



# A Pilot Study of Resilience, Stress, and Well-Being in Adults With and Without Children in the Home in Ukraine

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[Michell L. Temple](#) , [Olya Zaporozhets](#),

[James Sells](#) & [Olga](#)

[Lozova](#)

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Corresponding Author	FamilyName	<b>Temple</b>
	Particle	
	Given Name	<b>Michell L.</b>
	Suffix	
	Division	School of Psychology and Counseling
	Organization	Regent University
	Address	Virginia Beach, USA
	Division	
	Organization	Denver Seminary
	Address	6399 South Santa Fe Drive, Littleton, CO, 80120, USA
	Phone	
	Fax	
	Email	michell.temple@denverseminary.edu
	URL	
	ORCID	<a href="http://orcid.org/0000-0002-7883-7797">http://orcid.org/0000-0002-7883-7797</a>
Author	FamilyName	<b>Zaporozhets</b>
	Particle	
	Given Name	<b>Olya</b>
	Suffix	
	Division	School of Psychology and Counseling
	Organization	Regent University
	Address	Virginia Beach, USA
	Phone	
	Fax	
	Email	
	URL	
	ORCID	
Author	FamilyName	<b>Sells</b>
	Particle	
	Given Name	<b>James</b>
	Suffix	
	Division	School of Psychology and Counseling
	Organization	Regent University
	Address	Virginia Beach, USA
	Phone	
	Fax	
	Email	
	URL	
	ORCID	
Author	FamilyName	<b>Lozova</b>
	Particle	

Given Name **Olga**  
Suffix  
Division Institute of Human Sciences  
Organization Borys Grinchenko Kyiv University  
Address Kiev, Ukraine  
Phone  
Fax  
Email  
URL  
ORCID

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Abstract The pilot quantitative study investigated resilience and stress when predicting well-being in a sample of Ukrainian adults after accounting for the presence of children in the home during the coronavirus pandemic and six years into the Anti-Terrorism Operation. The total sample ( $N = 80$ ) showed that the mostly female sample (93.8%,  $n = 75$ ) reported scores on stress that fell in the average range,  $M = 18.8$  ( $SD = 6.3$ ), and resilience scores in the low resilience range,  $M = 2.8$  ( $SD = .70$ ). Results of the standard multiple regression found that perceived stress and resilience accounted for 48% of the variance of the well-being measure after controlling for children in the home. The implications of the study support stress management and resilience promoting resources and programs to improve Ukrainians' well-being.

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Keywords (separated by '-') Ukraine - Resilience - Stress - Well-being - Parenting

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Footnote Information Michell L. Temple is now serving as an Assistant Professor of Counseling in the Counseling Division at Denver Seminary.

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1 ORIGINAL ARTICLE



2 Resilience, Stress, and Well-Being in Adults With  
3 and Without Children in the Home in Ukraine

4 Michell L. Temple<sup>1,3</sup> · Olya Zaporozhets<sup>1</sup> · James Sells<sup>1</sup> · Olga Lozova<sup>2</sup>

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8 **Abstract**

AQ1

9 The pilot quantitative study investigated resilience and stress when predicting well-  
10 being in a sample of Ukrainian adults after accounting for the presence of children  
11 in the home during the coronavirus pandemic and six years into the Anti-Terrorism  
12 Operation. The total sample ( $N=80$ ) showed that the mostly female sample (93.8%,  
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17 home. The implications of the study support stress management and resilience pro-  
18 moting resources and programs to improve Ukrainians' well-being.

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19 **Keywords** Ukraine · Resilience · Stress · Well-being · Parenting

20 The health of a country's citizens impacts society at multiple levels (Funk et al.,  
21 2003). The World Health Organization (WHO; 2020) defines health as “a state of  
22 physical, mental and social well-being and not merely the absence of disease or  
23 infirmity” (p. 1). According to evidence-based practices in healthcare, the defini-  
24 tion suggests that a holistic approach to organizing human health services inte-  
25 grates medical and well-being models (Funk et al., 2003; World Bank Group, 2017).  
26 The framework considers protective and risk factors at the individual, social, and  
27 environmental levels that affect individual health (Conyne, 2015; WHO, 2019).

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AQ9

A1 Michell L. Temple is now serving as an Assistant Professor of Counseling in the Counseling  
A2 Division at Denver Seminary.

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A3 ✉ Michell L. Temple  
A4 michell.temple@denverseminary.edu

A5 <sup>1</sup> School of Psychology and Counseling, Regent University, Virginia Beach, USA

A6 <sup>2</sup> Institute of Human Sciences, Borys Grinchenko Kyiv University, Kiev, Ukraine

A7 <sup>3</sup> Denver Seminary, 6399 South Santa Fe Drive, Littleton, CO 80120, USA

28 Protective factors represent characteristics that decrease the likelihood of mala-  
29 daptive functioning. Risk factors describe elements born from the socioecological  
30 context that thwart persons' ability to thrive within their lived spaces. International  
31 studies operationalizing WHO's health framework suggest that an essential factor  
32 includes subjective well-being, both hedonic and eudaimonic characteristics, refer-  
33 ring to how positively or negatively people appraise their own lives cognitively,  
34 affectively, and functionally (Diener et al., 2017; Huppert & So, 2013).

35 Subjective well-being correlates with people's physical and mental health as both  
36 a risk or protective factor depending upon environmental stressors, availability of  
37 goods and resources, social connectedness, and capacity to function meaningfully  
38 within a given culture (Diener et al., 2017; WHO, 2019). Huppert and So (2013),  
39 in the seminal study defining and measuring well-being as synonymous with flour-  
40 ishing—a high level of mental well-being—showed that emotional stability, vitality,  
41 resilience, optimism, happiness/positive emotions, and self-esteem were factors that  
42 explained 50% or more of the variance of well-being. In comparing the well-being  
43 of 22 European countries, Huppert and So (2013) found that countries in Northern  
44 Europe, such as Denmark and Switzerland, ranked high on well-being indicators of  
45 emotional stability, meaning, positive emotion, and resilience. In contrast, countries  
46 in Eastern Europe, like Ukraine and Bulgaria, ranked lowest in positive emotions  
47 and resilience. They also highlighted unexplainable differences within and across  
48 countries of equal or greater perceptions of emotional stability, engagement, self-  
49 esteem, and optimism. For citizens of Northern and Eastern European countries,  
50 the opportunities to experience subjective well-being differ significantly. The most  
51 notable difference is that Eastern Europe was ruled by the former Union of Soviet  
52 Socialist Republics (USSR; Magosci, 2010).

53 Interestingly, Huppert and So (2013) acknowledged that this difference was most  
54 apparent societally through the distribution of wealth, the development of social and  
55 healthcare systems, and the degrees to which citizens expressed governmental trust.  
56 Huppert and So (2013) suggested that the variability revealed in their initial study  
57 should encourage future research about the spectrum of well-being. As such, this  
58 study aimed to investigate the relationship between resilience, functioning under  
59 stressful circumstances, and well-being in adults in Ukraine.

