



Enduring strengths: How childhood adversity shapes adult resilience in Kosovo

Kaltrina Kelmendi^{a,*}, Sherry Hamby^b

^a Department of Psychology, University of Prishtina, Nena Tereza str., nn, 10000, Prishtina, Republic of Kosovo

^b University of the South & Life Paths Research Center, Sewanee, TN, USA

ABSTRACT

This study investigates how adults who faced childhood adversity develop resilience, using the Resilience Portfolio Model to assess the impact of early victimization on adult well-being and posttraumatic growth. A sample of 689 adults aged 18 to 60 (average age 25.2 years, SD = 9.62) was recruited online in Kosovo, a collectivist and post-conflict society. Participants completed a survey on youth victimization, psychosocial strengths, subjective well-being and posttraumatic growth. Findings from the study show that 93% experienced some form of victimization, including 40% who were exposed to parental violence. Blockwise logistic regressions indicated that poly-strengths (an indicator of the breadth of one's resilience portfolio), sense of purpose, optimism, and religious meaning making were associated with higher levels of posttraumatic growth, controlling for polyvictimization and demographics (total $R^2 = 0.39$). Poly-strengths, sense of purpose, optimism, and psychological endurance were associated with higher subjective well-being (total $R^2 = 0.34$). Unexpectedly, some strengths were associated with lower posttraumatic growth, including coping, anger management, and moral-based meaning making. Findings from this highly victimized sample show that several strengths seem promising in promoting resilience. Intervention and prevention programs should consider focusing on promoting a sense of purpose or broadening resilience portfolios. More research is needed in other collectivist and post-conflict societies.

1. Enduring strengths: How childhood adversity shapes adult resilience in Kosovo

Research has consistently demonstrated a connection between traumatic or adverse childhood experiences and compromised physical and mental health outcomes (Beilharz et al., 2020; Gilbert et al., 2015; Leza et al., 2021). Additionally, research indicates that adverse childhood experiences rarely occur in isolation. Rather, they are often intricately intertwined with contextual risk factors and other adversities; this finding is well established in polyvictimization research (Finkelhor et al., 2011). The accumulation or 'dosage' of adversities significantly contributes to the development of mental health issues, behavioral problems, and negative health impacts (Choi et al., 2019; Hamby, Grych, & Banyard, 2018; Ungar, 2015). Nonetheless, many individuals who have experienced trauma demonstrate resilience, using their individual assets and external resources to achieve healthy functioning and wellbeing (Bonanno, Wortman, & Nesse, 2004; Hamby, Grych, & Banyard, 2018; Luthar et al., 2000). Unfortunately, most research on resilience has been conducted in Western, Industrialized, Educated, Rich, and Developed (WEIRD) countries (Henrich, Heine, & Norenzayan, 2010). This study uses the resilience portfolio model (RPM) to understand how individuals navigate childhood victimization (Grych et al.,

2015; Hamby, Grych, & Banyard, 2018). The portfolio element of the RPM recognizes that different people and different communities will have different combinations of strengths, making this model particularly well suited for cross-cultural research (Hamby, Grych, & Banyard, 2018; Moisan et al., 2019; Gonzalez-Mendez & Hamby, 2021). This is the first quantitative RPM study in a collectivist and post-conflict society, focusing on Kosovo in Southeastern Europe.

1.1. Adverse childhood experiences and polyvictimization

Childhood adversity encompasses various traumatic events, including physical and emotional maltreatment, family violence, exposure to parental substance abuse, and other similar experiences including peer and community victimization (Felitti et al., 1998; Finkelhor et al., 2011). Global research indicates that adverse childhood experiences (ACEs) can have long-term health impacts throughout a person's life (Hughes et al., 2017). This includes immediate effects on health and education, as well as an increased risk for mental health issues and engagement in risky behaviors (Campbell et al., 2016; Gilbert et al., 2015; Su et al., 2015). A recent systematic review reveals significant long-term health impacts of childhood adversities, based on research in Europe and North America (Bellis et al., 2019). In Europe,

* Corresponding author. Department of Psychology, University of Prishtina, Nena Tereza str., nn, 10000, Prishtina, Republic of Kosovo.

E-mail addresses: kaltrina.kelmendi@uni-pr.edu (K. Kelmendi), sherry.hamby@sewanee.edu (S. Hamby).

the review found an average prevalence rate of 23.5% for individuals experiencing one form of childhood adversity and approximately 18.7% for those with two or more experiences.

The impacts of ACEs include mental health issues such as anxiety, depression, trauma symptoms, and substance use (Bellis et al., 2019). ACEs research also indicates that experiencing childhood adversities significantly elevates the risk of various physical health issues (Bellis et al., 2019). Similar work on the cumulative dosage of victimization, called polyvictimization, also shows that child victimization is associated with trauma symptoms and other problems in the US and around the world (e.g., Aho et al., 2016; Finkelhor et al., 2011; Radford et al., 2022). Polyvictimization, which encompasses the cumulative experience of multiple types of victimization, expands the original ACEs model beyond family problems to include peer and community victimization (Brooks et al., 2023). In Kosovo, violence is present not only in the family but also at different levels of social ecology, including schools (Arenliu et al., 2022; Kelmendi et al., 2023). This broader social ecological lens is also consistent with the RPM approach.

1.2. Resilience Portfolio Model

The RPM is a strengths-based approach to understanding the processes involved in overcoming trauma (Grych et al., 2015; Hamby, Grych, & Banyard, 2018; Hamby et al., 2018). This model, which combines insights from positive psychology, posttraumatic growth, and coping, categorizes strengths into three areas: regulatory, interpersonal, and meaning making. Regulatory strengths focus on managing emotional and behavioral impulses. Interpersonal strengths are about building and maintaining healthy relationships and utilizing social ecological resources. Meaning-making strengths involve connecting to something greater than oneself (Hamby, Grych, & Banyard, 2018). This model underscores resilience as a dynamic process, emphasizing the interplay of individual, familial, and community strengths in overcoming adversity. This model views resilience as an active process of navigating through trauma, incorporating not just individual strengths but also leveraging familial and community resources, underscoring its dynamic and multifaceted nature.

Previous research using the RPM as a framework has primarily been conducted in North America and Western Europe (e.g., Hamby, Grych, & Banyard, 2018; Moisan et al., 2019; Gonzalez-Mendez et al., 2021). This work has shown that various psychosocial strengths are linked to improved mental health and subjective well-being. However, the RPM was a useful and effective framework for organizing existing resilience literature in a scoping review focused on southeastern Europe and a qualitative study of resilience among emerging adults in Kosovo (Hamiti et al., 2024; Kelmendi, Mulaj, Zymberi, & Kadiri, 2022).

1.3. Posttraumatic growth (PTG) and subjective well-being (SWB) after childhood adversity

Although a significant portion of research on adversity and victimization has concentrated on their detrimental effects, particularly regarding anxiety, depression, and other mental health concerns, there is an increasing recognition that many traumatized individuals nonetheless achieve high functioning. In the RPM, positive outcomes following trauma are indicators of resilience, and the psychosocial strengths are the mechanisms by which these positive outcomes are achieved. One such positive outcome is posttraumatic growth. As defined by Tedeschi and Calhoun (2004), PTG refers to positive psychological changes that emerge from the process of coping with trauma. PTG can often be seen in terms of changes in life priorities, changes in philosophical outlook, and spiritual development, often emerging from the cognitive reconstruction that follows trauma (Malhotra & Chebiyan, 2016). Research has established connections between PTG and various processes (Hamby et al., 2022), such as meaning making (Park, 2010), cognitive restructuring (Gangstad et al., 2009), and social support

(Brooks et al., 2019; Ning et al., 2023; Paul et al., 2010). Past RPM research has found that numerous strengths were associated with PTG in samples with high levels of adverse childhood experiences. Psychological endurance and poly-strengths (an index of the diversity of strengths in a person's resilience portfolio) were associated with PTG in a Spanish sample (Gonzalez-Mendez et al., 2021). In U.S. studies, psychological endurance, sense of purpose, teacher support, coping, religious meaning making, compassion, emotion awareness, and poly-strengths were associated with greater PTG (Brooks et al., 2023; Hamby, Grych, & Banyard, 2018).

