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Collective Violence, Strengths, and Perceived Posttraumatic Growth: A Scoping Review

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Abstract

Collective violence—such as armed conflict, state-sponsored violence, and terrorism—represents a profound form of trauma, which can harm individuals, communities, and societies. Existing research has largely examined risk factors and negative psychosocial outcomes from collective violence, neglecting the potential for survivors to draw upon a range of strengths that may allow them to perceive benefits from their experiences, known as posttraumatic growth (PTG). This scoping review uses the resilience portfolio model to highlight a potential portfolio of meaning-making, regulatory, and interpersonal-ecological strength-based resources and assets that are conducive to perceived PTG (PPTG) and possible better functioning following collective violence. The present review identified 52 papers from CINAHL, MEDLINE, PsycArticles, and PsycInfo, spanning from January 1995 to May 2023, which specifically focused on strengths and PTG in populations who reside (or had resided) in over 20 countries. This review highlights individual- and group-level meaning making, regulatory, and interpersonal strengths used by survivors in both individualistic and collectivist societies, providing a more comprehensive understanding of resilience and PPTG after collective violence. Some strengths, such as religious coping, positive reappraisal, and social support, demonstrated mixed relations with PPTG. The research also identified previously uncategorized ecological/systemic supports for PPTG such as political climate, access to education, and sanitation infrastructure, which require more research. The findings call for culturally sensitive approaches that recognize and promote individual and community efforts to enhance well-being among populations disproportionately affected by collective violence.

Collective violence presents a global mental health challenge (Benjet et al., 2016; Sousa, 2013), as populations are exposed to widespread and interconnected acts of harm, violence, or injustice, such as armed conflict, state-sponsored violence, organized crime, and terrorism. The consequences of exposure to such events are serious and include forced displacement (Pries, 2019), mental health challenges (Kira et al., 2019) and interpersonal functioning difficulties (Al-Krenawi & Graham, 2012), threats to social identity (Bilali & Vollhardt, 2019), and the cohesion and stability of societies (Derluyn et al., 2013). Although the negative psychological sequelae of collective violence have been previously documented, there is increasing recognition that collective adversity can be a catalyst for perceived positive transformations in survivors, known as posttraumatic growth (PTG; Ali et al., 2023). Even so, to date, relatively little is known about positive protective factors (strengths, resources, or assets) that are associated with PTG after exposure to collective violence. The present scoping review aims at bridging this gap in the existing knowledge.

PTG After Collective Violence

Most trauma research and discourse has concentrated on the psychosocial effects of adversity at the individual rather than collective level (Ali et al., 2023). However, research interest regarding the psychosocial consequences of collective violence has risen, at least partly because of some societies' increased awareness of the harmful mental health effects of conflict, political turmoil, and terrorism (Başoğlu et al., 2005; Spilerman & Stecklov, 2009). Research that has examined the psychosocial consequences of collective violence, and the study of traumatic after-effects more generally, has traditionally approached the topic from a deficit-based lens, with a focus on risk factors that contribute

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to negative psychological outcomes (El Mhamdi et al., 2017; Luszczynska et al., 2009; Sousa, 2013). The concept of PTG offers a complementary perspective, which recognizes the potential for humans to not only survive, but thrive, in the aftermath of adversity. PTG is thought to arise due to the cognitive and emotional struggle when processing seismic experiences (Tedeschi & Calhoun, 2004), and wider contextual factors including access to education (Maung et al., 2021) and mental healthcare (Jaramillo & Felix, 2021), or moving to a new location in the aftermath of adversity (Brooks et al., 2021). Survivors who report growth typically describe transformative changes in their interpersonal relationships since the adversity occurred, along with a renewed appreciation for life, enhanced perceptions of personal strength, greater spirituality or religious beliefs, and the opening of new possibilities (Tedeschi & Calhoun, 2004). Furthermore, survivors who endorse growth also engage in more prosocial behavior (Frazier et al., 2013); hence, PTG is a multifaceted phenomenon comprised of behavioral, interpersonal, social, and spiritual elements. Although PTG is often framed as a process experienced at the individual level (Tedeschi & Calhoun, 1996), within the context of collective trauma, these positive transformations can also co-occur at the communal level, through greater community cohesion and collective agency (Williamson, 2014).

It is argued that PTG is associated with benefits to well-being and functioning (Blevins & Tedeschi, 2022), even in the presence of posttraumatic stress symptoms and despite the level of adversity experienced (Hamby et al., 2022), at least in the short term. However, it has been noted by others that PTG has illusory qualities that are unrelated to improved functioning and may reflect poorer functioning (Jayawickreme et al., 2021) or that PTG may be expressed differently depending on the context in which it is reported (Henson et al., 2021). Considering the lack of consistency in research findings that link PTG with observable (or objective) positive well-being outcomes, in the present paper, we will focus on the survivors' subjective perception of PTG and thus use the term *perceived PTG* (PPTG). There is an increasing body of literature that points to the potential for healing, meaning-making resilience among survivors of collective violence (Ali et al., 2023; Clark & Ungar, 2021; Hirschberger, 2018; Kahraman & Kına, 2024) both at the individual and collective level (Williamson, 2014), which calls for further understanding as to factors that could be associated with these perceived transformational changes.