60 One way to further explore a phenomenon is to investigate the relationship of  
61 indicators that explain larger portions of the variance directly within populations of  
62 interest (Heppner et al., 2016). Resilience contributed significantly to the explain-  
63 able variance in Huppert and So's (2013) study; however, they did not have a vari-  
64 able to measure participants' level of stress. Considering the history of countries  
65 in Eastern Europe, stress appears to be a relevant construct to understanding well-  
66 being. Stress, the body's response to any demand (McCarffery, 2011), has also been  
67 conceptualized as a complex, concerted biosocial-psychological interplay of emo-  
68 tional arousal and regulation (Lazarus, 1999). Distinguishing people's responses to  
69 stressors as adaptive and maladaptive offers insight into subjective well-being and  
70 resilience. It also supports contemporary diagnostic criteria of psychological dis-  
71 tress concerning presenting symptoms in counseling.

72 The current study aimed to predict the subjective well-being of Ukrainian adults  
73 with and without children in the home during the fall of 2020, six months into the

74 coronavirus pandemic and six years post the start of the annexation of Crimea and  
75 subsequent eruption of the Anti-Terrorism Operation (ATO), a violent conflict with  
76 the Russian Federation (Russia), which began in Eastern Ukraine in 2014 (Hamilton,  
77 2019). Global research indicated that people who can positively adapt to adversity  
78 and trauma while navigating challenges to daily living, including life-threatening  
79 events in the places where they are born, grow, live, and work, can experience health  
80 (Committee on Educating Health Professionals to Address the Social Determinants  
81 of Health, 2016; Masten, 2015; WHO, 2019). The study considered the three dec-  
82 ades of resilience research, which has shown that human beings' perceptions of life  
83 stressors and their ability to manage them play a critical role in their susceptibility  
84 to ill-being (Kimhi, 2015; Bonanno & Mancini, 2011; Catherall, 2004; Delahanty,  
85 2008; DeCarvalho & Whealin, 2012; Eshel et al. Galatzer-Levy et al., 2018; Masten,  
86 2015; McCarffery, 2011; Ozbay et al., 2007; Southwick et al., 2016; Troy & Mauss,  
87 2011; Walsh, 2016; Wu et al., 2013). We operationalized stress and resilience on  
88 a spectrum to predict the well-being of Ukrainians based on their perceptions of  
89 stressors and their capacity to adapt positively. The literature review outlined below  
90 provided the cultural context of the study.

## 91 Describing the Health of Ukrainians

92 Ukrainians, like citizens of other former Soviet countries, experience poorer well-  
93 being, evidenced by high rates of physical, mental, and behavioral health problems  
94 (Burlaka et al., 2017; Global Mental Health, 2020; Rechel et al., 2014; WHO, 2006;  
95 World Bank Group, 2017; De-Identified, 2014). For example, the rise of chronic  
96 medical conditions in Ukraine has exceeded other European countries for more than  
97 15 years (Global Mental Health, 2020; WHO, 2019). In a 2005 report, the World  
98 Health Organization (2006) estimated that an average of eight years (12%) of a  
99 Ukrainian life, which is 14 less for males and eight years less for females than other  
100 European nations, was spent with illness and disability. The main causes of death  
101 and disability included circulatory system disorders and cancer. A review of demo-  
102 graphic trends in Ukraine suggested that the high mortality rates among men have  
103 been attributed to alcohol abuse, smoking, and stress (Romaniuk & Gladun, 2015).  
104 Additionally, the World Bank Group (2017) reported close to one-third of the popu-  
105 lace had experienced a mental health disorder in their lifetime in 2015, with post-  
106 traumatic stress disorder being most common among men at 5% and depression and  
107 anxiety in women at 7% and 3%, respectively.

108 A recent analysis of the prevalence of mental health disorders in Ukraine showed  
109 similarities to other countries in the Eastern European region except for major  
110 depressive disorder, 3.4% versus 2.9%, and women and men differ at estimated  
111 rates of 3.9% and 2.7%, respectively (Global Mental Health, 2020). The report  
112 highlighted the prevalence of alcohol use disorders in Ukraine at 6% compared to  
113 1.5% globally, with men experiencing the condition more than women, 11.5% and  
114 1.4%. The estimated average death rate by suicide is also higher in Ukraine when  
115 compared to other countries in Eastern Europe and global statistics (Global Mental  
116 Health, 2020). Estimated deaths by suicide for men and women indicate that per

117 100,000 population, 56.7 men and 8.4 women die annually versus the total deaths of  
118 29.6 in Eastern Europe and 10.4 worldwide (Global Mental Health, 2020).

## 119 **Subjective Well-Being in Ukraine**

120 Subjective well-being in countries like Ukraine included material living conditions  
121 characterized by goods and resources and quality of life indicated by health. The  
122 sociocultural risks of family employment status, income, and perceived financial  
123 distress were also supported by Libanova et al. (2020), which were identified as  
124 more severe by women in Ukraine in 2017. Interestingly, the *Assessment of Qual-*  
125 *ity of Life in Ukraine on the Basis of Subjective Indicators of Well-being* (Libanova  
126 et al., 2020) found that approximately 22% of women were satisfied with their stand-  
127 ing in society compared to 32% of men satisfied with their lives in general. Libanova  
128 et al. highlighted that these findings were favorable in relationship to personal happi-  
129 ness and health, not the state of the country overall in comparison to previous years.  
130 However, since 2010, Ukrainians have reported less hope and optimism, emotions  
131 associated with human resilience, across age groups and the two genders, though  
132 more significantly in adults 54 and older. The subjective well-being of Ukrainians  
133 has been in flux since its independence, showing discrepancies between perceived  
134 positive emotions and objective measures like life expectancy and physical health.

## 135 **Life Stressors Woven into Ukrainian Society**

136 Life stressors within the context of an anti-terrorist conflict require what Al-Krenawi  
137 et al. (2011) describe as a deeper understanding of political ideology's effects on the  
138 intensity of beliefs. Political ideology serves as a lens through which people under-  
139 stand and interpret political events and, therefore, affects the psychological reac-  
140 tion to those events (Kimhi et al., 2015b; Al-Krenawi et al., 2011). The citizens of  
141 Ukraine are deeply influenced by their history of foreign occupation.

142 Since its independence in 1991, the young democracy has faced considerable  
143 political, economic, and cultural transformations (Korostenlina, 2013). The nation's  
144 current growing pains have been linked to the citizens' divergent perspectives of the  
145 paternalistic and patriarchal power systems that were embedded into the country's  
146 society while under the Russian Empire during the 1900th century, then the Soviet  
147 Union, now the Russian Federation (Korostenlina, 2013; Magocsi, 2010; Romaniuk  
148 & Gladun, 2015; Zakhosha et al., 2020). The country also suffered from corruption  
149 after its independence, which exacerbated the declining economy and led to an eco-  
150 nomic crisis (Footman et al., 2013; Magocsi, 2010). The crisis divided the country's  
151 eastern and western regions. The country's experts who participated in Korostenlina's  
152 (2013) study characterized present-day Ukrainian society as one with system-based  
153 violence that deprived people of their basic human needs, nurtured paternalistic  
154 and patriarchal systems, and divided by the intergroup comparisons of ethnic  
155 groups. Sources indicated that an increased disparity in the distribution of economic  
156 resources intensified the public health crises with higher rates of transmission of

157 HIV and fluctuation of birth rates (Churakova et al., 2017; Ramachandran et al.,  
158 2019; WHO, 2006; Zaller et al., 2015).