Conversely, well-being is often characterized by subjective evaluations of life satisfaction and the fulfillment of developmental tasks or competencies in several areas of functioning (Bonanno et al., 2004; Masten & Obradović, 2006). Previous RPM research in Spain and the U. S. has shown that many psychosocial strengths also support subjective wellbeing following child victimization or intimate partner violence. These include poly-strengths, endurance, sense of purpose, coping, optimism, and generativity (Brooks et al., 2023; Gonzalez-Mendez & Hamby, 2021; Hamby, Grych, & Banyard, 2018). In the field of strength-based approaches, research has uncovered numerous correlates associated with improved mental health.

1.4. Kosovo context

Kosovo is a collectivist, majority Muslim society in the Balkan region of Southeastern Europe. Southeastern Europe's recent experiences with war trauma have significantly impacted regional mental health, highlighting a need for more research in resilience and trauma (Ahern et al., 2004; Fanaj & Melonashi, 2017; Ringdal & Ringdal, 2016; Spiegel & Salama, 2000; Turner et al., 2003; Wang et al., 2010). This is evident from increased mental health disorder rates in the war-affected Balkans compared to non-conflict zones (Priebe et al., 2010), indicating persistent health disparities in former Yugoslav nations (Eikemo et al., 2010). Furthermore, existing research highlights a significant prevalence of domestic violence and its co-occurrence with violence against children and exposure to parental violence in Kosovo, a pattern also observed in polyvictimization research (Kelmendi et al., 2019; Kelmendi, 2015).

Southeastern Europe, particularly post-conflict societies like Kosovo, has seen limited resilience and trauma research. Kelmendi and Hamby (2023) reviewed existing science on resilience in Southeastern Europe. This scoping review, which included 42 studies, revealed how various cultural values, norms, and social ecologies contribute to resilience in this region. Some key strengths, such as social support and a sense of purpose, were found to parallel findings from the US and Western Europe. The study also highlighted more culturally-specific factors like dignity, family solidarity, and nationwide meaning making. The review revealed that much of the resilience research that does exist is largely atheoretical and often focuses on risk factors instead of strengths, even for research on positive outcomes. The review suggests a need for more theoretically informed and comprehensive research on resilience in collectivist and post-conflict societies like Kosovo.

1.5. The present study

The current study investigates the impact of adverse childhood experiences and a spectrum of psychosocial strengths on posttraumatic growth (PTG) and subjective well-being within the Kosovo context. This research aims to bridge several knowledge gaps, notably applying the RPM framework in a context not previously studied and enhancing the understanding of how strengths correlate with PTG and subjective well-being. Additionally, the comprehensive examination of a wide range of adverse childhood experiences and poly-strengths in this study holds significant potential for informing the development of more effective intervention and prevention strategies to foster resilience in the aftermath of adversity. The strengths included in this study were chosen to sample from each of the RPM domains and to include strengths that have

shown positive associations with outcomes in prior studies. Given that this is the first quantitative RPM study in Kosovo and the first in a collectivist or post-conflict society, no formal hypotheses are made, but we generally expect higher levels of strengths to be associated with better outcomes.

2. Method

2.1. Participants

The study involved 689 participants residing in Kosovo (Table 1), with a majority (68%) residing in urban areas. The sample was predominantly women (73%), 25% men, 1% agender and 1% preferred not to disclose. Their ages ranged from 18 to 70 years, with a mean age of 25.24 years (standard deviation = 9.62). Educational backgrounds varied: 48.5% of participants had completed a bachelor's degree, 38.5% were in the process of completing their undergraduate studies, 11.9% held master's degrees, and 1.1% were pursuing doctoral studies. Regarding employment status, 46% of the participants reported being employed and 54% were not currently working. Compared to the general Kosovo population, the sample included more women, was slightly younger, and better educated.

2.2. Procedure

Participants were recruited via in-person word-of-mouth, using snowball sampling, and were then provided a link to an online survey. In this study, we included participants aged 18 to 70 to capture diverse perspectives on adversity across different life stages. Research indicates that individuals exhibit varying levels of resilience and coping strategies depending on their age. Including a larger and more varied sample enhances the statistical power of our findings and improves the generalizability of the results. This approach allows us to contextualize our findings within the broader literature on adversity.

Informed consent was obtained from all participants. All responses were anonymous. The ethical committee of the Faculty of Philosophy at the University of Prishtina approved the study. At the end of the survey, participants were provided a list with information on community mental health resources. No incentives were provided to participants.

2.3. Measures

The instruments used in this study were adapted from the prior research of Hamby, Grych, and Banyard (2018). Detailed information about these measures is accessible at the Life Paths Research Center's website; <https://www.lifepathsresearch.org/measures/>. These

measures were translated into Albanian and validated in a pilot study (Kelmendi & Hoxha, 2021). Unless specified otherwise, all strength measures employed a 4-point Likert scale, ranging from 0 (not true about me) to 4 (mostly true about me). In every instance, higher scores represented greater strengths. Additionally, socio-demographic data, including age, gender, educational background, employment status, and area of residence (urban or rural), were collected from participants.

2.3.1. Childhood adversities

Childhood adversities were measured using the Juvenile Victimization Questionnaire (adapted from Hamby et al., 2004, pp. 10–18), consisting of eight items on peer and community, six questions on caregiver maltreatment, and five questions on exposure to parental violence, each with a dichotomous response of “yes” or “no”. Example questions include: “During your childhood, did any kids, even a brother or sister, pick on you by chasing you, grabbing you, or by making you do something you didn't want to do?; “When you were a child, did you get scared or feel really bad because grown-ups called you names, said mean things to you, or said they didn't want you?;” and “During your childhood, did one of your parents get kicked, choked, or beat up by another parent?” Responses were summed to create an index of polyvictimization to indicate exposure to childhood adversities ($\alpha = 0.84$).

2.3.2. Regulatory strengths

Endurance (END) was measured using the Psychological Endurance Scale (Hamby et al., 2015, six items; $\alpha = 0.64$; example item: “People rely on me through good times and bad”). Anger management (AM) was measured through five items, assessing control of aggressive thoughts and actions ($\alpha = 0.65$; example: “I can calm myself down when I am upset”). Coping (CO) assesses cognitive, emotional, and behavioral methods of dealing with problems (13 items; $\alpha = 0.81$; example: “When dealing with a problem, I spend time trying to understand what happened”). Emotion Awareness (EA) assesses the ability to monitor and identify one's own feelings (two items; $\alpha = .72$; example: “I am aware of my feelings”). Emotion regulation (ER) assesses one's ability to maintain stability and manage distressing feelings (four items; $\alpha = .79$; example: “I have difficulty making sense of my feelings”).

