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Psychological Trauma: Theory, Research, Practice, and Policy

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Polyvictimization, Polystrengths, and Their Contribution to Subjective Well-Being and Posttraumatic Growth

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Objective: The negative biopsychosocial outcomes associated with exposure to victimization are well-known, however, limited research has examined the protective factors that can enhance well-being and growth following polyvictimization from in-person and digital sources. This study examines the contribution of adversities and a range of psychological and social strengths on perceptions of subjective well-being and posttraumatic growth (PTG). **Method:** A sample of 478 individuals aged 12–75 (57.5% female; $M_{age} = 36.44$) from a largely rural Appalachian region of the United States completed a survey on victimization experiences, other adversities, psychosocial strengths, subjective well-being, and PTG. **Results:** Approximately 93.3% of individuals reported at least one digital or in-person victimization, with 82.8% reporting two or more forms of victimization. Hierarchical logistic regression analyses indicated that strengths explained more than three times the variance in subjective well-being and PTG compared to adversities, with both models explaining about half of the variance in these outcomes (49% and 50%, respectively). Psychological endurance, sense of purpose, teacher support, and polystrengths were significantly associated with better well-being and/or PTG. **Conclusion:** Some strengths hold more promise than others for promoting well-being and PTG following polyvictimization.

Clinical Impact Statement

Not all assets and resources are equally helpful for promoting thriving after adversity. Psychological endurance, sense of purpose, and polystrengths (a diverse portfolio of assets and resources) hold promise as psychosocial strengths that can lead to better functioning after victimization and interventions should focus on those known to promote such strengths (e.g., mindfulness).

Keywords: adversities, polystrengths, polyvictimization, posttraumatic growth, subjective well-being

The psychological and physical consequences associated with victimization represent a major public health issue (Bouffard & Koepfel, 2014). Victimization experiences characterized by actual or threats of harm, or witnessing harm to others (Zimmerman & Posick, 2016) are associated with a wide range of potentially distressing and enduring negative mental health and physical outcomes (Dworkin et al., 2017; Hanson et al., 2010). Symptoms reported by survivors have been

shown to operate within a *dose–response* relationship, whereby increasing numbers of adverse incidents are associated with more severe negative symptoms (Hamby, Elm, et al., 2021; Steine et al., 2017). With an increased awareness of the cumulative burden of multiple victimization experiences, there have been calls (Hamby, Elm, et al., 2021; Hamby, Schultz, & Elm, 2020) to identify the full range of victimizations that people experience to provide a more comprehensive understanding of

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This is the first article to examine posttraumatic growth or any of the psychosocial strengths included in this dataset. Prior publications examined (a) whether digital polyvictimization uniquely contributed to trauma symptoms beyond that explained by in-person victimization (it does) and (b) the impact of different types of digital victimization (cyberbullying vs. financial or identity scams).

Matthew Brooks served as lead for writing—original draft and writing—review and editing. Elizabeth Taylor served as lead for data curation, formal analysis, and resources, contributed equally to project administration, and

served in a supporting role for writing—review and editing. Sherry Hamby served as lead for funding acquisition, project administration, and supervision and served in a supporting role for writing—review and editing. Matthew Brooks and Sherry Hamby contributed to conceptualization equally. Elizabeth Taylor and Sherry Hamby contributed to methodology and investigation equally.

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the scope of victimization and its impacts on human functioning. Likewise, numerous calls (Hamby, Elm, et al., 2021; Hamby, Grych, & Banyard, 2018) have been made to better understand strengths-based pathways to overcoming trauma, with a goal of better formulating prevention and intervention. However, both the range of victimizations and strengths examined has been limited. The current study aims to identify strengths that are associated with better current functioning (subjective well-being and posttraumatic growth) after the experience of victimization. The study includes digital victimization in the assessment of trauma dosage alongside strengths such as self-reliance that have received limited attention in the resilience literature.