159 Presently, millions of Ukrainians are displaced within the country, uprooted,  
160 and forcibly removed from their homes to escape the warzone or engage in com-  
161 bat (Hamilton, 2019; Office of the High Commissioner, 2019; Roberts et al., 2017).  
162 Since the ATO began in 2014, persons who were internally displaced (IDPs) and  
163 veterans experienced mental disorders at proportionally higher rates compared to the  
164 lifetime rates of the general population (e.g., depression, 22% versus 15% anxiety,  
165 18% versus 15%, posttraumatic stress disorder, 32% versus 8%, [World Bank Group,  
166 2017]). At the time of this study, Ukrainians had lived with the unrelenting stress of  
167 war and trauma in Eastern Ukraine for six years, which could negatively influence  
168 their resilience and well-being.

## 169 Resiliency and Ukrainian Adults

170 Resilience is defined from multiple perspectives and across the human lifespan. The  
171 common threads to understanding psychosocial resilience include the following: (a)  
172 people have situations in their lives where their sense of safety, control, belonging,  
173 and worth are violated deeply; (b) not all people decompensate into psychopathol-  
174 ogy; and (c) most adults can positively adapt from such situations (Southwick et al.,  
175 2014; Walsh, 2016). Research on resilience in families and children has evidenced  
176 that family well-being, parental quality, and child resilience are linked to social sup-  
177 port. Comprehensive literature reviews by Wu et al. (2013) and Liu et al. (2018) dem-  
178 onstrated that the physical and social environments created by parents and other adult  
179 caregivers influenced child development and resilience. The reviews concluded that  
180 parents and adult caregivers that offer children love, well-being, and manageable and  
181 age-appropriate stress levels support the development of resilience behaviors. Moreo-  
182 ver, other researchers contend that family networks have shown beneficial, especially  
183 in war times, because social support helps adults and children exhibit appropriate  
184 developmental needs (Kimhi et al., 2015; Al-Krenawi et al., 2011). Adults and car-  
185 egivers often modeled resilient behaviors for their children and those under their care.

186 Characteristics of resilience are present in parents in Ukraine and are influenced  
187 by indicators of subjective well-being. Mothers and fathers in Ukraine are known  
188 to praise their children regardless of their level of education and financial status  
189 (Burlaka et al., 2019). Women and mothers, as the primary caregivers, serve as the  
190 facilitators of healthy family communication such that praise, listening, collabora-  
191 tive discussions, problem-solving, and empathy are significantly related to children's  
192 mental health (Burlaka et al., 2017; Churakova et al., 2017). However, Burlaka et al.  
193 (2017) found that the parenting quality of families, whether two-parent or single moth-  
194 ers, was influenced by economic status, mental health, educational level of parents, and  
195 less frequent substance use, whereas mothers who are single, lower social class and  
196 less educated lost their parental rights most often due to substance use disorders and  
197 violence from 1999–2008 (Lisogor, & Sarioglo, 2009). Moreover, Churakova et al.  
198 (2017) noted the role of spirituality in the lives of Ukrainian mothers influenced  
199 their coping style and appraisal of life stressors. Churakova et al. (2017) indicated



200 that the 94% female sample showed a significant relationship between avoidance  
201 coping strategies, impulsive and externalizing behaviors, and increased alcohol  
202 consumption risk, while no significant relationship was found between alcohol use  
203 and adaptive coping style of help-seeking, self-control, and applying problem-solv-  
204 ing skills. Mothers' coping style was further correlated with children's behavior by  
205 Burlaka et al. (2019). The study found that children who exhibited externalizing  
206 behaviors were linked to mothers who sought social support and other outward  
207 coping behaviors. A significant negative relationship was noted between children  
208 who exhibited aggressive and defiant behaviors and mothers who utilized positive  
209 reappraisal. Burlaka et al. (2019) suggested that the finding may reflect such moth-  
210 ers' attempts to regulate emotions related to stressful situations. Zakhozha et al.  
211 (2020) investigated adverse childhood experiences, generally in college students.  
212 They found that emotional and physical neglect were reported at higher percent-  
213 ages, 28% and 25%, than emotional and physical abuse, 12% and 11%, associated  
214 with household dysfunction, meaning living with a problem drinker, someone with  
215 a mental health disorder, depression or suicide, or witnessing violence against their  
216 mothers.

217 This body of literature suggested that parents and caregivers in Ukraine are  
218 attempting to model positive stress adaption for children through healthy communi-  
219 cation, spiritual coping, and positive reappraisal. However, the studies also infer that  
220 adults caring for children could be experiencing poor mental health, which might  
221 explain the consistent findings of child emotional and physical neglect. The litera-  
222 ture appeared to affirm Yakushko's (2005) concern that adults with children in the  
223 home may have difficulty "bouncing back" from life stressors and traumatic experi-  
224 ences, which is the basic definition of resilience (Smith et al., 2008). Unfortunately,  
225 the high incidents of psychological distress do not correspond with citizen's utiliza-  
226 tion of mental and behavioral health services.

## 227 **Mental Health Services in Ukraine**

228 Mental health services pre- and post-Soviet Union remained dominated by psychia-  
229 try and followed a path that resulted in subsequent coercion or harm for political  
230 purposes (Voren, 2013). For example, Ukrainians who advocated against commu-  
231 nism were falsely diagnosed with psychiatric conditions, which limited their access  
232 to gainful employment and livable housing. The abuse of psychiatry also led to mil-  
233 lions of involuntary, indefinite hospitalizations of Ukrainians as early as the 1930s,  
234 continuing through the country's independence in 1991 (Voren, 2013). Unsurpris-  
235 ingly, many Ukrainians are suspicious of seeking formal mental health care (Bowen,  
236 2011), which can be evidenced by the observation of a 74% treatment gap between  
237 internally displaced persons and the general populace (Roberts et al., 2017).

238 Civilian Ukrainians often seek mental health support from churches, Protes-  
239 tant and Orthodox, which are highly respected (Bowen, 2011). Marriage and fam-  
240 ily counseling services are usually offered by clergy, who may have received at  
241 least one counseling course during seminary, but no practical training such as an  
242 internship (Bowen, 2011). Additionally, chaplains support the military-connected

243 members and their families, wives, and children. Kalenychenko (2016) stated the  
244 new corps of military chaplains divides functions based on population. One such  
245 group is purposed to establish communication between military members and their  
246 families, which may include spiritual care after losing a husband to war. Others may  
247 provide social services and pastoral care by working with military families, hosting  
248 mental health training, supporting the reintegration of discharged service members,  
249 and presiding over social and cultural events (Kalenychenko, 2016). Overall, stud-  
250 ies on the efficacy of the centralized mental health services in Ukraine have shown  
251 that current services fail to meet the psychosocial and behavioral health support  
252 needs of its citizens (Kreimeyer, 2019; Ramachandran et al., 2019; Roberts et al.,  
253 2017; World Bank Group, 2017; Yankovskyy, 2013; De-identified, 2014). However,  
254 Ukrainian leadership has written legislation to improve the country's health system.

