mediul educațional, preșcolar sau școlar. Familia și școala reprezintă, de altfel, primele cadre de socializare ale pacienților din spectrul TSA, care pot experimenta: *dificultăți de comunicare* (manifestate în exprimarea emoțiilor, înțelegerea limbajului nonverbal și menținerea conversațiilor); *dificultăți de interacțiune socială* (înțelegerea regulilor, stabilirea relațiilor de prietenie), *comportamente repetitive* (fluturatul mâinilor, mersul pe vârfuri, jocul cu aceleași obiecte), *interese restrânse* (numai pentru anumite subiecte sau activități), *sensibilitate excesivă sau insuficientă la stimuli senzoriali* (sunete, lumini, texturi), ca și *alte simptome care le pot afecta funcționarea în comunitate, la școală sau în profesie* (DSM-5, APA 2022).

În continuare, voi prezenta câteva contribuții proprii – două sondaje și un studiu în echipă internațională –, cu privire la problematica TSA în România, respectiv cunoașterea populației de copii și tineri autiști și a dificultăților familiilor afectate de această tulburare.

Primul sondaj a vizat modul în care medicii de familie aplică un chestionar specific copiilor cu vârste între 0–3 ani, în scopul *screening*-ului TSA și al tulburărilor de sănătate mintală asociate. Conform legii, depistarea precoce a autismului se efectuează pentru întreaga populație pediatrică, cu ocazia evaluărilor medicale efectuate obligatoriu la 12, 15, 18, 24 și 36 de luni, de către medicul de familie la care este înregistrat copilul. Chestionarul de *screening* este aprobat de Ministerul Sănătății, ca anexă a *Normelor metodologice de aplicare a Legii nr. 151/2010 privind serviciile specializate integrate de sănătate, educație și sociale*

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adresate persoanelor cu tulburări din spectrul autist și cu tulburări de sănătate mintală asociate.

La sondaj au participat voluntar 399 de părinți, din toate județele. Rezultatele sunt prezentate succint în continuare:

- 99,2% dintre părinți au declarat că au copiii înscriși la medicii de familie;
- 91,7% dintre părinții cu copii înscriși la medici au declarat că s-au prezentat periodic la controalele medicale obligatorii, în timp ce 8,3% nu s-au prezentat periodic la controale;
- 39,6% dintre părinți au declarat că medicul de familie nu a investigat dezvoltarea psihologică a copilului (cognitivă, de limbaj, socializarea), iar 60,4% au susținut că nici măcar nu li s-au adresat întrebări cu privire la această dezvoltare;
- 87,7% dintre părinți au declarat că medicul de familie nu a realizat un *screening* pentru TSA, în timp ce numai 6,5% au spus că a realizat (8,8% nu își aminteau);
- 72,2% dintre părinți au susținut că medicul nu le-a pus întrebări legate de prezența contactului vizual la copil, 20,3% au declarat că li s-au adresat astfel de întrebări (7,5% nu își aminteau);
- 70,4% dintre părinți au declarat că medicul de familie nu le-a adresat întrebări legate de capacitatea copilului de a reacționa la sunete, 23,32% au spus că le-a adresat (6,3% nu își aminteau);
- 68,7% dintre părinți au susținut că medicul de familie nu le-a adresat întrebări legate de capacitatea copilului de a reacționa la propriul nume, 27,1% au declarat că le-a adresat astfel de întrebări (4,3% nu își aminteau);
- 76,2% dintre părinți au declarat că medicul de familie nu le-a adresat întrebări legate de dezvoltarea normală a abilităților de joc, 18% au spus că le-a adresat;
- 84,5% dintre părinți au declarat că medicul nu i-a întrebat dacă copilul opune rezistență la contactul fizic, 10,3% au spus că i-a întrebat (5,3% nu își aminteau);
- 79,7% dintre părinți au declarat că medicul de familie nu a realizat *screening*-ul pentru depistarea precoce a tulburărilor din spectrul autist, în timp ce 7,5% au răspuns că *screening*-ul a fost realizat o dată, 1,5% au răspuns că *screening*-ul a fost realizat de două ori, 1% – de trei ori, 1% – de patru ori, în timp ce doar 0,8% – de cinci ori, așa cum prevăd normele medicale (10% nu își aminteau);
- 73,4% dintre respondenți au declarat că, în urma manifestării îngrijorării lor cu privire la dezvoltarea psihologică a copilului, medicul de familie nu a recomandat un consult de specialitate realizat de un psihiatru pediatru sau neurolog pediatru, în timp ce 26,6% au declarat că le-a recomandat.

Concluzia sondajului a fost aceea că, deși importanța *screening*-ului pentru depistarea precoce a TSA este recunoscută pe plan mondial, iar România dispune de legislația necesară acestui *screening*, el nu se realizează în cazul unei părți

importante din populația vizată. Chiar dacă numărul de participanți la sondaj a fost limitat și nu permite generalizarea rezultatelor, răspunsurile părinților nu pot fi ignorate.