2.3.3. Meaning making strengths

In terms of meaning making, several constructs were assessed using the instrument adapted from Hamby, Grych, and Banyard (2018). Meaning making–family care (MMFC) assesses the extent to which individuals help their loved ones and work on strengthening family ties (five items; $\alpha = .78$; example: “I plan regular family gatherings”). Meaning making–morals (MMO) assesses the extent to which individuals find meaning through adhering to moral or ethical standards of behavior (four items; $\alpha = .74$; example: “I make sure that each day I am doing the right thing”). Meaning making, self-oriented (MMSF) assesses how individuals engage in activities to invest in themselves (four items; $\alpha = .78$; exp: “I try to act and make choices like people who are successful”). Religious meaning making (RMM) assesses the extent to which individuals engage in religious and spiritual practices to find meaning in their lives (six items; $\alpha = .83$; example: “My faith or spiritual beliefs affect my views on other things”). Sense of purpose (PU) assesses the degree to which an individual has a sense of meaning in life and a reason for living (three items; $\alpha = .76$; example: “My life has a clear sense of purpose”). Optimism (OP) assesses the degree to which an individual has a positive overview of life (two items; $\alpha = .65$; example: “I hardly ever expect things to go my way”).

2.3.4. Interpersonal Strengths

Compassion (CoP) assesses the degree to which an individual displays care and concern for others and is motivated to help them (six items; $\alpha = .74$; example: “My heart goes out to people who are unhappy.”). Social Support (SS) focuses on support from friends and non-parent adults (six items; $\alpha = .84$; example: “I can talk about my problems with my friends”).

Table 1
Sociodemographic characteristics of participants.

Sociodemographic characteristic	Percentage	Mean (SD)
Age		25.24 (9.62)
Gender		
Women	73%	
Men	25%	
Agender/nonbinary	1%	
Prefer not to specify	1%	
Education		
Undergraduate studies in process	39%	
Bachelor studies	49%	
Master studies	12%	
Postgraduate studies	1%	
Employed		
Yes	46%	
No	54%	
Residence		
Urban	68%	
Rural	32%	

2.3.5. Posttraumatic Growth

Posttraumatic Growth (PTG) refers to positive outcomes as described by individuals who have experienced adverse or stressful events. The Posttraumatic Growth Inventory was developed by [Tedeschi & Calhoun in 1996](#) and included 21 items that assessed the positive impact of negative events. A 9-item short form was later developed by [Hamby et al. \(2015\)](#). This measure assesses increased strengths, spiritual change, new life possibilities, and appreciation of life (nine items; $\alpha = .89$). Respondents were asked to “Answer these questions about the most stressful event you experienced in the past year.” A sample item is “*I changed my priorities about what is important in life*”).

2.3.6. Subjective well-being

Subjective well-being encompasses satisfaction with the quality of life and represents an attempt to move beyond mental health symptomology (or its absence) as an outcome. These 13 items were previously used in resilience portfolio research in the U.S. ([Hamby, Grych, & Banyard, 2018](#)). A sample item is: “The conditions of my life are excellent”; $\alpha = 0.95$.

2.4. Data analysis

Poly-strengths, a measure of the breadth and diversity of a person’s resilience portfolio, was defined as the total number of 14 strengths that each individual reported at above average levels (>0.5 SD), following procedures established in [Hamby, Grych, and Banyard \(2018\)](#). Descriptive statistics for study variables (mean, SD, and range) are in [Table 2](#). Pearson correlations were conducted between study measures. Two blockwise logistic regression analyses were used to assess the contribution of adversities and poly-strengths on subjective well-being and PTG, while controlling for demographics, using the R studio package. For the purpose of these analyses, we dichotomized the scores on PTG and SWB based on the mean. Prior resilience portfolio research has adopted a similar approach to identify predictors of above-average functioning.

3. Results

3.1. Victimization experiences in the sample

Regarding youth victimization, 92.3% of participants reported victimization from peers and community, 72.1% experienced exposure to domestic violence, and 40.2% experienced victimization from caregivers. The most prevalent forms of victimization were seeing someone being threatened without a stick, rock, knife, or gun (72%), followed by being scared or feel really bad because kids were calling you names or

saying mean things (61.7%) and seeing someone attacked with a stick, stone or knife (60.1%).

In terms of polyvictimization, 92.9% (more than 9 in 10 participants) experienced at least one form of victimization, 17.1% experienced two kinds of victimization, and 64.6% experienced three or more types of victimization. Thus, more than four in five participants (81.7%) are polyvictims (experienced two or more types of victimization). On average, respondents reported several types of victimization ($M = 6.62$, $SD = 4.34$).

3.2. Bivariate analyses

Correlations among demographics, adversities, poly-strengths, specific psychosocial strengths, subjective well-being, and PTG are presented in [Table 3](#). Findings show that polyvictimization was negatively associated with all the strengths, posttraumatic growth, and subjective well-being. All psychosocial strengths were positively associated with subjective well-being. Most psychosocial strengths were also positively correlated with PTG, with the exceptions of emotion regulation and optimism, which were not significantly associated. For the most part, specific strengths showed low to moderate positive correlations with other strengths, although several associations were not significant.

3.3. Strengths, posttraumatic growth, and subjective well-being

A blockwise logistic regression analysis was performed to identify the relationships between childhood adversities, protective factors, posttraumatic growth (PTG), and subjective well-being (refer to [Table 4](#) for details). In the first stage of the analysis, sociodemographic variables were entered. These did not show significant associations with either PTG or subjective well-being, explaining approximately one percent of the variance in PTG and SWB. In the second stage, the model was expanded to include polyvictimization. Polyvictimization was not associated with PTG and the model variance was still 1%. Conversely, higher levels of polyvictimization were significantly associated with lower subjective well-being, bringing the R^2 to 4% of the variance.

In the third block of the analysis, strengths were incorporated into the model. Including these strengths notably enhanced the explained variance, accounting for 39% in the case of posttraumatic growth (PTG) and 34% for subjective well-being (SWB). Examining specific strengths, poly-strengths—an indicator of the breadth and diversity of one’s resilience portfolio—showed the strongest positive association with PTG. A sense of purpose, optimism, and religious meaning making, all from the meaning making domain, were also significantly positively associated with PTG. However, coping, anger management, and moral-based meaning making all showed odds ratios below 1, indicating that higher levels of these strengths were associated with lower levels of PTG.

Some of these patterns were also observed for subjective well-being. Poly-strengths, sense of purpose, and optimism were significantly positively associated with SWB, as with PTG. In addition, psychological endurance was also significantly positively associated with SWB. No other strengths were significant in this model, and no results in the unexpected direction were observed.

4. Discussion

The results from this study offer new knowledge regarding experiences of polyvictimization and the strengths that foster resilience after childhood adversity in a Kosovo sample. This is the first quantitative study to assess multiple adversities and strengths associated with subjective well-being (SWB) and posttraumatic growth (PTG) in the context of Southeastern Europe, specifically within the collectivist, postwar environment of Kosovo.

Table 2

Descriptive statistics for the strengths, poly-strengths and poly-victimization.