Comprehensive Assessment of Victimization Experiences

Victimization can be broadly defined as intentional and unwanted acts that cause unnecessary harm (Hamby, 2017). Globally, in-person victimization experiences, such as physical or sexual abuse, are common. Exposure estimates range from 64% to 98% (Hamby, Taylor, et al., 2020), with the negative outcomes associated with in-person victimization well-documented (e.g., Dworkin et al., 2017; Hanson et al., 2010). Alongside in-person victimization experiences, individuals are increasingly exposed to victimization online. Digital victimization encompasses a range of intentional and harmful experiences such as cyberbullying, data theft, harassment, and sexting (Hamby, Blount, et al., 2018), that are perpetrated using computers, the Internet, or mobile devices. Both digital and in-person victimization are often researched separately (Hamby, Taylor, et al., 2018), which may not reflect many people's experiences of victimization as the same individual can be victimized both in the online and offline world (Tamarit-Sumalla et al., 2022). Therefore, research using frameworks that recognize victimization occurring from multiple domains is needed to better understand the burden of harm and violence. Polyvictimization is one such lens, and this approach refers to the cumulative toll of experiencing multiple different types of interpersonal victimization, which can contribute to the development and maintenance of trauma symptoms and other adverse consequences (Haahr-Pedersen et al., 2020; Mitchell et al., 2020). Conceptualizations of polyvictimization that capture in-person and digital victimization may provide a more accurate reflection of the total burden of cumulative victimization.

Subjective Well-Being After Traumatic Experiences

When considering the consequences associated with victimization, research (e.g., Haahr-Pedersen et al., 2020) has traditionally focused on symptom outcomes, such as anxiety and depression, as indicators of functioning. However, this approach is concerned with minimizing pathology rather than identifying factors that may promote well-being among survivors. One marker of psychological adjustment postvictimization is subjective well-being. Subjective well-being has been variously conceptualized as an indication of an individual's satisfaction with their quality of life and degree of happiness (McGillivray & Clarke, 2006). Research has found that polyvictimization is negatively related to well-being (Bravo-Sanzana et al., 2022), which is further exacerbated in the context of more persistent and diverse victimization (Mitchell et al., 2020). More research on overcoming the effects of victimization needs to incorporate digital victimization in estimates of victimization dosage, which would broaden understanding of the cumulative burden of such polyvictimization.

Posttraumatic Growth

Although negative changes postvictimization are well-documented, research has shown that people can also report enhanced functioning, in a phenomenon known as posttraumatic growth (PTG; Tedeschi & Calhoun, 2004). Survivors of adverse events can perceive transformational changes in various life domains that can co-occur alongside negative changes: (a) enhanced perceptions of personal strength; (b) increased appreciation of life; (c) stronger interpersonal relationships; (d) openness to new possibilities; and (e) spiritual or existential changes (Elderton et al., 2017; Taku et al., 2021; Ulloa et al., 2016). There are several hypotheses about the nature of PTG and how it occurs (Hamby et al., 2022; Jayawickreme et al., 2021). In their PTG model, Tedeschi and Calhoun (2004) argue that these changes emerge due to the emotional struggle associated with cognitively processing challenging life events. Other work (Park, 2010) has suggested that distress from adversity can be mitigated by meaning-making processes that can support growth. However, some researchers (e.g., Brooks et al., 2021; Gower et al., 2022) have suggested that PTG can have an illusory function to mitigate against distress. Previous research largely focused on outcomes in relation to a single or a limited range of adverse events, although recent evidence has indicated that some survivors of diverse and multiple adverse events can experience PTG (Brooks et al., 2017, 2019; Jirek & Saunders, 2018; Nuccio & Stripling, 2021), while others can be overwhelmed, thus inhibiting growth (Brooks et al., 2021). These studies have so far focused on in-person victimization experiences and not yet addressed the additional cumulative burden of digital victimization within a broader polyvictimization perspective.