Understanding Resilience After Collective Violence

Resilience literature may provide insights into the facilitators of growth that could explain improved well-being following collective violence. Although some researchers conceptualize resilience as a trait (Wagnild & Young, 1993), contemporary understandings view it as a dynamic process of adaptation after adversity operating at multiple levels (e.g., individual, family, community, and cultural; Southwick et al., 2014). Work on resilience has shifted the focus from identifying risk factors to recognizing socioecological and individual strengths that enhance well-being (Bonanno, 2021; Hamby et al., 2018). Although inherent to resilience and PPTG are the challenge presented by adversity, resilience is concerned with psychosocial processes that support positive adaptation (and not just the absence of symptoms; Hamby et al., 2018), and PPTG refers to transformative changes reported after adverse events (Tedeschi et al., 2018). Informed by work in positive psychology, PPTG, resilience, and stress and coping, the resilience portfolio model (RPM; Grych et al., 2015) presents a framework for understanding how a combination of individual and external strengths support individuals to overcome trauma. The RPM proposes that resilience comprises a diversity of strengths needed to navigate the negative sequelae associated with violence. These strengths fall into three higher-order domains. *Regulatory strengths* are resources that people use to manage emotional and behavioral responses, such as emotion regulation. *Meaning-making strengths* refer to how people derive significance from their connections with something greater than themselves, including religious belief and sense of purpose. *Interpersonal strengths* are relational supports, such as group connectedness and compassion. According to the RPM, the number of strengths in an individual's portfolio could contribute to healthy psychological functioning (Hamby et al., 2018).

Recent evidence supports the idea that the diversity and totality of strengths, collectively known as *poly-strengths*, could help mitigate the burden associated with exposure to cumulative and wide-ranging forms of violence. One study identified that psychological endurance, sense of purpose, teacher support, and poly-strengths were associated with better well-being and/or PPTG in people who reported multiple forms of victimization (Brooks et al., 2023). A review identified that social connections, nationwide meaning making, dignity, and honor were important strengths used to promote health outcomes in Kosovo and other post-conflict societies in southeastern Europe (Kelmendi & Hamby, 2023). Taken together, the RPM provides a useful framework to identify an array of strengths and protective factors that could facilitate PPTG and inform support prevention and intervention efforts in response to collective violence.

Research has increasingly supported a multifaceted approach to the study of resilience, although many existing studies have been conducted in Western nations, which tend to emphasize personal resilience and PPTG experiences within the individual, unlike collectivist cultures where communal bonds and social cohesion are more salient (Ali et al., 2023; Kashyap & Hussain, 2018). In addition, although collective violence can occur in any region of the world, its effects are disproportionately felt in low-income nations (Levy et al., 2017). There is a need to understand the strengths

that may relate to PPTG in communities and societies that have been exposed to collective violence globally. The identification of collective strengths in societies that have experienced systemic violence or historical trauma could help identify markers of individual and collective functioning (Sousa, 2013) and are also necessary to help individuals and societies heal (Ortega-Williams et al., 2021).

Although the psychosocial consequences of adversity experienced at an individual level have been studied extensively, less is known about the psychosocial repercussions of collective violence. Existing research has narrowly focused on negative psychological outcomes and their risk factors, which does not recognize the potential of people to thrive following collective violence. Some existing reviews (Betancourt & Khan, 2008; Bosqui & Marshoud, 2018; Masten & Narayan, 2012; Siriwardhana et al., 2014) have considered protective factors after collective violence, but are limited in several aspects. For instance, resilience has been framed as an outcome rather than a dynamic process made up of a range of strengths (Masten & Narayan, 2012). Furthermore, existing reviews tend to focus on a narrow range of populations (e.g., child survivors of armed conflict, Betancourt & Khan, 2008) and/or forms of collective violence (e.g., war/armed conflict, Bosqui & Marshoud, 2018). There is also a lack of recognition for the potential of collective violence survivors to report PPTG following exposure. With these considerations in mind, the present scoping review will use the RPM as a framework to synthesize existing knowledge about strength-based assets and resources that may be associated with PPTG at the individual and/or collective level in people who have experienced collective violence.