Intervențiile timpurii necesită depistări precoce, fiind în mod direct dependente de ele. Copiii care beneficiază de servicii de intervenție timpurie până la vârsta de 3 ani prezintă progrese semnificative în toate ariile dezvoltării. De asemenea, cei care dezvoltă limbaj și abilități de joc simbolic înaintea vârstei de 5 ani au șanse mai mari să urmeze cursurile învățământului de masă și să dobândească abilități de comunicare și limbaj importante, comparativ cu cei nonverbalii la vârsta de 5 ani. Intervențiile timpurii reduc masiv severitatea deficitelor asociate autismului, în comunicare și socializare, care interferează cu dezvoltarea ulterioară.

Cu toate că s-au făcut progrese în ce privește conștientizarea TSA și a dovezilor privind apariția simptomatologiei specifice încă din primul an de viață, în România majoritatea copiilor nu sunt diagnosticați clinic înainte de împlinirea vârstei de 2 ani. Cadrul legislativ favorabil *screening*-ului există, însă el nu se aplică, ceea ce impune eforturi de formare a medicilor de familie în depistarea precoce a tulburărilor de dezvoltare.

Cel de-al doilea sondaj realizat a vizat situația persoanelor cu TSA din România la orizontul anului 2022, respectiv suportul de care beneficiază și dificultățile cu care se confruntă. A fost urmat de o analiză calitativă, la care au participat voluntar 420 de persoane din toate județele țării, părinți ai unor copii și adolescenți cu TSA, cu vârste cuprinse între 2–18 ani. S-au obținut următoarele rezultate:

- 85,2% dintre respondenți au declarat că persoanele cu TSA aflate în grija lor sunt încadrate în grad de handicap, în timp ce 14,8% au spus că nu sunt încadrate în grad de handicap;
- doar 57,6% dintre membrii diagnosticați cu autism ai familiilor respondenților beneficiau de asistent personal plătit de stat, în timp ce 42,4% nu beneficiau de asistent;
- 79,4% dintre respondenți au declarat că membrul familiei afectat de autism este încadrat în grad de handicap grav, iar 14% că nu este încadrat în niciun grad de handicap;
- 58,37% dintre respondenți aveau sau avuseseră copiii încadrați în învățământul de masă, 21,29% – în învățământul special, 4,31% beneficiau sau beneficiaseră de învățământ la domiciliu, iar 14,59% nu erau sau nu fuseseră școlarizați;
- un singur respondent a declarat că membrul familiei lui, afectat de autism, muncea într-un atelier protejat, iar o altă persoană a declarat că membrul familiei diagnosticat cu autism lucra într-un loc de muncă neprotejat, în timp ce restul nu aveau locuri de muncă, trăind din indemnizații;

- în privința serviciilor de suport pentru persoana cu TSA, 114 beneficiau de intervenție timpurie, 314 – de terapie comportamentală, 137 – de consiliere psihologică, 188 – de terapie a limbajului, 124 – de kinetoterapie, 125 – de medicație psihiatrică, în timp ce doar doi beneficiau de servicii de tip respiro pentru familie;
- doar 6,20% din respondenți au declarat că membrul familiei afectat beneficia de profesor de sprijin;
- doar 24,5% dintre respondenți au declarat că membrii familiei lor, afectați de autism, beneficiau de servicii de suport oferite de statul român, în timp ce 65% beneficiau de servicii de terapie în privat, iar 34% – de terapie în cadrul unui ONG;
- doar 7,6% din cei diagnosticați cu autism beneficiau de servicii de suport gratuite, în timp ce 72,5% plăteau serviciile de suport din bugetul familiei, iar 23,1% beneficiau atât de servicii gratuite, cât și de servicii contracost;
- 31,34 % dintre respondenți au declarat că sumele cheltuite cu terapia de recuperare se situau între 2.000 și 5.000 lei/lună, 27,99% – între 1.000 și 2.000 lei/lună, 17,94% – între 100 și 500 lei/lună, în timp ce pentru 56 de respondenți, cheltuielile se situau între zero și 500 lei/lună (39 dintre persoanele chestionate nu au răspuns la întrebarea privind cheltuielile);
- 23,68% dintre aparținătorii intervievați aveau venituri lunare de peste 5.000 de lei, 16,27% – între 4.000 și 5.000 de lei, 16,27% între 3.000 și 4.000 de lei, 19,62% – între 2.000–3.000 de lei, 11,48% – între 1.500 și 2.000 de lei, 7,42% – între 1.000–1500 lei, 0,96% sub 1.000 de lei, iar 0,48 % nu aveau niciun venit;
- raportat la nevoi, membrul familiei afectat de autism beneficia de servicii de suport gratuite în proporție de sub 10% (72,03% din respondenți), sub 25% (13,56% din respondenți), sub 50% (9,6% din respondenți) și de 100% (0,85% din respondenți).

Sondajul a inclus și câteva întrebări cu răspuns deschis. Analiza calitativă s-a bazat pe două grile categoriale – principalele nevoi ale familiilor cu un membru diagnosticat cu TSA și principalele probleme cu care se confruntă familiile.