255 Recent reforms to the mental health care system, possibly perpetuated by the con-  
256 flict in the east, were due to the signing of the Concept of Mental Health Devel-  
257 opment in Ukraine (CMHDU), which focuses on updating the system and aligning  
258 practices with international standards and guidelines of protection (Global Mental  
259 Health, 2020). The CMHDU represents the policy and a plan; however, the plan to  
260 reform the mental health system has not been approved. The policy includes inte-  
261egrative care, mental and primary health care services in one location, the establish-  
262ment of community-based and outpatient mental health services, crisis counseling,  
263and the increased utilization of psychosocial interventions through nongovernmental  
264agencies (Global Mental Health, 2020). Little evidence suggests that the CMHDU  
265policy and plan intentionally addresses the needs of parents. Burlaka, Serduik, Nick-  
266elsen, Tkach, and Khvorova, as cited in Burlaka et al., (2019, p. 1291), pointedly  
267state that Ukraine is still in the process of developing sustainable services for chil-  
268dren and families.

## 269 **The Current Study**

270 This pilot study employed newly validated psychological measures that quantify  
271 resilience, stress, and well-being within Ukraine, a country that has limited men-  
272tal health resources for its citizens. The reviewed research suggests that Ukrainian  
273adults' well-being is influenced by their perceived stress due to contextual risk fac-  
274tors such as aggressive foreign occupation, socioeconomic disparities, and a high  
275prevalence of mental health disorders (Global Mental Health, 2020; World Health  
276Group, 2017). Sources demonstrate that these risk factors, coupled with the respon-  
277sibility of caring for a child, may exacerbate adults' perceived stress and promote  
278their utilization of ineffective coping mechanisms (Burlaka et al., 2019; Burlaka  
279et al., 2014; Churakova et al., 2017; Zakhosha et al., 2020). In light of the contextual  
280risk factors, Huppert and So's (2013) finding that resilience contributed meaning-  
281fully to their measure of well-being in European countries may offer insight into  
282how Ukrainians could be managing the unrelenting life stressors despite their sig-  
283nificantly lower ranking on the measure compared to other countries, 17 out of 22.  
284Resilience has been shown to be a universal protective factor cross-culturally and  
285throughout the human lifespan, reducing the intensity and duration of mental health

286 disorders (Galatzer-Levy, 2018; Masten, 2015). Since resilience embeds itself into  
287 the ideas, traditions, and practices for confronting the challenges that arise during  
288 the act of living (Masten, 2015), the study sought to contextualize the subjective  
289 well-being in Ukraine as a process of navigating life stressors by employing resil-  
290 ience. The research question tested the null hypotheses:

291 Do resilience and stress significantly predict well-being among Ukrainian  
292 adults after controlling for children in the home?

293 The results of the pilot study intended to support nonprofit organizations, medi-  
294 cal professionals, and mental health practitioners' ability to provide holistic mental  
295 health care.

## 296 Method

297 The present nonexperimental pilot study investigated the relationship of resilience  
298 and stress in predicting well-being of Ukrainian adults with and without chil-  
299 dren in the home. The study used archival survey data from three measures from  
300 the validation study of the Socioecological Assessment on Individual and Family  
301 Resilience Questionnaire (SAIFR) in Ukraine (De-identified., 2020). The valida-  
302 tion study translated and validated eight scales in the Ukrainian language for use in  
303 a strength-based assessment for individuals and families (De-identified al., 2020).  
304 The informed consent notified respondents that the validation study results would  
305 be used in future research, counseling practice, and to integrate a strength-based  
306 approach in a post-graduate education program.

## 307 Participants and Procedures

308 Participants were Ukrainian-speaking adults, men, and women, who resided in the  
309 country and completed the SAIFR from September 2020 through October 2020.  
310 One hundred twenty-seven ( $N=127$ ) Ukrainians completed the SAIFR. These par-  
311 ticipants were able to read at an equivalent level to the United States' fifth-grade  
312 reading level.

313 The inclusion criteria for the surveys included in the study were as follows: (1) a  
314 response to the sociodemographic variable of number of children in the home and  
315 (2) completion of the three scales, WHO-5 Well-being Index (Bech, 2012), the Per-  
316 ceived Stress Scale (Cohen et al., 1983), and the Brief Resilience Scale (Smith et al.,  
317 2008). The study aggregated these sociodemographic descriptors from the SAIFR:  
318 age, gender, location, language spoken in the home, level of education, economic  
319 status (employment and monthly income), military status, couple and family demo-  
320 graphics (marital status, years in current relationship, number of people in the home,  
321 family composition, relation to family members living in the home), and reported  
322 exposure to trauma and adversity using 14 questions from the Life Events Checklist  
323 (Weathers et al., 2013).

324 G\*Power 3 (Faul et al., 2009) was used to conduct a priori to compute the  
325 required sample size for a linear regression fixed model with  $R^2$  deviation from  
326 zero. The inputs were conventional power of  $1-\beta=0.80$  with  $\alpha=0.05$  to detect a **AQ11**  
327 medium effect size for three predictors (Crowson, 2020). G\*Power calculated a total  
328 sample size of  $N=77$  with a critical  $F=2.730$  for the covariate and two predictors.  
329 Achieved power based on actual sample size was reported in the “Results” section.

## 330 Method

331 Based on the inclusion criteria, 80 participants ( $N=80$ ) from the SAIFR were  
332 included in this pilot study. Table 1 describes the participants. The majority of the  
333 female sample, 93.8% ( $n=75$ ), ranged between the ages of 17 and 59 years old,  
334  $M=31$  ( $SD=10.7$ ), and reported the length of their current relationship short as one  
335 month to as long as 456 months,  $M=120$  months or 10 years ( $SD=109.4$  months or  
336 9.1 years). Of the total sample, 62.5% ( $n=50$ ) indicated their family type as nuclear,  
337 and 26.6% ( $n=21$ ) labeled their families multi-generational. Twenty-one percent of  
338 the sample ( $n=17$ ) identified as military-connected either by self or spouse current  
339 or previous service. The sample was relatively split evenly by the presence of chil-  
340 dren in the home, no = 51.2% ( $n=41$ ) and yes = 48.8% ( $n=39$ ). The sample largely  
341 represents citizens in the Western Region of Ukraine, 87.5% ( $n=70$ ).

342 Additionally, participants reported potentially adverse and traumatic events using  
343 the Life-Events Checklist (Weathers et al., 2013). Participants selected the events  
344 they had experienced or witnessed in their lives. Participants reported severe human  
345 suffering, 46.3% ( $n=37$ ), other stressful experiences, 27.5% ( $n=22$ ), and life-threat-  
346 ening illness or injury, 17.5% ( $n=14$ ) at the highest rates. Eight participants (10%)  
347 reported not having any significant stressful events. Participants did not report expe-  
348 riences with exposure to a toxic substance and captivity.