Methodology

We completed a literature search of the CINAHL, MEDLINE, PsycArticles, and PsycInfo databases for this scoping review. Our inclusion criteria were that papers: (a) should focus on survivors of collective violence; (b) examine or explore strength-based protective factors; (c) use PTG as an outcome; and (d) are peer-reviewed empirical articles published in English between January 1995 (the year in which the term "PTG" was first coined by Tedeschi & Calhoun, 1995) and May 2023, the point at which the searches were conducted. No restrictions were applied regarding the study design, study setting, or country of publication; however, review articles were excluded.

The process of searching and extracting studies is shown in Figure 1. The initial search terms were entered in three steps: (a) to capture the target population such as "collective trauma," "collective violence," "mass trauma," "political violence," "war," "conflict," "terroris*," or "genocide," (b) to identify articles that focused on strengths, with terms such as "strength*" or "protective," and (3) to capture the outcome of interest, such as "posttraumatic growth," "post-traumatic growth," or "PTG." We used the Boolean operator "OR" to combine similar terms within each step (e.g., all terms relating to collective violence), with each step separated by "AND" to ensure the returned searches were not too broad. This initial search yielded 384 papers prior to screening. An extended search was then conducted, using other synonyms to describe relationships, including "predict*," "facilitat*," or "determin*," further synonyms for types of strengths such as "gratitude," "endurance," or "social support," and alternative terms for PTG including "meaning making," "thriving," "finding benefits," "stress-related growth," "adversarial growth," or "collective PTG." This resulted in 828 more articles, with 1,212 for abstract screening. After removing articles that did not meet the inclusion criteria (*N*=1,002), a full-text review of the remaining articles took place. The 10 review articles that were excluded focused either on risk factors and PPTG, specific forms of collective violence, did not explicitly discuss strengths or PPTG, or treated resilience as an outcome rather than a dynamic process. One of the cited studies (Anderson et al., 2019) in the published reviews was already incorporated into our review. No additional studies were included from the review articles.

To streamline the screening process, Rayyan web-based software designed for systematic reviews was used (Ouzzani et al., 2016). Both the first and second authors independently reviewed the abstracts of all imported studies in Rayyan. Any discrepancies or doubts regarding inclusion/exclusion were resolved through discussions involving both reviewers and the remaining authors.

Results

Fifty-two studies published between 2005 and 2023 were identified. The results are organized according to the three domains of the RPM: (a) regulatory strengths, (b) meaning-making strengths, and (c) interpersonal strengths. We recognize that some strengths overlap or may feature across more than one domain and have noted this where possible. A summary of key findings is presented in Table 1, with a summary of the studies included in the Supplementary Information. Most of the studies (*N*=38) were cross-sectional and quantitative in nature, with an additional three using longitudinal methods. The remaining studies adopted qualitative (*N*=9) or mixed-method (*N*=2) approaches. Included studies sampled populations in over 20 countries, and largely consisted of refugee populations affected by armed conflict, political violence, and genocide from the Middle East and Africa, including displaced refugee populations from these conflicts, and others, residing in Western countries. Five studies focused on isolated mass violent events in Spain and the United States.