Ierarhia nevoilor a fost: informații despre TSA; specialiști în terapie comportamentală și facilitatori școlari; terapie și suport pentru adulții cu TSA și pentru familiile lor (consiliere); sprijin financiar pentru terapie/terapie gratuită, decontată de stat și incluziune școlară reală.

Ierarhia problemelor a fost: suport financiar redus pentru plata specialiștilor și a transportului la centrele de terapie, din cauza inexistenței unor centre în localitățile de domiciliu; epuizarea fizică, psihică și financiară; discriminarea școlară și socială (mentalitatea profesorilor, bullying-ul, stigmatizarea, lipsa adaptărilor școlare și a accesului pe piața muncii), comportamentele disruptive specifice TSA, comunicarea deficitară, autostimulările, crizele, insomniile, problemele alimentare și stereotipiile.

Concluziile acestui studiu, deși nu pot fi generalizate din cauza mărimii eșantionului, servesc nu doar analizei problematicei TSA, ci și decidenților

domeniului. Ele pot fi astfel rezumate: cheltuielile cu terapia depășesc cu mult veniturile familiilor; în România există prea puțini psihoterapeuți specializați în TSA; mediul privat și ONG-urile oferă majoritatea serviciilor de terapie; adulții cu TSA nu beneficiază de suport psihologic gratuit și nici de încadrare în muncă; numărul persoanelor de suport din școlile de masă este redus.

Cel de-al treilea studiu (2022), pe care l-am realizat în echipă internațională (Van Kessel, R., Massrali, A., Vom Felde Genannt Imbusch, P., Dragu, A., Brayne, C., Baron-Cohen, S., Czabanowska, K., & Roman&Urrestarazu, A.), a vizat autismul și educația. În acest studiu de tip exploratoriu, publicat sub titlul *Autism and education – The role of Europeanisation in South-Eastern Europe: Policy mapping in Bulgaria, Romania and Croatia*, în revista *ISI Children & Society*, s-a analizat în ce mod și în ce măsură procesul de europenizare interacționează cu dezvoltarea politicilor privind nevoile educaționale speciale (SEN), cu accent special asupra copiilor cu autism. S-au cartografiat politicile pentru autism și educația specială din Bulgaria, România și Croația, s-a investigat modul în care europenizarea a interacționat cu politica pentru autism și educație, printr-o analiză a dependenței de cale (path dependence analysis).

Colectarea datelor a implicat o abordare modulară calitativă, bazată pe căutare electronică în bazele de date, între aprilie și iunie 2020. Datele relevante din politicile guvernamentale/legislațiile care abordează dreptul la educație pentru persoanele cu autism au fost extrase direct din surse guvernamentale și legislative – drepturile omului (ONU), dreptul european (Eur-lex) și dreptul național (N-lex, Monitorul Oficial al Bulgariei, Portalul Legislativ al României și Catalogul Central al Croației).

O politică specifică a României, obținută prin lobby-ul asociațiilor de părinți, la care a contribuit și autoarea acestei teze, a generat oportunitatea ca elevii diagnosticați cu autism să beneficieze de locuri speciale pentru înscrierea la liceu și de examene adaptate. De asemenea, în România, copiii diagnosticați cu TSA au dreptul la diagnosticare timpurie, chiar dacă acest lucru nu este transpus în practică, după cum s-a arătat anterior. Adoptarea legislației specifice, în special a Planului Național de Autism (2018), a oferit elevilor cu nevoi speciale dreptul de a învăța după programe educaționale adaptate. Mai mult, ei nu trebuie să mai concureze acum cu copiii tipici pentru înscrierea la liceu.

Conform studiului, Bulgaria a înregistrat la rândul ei îmbunătățiri ale politicilor privind nevoile educaționale speciale (SEN) și incluziunea socială. Cu toate acestea, un document recent al Ministerului Bulgar al Muncii și Politicii Sociale (2018) recomandă continuarea eforturilor în acest domeniu, deoarece doar aproximativ jumătate dintre copiii cu dizabilități sunt efectiv incluși în sistemul general de învățământ, iar numeroși elevi cu dizabilități nu merg încă la școală. Până în prezent, țara vecină nu are o strategie specifică pentru autism, dar copiii cu autism sunt abordați în mod explicit în cadrul politicilor SEN și educaționale.

În Croația, de-abia din 2008 au fost posibile schimbări semnificative în domeniul educației incluzive, fără referire specială la elevii cu autism. Mai întâi, s-a stabilit un cadru incluziv pentru învățământul preșcolar. Pentru a oferi o educație de calitate tuturor elevilor, s-a reglementat numărul copiilor cu dizabilități ușoare și severe care pot fi integrați într-o clasă obișnuită. Elevii cu nevoi educaționale speciale pot solicita sprijin suplimentar în timpul învățământului secundar obișnuit. Educația incluzivă este susținută și de Parlamentul Croat (2014), în concordanță cu strategiile UE precum Horizon 2020 sau „Youth on the Move”.

Acest studiu regional a relevat că nevoile educaționale speciale au fost abordate în regiune la modul general, doar România având o politică specifică pentru autism.