## 349 Measures

350 The archival data from the SAIFR was secured after approval by the Human Sub-  
351 jects Review at a southeastern university in the United States. De-identified. (2020) **AQ13**  
352 employed convenience sampling to obtain a sample representative of the general  
353 populace. Measures were validated using principal component and internal consist-  
354 ency analyses. The initial validation study’s results are listed with each measure’s  
355 descriptions. Additionally, following Koo and Li (2017), a two-way mixed effects **AQ14**  
356 model was used to report the Cronbach alphas and confidence intervals for the  
357 measures based on the current sample.

## 358 WHO-5 Well-being Index

359 The WHO-5 Wellness Index ([WHO-5], Bech,1998) was developed in 1998 as a  
360 short, self-report measure to evaluate mental well-being, e.g., disease anonymous  
361 (Topp et al., 2015). The WHO includes statements such as “I have felt cheerful  
362 and in good spirits” and “I have felt active and vigorous.” Respondents rate five

**Table 1** Sociodemographic characteristics of participants

Sociodemographic	Total Sample	
	<i>N</i>	%
Gender		
Female	75	93.8
Male	5	6.3
Relationship status		
Single	29	36.3
Married	30	37.5
Living together	12	15.0
Divorced	5	6.3
Remarried	4	5.0
Number of children in the home		
No or one child	57	71.3
Two or more children	23	28.7
Children in the home		
Yes	39	48.8
No	41	51.2
Number of adults in the home		
3 or fewer adults	66	82.5
4 or more adults	14	17.5
Military-connection		
Yes	17	21.3
No	63	78.7
Region of the country		
West	70	87.5
East	10	12.5
Language(s) spoken in the home		
Ukrainian	34	42.5
Russian	26	32.5
Both Ukrainian and Russian	15	18.8
Both and other languages	5	6.3
Employment status		
Full-time	41	51.2
Part-time	20	25.0
Unemployed	19	23.8
Education status		
General	10	12.5
Specialist, Technical, College	5	6.3
Bachelors	22	27.5
Masters	30	37.5
Doctorate	13	16.3
Monthly income in Hryvnia*		
0–2000	16	20.0
2001–4000	4	5.0

AQ12

**Table 1** (continued)

Sociodemographic	Total Sample	
	<i>N</i>	%
4001–8000	15	18.8
8001–12,000	14	17.5
120,001–16,000	10	12.5
16,001–20,000	9	11.3
20,001–25,000	4	5.0
25,001–50,000	4	5.0
Greater than 50,001	2	2.5
Missing	2	2.5

*N* = 80. Standard deviations are presented in parentheses. Missing data was provided to account for 100% of cases. \*In 2020, the average exchange rate for hryvnia to the US dollar was 0.34 for \$1.00 (Exchange-Rates.org, 2024)

363 statements on a scale of 0 (*no time*) to 5 (*all the time*). The score is calculated by  
 364 summing all questions and then multiplying by 4 to obtain the final score. Scores  
 365 closer to zero are interpreted as the worst possible well-being imaginable, and scores  
 366 closer to 100 suggest the best possible well-being imaginable (Topp et al., 2015).  
 367 Persons whose raw score on the WHO equals less than 13 would benefit from fur-  
 368 ther assessment of depressive symptoms because this score suggests poor well-being  
 369 (Dadfar et al., 2018). Index validity for the WHO-5 related to psychiatry and clinical  
 370 psychometrics produced sensitivity values of 0.93 and 0.77 with specificity val-  
 371 ues of 0.65 and 0.89, respectively, using a cut-off score of less than 50 (Topp et al.,  
 372 2015). Sishcka et al. (2020) confirmed Topp et al.’s (2105) assessment of the psy-  
 373 chometric soundness of the WHO-5; however, the researchers’ findings showed the  
 374 importance of using a latent variable model when comparing subjective well-being  
 375 cross-culturally to account for probable variations in the WHO-5 scores. WHO-5  
 376 translated into Ukrainian produced a Cronbach  $\alpha = 0.80$  (De-identified et al., 2020).  
 377 The internal consistency results on the study sample matched those from the valida-  
 378 tion study with 95% CI (0.72 to 0.86).

### 379 Perceived Stress Scale-10

380 The Perceived Stress Scale-10 ([PSS-10]; Cohen et al., 1983) is a 10-item self-report  
 381 designed to tap into how unpredictable, uncontrollable, and overloaded respondents  
 382 find their lives within the last month. Sample items include: “How often have you  
 383 felt that you were unable to control the important things in your life?” “How often  
 384 have you felt confident about your ability to handle your personal problems?” “How  
 385 often have you felt that things were going your way? Respondents use a 4-point Lik-  
 386 ert-type scale, where 0 = *never* to 4 = *very often*. Scores range from 0 to 40, with  
 387 higher scores indicating higher levels of stress. The 10-item scale also demonstrated  
 388 consistent reliability across multiple cultures for research purposes (Lee, 2012). Tay-  
 389 lor (2015) analyzed the psychometric properties of the PSS-10 using item response

390 theory, which resulted in internal consistency of  $\alpha=0.76$ , and a multidimensional  
391 model of two subscales, the perceived helplessness scale ([PHS] six negatively  
392 phrased items) and the perceived self-efficacy scale ([PSES], four positively phrase  
393 items). Cronbach alphas for the subscales were reported as PHS, 0.86, and PSES,  
394 0.82 (Roberti et al., 2006). The PSS-10 translated in Ukrainian produced a Cronbach  
395  $\alpha=0.84$  with subscales of 0.83 PHS and 0.58 PSES (De-identified et al., 2020). On  
396 the current sample, the full scale produced a Cronbach  $\alpha=0.84$  at 95% CI (0.78 to  
397 0.89) with subscales of 0.83 PHS at 95% CI (0.77 to 0.89) and 0.58 PSES at 95% CI  
398 (0.40 to 0.72).

### 399 Brief Resilience Scale

400 The Brief Resilience Scale (Smith et al., 2008) assesses the original definition of  
401 resilience: to bounce or spring back or recover from stress. Statements on the scale  
402 include, “I tend to bounce back quickly after hard times” and “I have a hard time  
403 making it through stressful events.” The 6-item Likert scale is from 1 = *strongly dis-*  
404 *agree* to 5 = *strongly agree*. The self-report yields a sum of 6–30, and then the sum  
405 is divided by the number of questions answered. The established cut-off scores for  
406 the scale interpret low (1.00–2.99), normal (3.00–4.30), and high (4.31–5.00) resili-  
407 ence scores. The scale has shown good internal consistency and test–retest reliabil-  
408 ity in behavioral medicine research. Cronbach’s  $\alpha$  for the one-factor scale was noted  
409 to be between 0.84 and 0.86 (Smith et al., 2008). The BRS translated into Ukrainian  
410 produced a Cronbach  $\alpha=0.83$  (De-identified et al., 2020). Study sample measure  
411 produced Cronbach  $\alpha=0.83$  at 95% CI (0.77 to 0.88).