Polystrengths and the Resilience Portfolio Model

Comparable with the study of polyvictimization is the concept of *polystrengths*, which refers to the total range of protective factors that individuals may possess to help them overcome adversity (Hamby, Grych, & Banyard, 2018). It is considered a parallel to the concept of polyvictimization, such that a higher number of polystrengths could be linked to better outcomes (Hamby, Taylor, et al., 2018). The Resilience Portfolio Model (RPM; Grych et al., 2015) further develops the resiliency literature by acknowledging the role of cumulative protective mechanisms in psychological adjustment, which fall into three broad areas. *Regulatory strengths* refer to skills in managing emotional and behavioral responses and consist of characteristics such as psychological endurance, emotion regulation, and self-reliance. *Meaning-making strengths* consist of the ways in which individuals derive meaning from spiritual experiences and connecting to something larger than themselves and include a sense of purpose and religious meaning-making. Finally, *interpersonal strengths* include relational skills and supports from the social environment, which may be reflected through community or teacher support, the school environment, and compassion for others. According to the RPM, the totality (dose) of the strengths in one's portfolio, in addition to the nature of individual strengths, is associated with better functioning (see Hamby, Taylor, et al., 2018 for discussion). Research has found some individual strengths and polystrengths to buffer against distress (Hamby, Taylor, et al., 2020) and be positively related to PTG and subjective well-being (Gonzalez-Mendez et al., 2021; Hamby, Grych, & Banyard, 2018), although these studies focused on polystrengths in relation

to in-person victimization. Given that the role of polystrengths has not yet been fully considered within the context of polyvictimization from both in-person and digital sources, there is a need for research that incorporates digital victimization into this model.

The Present Study

The current study examines the contribution of polyvictimization exposure and a range of polystrengths on individual perceptions of subjective well-being and PTG. In doing so, the study addresses a number of research gaps, namely, the exclusion of digital victimization within a polyvictimization framework, the narrow range of outcomes assessed among polyvictimization survivors, and limited knowledge of resilience portfolio factors associated with subjective well-being and PTG. Furthermore, the broad scope of victimization experiences and individual strengths assessed in this study will help contribute to aiding interventions to support people exposed to adversity. It is hypothesized that adversities including polyvictimization and financial strain are negatively related to subjective well-being, while polystrengths will be positively associated with subjective well-being and PTG. Due to mixed evidence in relation to the experience of multiple adversities and PTG (e.g., Brooks et al., 2021; Nuccio & Stripling, 2021), no directional hypothesis was made.

Method

Participants

Participants were 478 individuals residing in a predominantly rural southern Appalachian region of the United States who completed a broader survey on digital privacy, security, and character development (Hamby, Blount, et al., 2018). The sample was 57.5% female, and aged 12–75 years ($M = 36.44$, $SD = 17.61$). Most participants (84.9%) identified as White/European American (non-Latino), 5.7% described themselves as African American/Black (non-Latino), 4.0% as multiracial, 3.6% as Latino/Latina, 0.8% as Asian (non-Latino), and 0.8% as American Indian/Alaska Native (non-Latino). Almost a third of survey participants (29.3%) reported an annual income under \$20,000 per year, a third (33.3%) reported earning \$20,000–\$50,000, and 37.4% reported earning \$50,000 or more. Over half of the sample (54.6%) lived in rural areas with populations of less than 2,500 people, 32.7% reported living in small towns with a population of 2,500–20,000 people, and others (12.7%) lived in more populous areas.

Procedure

Survey participants were recruited through a range of advertising techniques. Most participants (65.7%) were recruited through word-of-mouth. Around a fifth of participants (21.3%) were recruited at local community events, such as festivals and county fairs. The remaining participants (13%) were recruited through website advertisements or local community organizations. This range of strategies enabled us to recruit participants who do not often participate in research and ensured that the participants included both those with and without extensive experience with computer technology. The survey was administered as a computer-assisted self-interview, using the Snap11 software platform on computer tablets. The overall survey completion rate was 94%. Three individuals (0.59% of participants) who could not read completed the survey

as an interview. On average, the survey took 31 min to complete. Each participant received a \$20 Walmart gift card and was provided with information on local community resources. Informed consent, including parental consent and youth assent for minors, was obtained for all participants. All procedures were approved by the institutional review board.