Meaning-Making Strengths

Thirty studies measured meaning-making strengths. Religious coping, faith, and spirituality were well-represented across the studies and positively associated with
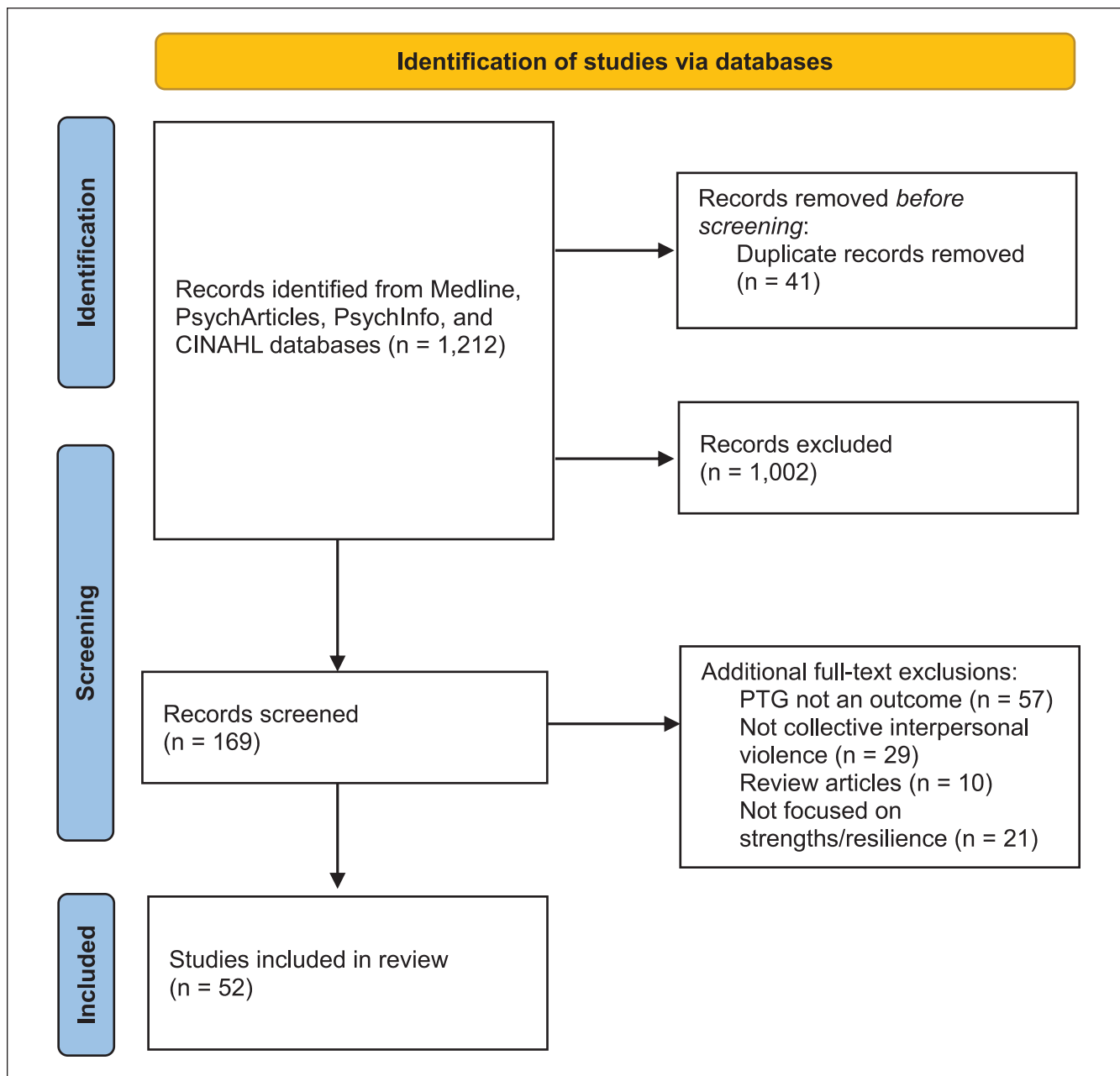
Figure 1. PRISMA flow diagram of searches and extraction of studies.

PPTG (Abraham et al., 2018; Alsubaie et al., 2021; Cárdenas-Castro et al., 2021; Doherty et al., 2020; Ersahin, 2022; Exenberger et al., 2022; Ferriss & Forrest-Bank, 2018; Kanaan et al., 2020; Kroo & Nagy, 2011; Matos et al., 2021; Morrison & Dwarika, 2022; Ochu et al., 2018; Ogden et al., 2011; Shah & Mishra, 2021; Şimşir et al., 2021; Taylor et al., 2020; Uy & Okubo, 2018), and in one study, religious commitment moderated the relationship between trauma exposure and PPTG (Acquaye et al., 2018). However, some studies found that religious coping was unrelated to PPTG at the bivariate (Anderson et al., 2019; Feder et al., 2008; Kroo & Nagy, 2011) or multivariate level (Feder et al., 2008), with

qualitative findings suggesting that religious coping was unhelpful for some survivors (Simms, 2015).

Strengths centered on adherence to a specific creed or ethos were conducive to greater PPTG. Adopting a moral approach to life (Kroo & Nagy, 2011), spiritual, career, intellectual, romantic, materialistic, and life values (Doherty et al., 2020; Exenberger et al., 2022; Şimşir & Dilmaç, 2021; Uy & Okubo, 2018) and valuing one's life fortunes (Maung et al., 2021) were related to greater PPTG. Furthermore, reconciliatory beliefs of reconstructing a society based on democracy and the rule of law (Cárdenas-Castro et al., 2021) and holding a strong attachment (Nuttman-Shwartz et al.,

Table 1. Summary of Key Findings.

- Research evidence suggests that despite the high burden of collective violence, survivors draw upon a portfolio of regulatory, meaning-making, interpersonal, and ecological strengths at individual and collective levels that may help to facilitate higher levels of PPTG.
- Meaning-making strengths utilized by survivors that were associated with more PPTG included hope, gratitude, adherence to specific moral values, collective meaning making, and participation in mission-driven activities such as community activism. Religious or spiritual coping and optimism had mixed relationships with PPTG.
- Regulatory assets for collective violence survivors linked to enhanced PPTG included perspective taking, self-reflection, and engaging in activities to regulate emotions such as leisure, yoga, or engagement with mental health services. There were conflicting findings regarding problem-focused coping, acceptance, and positive reappraisal.
- Interpersonal resources aligned with greater PPTG include community participation, collective action, and helping others. Evidence was inconclusive regarding the effectiveness of social support on promoting PPTG.
- Ecological assets that are not presently recognized in the RPM that may facilitate increased PPTG include the provision of education, employment, new homes, sanitation, and a free political climate. School safety and access to therapy demonstrated mixed findings.