## 412 Results

413 A total of 127 surveys were completed in the Ukrainian language. The survey was back-  
414 translated using resources from the previously conducted validation study (De-identified,  
415 2020). The translation of open-response demographic questions from Ukrainian to Eng-  
416 lish was performed using online translation software because the statements provided in  
417 response to the variables, region of the country, language spoken in the home, and length  
418 of time in the current relationship did not require interpretation of meaning. Data was  
419 then screened for completeness according to the inclusion criteria. Forty-seven cases  
420 were excluded from the study because participants did not respond to one of the included  
421 scales. The total study sample size was  $N=80$ .

### 422 Data analysis

423 Data analyses were conducted using descriptive statistics and simultaneous multi-  
424 ple regression. The achieved power for the actual sample size of  $N=80$  was calcu-  
425 lated via G\*Power. Sufficient power at  $1-\beta=.82$  was achieved to detect a medium

426 effect, Cohen's  $f^2 = 2.72$ , with  $\alpha = 0.05$ . The outcome variable was subjective well-  
427 being. The predictor variables were psychological resilience and perceived stress.

428 All analyses described in this section were performed using IBM SPSS Statistics  
429 Version 27. Descriptive statistics of the study participants were explored by the vari-  
430 ables of interest. The results for the total sample ( $N = 80$ ) are as follows: Perceived **AQ15**  
431 Stress Scale (PSS-10),  $M = 18.8$  ( $SD = 6.3$ ); Brief Resilience Scale (BRS),  $M = 2.8$   
432 ( $SD = 0.70$ ); and WHO-5 Well-being Index (WHO-5),  $M = 12.7$  ( $SD = 4.3$ ). The  
433 mean scores for the scales were interpreted with cut-off scores as follows: PSS-10 **AQ16**  
434 reflects moderate stress with cut-off scores at 18–29; BRS below 2.99, suggesting  
435 low resilience; and WHO-5 mean equal to less than 13, indicating further evaluation  
436 of depressive symptoms and the possibility of poorer well-being. The descriptive **AQ17**  
437 statistics results for the measures by the categorical variable children in the home  
438 were as follows: no children in the home ( $n = 41$ ), PSS-10,  $M = 18.3$  ( $SD = 6.19$ );  
439 BRS,  $M = 2.84$  ( $SD = 0.71$ ); and WHO-5,  $M = 12.78$  ( $SD = 4.45$ ), and yes children  
440 in the home ( $n = 39$ ), PSS-10,  $M = 19.23$  ( $SD = 6.47$ ); BRS,  $M = 2.81$  ( $SD = 0.70$ );  
441 and WHO-5,  $M = 12.67$  ( $SD = 4.2$ ). Pearson product-moment correlation coefficients **AQ18**  
442 suggested a strong negative relationship between WHO-5 and PSS-10,  $r = -0.71$ ,  
443  $p < 0.001$ . Correlation results also suggested a moderately negative relationship  
444 between PSS-10 and BRS,  $r = -0.43$ ,  $p < 0.001$ , and a moderately positive relation-  
445 ship between WHO-5 and BRS,  $r = 0.35$ ,  $p = 0.001$ .

446 Simultaneous multiple regression was used to investigate perceived stress, as meas-  
447 ured by the PSS-10, and psychological resilience, as measured by the BRS predic-  
448 tive significance of well-being as measured by the WHO-5 among Ukrainian adults  
449 after controlling for whether or not children were in the home. The assumption tests  
450 required for a simultaneous multiple regression were met (e.g., the ratio of cases to pre-  
451 dictor variables, normality, linearity, homoscedasticity and independence of residuals,  
452 absence of univariate and multivariate outliers, and multicollinearity and singularity).  
453 The null hypothesis was tested. Data analysis followed adjustment procedures, mean-  
454 ing the covariate variable was entered into the model before the predictor variables  
455 (Pourhoseinghol et al., 2012). The categorical variable of children in the home, dummy  
456 coded, 0 = no (zero children in the home) and 1 = yes (one or more children in the  
457 home) was entered into the model first and PSS-10 and BRS scores. The results of the  
458 regression were evaluated to determine the extent to which perceived stress and resil-  
459 ience predicted well-being after controlling for children in the home. Soper's (2016)  
460 online calculator was used to determine the confidence intervals and the effect size **AQ19**  
461 for the full model. The simple regression of well-being and children in the home indi-  
462 cated that  $F(1,76) = 0.014$ ,  $p = 0.907$ ,  $R^2 = 0.000$ , and adjusted  $R^2 = -0.013$ , and the full  
463 model with all three variables produced  $F(1,76) = 25.4$ ,  $p < 0.001$ ,  $R^2 = 0.50$ , adjusted  
464  $R^2 = 0.48$ , and Cohen's  $f^2 = 0.92$  at 95% CI (0.491 to 1.695). The results are in Table 2.

465 An examination of each step of the regression model showed that children in  
466 the home produced no significant changes in variance. Taken together, 50% (48%  
467 adjusted) of the variance of well-being was predicted by scores on the perceived  
468 stress and brief resilience scales. The standardized coefficient,  $\beta = -0.68$  (par-  
469 tial  $r = -0.66$ ) showed that the PSS-10 significantly predicted well-being in size  
470 and direction. Resilience in the regression model was positively correlated with  
471 well-being and negatively correlated with stress; however, the relationship did not



**Table 2** Correlations and multiple regression of predictor variables of well-being after controlling for children in the home

Variables	1	2	3	4	B	95% CI for B		SE B	$\beta$	$R^2$	$\Delta R^2$
						LL	UL				
1. WHO-5		-0.71**	0.35*	-0.01							
2. PSS-10			-0.43**	0.07							
3. BRS	0.35*	-0.43**		-0.02							
4. Children in the home	-0.01	0.07	-0.02								
Step 1										0.00	-01
Constant					12.78	11.43	14.13	0.68			
Children in the home					0.11	-2.05	1.82	0.97	-0.01		
Step 2										0.5	0.48
Constant					20.43	15.77	25.1	2.34			
Children in the home					0.31	-1.08	1.72	0.7	0.37		
BRS					0.33	-0.77	1.43	0.55	0.05		
PSS-10					-0.47	-0.59	-0.35	0.06	-0.68		

CI confidence intervals, LL lower limit, UL upper limit. \* $p = 0.001$ , \*\* $p < 0.001$

472 significantly contribute to the full regression model,  $\beta = 0.053$  (partial,  $r = 0.07$ ). The  
473 unique contribution of each predictor variable showed perceived stress accounted  
474 for 43.5%, while resilience uniquely explained 0.5% of variance. The alternative  
475 hypothesis was accepted as perceived stress and resilience significantly predicted  
476 well-being in adults exceeding the presence of children in the home.

477 A regression equation was developed to predict well-being as measured by the  
478 WHO-5 accounting for children in the home using perceived stress and resilience.  
479 WHO-5 =  $20.434 + (-0.013) + \text{PSS-10} (-0.684) + \text{BRS} (0.053)$ . The equation indi- **AQ20**  
480 cated that mean scores on the predictive variables would produce a well-being score  
481 of 7, well-below the cut-off score for screening for depressive disorders, whereas  
482 perceived stress scores of  $M = 12.5$ , one standard deviation below the mean and  
483 resilience scores of  $M = 3.5$ , and one standard deviation above the mean generated a  
484 well-being of 12.