Materials

Given that the study intended to measure a range of adversities and strengths, brevity was important. All measures were developed from prior research or adapted from existing measures and were validated in previous studies (Hamby, Blount, et al., 2021; Hamby et al., 2015, 2019; Hamby, Grych, & Banyard, 2018). All items and development information can be found at <https://www.lifepathsresearch.org/measures/>. Unless otherwise stated, all strength measures were scored on a 4-point Likert scale, ranging from 0 (*not true about me*) to 4 (*mostly true about me*). In all cases, higher scores indicate higher levels of adversity and psychosocial strengths. Alongside the completion of the scales, participants were asked about age, gender, household income, and ownership and use of technology devices.

Adversities

Adversities consisted of polyvictimization exposure (assessing both in-person and online victimization) and financial strain. *Polyvictimization* was measured using the Juvenile Victimization Questionnaire (adapted from Hamby et al., 2004), which consisted of 13 items, plus 11 items from the Digital Polyvictimization Scale (Hamby, Blount, et al., 2018) to comprehensively assess digital victimization (prior work with this sample has established that these experiences were distressing and contributed to current trauma symptoms; Hamby, Blount, et al., 2018, 2021). Therefore, the polyvictimization measure was comprised of 24 items ($\alpha = .84$). For all items, participants were invited to respond to dichotomous anchors (“yes” or “no”), and items were summed to create the scale. Example items include, “During your childhood, did one of your parents get kicked, choked, or beat up by another parent?” and “Someone caused problems for me when they pretended to be me online.” *Financial strain* was considered separately as another form of adversity, given previous associations with well-being (Hamby, Grych, & Banyard, 2018), and was assessed using the Financial Strain Index (Hamby et al., 2011; 5 items; $\alpha = .80$) of current financial difficulties. Items are scored on the 3-point scale ranging from *not true* to *very true*. An example item is, “You don’t have enough money to pay your regular bills.”

Regulatory Strengths

Endurance was measured using the Psychological Endurance Scale (Hamby et al., 2015; six items; $\alpha = .84$) of individual perseverance in the face of challenges. An example item is, “I am a source of strength to my family.” *Impulse control* was assessed using seven items ($\alpha = .71$) describing impulsive thoughts and actions. A sample item is, “I stop to think before I act.” *Recovering positive affect* was measured with five items ($\alpha = .75$) referring to the management of positive emotions. An example item is, “I can cheer myself up after a hard day.” *Self-reliance* was assessed with four items ($\alpha = .73$). An example item is, “I take care of myself.”

Meaning-Making Strengths

Sense of purpose was assessed using three items ($\alpha = .82$) that measure perceptions of a reason for living. An example item is, "My life has a clear sense of purpose." *Religious meaning making* was measured with six items ($\alpha = .95$) relating to religious and spiritual practices. A sample item is, "My faith or spiritual beliefs are very important in my life."

Interpersonal Strengths

Compassion was comprised of five items ($\alpha = .75$) assessing care and concern for others. An example item is, "When others feel sad, I try to comfort them." *Community support* (Roberts et al., 2015) was measured using six items ($\alpha = .82$) that assess how well one's neighbors get along and help one another. An example item is, "People in my neighborhood offer help to one another in times of need." *School climate* consisted of nine items ($\alpha = .91$) that measure attachment, involvement, and commitment toward school. A sample item is, "I am happy to be at my school." *Teacher support* was measured using five items ($\alpha = .94$) which assess perceptions of teacher support. A sample item is, "I had a teacher who was interested in my future."