Strengths	Mean	(SD)	Min
Anger Management	15.70 (3.00)	5.00	20.00
Coping	38.40 (6.80)	13.00	52.00
Psychological Endurance	19.74 (3.04)	6.00	24.00
Emotion Awareness	7.10 (1.30)	2.00	8.00
Emotion Regulation	8.70 (3.10)	4.00	16.00
Compassion	25.00 (3.15)	8.00	28.00
Social Support	19.10 (3.40)	6.00	24.00
Meaning Making Family Care	13.79 (4.00)	5.00	20.00
Meaning Making Morals	12.80 (2.60)	4.00	16.00
Meaning Making Self-Oriented	21.70 (5.00)	8.00	32.00
Optimism	5.40 (1.70)	2.00	8.00
Sense of Purpose	10.10 (2.10)	3.00	12.00
Religious Meaning Making	25.40 (7.80)	8.00	38.00
Poly-Strengths	6.90 (3.30)	0.00	14.00
Post-traumatic Growth	29.50 (6.00)	9.00	36.00
Subjective Wellbeing	42.00 (8.70)	13.00	52.00
Polyvictimization	6.62 (4.34)	0.00	18.00

Table 3
Pearson bivariate correlations of all study variables.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1 Age	1	−0.17 ^c	0.41 ^c	0.23 ^c	−0.08 ^a	−0.04	0.08 ^a	0.11 ^b	0.00	0.04	−0.03	0.01	0.30 ^c	0.25 ^c	−0.04	0.10 ^a	0.13 ^c	0.00	0.02	0.11 ^b	0.08 ^a	0.10 ^b
2 Gender		1	−0.06	−0.26 ^c	−0.01	0.00	−0.07	0.01	0.10 ^b	−0.07	0.16 ^c	0.04	0.10 ^a	0.05	0.08 ^a	0.03	0.00	0.13 ^c	0.00	−0.04	−0.10 ^b	0.08 ^a
3 Education			1	0.16***	−0.03	0.04	0.10 ^b	0.09 ^a	0.06	0.06	−0.02	0.00	0.19 ^c	0.16 ^c	0.02	0.01	0.10 ^b	0.02	0.06	0.10 ^b	−0.07	0.09 ^a
4 Employment				1	0.13 ^c	0.03	0.07	0.06	−0.03	0.15 ^c	−0.06	0.01	0.01	0.02	0.03	0.06	0.06	−0.11 ^b	−0.02	0.07	−0.04	0.04
5 Residence					1	0.03	−0.05	−0.03	0.02	0.05	0.04	0.01	−0.18 ^c	−0.16 ^c	−0.03	0.10 ^b	0.05	−0.24 ^c	−0.07	−0.08 ^a	0.00	−0.11 ^b
6 AM						1	0.53 ^c	0.34 ^c	0.36 ^c	0.16 ^c	0.19 ^c	0.18 ^c	0.18 ^c	0.14 ^c	0.31 ^c	0.01	0.31 ^c	0.08 ^a	0.25 ^c	0.35 ^c	−0.12 ^b	0.49 ^c
7 CO							1	0.49 ^c	0.35 ^c	0.01	0.28 ^c	0.28 ^c	0.30 ^c	0.31 ^c	0.41 ^c	−0.10 ^b	0.36 ^c	0.22 ^c	0.35 ^c	0.40 ^c	−0.09 ^a	0.63 ^c
8 END								1	0.36 ^c	0.07	0.38 ^c	0.27 ^c	0.40 ^c	0.39 ^c	0.34 ^c	−0.03	0.51 ^c	0.26 ^c	0.47 ^c	0.54 ^c	−0.11 ^b	0.65 ^c
9 EA									1	0.13 ^c	0.27 ^c	0.31 ^c	0.24 ^b	0.20 ^c	0.26 ^c	0.03	0.45 ^c	0.15 ^c	0.31 ^c	0.36 ^c	−0.08 ^a	0.54 ^c
10 ER										1	−0.06	0.02	0.01	−0.10 ^b	0.01	0.38 ^c	0.12 ^b	−0.20 ^c	0.05	0.18 ^c	−0.10 ^b	0.09 ^a
11 COP											1	0.35 ^c	0.26 ^c	0.32 ^c	0.21 ^c	−0.07	0.30 ^c	0.17 ^c	0.37 ^c	0.33 ^c	−0.05	0.50 ^c
12 SSA												1	0.26 ^c	0.20 ^c	0.25 ^c	0.02	0.34 ^c	0.11 ^b	0.27 ^c	0.30 ^c	−0.11 ^b	0.46 ^c
13 MMFC													1	0.47 ^c	0.42 ^c	−0.07	0.36 ^b	0.37 ^c	0.31 ^c	0.41 ^c	−0.14 ^c	0.60 ^c
14 MMO														1	0.28 ^c	−0.09 ^a	0.36 ^c	0.38 ^c	0.28 ^c	0.35 ^b	−0.12 ^b	0.54 ^c
15 MMSO															1	−0.16 ^c	0.34 ^c	0.27 ^c	0.27 ^c	0.36 ^c	−0.04	0.58 ^c
16 OPT																1	0.10 ^a	−0.19 ^c	−0.01	0.10 ^b	−0.07	−0.16 ^c
17 PUR																	1	0.24 ^c	0.46 ^c	0.62 ^c	−0.11 ^b	0.63 ^c
18 RMM																		1	0.37 ^c	0.26 ^c	−0.01	0.45 ^c
19 PTG																			1	0.53 ^c	−0.02 ^a	0.55 ^c
20 SWB																				1	−0.22 ^c	0.60 ^c
21 Polyvictimization																					1	−0.13 ^c
22 Poly-strengths																						1

Notes: AM = Anger Management; CO=Coping; END = Endurance; EA = Emotion Awareness; ER = Emotion Regulation; COP=Compassion; SS=Social Support; MMFC = Meaning Making Family Care; MMO = Meaning Making Morals; MMSO = Meaning Making Self-Oriented; OPT=Optimism; PUR=Sense of purpose; RMM = Religious Meaning Making; PTG=Posttraumatic Growth; SWB=Subjective Wellbeing.

^a $p < 0.05$.

^b $p < 0.01$.

^c $p < 0.001$.

Table 4

Blockwise logistic regression with posttraumatic growth and subjective well-being as outcomes.

Posttraumatic Growth (PTG)			Subjective Well-Being (SWB)		
Predictors	Odds Ratio	95% Ci for OR		Odds Ratio	95% Ci for OR
Block 1: Demographic Characteristics			Block 1: Demographic Characteristics		
Age	0.99	0.96–1.02	Age	0.99	0.97–1.02
Gender	0.70	0.43–1.15	Gender	0.63	0.39–1.02
Residence	1.01	0.64–1.61	Residence	0.74	0.47–1.16
Education	1.04	0.96–1.13	Education	1.01	0.94–1.10
Employment	0.87	0.55–1.36	Employment	0.84	0.54–1.26
R ² for demographics	0.01		R ² for demographics	0.01	
Block 2: Victimization			Block 2: Victimization		
Polyvictimization	0.94	0.74–1.19	Polyvictimization	0.62***	0.49–0.78
R ² for victimization + demos	0.01		R ² for victimization + demos	0.04	
Block 3: Strengths			Block 3: Strengths		
<i>Meaning Making Strengths</i>			<i>Meaning Making Strengths</i>		
Sense of Purpose	1.17 ^a	1.02–1.34	Sense of Purpose	1.41 ^c	1.23–1.62
Optimism	1.21 ^a	1.04–1.40	Optimism	1.27 ^b	1.10–1.48
Religious Meaning Making	1.06 ^c	1.03–1.09	Religious Meaning Making	1.00	0.97–1.04
Meaning Making Self-Oriented	0.95	0.91–1.00	Meaning Making Self-Oriented	1.05	1.00–1.10
Meaning Making Family Care	0.94	0.88–1.01	Meaning Making Family Care	1.02	0.95–1.09
Meaning Making Morals	0.83**	0.75–0.92	Meaning Making Morals	0.95	0.86–1.05
<i>Regulatory Strengths</i>			<i>Regulatory Strengths</i>		
Endurance	1.00	0.91–1.09	Endurance	1.10*	1.01–1.21
Emotion Regulation	0.95	0.88–1.03	Emotion Regulation	1.04	0.96–1.12
Coping	0.95 ^b	0.91–0.99	Coping	1.01	0.97–1.05
Anger Management	0.92 ^a	0.84–1.00	Anger Management	0.98	0.90–1.06
Emotion Awareness	0.83	0.68–1.02	Emotion Awareness	0.96	0.79–1.17
<i>Interpersonal Strengths</i>			<i>Interpersonal Strengths</i>		
Compassion	1.04	0.97–1.12	Compassion	1.07	0.99–1.16
Social Support	0.96	0.91–1.01	Social Support	0.98	0.93–1.04
Poly-strengths	2.23 ^c	1.86–2.71	Poly-strengths	1.29 ^b	1.09–1.53
R ² for strengths alone	0.38		R ² for strengths alone	0.30	
Total model R² (all variables)			Total model R² (all variables)		
<u>0.39</u>			<u>0.34</u>		