Note. PPTG = perceived posttraumatic growth.

2011; Taylor et al., 2020) or commitment to rebuilding one's homeland (Şimşir et al., 2021) were related to higher levels of PPTG.

Aspects of a positive mindset were found to relate to more PPTG. Holding positive views about the world (Abraham et al., 2018; Butler et al., 2005; Exenberger et al., 2022; Uy & Okubo, 2018), meaning-in-life beliefs (Cárdenas-Castro et al., 2021; Doherty et al., 2020; Jaramillo & Felix, 2021; Morrison & Dwarika, 2022; Shah & Mishra, 2021; Uy & Okubo, 2018), a will to live (Kanaan et al., 2020; Uy & Okubo, 2018), and aspirations for the future (Maung et al., 2021) were strengths utilized by survivors that were related to more PPTG. Optimism was associated with more growth in several studies (Feder et al., 2008; Sleijpen et al., 2016; Uy & Okubo, 2018), but was only significant at the bivariate level in others (Anderson et al., 2019; Kroo & Nagy, 2011), or unrelated to PPTG in one longitudinal study (Fausor et al., 2022). Hope was associated with more PPTG in several studies (Abraham et al., 2018; Kroo & Nagy, 2011; Maung et al., 2021; Richardson, 2023; Uy & Okubo, 2018), but was only related to PPTG at the multivariate level in other research (Ai et al., 2007). In addition, greater life satisfaction (Sleijpen et al., 2016), contentment (Morrison & Dwarika, 2022), and gratitude toward life (Kroo & Nagy, 2011; Maung et al., 2021; Morrison & Dwarika, 2022; Taylor et al., 2020) were related to greater PPTG. Appreciation of life demonstrated mixed findings, being a facilitator of more PPTG (Exenberger et al., 2022; Matos et al., 2021), but also seen as less useful for other survivors in qualitative work (Simms, 2015). Self-appreciation (Morrison & Dwarika, 2022), a sense of self-worth (Maung et al., 2021), sense of coherence (Forstmeier et al., 2009), an acceptance of one's own limitations (Maung et al., 2021; Morrison & Dwarika, 2022) were also strengths associated with more PPTG. Sense of purpose was found to be positively related (Uy & Okubo, 2018) and unrelated to PPTG (Feder et al., 2008).

Mission-driven activities and behaviors were additional strengths associated with greater PPTG. Participation in communal funerary rituals (Gasparre et al., 2010), secular commemorations (Gasparre et al., 2010), truth and reparation commissions (Gasparre et al., 2010), fundraising, rallies, and community forums (Jaramillo & Felix, 2021), community and political activism (Uy & Okubo, 2018), participation in social movements and demonstrations (Gasparre et al., 2010; Páez et al., 2007), and the desire to succeed in life and leave a legacy for others (Uy & Okubo, 2018) were meaning-making strengths that facilitated higher PPTG. Engagement in remembrance activities was only related to increased PPTG at the bivariate level among university students exposed to a mass murder incident (Jaramillo & Felix, 2021).

Regulatory Strengths

Twenty-six studies measured regulatory strengths. Problem-focused active coping was related to PPTG in several studies (Acar et al., 2021; Al Beainy & El Hassan, 2023; Butler et al., 2005; Ersahin, 2022), although it was associated with more PPTG at the multivariate level only in Tibetan refugees (Hussain & Bhushan, 2011), and demonstrated a nonsignificant relationship with PPTG at the bivariate level among female survivors of conflict-related sexual violence in Bosnia and Herzegovina (Anderson et al., 2019). One study (Butler et al., 2005) did not use a global PPTG score and instead assessed changes using the five domains of the Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996). Greater use of active coping was associated with less PPTG in the personal strength, relating to others, and spiritual change domains either at baseline and/or at the 6-month follow-up. Emotion-focused coping demonstrated mixed associations with PPTG, with some studies reporting positive (Acar et al., 2021) and negative (Ersahin, 2022) associations.

Beyond general coping strategies, other regulatory strengths were aligned with greater PPTG. Positive reappraisal was related to increased PPTG at the multivariate level in several studies (Ai et al., 2007; Anderson et al., 2019;