Subjective Well-Being

Subjective well-being was measured with 13 items ($\alpha = .87$) that assess an individual's satisfaction with their quality of life. Five items were taken from the Satisfaction with Life Scale (Diener et al., 1985; Pavot & Diener, 1993), along with four items from the Self-Concept Scale (Turner et al., 2012, originally adapted from Pearlin & Schooler, 1978; Rosenberg, 1965) and four items from the Life Regard Index (Battista & Almond, 1973). A prior study (Hamby, Blount, et al., 2018; Hamby, Grych, & Banyard, 2018; Hamby, Taylor, et al., 2018) confirmed that all items loaded onto the same 13-item factor, with good reliability and validity. An example item is, "I have a lot to be proud of."

Posttraumatic Growth

For brevity purposes, and in line with other studies (e.g., Sattler et al., 2006), PTG was assessed using six items ($\alpha = .87$), adapted from the Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996) which is a measure of perceived better functioning following adverse experiences. An example item is, "I am able to do better things with my life." The referent period was the past year.

Data Analysis

The analytical approach builds upon previous work in this area (Hamby, Blount, et al., 2018, 2021). First, scale scores were standardized using Z-scores, so that all measures had a mean of 0 and standard deviation of 1. In line with previous work (Hamby, Grych, & Banyard, 2018), polystrengths was defined as the total number of the 10 assessed psychosocial strengths that each individual reported at above average levels ($>.5 SD$). Pearson correlation analyses between study measures were conducted. Next, two separate hierarchical logistic regressions were used to assess the unique contributions of adversities and psychosocial strengths on subjective well-being and PTG. To identify factors that predict above average functioning,

subjective well-being and PTG were dichotomized so that 1 represented scores above $.5 SD$. This is consistent with the analytic strategy used in past RPM research. In the hierarchical logistic regression, demographic information (age and gender) was entered in the first block, adversities (financial strain and polyvictimization) in the second, and polystrengths and the 10 psychosocial strengths in the third.

Results

Victimization exposure was common in the sample, with 93.3% of individuals experiencing at least one digital or in-person victimization. Most individuals in this sample (82.8%) reported two or more forms of victimization. The median number of victimizations reported was 5 ($M = 5.87$; $SD = 4.45$). The most frequent types of victimization included witnessing an assault with some form of weapon (44.4%, e.g., stick, rock, gun, knife, etc.), and experiencing psychological or emotional abuse from a caregiver (22.1%, e.g., caregiver saying mean things or saying they did not want the child). Online relational aggression was also particularly poignant to participants (14.5%, e.g., someone causing problems by saying mean things online).

Bivariate Analyses

Correlations among demographic variables, adversities, polystrengths, and subjective well-being and PTG are presented in Table 1. While adversities were generally negatively associated with subjective well-being and PTG, polyvictimization was unrelated to PTG. Individual strengths were all positively correlated with subjective well-being and PTG.

Adversities, Polystrengths, and Subjective Well-Being

A hierarchical logistic regression was conducted to determine which adversities and protective factors demonstrated associations with subjective well-being (see Table 2). Age and gender were not significantly associated with subjective well-being and explained 0% of the variance. In the next block, adversities explained 11% of the variance in subjective well-being. Although polyvictimization was negatively associated with subjective well-being in the bivariate analysis, at the multivariate level it was not, and financial strain was associated with worse subjective well-being. Resilience portfolio strengths explained more than three times the variance (38%) in subjective well-being compared to adversities (11%), and polystrengths was associated with enhanced perceptions of well-being. Of the specific psychosocial strengths assessed, psychological endurance and sense of purpose were significantly positively associated with better subjective well-being. The final model explained 49% of the variance in subjective well-being.