Notes: 95% Ci is the 95% confidence interval for the odds ratio. All R² are McFadden formula.^a $p < 0.05$.^b $p < 0.01$.^c $p < 0.001$.

4.1. Victimization rates

A key finding is that over 90% of participants reported experiencing at least one form of victimization. This figure reflects both the global scope of victimization and the specific historical and social context of regions like Kosovo, which has been historically affected by conflicts in the former Yugoslavia. Prior research also indicates that most people around the world have experienced at least one form of victimization, although the 92% found here is somewhat higher than found in other samples. Also using forms of the Juvenile Victimization Questionnaire, a Swedish sample found that 84% of individuals have encountered one type of victimization (Aho et al., 2016). Similar findings emerge from Chile, with 89% reporting at least one form of victimization (Pinto Cortez et al., 2017), Mexico with 86% (Méndez-López & Pereda, 2019), and Spain, at 79% (Gonzalez-Mendez et al., 2021). The mean number of victimizations was similar to that found in Hamby, Grych, and Banyard (2018), using the same measure.

4.2. Resilience and strengths

4.2.1. Impact of resilience portfolios

In multivariate analyses, resilience portfolio strengths accounted for a significant proportion of the variance in PTG (39%) and SWB (34%), compared to adversities, which explained less than 1% for PTG and 4%

for SWB. This suggests that individuals can harness assets and resources that substantially impact their ability to thrive, consistent with prior RPM research in other samples (Brooks et al., 2023; Hamby et al., 2018).

4.2.2. Key predictors of positive outcomes

Blockwise logistic regression revealed that poly-strengths and sense of purpose predicted higher rates of PTG and SWB. Religious meaning-making was also associated with higher rates of PTG, while psychological endurance correlated with higher rates of SWB. The importance of poly-strengths underscores the need for access to a range of strengths for improved functioning and mental health (Brooks et al., 2023; Gonzalez-Mendez & Hamby, 2021). These findings are also consistent with resilience theories that emphasize coping flexibility, suggesting that different resources can be accessed for different problems (Kato, 2020; Bonanno & Burton, 2013).

4.2.3. Specific strengths and their effects

Sense of Purpose. The results also show that some strengths are more important than others in overcoming adversity. This has also been found in previous studies (e.g., Brooks et al., 2023; Goodman et al., 2019). The study identified a sense of purpose as a key strength associated with both SWB and PTG. This aligns with previous research indicating that sense of purpose and poly-strengths are among the best predictors of positive outcomes (Brooks et al., 2023; Gonzalez-Mendez & Hamby, 2021). In

Kosovo, where mental health services are still developing, a sense of purpose as a way of meaning-making is linked to better mental health outcomes. Previous studies in Kosovo also point to meaning making at the national level, as Kosovo was established as an independent nation recently (in 2008) (Kelmendi & Hamby, 2023). This may be one reason why meaning making performed so well in these analyses.

Religious Meaning-Making. In this Kosovar sample, religious meaning-making emerged as a significant strength associated with PTG. This is one of the first times resilience and religious meaning making have been studied in a majority Muslim population. Religious meaning making has shown mixed results in other studies, with a significant association with PTG in one study (Hamby, Grych, & Banyard, 2018), while other samples and other outcomes have not shown significance (Brooks et al., 2023; Hamby et al., 2018, 2020; Taku & Cann, 2014). However, other studies highlight the importance of incorporating existential beliefs into the meaning-making process, as this approach has been shown to enhance overall well-being and growth (Brooks et al., 2016; Helgeson et al., 2006; Prati & Pietrantonio, 2009), which emphasize the beneficial impact of integrating spiritual or religious dimensions in coping and recovery processes. Religious beliefs and practices have been recognized as vital components of meaning-making strategies when intertwined with a profound sense of purpose. These elements have been identified as crucial strengths that promote resilience, as evidenced in previous research (Kelmendi & Hamby, 2023). This synergy of spirituality and purpose plays a significant role in fortifying individuals against adversities and enhancing their resilience. Although religious practice varies among the Kosovo population, a recent study found that one-third of Kosovo's young population engage in religious practices at least once a month (FES, 2018).

Optimism. Higher levels of optimism were associated with better outcomes for PTG and SWB. Existing evidence indicates that the relationship between optimism and PTG is not consistently positive (Bostock et al., 2009; Hamby, Grych, & Banyard, 2018). Optimism is particularly emphasized and valued in individualistic societies (Markus & Kitayama, 1991). However, in collectivist societies such as Kosovo, higher levels of dispositional pessimism have been noted in some studies (Taku & Cann, 2014). Although these data cannot speak directly to relative levels across cultures, they suggest that higher than average optimism is still associated with better post-adversity functioning.

Negative Associations with Some Strengths. Notably, some strengths were associated with lower levels of PTG (but none for SWB). These include moral-based meaning making, coping, and anger management. These results contradict typical expectations and may suggest a suppressive effect. It is possible that collectivist values imposed by society, family, and tradition may hinder rather than facilitate the process of overcoming trauma. This is particularly evident in light of previous qualitative work on the resilience portfolio model in Kosovo, which indicated that while values and traditions are often regarded as essential pillars of support, they can also impose limitations on individual coping strategies and personal growth (Hamiti et al., 2024). Adherence to these collective standards may, in certain contexts, act as barriers to adapting and thriving following traumatic experiences. It is noteworthy that while Kosovo remains rooted in collectivist values, there is an observable shift among the younger generation towards individualist values. This shift has led to occasional clashes in perceptions and beliefs. For example, dignity is more associated with future orientation, self-development, and agency. However, it is also true that findings for moral meaning making have shown mixed results in previous RPM studies, with a positive association in Banyard et al. (2017) and a negative one in Hamby, Grych, and Banyard (2018). Thus, although the specific moral values might vary, there may be complexities in many settings.

Similarly, coping and anger management are contingent upon a multitude of factors, such as environmental and societal infrastructures, and these complexities may contribute to mixed findings. In the aftermath of the Kosovar conflict, individuals were inclined towards

problem-focused coping strategies related to reconstructing homes, securing employment, and enhancing their quality of life. These endeavors were often interwoven with hope and optimism for the future of the growing state and promoted resilience and better mental health functioning (Kelmendi et al., 2022). However, two and a half decades post-war, with fundamental survival needs primarily met, coping has evolved, and is now dependent on the contextual resources and assets available in the still-developing nation. Despite its rebuilding efforts, Kosovo still faces big challenges like high poverty and unemployment, and many young people think about leaving the country because of the tough economic situation, favoritism, and corruption (UNDP, 2021). According to Kato (2020), when people can't control the problems they face, the usual ways of solving problems don't work as well. Instead, dealing with emotions or avoiding problems becomes more useful. This might also be true for the situation in Kosovo, where people are adapting their ways of coping with these difficult conditions.