Butler et al., 2005; Cárdenas-Castro et al., 2021; Maung et al., 2021), but only at the bivariate level in others (Al Beainy & El Hassan, 2023; Hussain & Bhushan, 2011). Adaptive cognitive processing (Currier et al., 2013) and deliberate rumination (Cárdenas-Castro et al., 2021) were positively related to PPTG, but only at the bivariate level. Perspective taking was associated with more PPTG (Hussain & Bhushan, 2011), as was cognitive flexibility in the sense of adapting to new situations (Hijazi et al., 2015), self-reflection (Doherty et al., 2020; Matos et al., 2021; Morrison & Dwarika, 2022), and self-awareness (Morrison & Dwarika, 2022). Acceptance of the situation or one's own fate was related to greater PPTG in some studies (Butler et al., 2005; Kroo & Nagy, 2011; Morrison & Dwarika, 2022; Uy & Okubo, 2018), but was nonsignificant in others (Anderson et al., 2019; Hussain & Bhushan, 2011). Positive affect was associated with increased PPTG (Erbes et al., 2005). Specifically, positive emotions of excitement, strength, joy, and pride were positively related to perceived benefits (Vázquez & Hervás, 2010). Humor was unrelated to PPTG among conflict-related sexual violence survivors (Anderson et al., 2019). Self-control (Al Beainy & El Hassan, 2023), patience (Ferriss & Forrest-Bank, 2018; Şimşir et al., 2021), and humility (Maung et al., 2021) were identified as useful strengths to regulate emotions and behaviors aligned with increased PPTG. Restraint that involved holding back coping attempts until they were of use was unrelated to PPTG among conflict-related sexual violence survivors (Anderson et al., 2019). Self-efficacy to engage in goal-directed actions (Hall et al., 2010; Kokun, 2023; Morrison & Dwarika, 2022; Uy & Okubo, 2018) and perseverance to contribute to the well-being of the community (Ferriss & Forrest-Bank, 2018) were associated with greater PPTG.

Several studies revealed activities and behaviors that were used by survivors to enhance regulatory strengths. Engagement in personal self-care, which included leisurely activities (Maung et al., 2021; Şimşir et al., 2021), Kundalini yoga (Morrison & Dwarika, 2022), and meditation (Abraham et al., 2018; Morrison & Dwarika, 2022), were all aligned with enhanced PPTG. Other studies found that longer periods of engaging with art, writing, or music to heal were unrelated to PPTG (Richardson, 2023). Post-event coping activities were related to higher levels of PPTG at the bivariate but not multivariate level (Jaramillo & Felix, 2021), although the nature of the activities was not specified. Survivors who accessed ecological supports for the purposes of regulating emotions and behaviors, namely engagement with mental health services (Jaramillo & Felix, 2021) and education (Ferriss & Forrest-Bank, 2018; Matos et al., 2021; Şimşir et al., 2021; Uy & Okubo, 2018), and finding new employment (Ferriss & Forrest-Bank, 2018), also reported more PPTG.

Six studies identified regulatory strengths more aligned with trait-like resilience. Survivors of the Ukraine-Russia war (Kokun, 2023), Sunni Muslim Syrian and Palestinian

refugees (Kanaan et al., 2020; Şimşir et al., 2021), and Cambodian survivors of genocide (Uy & Okubo, 2018) reported increased hardiness, toughness, and competence, respectively, which were all positively associated with PPTG. Among American war veterans recovering from injuries, hardiness was related to more PPTG at the multivariate level only (Bartone & Bowles, 2021).

Interpersonal Strengths

Twenty-five studies included measures of interpersonal strengths. Although overall social support (Bhat & Rangiah, 2015; Panjikidze et al., 2020) was an important asset associated with more PPTG among survivors, other studies identified emotional and practical support as being conducive of greater PPTG (Abraham et al., 2018; Currier et al., 2013; Jaramillo & Felix, 2021; Maung et al., 2021; Nordstrand et al., 2020). Yet, emotional and instrumental social support were unrelated to PPTG in other research (Anderson et al., 2019; Feder et al., 2008), as was perceived social support (Jaramillo & Felix, 2021). Other studies reported a lack of association between social support satisfaction and PPTG at the bivariate level, but it was significant and positive at the multivariate level (Hall et al., 2010). Functional support was positively related to the relating to others and spiritual change dimensions of PPTG at the bivariate level only among Korean war veterans (Erbes et al., 2005), as was post-event informational support among students exposed to a terrorist attack (Jaramillo & Felix, 2021), and instrumental support among internally displaced children (Panjikidze et al., 2020). In a longitudinal study of responses to 9/11 (Butler et al., 2005), social support was positively associated with the relating to others PPTG domain at baseline, but unrelated to any PPTG domain at the six-month follow-up.