## 485 Discussion

486 This pilot study investigated resilience and stress to predict well-being to advance  
487 Huppert and So's (2013) findings on well-being as human flourishing in European  
488 countries, more specifically, former Soviet-Union nations like Ukraine that ranked  
489 at lowest in all domains. The variable of children in the home was included as a **AQ21**  
490 covariate because research and national reports about families in Ukraine suggested  
491 that adults, parents, and caregivers' ability to care for children might be impaired  
492 by psychological distress related to chronic stressors and unresolved trauma. This  
493 exploratory study tested the hypothesis that there was no relationship between per-  
494 ceived stress and resilience in predicting subjective well-being in Ukrainian adults  
495 while controlling for the presence of children in the home during the coronavirus  
496 pandemic and six years into the Anti-Terrorism Operation (ATO).

497 The full regression model showed a significant association between stress and  
498 resilience when predicting the well-being of adults; however, whether or not chil-  
499 dren were in the home did not vary Ukrainian adults' scores on the well-being scale.  
500 Additionally, an assessment of the model revealed that perceived stress significantly  
501 varied with well-being, 43%, clearly indicating perceived stress's influential relation-  
502 ship to well-being. The bivariate correlation between resilience and well-being was  
503 moderate in strength with a small effect size while only accounting for 5% of the  
504 regression model. These results offer several contributions to the body of research  
505 about Ukrainians and their well-being.

506 First, perceived stress was an influential variable in understanding Ukrainians'  
507 well-being, expanding Huppert and So's (2013) seminal study on defining flourish-  
508 ing as a high quality of mental health. Particularly, perceived stress had an inverse  
509 relationship with well-being, bivariately and predictively. The result supported the  
510 need to include a conceptualization of psychological stress like Lazarus' (1999) as a  
511 factor when exploring characteristics that either promote or hinder subjective well-  
512 being in Ukrainian adults. Perceived stress measured in this study quantified Ukrainians'  
513 perceptions of unpredictability, uncontrollability, and the degree to which they felt  
514 overloaded by their lives. The result showed that higher scores on the perceived

515 stress scale were correlated with lower scores on the well-being scale, indicating  
516 psychological distress and a possible mental health disorder, like depression, a con-  
517 dition known to prevail in Ukraine (Global Mental Health, 2020). Alternatively, the **AQ22**  
518 finding inferred the opposite; lower scores on the perceived stress suggested predict-  
519 able, controllable, and manageable life stressors were associated with higher scores  
520 on the well-being scale. This finding corresponds to Diener et al. (2017) emphasis  
521 on the hedonic and eudaimonic characteristics of well-being because the Ukrainian  
522 women in the study had perceived stress scores in the moderate range. Specifically,  
523 perceptions of environmental stressors that were positively associated with sense of  
524 self-efficacy and agency during the coronavirus pandemic and the ATO likely varied  
525 with positive well-being. Overall, the result suggested that stress management, or  
526 the lack thereof, was significant in predicting well-being in Ukraine, a former Soviet  
527 Union country.

528 Second, the study found that resilience made an insignificant contribution to the  
529 prediction of well-being scores, but was negatively correlated with perceived stress.  
530 The small contribution of resilience in this study does align with Huppert and So  
531 (2013), who found that Ukrainians' score on the resilience measure was the sec-  
532 ond lowest overall, leaving Bulgaria with the lowest score. Unlike Huppert and So  
533 (2013), who found that the construct contributed to the 56% of the explainable vari-  
534 ance in overall well-being, the results of the current study implied the degree of  
535 the construct within the Ukrainian sample blunted its relationship with well-being.  
536 Study results indicated a mean of low resilience, which positively correlated with  
537 well-being and negatively associated with perceived stress, but contributed an insig-  
538 nificant amount of explainable variance. Huppert and So (2013) noted that the con-  
539 textual factors of limited access to material resources, political corruption, and his-  
540 torical trauma pervasive in Soviet Union countries could negatively influence the  
541 well-being of these countries. The current measure of resilience, coupled with the  
542 intergenerational influence of Ukrainian history, may not have uniquely contributed  
543 to the overall model because of the inherent challenges of bouncing back or recover-  
544 ing during personal and social adversities like a mandated quarantine and an ongo-  
545 ing violent conflict.

546 Third, children in the home did not meaningfully control any variance in well-  
547 being scores. This result was different from Burlaka et al. (2017, 2019) and Chura-  
548 kova et al. (2017), who found that life stressors of financial distress, exposure to  
549 intimate partner violence, and help-seeking behaviors negatively influenced parent-  
550 ing. These studies suggested that these contextual risk factors may disrupt adults in  
551 parental role capacity to positively adapt and use ineffective coping strategies such  
552 as maladaptive emotion regulation. However, this study indicated that children in the  
553 home did not change adults' perceptions of their subjective well-being. The result  
554 also did not corroborate previous findings that children enhance adult resilience  
555 (Kimhi et al., 2015; Wu et al., 2013). Adults with and without children in the home  
556 scored in the low range on their ability to bounce back. The study results suggested  
557 that participants likely align with Libanova et al. (2020) report that personal happi-  
558 ness makes a meaningful contribution to subjective well-being in Ukraine. It also  
559 supported previous studies by Yakushko (2005), Global Mental Health (2020), and  
560 De-identified (2014), which concluded that the high rates of mental health disorders

561 and environmental stressors have a greater influence on perceived stress in adults in  
562 Ukraine. The study results indicated that the adults' psychological well-being in the  
563 current study was not significantly related to the presence of children.

564 Fourth, the study results also aligned with Libanova et al. (2020) by documenting  
565 lower resilience and subjective well-being in Ukrainians, especially, women. The  
566 lower well-being measured by the WHO-5 suggested further assessment for depres-  
567 sive disorders, which has been shown to thwart resilience-promoting behaviors and  
568 thoughts such as adaptive and prosocial behavior, cognitive flexibility, and positive  
569 outlook (Bonanno & Mancini, 2011; Liu et al., 2018; Troy & Mauss, 2011). The  
570 findings infer that greater capacity to regulate emotions had an inverse relationship  
571 between stress, which corresponded with prior cross-cultural research by Galatzer-Levy  
572 et al. (2018), Liu et al. (2018), DeCarvalho and Whealin (2012), and McCarffery  
573 (2011), Ozbay et al. (2007), and Southwick et al. (2016). These studies indicated **AQ23**  
574 that affect and emotion regulation and social support are critical characteristics for  
575 people to bounce back from adversity and trauma. As such, the result suggested low  
576 resilience was correlated with low well-being noting the possible psychosocial chal-  
577 lenges related to the convergence of stressors like the coronavirus pandemic and the  
578 ATO.