Interpersonal Strengths. Interestingly, no interpersonal strengths showed a significant association with either subjective well-being (SWB) or posttraumatic growth (PTG). This lack of correlation might be attributed to the current ambiguity surrounding interpersonal strengths in Kosovo. As a primarily collectivist society experiencing a shift towards individualistic values among the younger generations (Kadriu, 2023), Kosovo presents a unique backdrop for further exploration and understanding of the role and impact of interpersonal strengths in this evolving context. This transition may offer valuable insights into how interpersonal dynamics are changing and their implications for personal and collective well-being.

These findings highlight the complexities of resilience and coping in the context of Kosovo, emphasizing the need for further exploration of the role of strengths in fostering resilience and well-being in evolving cultural landscapes. This reorganization groups similar themes together, improves clarity, and provides a logical flow from the introduction of the study's findings to specific strengths and their implications.

4.3. Strengths and limitations

This research represents a pivotal quantitative exploration within the Kosovar milieu, investigating psychosocial strengths through the analytical framework of the resilience portfolio model. It is an important contribution within a developing body of empirical studies focused on resilience in various geographical contexts. Significantly, this study expands the existing, yet limited, scholarly research on posttraumatic growth (PTG) and subjective well-being after experiences of childhood adversities and polyvictimization in the under-researched contexts of non-Western, Educated, Industrialized, Rich, and Democratic (WEIRD) countries (Henrich et al., 2010). Furthermore, it provides a nuanced understanding of both the universality and specificity of psychosocial strengths that reinforce resilience and well-being in a collectivist society, thereby enriching the global comprehension of these constructs. Regarding limitations, this study encompassed a wide age range, yet did not delve into the manifestation of poly-strengths across various developmental stages. This aspect presents a promising avenue for future research. Furthermore, the cross-sectional research design of this study, while informative, limits the depth of understanding that could be achieved compared to a longitudinal approach. Such a design would allow for a more comprehensive exploration of changes and developments over time. Additionally, employing a mixed-methods methodology could offer a richer, more detailed understanding of how specific psychosocial strengths contribute to posttraumatic growth (PTG) and subjective well-being, providing insights that a purely quantitative approach might overlook.

4.4. Research implications

Future research should view these findings as preliminary, with a need for further exploration to identify factors that facilitate thriving in

the face of adversities. Given the importance of sense of purpose in these results, future research could explore different nuances of meaning making in the context of Kosovo's post-war rebuilding efforts and develop a more collectivist measure of community or nationwide meaning making. Moreover, findings from this study suggest development of a measure of trauma in post-conflict environments, which tackles dimensions related to damaged social relations/networks, elevation of destructive social norms, and a low sense of collective political and social efficacy. The experiences of children in post-conflict environments especially needs more attention, and more consideration with how this intersects with other childhood adversities. Additionally, future research could develop measures of strengths that align with the collectivist values prevalent in this environment. Moreover, it is crucial for future investigations to explore other sources of strengths located within different layers of the social ecology that foster resilience in the aftermath of adversity.

4.5. Practical implications

The results of this study offer insights that can be applied in practical settings. The findings tentatively suggest that interventions focused on enhancing certain psychosocial strengths could potentially play a role in fostering resilience and well-being. It is possible that interventions aimed at cultivating a sense of purpose and facilitating religious or spiritual meaning-making, in particular, may potentially lead to improved well-being. Research, such as that by [Manco and Hamby \(2021\)](#), has demonstrated the efficacy of mindfulness and narrative approaches in augmenting meaning-making. Additionally, the finding that a combination of poly-strengths and a diverse range of psychosocial strengths accounts for a substantial variance in posttraumatic growth (PTG) and well-being underscores the significance of developing preventative programs that encompass a wide array of strengths enhancement. In particular, the implementation of resilience-based educational frameworks and socio-emotional learning can serve as exemplary models for future initiatives aimed at fostering well-being through a strength-based perspective ([CASEL, 2020](#); [Wallace, 2021](#)). This approach highlights the potential of holistic and multi-faceted strategies in promoting mental health and resilience.