In addition, the size and diversity of a survivor's support network was a key strength associated with higher levels of PPTG. Receiving support from spouses, family, and friends (Arenliu et al., 2019; Nordstrand et al., 2020; Simms, 2015; Şimşir et al., 2021; Şimşir & Dilmaç, 2021; Sleijpen et al., 2016; Uy & Okubo, 2018) was often cited as an interpersonal resource for survivors aligned with more PPTG. Beyond immediate support networks, support from neighbors (Şimşir et al., 2021), classmates (Panjikidze et al., 2020), teachers (Maung et al., 2021; Yablon, 2015), and post-deployment support from peers and superiors within military structures (Maguen et al., 2006) were conducive to greater PPTG. In addition, support received from refugee reception centers (Abraham et al., 2018; Maung et al., 2021), formal institutions such as United Nations (Maung et al., 2021), and perceived support from the wider societal population (Şimşir et al., 2021) were interpersonal strengths that helped survivors navigate difficulties following collective violence and report more PPTG. However, other research with internally displaced children in Georgia found that support from teachers and school was positively related to PPTG at the bivariate

level only (Panjikidze et al., 2020). In the same study, conscientiousness and extraversion helped to navigate relational networks, which in turn enhanced PPTG. Agreeableness and intellect/openness were only positively related to PPTG at the bivariate level.

Survivors also drew upon their connections with others (Maung et al., 2021; Morrison & Dwarika, 2022; Şimşir et al., 2021; Taylor et al., 2020), school (Yablon, 2015), and religious communities (Abraham et al., 2018; Maung et al., 2021), which were associated with more PPTG. The ability or wish to disclose and share experiences and emotions (Al Beainy & El Hassan, 2023; Cárdenas-Castro et al., 2021; Currier et al., 2013; Rimé et al., 2010; Uy & Okubo, 2018), as well as the recognition of being a survivor of collective violence by significant others (Forstmeier et al., 2009), was related to increased PPTG. Social sharing of emotion was related to more collective benefits (e.g., political participation and community awareness of human rights violations) 1 (Rimé et al., 2010) and 3 weeks (Páez et al., 2007) after the Madrid terrorist attacks in 2004. However, these studies were inconsistent in terms of when social sharing was aligned with PPTG, with Rimé et al. (2010) reporting significant positive associations 1-week post-event only, whereas Páez et al. (2007) observed a significant positive association only 3-weeks post-event. The ability to open up to others, community engagement, and belongingness were seen as less helpful for PPTG among other survivors in qualitative studies (Simms, 2015), as some survivors felt that memory of the collective violence would fade over time and these strengths would be less salient (Richardson, 2023). Survivors reported gratitude at receiving kindness received from others, which was aligned with more PPTG (Maung et al., 2021; Taylor et al., 2020).

As well as receiving support, interpersonal strengths in terms of understanding and relating to others were identified. Specifically, compassion (Doherty et al., 2020; Exenberger et al., 2022; Maung et al., 2021; Morrison & Dwarika, 2022; Şimşir et al., 2021), empathy (Simms, 2015), tolerance of others (Ferriss & Forrest-Bank, 2018; Şimşir et al., 2021), tolerance between societal ethnic groups (Exenberger et al., 2022), and cultural competence by way of abiding by the spiritual beliefs and values of others (Doherty et al., 2020) were strengths all associated with greater PPTG. Forgiveness was unrelated to PPTG among Chilean survivors of state terrorism (Cárdenas-Castro et al., 2021), but it was positively related to PPTG among Liberian (Ochu et al., 2018) and Sierra Leonean (Exenberger et al., 2022) civil war survivors and people indirectly affected by a mass shooting (Wusik et al., 2015).

In addition to receiving support and recognition, the ability to help and advocate for others in similar situations (Maung et al., 2021; Richardson, 2023; Simms, 2015; Taylor et al., 2020; Uy & Okubo, 2018), participation in community (Arenliu et al., 2019) or victim organizations (Simms, 2015), community organizing (Richardson, 2023), becoming a

leader in the community (Richardson, 2023; Uy & Okubo, 2018), engaging in collective action to produce social change (Richardson, 2023), and an awareness of social control (knowing how people behave to create safe spaces; Richardson, 2023) facilitated greater PPTG.

Ecological Strengths

Eleven studies measured resources or assets that survivors gained from their interactions with the wider natural and/or human environment not presently categorized in the RPM. Ecological supports through the provision of educational resources (Ferriss & Forrest-Bank, 2018; Maung et al., 2021; Şimşir et al., 2021), employment opportunities (Ferriss & Forrest-Bank, 2018), and new homes (Ferriss & Forrest-Bank, 2018) were seen as contributory factors associated with more PPTG. School safety and the provision of school facilities were negatively related to PPTG, with school anti-violence policies unrelated to PPTG at the multivariate level (Yablon, 2015). Studies also found that accessing therapy was only significantly related to more PPTG at the bivariate level (Jaramillo & Felix, 2021; Richardson, 2023).