Adversities, Polystrengths, and Posttraumatic Growth

To assess the adversity and strengths-based factors associated with PTG, a second hierarchical logistic regression was conducted (see Table 3). Demographic variables explained 2% of the variance in PTG, with females reporting higher PTG than males. Adversities accounted for a further 5% of the variance in PTG. Polyvictimization was negatively related to PTG in the correlation analysis, although neither of the adversity variables were significantly associated with PTG in the multivariate regression. Notably, psychosocial

Table 1
Correlations Among All Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Subjective well-being	—	.52	.08	.06	-.33	-.25	.64	.21	.44	.25	.67	.29	.28	.30	.27	.40
2. Posttraumatic growth	—	—	.07	.08	-.11	-.06	.63	.22	.45	.25	.65	.35	.19	.20	.28	.48
3. Age	—	—	—	.21	.04	.07	.18	.21	.16	.18	.15	.21	.07	-.10	-.29	.06
4. Gender	—	—	—	—	.12	-.04	.09	.01	-.01	-.05	.05	.14	.02	-.07	-.14	.21
5. Financial strain	—	—	—	—	—	.30	-.16	.05	-.13	-.19	-.22	.06	-.20	-.32	-.19	-.17
6. Polyvictimization	—	—	—	—	—	—	-.10	-.06	-.14	-.24	-.18	-.04	-.17	.30	-.12	-.05
7. Psychological endurance	—	—	—	—	—	—	—	.36	.48	.40	.64	.33	.25	.21	.27	.53
8. Self-reliance	—	—	—	—	—	—	—	—	.37	.36	.28	.07	.11	.16	.08	.20
9. Recovering positive affect	—	—	—	—	—	—	—	—	—	.28	.50	.27	.17	.17	.20	.34
10. Impulse control	—	—	—	—	—	—	—	—	—	—	.27	.07	.23	.30	.14	.28
11. Sense of purpose	—	—	—	—	—	—	—	—	—	—	—	.44	.19	.27	.26	.47
12. Religious meaning making	—	—	—	—	—	—	—	—	—	—	—	—	.15	.05	.01	.29
13. Community support	—	—	—	—	—	—	—	—	—	—	—	—	—	.37	.23	.25
14. School climate	—	—	—	—	—	—	—	—	—	—	—	—	—	—	.55	.30
15. Teacher support	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	.29
16. Compassion	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note. Italics indicates significance at .05 level. Bold indicates significance at .01 level. Higher scores represent higher levels of each named variable, except for gender, which was dichotomized with a higher value corresponding to “female.”

strengths explained a large proportion of the variance in PTG (43%), far outweighing the contribution of demographic (2%) and adversities (5%). In terms of specific strengths, psychological endurance, sense of purpose, and teacher support were associated with higher perceptions of PTG. Altogether, the total R^2 for the final model was 50%.

Discussion

The increased recognition of the burden of online and in-person victimization has prompted research into the protective factors that can promote resiliency in the face of multiple adverse events. To our knowledge, this is the first study to assess multiple adversity and strength factors that may be associated with psychological well-being and PTG among individuals who have experienced digital and in-person polyvictimization. Although correlated at the bivariate level, in multivariate analyses polyvictimization exposure did not contribute to either subjective well-being or PTG, although some psychosocial strengths were predictive of either or both outcomes in this community sample. These findings extend prior RPM research (Hamby, Blount, et al., 2018, 2021), and are consistent with relationships found between female gender, teacher support and PTG (Tedeschi & Calhoun, 1996; Yablon, 2015), and financial strain and well-being (Hamby, Grych, & Banyard, 2018).

Within the multivariate analyses, resilience portfolio strength factors explained more of the variance in subjective well-being (38%) and PTG (43%), compared to adversities (subjective well-being: 11%, PTG: 5%). This is consistent with the view that subjective perceptions of adverse events are the catalyst for better-perceived functioning, regardless of the level or type of adversity experienced (Brooks et al., 2019; Hamby et al., 2022). When evaluating one's life assets in the face of adverse events, a broadening of individual strengths appears to contribute to processes that lead to enhanced well-being and growth. Out of all the psychosocial strengths assessed, psychological endurance and a sense of purpose showed the most promise in promoting better functioning. These findings are consistent with prior research on in-person

polyvictimization (Gonzalez-Mendez et al., 2021; Hamby, Grych, & Banyard, 2018), which may infer some robustness to these strengths as protective factors that align with better well-being and meaning-making processes. Psychological endurance has received limited attention in mainstream research, yet endurance and a sense of purpose are broadly goal-focused and can persist in the face of adversity (Hamby, Grych, & Banyard, 2018), which may explain why these strengths are pertinent following polyvictimization.