### 579 **Limitations of the Study**

580 The pilot study has limitations that should be considered when interpreting the  
581 results and their generalizability. The study used self-report instruments, and the  
582 accuracy of the findings is limited to the respondents' truthfulness. Participation  
583 was voluntary, and no incentive was provided, yet consideration must be given to  
584 participation bias. Since the study was conducted during the coronavirus pandemic,  
585 participants' responses may be more reflective of the time and less of their overall  
586 experience with stress, well-being, and resilience. The use of a resilience scale that  
587 measured bouncing back may also have been a limitation of the study. The circum-  
588 stance in Ukraine at the time of the study may have attributed to the insignificant  
589 influence of the measure. Notably, 93.8% of the convenience sample used in the  
590 study were women, which suggested the findings may not apply to Ukrainian men.  
591 The study's sample size limits its applicability regardless of the statistical power  
592 achieved because it was drawn from a convenience sample. The statistical method  
593 further limits the findings of the study to detect associations and shared variance,  
594 not causation. Even with these limitations in mind, the findings of this study offer  
595 practical suggestions to nongovernmental agencies, policymakers, and helping pro-  
596 fessionals in Ukraine. They also add to the existing research on resilience, perceived  
597 stress, and well-being.

### 598 **Study Implications**

599 Ukraine is a young democracy battling a foreign aggressor. Citizens undoubtedly  
600 will need individual, marriage, and family counseling services to treat mental health  
601 conditions associated with the current war. Interestingly, the results of this pilot

602 study suggested that alongside being prepared to treat post-traumatic stress disorder,  
603 anxiety, and depression, counselors should consider assessing and treating clients'  
604 psychological stress response to their daily experiences. Counselors could integrate  
605 Lazarus (1999) conceptual framework to understand clients' appraisal of the  
606 life circumstances and their capacity to navigate them effectively. Then, counselors  
607 could utilize resilience promoting interventions such as affirming beliefs, emotion  
608 regulation techniques, mindfulness, behavior adaptation, and social supports to pre-  
609 pare clients to recover or bounce back from daily adversities (Bonanno & Mancini,  
610 2011; Lui et al., 2018; Troy & Mauss, 2011; Wu et al., 2013). These interventions  
611 have shown to improve healthy living habits; reduce hopelessness, helplessness, and  
612 avoidance behaviors; and allow people to modify their behaviors to successfully  
613 respond to stressful circumstances. Notably, Masten (2015) found that parents and  
614 other significant figures indirectly influence children's response to trauma and adver-  
615 sity. Improving Ukrainian adults' ability to manage life stressors, especially women,  
616 could influence positive outcomes for children. The study immediately informs  
617 the field of counseling in Ukraine by evidencing the importance of systematically  
618 addressing psychological stress for adults with and without children in the home to  
619 improve subjective well-being.

620 The study results also imply the need to infuse the treatment of psychological  
621 stress using the prevention paradigm (Conyne, 2015; Funk et al., 2003). The study  
622 findings could aid nongovernmental agencies, military chaplains, and health profes-  
623 sionals in creating multilevel interventions to manage life stressor and enhance resil-  
624 ience within the general populace and people in parental roles. Nongovernmental  
625 agencies could distribute mental wellness materials, including signs and symptoms  
626 of stress and health tips, during one-day events or via pamphlets or other materials  
627 provided to constituents. The agencies could offer community and parenting sup-  
628 port groups to teach stress management techniques like setting short-term goals and  
629 exercising. Support groups could offer resources about parenting while stressed and  
630 facilitate informal peer mentoring. Military chaplains might also enhance social  
631 support to individuals and families by incorporating volunteer opportunities for  
632 other military-connected persons. The clergy could offer church-sponsored social  
633 events to reduce stress and develop community relationships that cultivate optimism.  
634 Promoting resilience through community engagement could decrease the negative  
635 implications of the ongoing war with Russia, while increasing Ukrainians' sense of  
636 self-efficacy and social support.

637 The three self-report instruments used in this study proved useful, and their  
638 application in Ukraine does appear utile for health professionals. Both medical and  
639 mental health professions could utilize the findings to integrate strength-based inter-  
640 ventions such as wellness counseling into the care of adults. Psychiatrists and coun-  
641 selors could use these instruments to demonstrate the restorative nature of thera-  
642 peutic services, which might improve Ukrainians' trust in mental health services.  
643 Both professions could apply the results of the instruments at the individual level  
644 to create treatment plans and monitor progress. They could use the scores from the  
645 scales along with their clinical knowledge to develop treatment plans that employ  
646 secondary and tertiary interventions such as mental health counseling, medication,  
647 nutrition, exercise, and sleep hygiene. Treatment goals could include increasing

648 well-being, resilience, and improved stress management. The re-administration of  
649 the instruments throughout care could inform service providers with a mechanism to  
650 explore health as both physical and mental functioning.

651 Broadly, the pilot study showed the importance of including both eudaimonic and  
652 hedonic measures to predict well-being in Ukraine. Researchers and counselors alike  
653 should consider incorporating these or similar scales into future research and clinical  
654 practice. These measures could enhance the contextualization of findings about  
655 study participants' perspectives of subjective well-being research. Counselors could  
656 incorporate stress and resilience self-report scales to understand clients' distress,  
657 improve treatment planning, and monitor clinical progress more comprehensively.  
658 The inclusion of psychological variables that account for the people's perceptions  
659 of daily life stressors and their ability to recover from them can provide researchers,  
660 medical doctors, and counselors with vital information about the material and psychosocial  
661 needs of clients. The practical application of these instruments would aid  
662 practitioners, especially professional counselors, in embracing a holistic approach  
663 to medical and mental health care as the country transforms its healthcare system to  
664 meet the needs of citizens.

## 665 **Future Research Directions**

666 Additional studies on resilience in Ukraine should continue to identify the cultur-  
667 ally contextual risk and strategies to cultivate universal protective factors. Future  
668 research should begin with replicating this present study on a national scale to deter-  
669 mine generalizability. The national study should consider including measures that  
670 specify the various domains of resilience. Moreover, a quantitative study investigat-  
671 ing individual and family resilience alongside associated stress factors across family  
672 characteristics, including single-parent homes, would provide insight into the needs  
673 of Ukrainians' well-being. Studies could also explore the experience of men and  
674 fathers' well-being and resilience, in particular, males' influence on families and the  
675 lives of children. Future research could also include experimental and quasi-exper-  
676 imental designs administering these scales to measure change over time in Ukraine  
677 and across the globe. Studies focused on mental health therapies, public health  
678 interventions, and policies that promote resilience and improve stress management  
679 to facilitate subjective well-being at the individual, community, and societal levels  
680 would advance this line of research.

## 681 **Conclusion**

682 The results of this pilot study provide initial findings of resilience, perceived  
683 stress, and subjective well-being in Ukrainian adults after controlling for children  
684 in the home. Findings suggested that services and programs designed to reduce  
685 psychological stress and promote resilience would help mitigate the negative  
686 effects of historical and present-day adversities that have been linked to the high  
687 prevalence of depression, anxiety, and substance use disorders. Counselors and

688 other helping professionals could play an essential role in improving the health  
689 of Ukrainians. Uniting Ukraine through its endeavors to adapt positively after  
690 trauma and adversity must be a national effort grounded in well-being science. **AQ25**

691

## 692 **Declarations**

693 **Competing Interests** The authors declare no competing interests.

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