CRedit authorship contribution statement

Kaltrina Kelmendi: Writing – review & editing, Writing – original draft, Project administration, Methodology, Conceptualization. **Sherry Hamby:** Writing – review & editing, Supervision, Methodology, Formal analysis.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Ahern, J., Galea, S., Fernandez, W. G., Koci, B., Waldman, R., & Vlahov, D. (2004). Gender, social support, and posttraumatic stress in postwar Kosovo. *The Journal of Nervous and Mental Disease*, 192(11), 762–770. <https://doi.org/10.1097/01.nmd.0000144695.02982.41>
- Aho, N., Proczkowska-Björklund, M., & Svedin, C. G. (2016). Victimization, polyvictimization, and health in Swedish adolescents. *Adolescent Health, Medicine and Therapeutics*, 89–99. <https://doi.org/10.2147/AHMT.S109587>
- Arënlju, A., Benbenishty, R., Kelmendi, K., Duraku, Z. H., Konjufca, J., & Astor, R. A. (2022). Prevalence and predictors of staff victimization of students in Kosovo. *School Psychology International*, 43(3), 296–317. <https://doi.org/10.1177/01430343221081994>
- Banyard, V., Hamby, S., & Grych, J. (2017). Health effects of adverse childhood events: Identifying promising protective factors at the intersection of mental and physical well-being. *Child Abuse & Neglect*, 65, 88–98. <https://doi.org/10.1016/j.chiabu.2017.01.011>
- Beilharz, J. E., Paterson, M., Fatt, S., Wilson, C., Burton, A., Cvejic, E., ... Vollmer-Conna, U. (2020). The impact of childhood trauma on psychosocial functioning and physical health in a non-clinical community sample of young adults. *Australian and New Zealand Journal of Psychiatry*, 54(2), 185–194. <https://doi.org/10.1177/0004867419881206>
- Bellis, M. A., Hughes, K., Ford, K., Rodriguez, G. R., Sethi, D., & Passmore, J. (2019). Life course health consequences and associated annual costs of adverse childhood experiences across Europe and North America: A systematic review and meta-analysis. *The Lancet Public Health*, 4(10), e517–e528. [https://doi.org/10.1016/S2468-2667\(19\)30145-8](https://doi.org/10.1016/S2468-2667(19)30145-8)
- Bonanno, G. A., & Burton, C. L. (2013). Regulatory flexibility: An individual differences perspective on coping and emotion regulation. *Perspectives on Psychological Science*, 8(6), 591–612. <https://doi.org/10.1177/1745691613504116>
- Bonanno, G. A., Wortman, C. B., & Nesse, R. M. (2004). Prospective patterns of resilience and maladjustment during widowhood. *Psychology and Aging*, 19(2), 260. [https://doi.org/10.1016/S2468-2667\(19\)30145-8](https://doi.org/10.1016/S2468-2667(19)30145-8)
- Bostock, J. A. N., Plumpton, M., & Pratt, R. (2009). Domestic violence against women: Understanding social processes and women's experiences. *Journal of Community & Applied Social Psychology*, 19(2), 95–110.
- Brooks, M., Graham-Kevan, N., Robinson, S., & Lowe, M. (2019). Trauma characteristics and posttraumatic growth: The mediating role of avoidance coping, intrusive thoughts, and social support. *Psychological Trauma: Theory, Research, Practice, and Policy*, 11(2), 232. <https://doi.org/10.1002/casp.985>
- Brooks, M., Lowe, M., Graham-Kevan, N., & Robinson, S. (2016). Posttraumatic growth in students, crime survivors and trauma workers exposed to adversity. *Personality and Individual Differences*, 98, 199–207. <https://doi.org/10.1016/j.paid.2016.04.051>
- Brooks, M., Taylor, E., & Hamby, S. (2023). Polyvictimization, polystrengths, and their contribution to subjective well-being and posttraumatic growth psychological trauma: Theory, Research, practice, and policy. Advance online publication. <https://doi.org/10.1037/tra0001489>
- Campbell, J. A., Walker, R. J., & Egede, L. E. (2016). Associations between adverse childhood experiences, high-risk behaviors, and morbidity in adulthood. *American Journal of Preventive Medicine*, 50(3), 344–352. <https://doi.org/10.1016/j.amepre.2015.07.022>
- Choi, J. K., Wang, D., & Jackson, A. P. (2019). Adverse experiences in early childhood and their longitudinal impact on later behavioral problems of children living in poverty. *Child Abuse & Neglect*, 98, Article 104181. <https://doi.org/10.1016/j.chiabu.2019.104181>
- Collaborative for Academic, Social, and Emotional Learning. (2020). CASEL SEL framework. Available at: <https://casel.org/wp-content/uploads/2020/12/CASEL-SEL-Framework-11.2020.pdf>
- Eikemo, T. A., Huisman, M., Perlman, F., & Ringdal, K. (2010). Educational health inequalities in former Yugoslavia: Evidence from the South-East European social survey project. *The European Journal of Public Health*, 20(6), 640–646. <https://doi.org/10.1093/eurpub/ckp200>
- Fanaj, N., & Melonashi, E. (2017). Understanding and describing PTSD in Kosovo: A systematic evidence-based review. *Sage Open*, 7(4), Article 2158244017734588.
- Felitti, V. J., Anda, R. F., Nordenberg, D., & Williamson, D. F. (1998). Adverse childhood experiences and health outcomes in adults: The ACE study. *Journal of Family and Consumer Sciences*, 90(3), 31.
- Finkelhor, D., Turner, H., Hamby, S. L., & Ormrod, R. (2011). Polyvictimization: Children's exposure to multiple types of violence, crime, and abuse. *National Survey of Children's Exposure to Violence*. Office of Juvenile Justice and Delinquency Prevention <https://www.ncjrs.gov/pdffiles1/ojjdp/235504.pdf>
- Friedrich-Ebert-Stiftung -FES. (2018). *Youth study Kosovo 2018/2019*. 15264.pdf. fes.de.
- Gangstad, B., Norman, P., & Barton, J. (2009). Cognitive processing and posttraumatic growth after stroke. *Rehabilitation Psychology*, 54(1), 69. <https://doi.org/10.1037/a0014639>
- Gilbert, L. K., Breiding, M. J., Merrick, M. T., Thompson, W. W., Ford, D. C., Dhingra, S. S., & Parks, S. E. (2015). Childhood adversity and adult chronic disease: An update from ten states and the District of Columbia, 2010. *American Journal of Preventive Medicine*, 48(3), 345–349. <https://doi.org/10.1016/j.amepre.2014.09.006>
- Gonzalez-Mendez, R., & Hamby, S. (2021). Identifying women's strengths for promoting resilience after experiencing intimate partner violence. *Violence & Victims*, 36(1), 29–44.
- Gonzalez-Mendez, R., Ramirez-Santana, G., & Hamby, S. (2021). Analyzing Spanish adolescents through the lens of the resilience portfolio model. *Journal of Interpersonal Violence*, 36(9–10), 4472–4489. <https://doi.org/10.1177/0886260518790600>
- Goodman, F. R., Disabato, D. J., & Kashdan, T. B. (2019). Integrating psychological strengths under the umbrella of personality science: Rethinking the definition, measurement, and modification of strengths. *The Journal of Positive Psychology*, 14(1), 61–67. <https://doi.org/10.1080/17439760.2018.1528380>
- Grych, J., Hamby, S., & Banyard, V. (2015). The resilience portfolio model: Understanding healthy adaptation in victims of violence. *Psychology of Violence*, 5(4), 343. <https://doi.org/10.1037/a0039671>
- Hamby, S. L., Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2004). *The juvenile victimization questionnaire (JVQ): Administration and scoring manual*. Durham, NH: Crimes Against Children Research Center.
- Hamby, S., Grych, J., & Banyard, V. L. (2015). *Life Paths measurement packet: Finalized scales*. Sewanee, TN. <https://www.lifepathsresearch.org/measures/>
- Hamby, S., Grych, J., & Banyard, V. (2018). Resilience portfolios and poly-strengths: Identifying protective factors associated with thriving after adversity. *Psychology of Violence*, 8(2), 172. <https://doi.org/10.1037/vio0000135>
- Hamby, S., Taylor, E., Mitchell, K., Jones, L., & Newlin, C. (2020). Poly-victimization, trauma, and resilience: Exploring strengths that promote thriving after adversity. *Journal of Trauma & Dissociation*, 21(3), 376–395.