The positive relationships with subjective well-being and the full range of strengths assessed within the bivariate analyses appear contrary to suggestions that PTG is an illusory coping strategy (e.g., Jayawickreme et al., 2021). However, this finding may also be a product of unmeasured cognitive biases such as downward comparisons or social desirability (Gower et al., 2022), which could be a focus of further study. Although previous research has identified relationships between other psychosocial strengths, well-being and PTG (e.g., Hamby, Grych, & Banyard, 2018), not all strengths contributed to subjective well-being and PTG. It may be that some psychosocial strengths are more helpful than others in terms of overcoming adversity (Goodman et al., 2019). This would find support in coping flexibility hypotheses (Kato, 2020) which suggest that ineffective responses to adverse events are discontinued in favor of strategies that lead to more adaptive outcomes. Factors commonly associated with growth and well-being, such as compassion and self-reliance (Park, 2010; Tedeschi & Calhoun, 2004), may therefore not be sufficient for enhanced well-being or PTG in cases of protracted or frequent polyvictimization. Future work should also include post-traumatic harms at the social and community levels (Villagrán Valenzuela et al., 2021).

Strengths and Limitations

This study has strengths and limitations which should be considered when interpreting the findings. Notably, this study contributed to the limited literature on subjective well-being and PTG following online and in-person victimization, demonstrating that PTG is a possible outcome in the aftermath of such

Table 2
Hierarchical Logistic Regression Predicting Subjective Well-Being

Predictor	Subjective well-being		
	Odds ratio (OR)	95% CI for OR	
Block 1			
Age	.85	.64	1.13
Gender	.96	.74	1.26
R^2 demographics only	.00		
Block 2			
Financial strain	.60***	.45	.80
Polyvictimization	1.01	.76	1.35
ΔR^2 when adversities added	.11		
R^2 adversities + demographics	.11		
Block 3			
Polystrengths	2.41**	1.37	4.28
Regulatory strengths			
Psychological endurance	1.89**	1.19	3.02
Self-reliance	1.10	.80	1.52
Impulse control	.74 [†]	.54	1.02
Recovering positive affect	.86	.61	1.21
Meaning-making strengths			
Sense of purpose	2.24***	1.46	3.44
Religious meaning-making	1.03	.77	1.39
Interpersonal strengths			
School climate	1.23	.85	1.80
Teacher support	.85	.60	1.21
Community support	.94	.69	1.26
Compassion	.72 [†]	.49	1.05
ΔR^2 resilience portfolio strengths added	.38		
Final R^2 full model	.49		

Note. Gender was dichotomized with a higher value corresponding to "female." Final full model with all planned variables included. At each block, the percentage of variance explained by the variables in that and any previous block is shown (R^2). For Blocks 2 and 3, the additional variance explained by the new variables is shown (ΔR^2).

[†] $p < .10$. ** $p < .01$. *** $p < .001$.

polyvictimization. The study included a wide range of psychosocial strength measures, some of which have rarely been studied in relation to subjective well-being or PTG. Although the measures were developed via an extensive mixed-methods process, continuing work to improve and expand measures of psychosocial strengths may enhance the identification of key strengths. The large community sample is representative of the largely White and low-income southern U.S. Appalachia region, but further research is needed to see whether the findings are generalizable to more diverse U.S. communities and beyond, where cultural expressions of enhanced functioning may differ. The sample age range was broad, but the study did not investigate whether polystrengths vary at different developmental periods, which could be a focus of further study. Although a cross-sectional design was used to maximize cost-effectiveness, the findings would benefit from longitudinal replication to provide further insight as to whether strength factors can sustain growth and well-being over time, furthering debates around the veracity of PTG (Jayawickreme et al., 2021). The study did not measure the perceived severity of victimization experiences, and future resilience research could examine whether that impacts growth or well-being.

Table 3
Hierarchical Logistic Regression Predicting Posttraumatic Growth

Predictor	Posttraumatic growth		
	Odds ratio (OR)	95% CI for OR	
Block 1			
Age	.77 [†]	.58	1.02
Gender	1.39*	1.07	1.82
R^2 demographics only	.02		
Block 2			
Financial strain	1.12	.84	1.49
Polyvictimization	.86	.64	1.14
ΔR^2 when adversities added	.05		
R^2 adversities + demographics	.07		
Block 3			
Polystrengths	1.23	.70	2.18
Regulatory strengths			
Psychological endurance	2.54***	1.58	4.09
Self-reliance	.83	.60	1.15
Impulse control	1.13	.84	1.53
Recovering positive affect	1.25	.88	1.77
Meaning-making strengths			
Sense of purpose	2.74***	1.76	4.27
Religious meaning-making	.95	.70	1.29
Interpersonal strengths			
School climate	.86	.60	1.22
Teacher support	1.64**	1.16	2.33
Community support	.86	.64	1.15
Compassion	1.10	.75	1.62
ΔR^2 resilience portfolio strengths added	.43		
Final R^2 full model	.50		

Note. Gender was dichotomized with a higher value corresponding to "female." Final full model with all planned variables included. At each block, the percentage of variance explained by the variables in that and any previous block is shown (R^2). For Blocks 2 and 3, the additional variance explained by the new variables is shown (ΔR^2).

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Implications and Conclusion

Using the RPM as a theoretical framework, this study has contributed knowledge in relation to the psychosocial strengths that are associated with enhanced subjective well-being and PTG following polyvictimization. Emerging research has indicated the potential for resilient outcomes following victimization in the digital and physical world (Hamby, Taylor, et al., 2020), and it will be essential for this to translate into policy and practice. The findings offer broad support to ideas that advocate targeted interventions to promote strengths to manage the aftereffects of adversity, as opposed to a sole focus on victimization history or symptoms (David et al., 2022; Hamby et al., 2022). Interventions that promote psychosocial strengths, particularly psychological endurance and sense of purpose, may lead to enhanced well-being and meaning making for overcoming adversity. A recent meta-analysis indicated that mindfulness and narrative interventions were especially effective for promoting meaning making (Manco & Hamby, 2021). The findings may also address earlier arguments as to whether personalized support is more effective in promoting well-being compared to generic strengths-based interventions that target multiple strengths (Ruch et al., 2020), the latter of which may not be practical for clinicians within time-limited intervention programs.

These findings indicate that a range of different strengths and a diverse portfolio of strengths (polystrengths) are important for thriving after adversity. Unfortunately, resilience is still often discussed as if it is loosely equivalent to emotional toughness or unflappability. Data from this and other studies indicate that no single strength produces resilience. Rather, resilience involves drawing upon a range of psychological and social-ecological resources in response to adversity (Hamby, Grych, & Banyard, 2018; Ungar, 2013). Future research should continue to investigate other systemic or contextual sources of strength that may facilitate enhanced functioning after polyvictimization.

This study has identified potential protective factors that can promote subjective well-being and PTG among a community sample and raises further questions about the range of potentially useful strengths and mechanisms of strength development following polyvictimization. Given that not all strengths explained the variance in the two outcomes, and the strengths assessed accounted for 38%–43% of the variance in subjective well-being and PTG respectively, future work should continue to expand the range of strengths to improve our understanding of factors that can promote better well-being and PTG following in-person and digital polyvictimization. Such research would go further to help support prevention and intervention efforts to improve the well-being of people burdened by victimization.

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