- Hamby, S., Taylor, E., Segura, A., & Weber, M. (2022). A dual-factor model of posttraumatic responses: Which is better, high posttraumatic growth or low symptoms? *Psychological Trauma: Theory, Research, Practice, and Policy*, 14(S1), S148. <https://doi.org/10.1037/tra0001122>
- Hamiti, E., Kelmendi, K., Retkoceri, S., & Hamby, S. (2024). Resilience in the Kosovo context: A qualitative study of young adults. *Emerging Adulthood*, Article 21676968241261086.
- Helgeson, V. S., Reynolds, K. A., & Tomich, P. L. (2006). A meta-analytic review of benefit finding and growth. *Journal of Consulting and Clinical Psychology*, 74(5), 797.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2–3), 61–83.
- Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., ... Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *The Lancet Public Health*, 2(8), e356–e366. [https://doi.org/10.1016/S2468-2667\(17\)30118-4](https://doi.org/10.1016/S2468-2667(17)30118-4)
- Kadriu, E. (2023). *Individualism and collectivism cultural dimensions in Kosovo: Exploring the effects of age and educational setting on value orientations*. Doctoral dissertation.
- Kato, T. (2020). Examination of the coping flexibility hypothesis using the coping flexibility scale–revised. *Frontiers in Psychology*, 11, 3494. <https://doi.org/10.3389/fpsyg.2020.561731>
- Kelmendi, K. (2015). Domestic Violence Against Women in Kosovo: A Qualitative Study of Women's Experiences. *Journal of Interpersonal Violence*, 30(4), 680–702. <https://doi.org/10.1177/0886260514535255>.
- Kelmendi, K., Arënlju, A., Benbenishty, R., Astor, R. A., Hyseni Duraku, Z., & Konjufca, J. (2023). An exploratory study of secondary school student victimization in Kosovo and its correlates. *Journal of School Violence*, 1–15. <https://doi.org/10.1080/15388220.2023.2214736>
- Kelmendi, K., Duraku, Z. H., & Jemini-Gashi, L. (2019). Coexistence of intimate partner violence and child maltreatment among adolescents in Kosovo. *Journal of Family Violence*, 34, 411–421. <https://doi.org/10.1007/s10896-018-00034-y>
- Kelmendi, K., & Hamby, S. (2023). Resilience after trauma in Kosovo and southeastern Europe: A scoping review. *Trauma, Violence, & Abuse*, 24(4), 2333–2345. <https://doi.org/10.1177/15248380221093693>
- Kelmendi, K., & Hoxha, L. Resilience among Kosovar students: Protective factors [Conference presentation]. <https://www.icp2020.com/scientific-program/scientific-programme/>.
- Kelmendi, K., Mulaj, I., Zymeri, M., & Kadiri, S. (2022). Meaning making of war experiences: Stories from Kosova. *OMEGA - Journal of Death and Dying*, 86(1), 89–118. <https://doi.org/10.1177/0030222820962251>
- Leza, L., Siria, S., López-Goñi, J. J., & Fernandez-Montalvo, J. (2021). Adverse childhood experiences (ACEs) and substance use disorder (SUD): A scoping review. *Drug and Alcohol Dependence*, 221, Article 108563. <https://doi.org/10.1016/j.drugalcdep.2021.108563>
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543–562. <https://doi.org/10.1111/1467-8624.00164>
- Malhotra, M., & Chebiyan, S. (2016). Posttraumatic growth: Positive changes following adversity—an overview. *International Journal of Psychology and Behavioral Sciences*, 6(3), 109–118. <https://doi.org/10.5923/j.ijpbs.20160603.03>
- Manco, N., & Hamby, S. (2021). A meta-analytic review of interventions that promote meaning in life. *American Journal of Health Promotion*, 35(6), 866–873. <https://doi.org/10.1177/0890117121995736>
- Markus, H. R., & Kitayama, S. (1991). Cultural variation in the self-concept. In *The self: Interdisciplinary approaches* (pp. 18–48). New York, NY: Springer New York.
- Masten, A. S., & Obradović, J. (2006). Competence and resilience in development. *Annals of the New York Academy of Sciences*, 1094(1), 13–27. <https://doi.org/10.1196/annals.1376.003>
- Méndez-López, C., & Pereda, N. (2019). Victimization and poly-victimization in a community sample of Mexican adolescents. *Child Abuse & Neglect*, 96. <https://doi.org/10.1016/j.chiabu.2019.104100>
- Moisan, C., Hébert, M., Fernet, M., Blais, M., & Amédée, L. M. (2019). Resilience portfolios and poly-strengths: Identifying strengths associated with wellbeing after adversity. *International Journal of Child and Adolescent Resilience*, 6(1), 19–35. <https://doi.org/10.7202/1069073ar>
- Ning, J., Tang, X., Shi, H., Yao, D., Zhao, Z., & Li, J. (2023). Social support and posttraumatic growth: A meta-analysis. *Journal of Affective Disorders*, 320, 117–132. <https://doi.org/10.1016/j.jad.2022.09.114Getrightsandcontent>
- Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, 136(2), 257. <https://doi.org/10.1037/a0018301>
- Paul, M. S., Berger, R., Berlow, N., Rovner-Ferguson, H., Figlerski, L., Gardner, S., & Malave, A. F. (2010). Posttraumatic growth and social support in individuals with infertility. *Human Reproduction*, 25(1), 133–141. <https://doi.org/10.1093/humrep/dep367>
- Pinto-Cortez, C., Guerra Vio, C., Barocas, B., & Pereda, N. (2022). Victimization and poly-victimization in a national representative sample of children and youth: The case of Chile. *Journal of Aggression, Maltreatment & Trauma*, 31(1), 3–21. <https://doi.org/10.1080/10926771.2020.1796873>
- Prati, G., & Pietrantonio, L. (2009). Optimism, social support, and coping strategies as factors contributing to posttraumatic growth: A meta-analysis. *Journal of Loss & Trauma*, 14(5), 364–388. <https://doi.org/10.1080/15325020902724271>
- Priebe, S., Bogic, M., Ajdukovic, D., Franciskovic, T., Galeazzi, G. M., Kucukalic, A., ... Schützwohl, M. (2010). Mental disorders following war in the Balkans: A study in 5 countries. *Archives of General Psychiatry*, 67(5), 518–528. <https://doi.org/10.1001/archgenpsychiatry.2010.37>
- Radford, A., Toombs, E., Zugic, K., Boles, K., Lund, J., & Mushquash, C. J. (2022). Examining adverse childhood experiences (ACEs) within indigenous populations: A systematic review. *Journal of Child & Adolescent Trauma*, 15(2), 401–421. <https://doi.org/10.1007/s40653-021-00393-7>
- Ringdal, G. I., & Ringdal, K. (2016). War experiences and war-related distress in Bosnia-Herzegovina, Croatia and Kosovo. In *The aftermath of war* (pp. 27–46). Routledge.
- Spiegel, P. B., & Salama, P. (2000). War and mortality in Kosovo, 1998–99: An epidemiological testimony. *The Lancet*, 355(9222), 2204–2209. [https://doi.org/10.1016/S0140-6736\(00\)02404-1](https://doi.org/10.1016/S0140-6736(00)02404-1)
- Su, S., Jimenez, M. P., Roberts, C. T., & Loucks, E. B. (2015). The role of adverse childhood experiences in cardiovascular disease risk: A review with emphasis on plausible mechanisms. *Current Cardiology Reports*, 17, 1–10. <https://doi.org/10.1007/s11886-015-0645-1>
- Taku, K., & Cann, A. (2014). Cross-national and religious relationships with posttraumatic growth: The role of individual differences and perceptions of the triggering event. *Journal of Cross-Cultural Psychology*, 45(4), 601–617. <https://doi.org/10.1177/0022022113520074>
- Tedeschi, R. G., & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress*, 9, 455–471.
- Turner, S. W., Bowie, C., Dunn, G., Shapo, L., & Yule, W. (2003). Mental health of Kosovan Albanian refugees in the UK. *The British Journal of Psychiatry*, 182(5), 444–448. <https://doi.org/10.1192/bjp.182.5.444>
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1–18. https://doi.org/10.1207/s15327965pli1501_01
- UNDP. (2021). Youth challenges and perspective in Kosovo. Retrieved from <https://www.undp.org/sites/g/files/zskgke326/files/migration/ks/YouthChallengesandPerspectivesinKosovoENG.pdf>.
- Ungar, M. (2015). Practitioner review: Diagnosing childhood resilience—a systemic approach to the diagnosis of adaptation in adverse social and physical ecologies. *Journal of Child Psychology and Psychiatry*, 56(1), 4–17. <https://doi.org/10.1111/jcpp.12306>
- Wallace, A. (2021). Social and emotional learning. *NCSL Policy Research* (ncsl.org).
- Wang, S. J., Salihu, M., Rushiti, F., Bala, L., & Modvig, J. (2010). Survivors of the war in the Northern Kosovo: Violence exposure, risk factors and public health effects of an ethnic conflict. *Conflict and Health*, 4(1), 1–16. <https://doi.org/10.1186/1752-1505-4-11>
- Kaltrina Kelmendi**, Ph.D., is an associate professor at the Department of Psychology, University of Prishtina, in Kosovo. Her research interests are domestic violence, gender-based violence, youth violence, and child protection. Recently she has been working on the issue of resilience in Kosovo and South-Eastern Europe. Kaltrina was a Fulbright Visiting Scholar during 2020/2021.
- Sherry Hamby**, Ph.D. is Distinguished Research Professor of Psychology at the University of the South and Director of the Life Paths Research Center. An influential researcher who focuses on trauma and resilience, she has been ranked in the top 1% among more than 6 million researchers in 22 disciplines based on citations to her more than 200 publications. Her awards include Outstanding Contributions to the Science of Trauma Psychology from the American Psychological Association (APA).