Other studies discussed wider societal strengths. Among civil war survivors in Sierra Leone (Exenberger et al., 2022), higher levels of PPTG were facilitated by societal (e.g., progress with regards to human rights) and political developments (e.g., provision of free educational and health facilities, and improved sanitation). Economic conditions in society were positively related to PPTG in one study (Kimhi et al., 2010), as was the sociocultural context (Shah & Mishra, 2021), although the latter strength was not clearly defined. The same study reported that the social environment (defined as the home environment and orphanages) was negatively related to PPTG, although other research reported that satisfaction with living conditions was unrelated to PPTG (Kroo & Nagy, 2011). In addition, living in a peaceful, safe, and politically free environment (Matos et al., 2021; Şimşir et al., 2021), a positive emotional climate in the country (Páez et al., 2007), and exerting personal agency to either leave or stay in an environment affected by collective violence (Richardson, 2023) were assets that may facilitate higher PPTG.

Discussion

The experience of collective violence can lead to significant psychosocial consequences on individuals, communities, and societies. Using the RPM as a framework, research evidence suggests that survivors draw upon a portfolio of meaning-making, regulatory, interpersonal, and ecological strengths to help overcome the burden of such adversity. Meaning-making strengths linked to greater PPTG among collective violence survivors included adherence to specific values and moral beliefs, hope, gratitude, and mission-driven activities such as community activism, with mixed

findings in relation to religious coping and optimism. Regulatory strengths aligned with more PPTG included perspective taking, self-reflection, and activities such as leisure, yoga, meditation, or engagement with mental health services. Findings were less conclusive in relation to problem-focused coping, acceptance, and positive reappraisal. Interpersonal strengths associated with greater PPTG included helping others, community participation, and collective action, although results were mixed about the effectiveness of social support on PPTG. We also identified ecological supports not currently categorized in the RPM, including education, employment, new homes, and a free political climate, although school safety and access to therapy had mixed impacts on PPTG. Broadly, the results support other work on collective trauma that has observed meaning-making processes, regulated emotional expression, interpersonal resources, and the wider social ecology to be aligned with enhanced well-being following the COVID-19 pandemic and other natural disasters (Cadamuro et al., 2021; Maffly-Kipp et al., 2022; Wlodarczyk et al., 2017).

Limitations

Although this was the first review of strength-based facilitators of PPTG in the context of collective violence, it is not without limitations. This review only included English-language peer-reviewed papers to allow the research team to review the articles. Although we used a wide range of search terms relevant to collective violence, strengths, and PTG, it is possible that not all relevant work was included in the review. The examples of collective violence featured in this review largely included war, genocide, and forced displacement because of armed conflict. Our search terms did not include other forms of collective violence, harm, and abuse such as discrimination (Matheson et al., 2019), oppression (Kira et al., 2019), and denial of culture (Subica & Link, 2022). Although some of the included studies did incorporate some of these experiences, other work may have been excluded. The use of convenience and self-selecting samples in many studies may limit generalizability and over-represent PPTG following collective violence. Furthermore, the cross-sectional nature of many of the reviewed studies means that although strengths were associated with PPTG in the short term, it is not possible to determine whether these were a temporary strategy to maintain functioning or whether such changes were aligned with enhanced well-being in the long term (Jayawickreme et al., 2021), although survivors may still report benefits despite experiencing hardship (Hamby et al., 2022).

Research Implications

The findings from this review have global reach given the inclusion of survivors exposed to collective violence within low-income and/or collectivist societies and developed and/or individualistic cultures. We identified strengths shared with survivors in individualistic societies (e.g., positive reappraisal), but also strengths from collectivist cultures (e.g., community social support) that enrich the understanding of resilience and PPTG from collective adversity. Existing empirical knowledge of resilience and PPTG is dominated by research originating from Western or individualistic societies. However, globally, there are a range of perspectives and traditions that predate these findings, which can be found in ancient art, philosophy, and religion (Tedeschi et al., 2018), and this review also included research from non-Western societies that contributes to cross-cultural understandings of resilience and PPTG. Among survivors originating from collectivist cultures, qualitative and mixed-method studies in particular emphasized strong social bonds, collective meaning making, and overcoming adversities as a community or society (Abraham et al., 2018; Ferriss & Forrest-Bank, 2018; Matos et al., 2021). Survivors spoke about how these strengths contributed to the well-being of the whole community, with less focus on individual-level outcomes. A more culturally sensitive approach to the study of strength-based assets and resources is needed to identify additional protective factors that enhance resilience and PPTG as a potential means to overcome collective adversity experienced within individualistic and collectivist societies.

The findings of this review have implications for the RPM. Many of the strengths identified, such as social support or tolerance, operated at individual and collective levels. The existing RPM approach focuses on individual-level outcomes in the ways that survivors use personal and social–ecological assets and resources to adapt to adversity. Within a historical trauma PTG framework (Ortega-Williams et al., 2021), there is recognition of the interconnected nature of individual and collective processes central to recovery following collective violence. Future work could identify and incorporate collective or community-level strengths into the RPM framework that better recognizes the multilevel nature of resilience.

We identified strengths from the wider environment that sat outside of the existing RPM domains, such as access to education and employment, improved sanitation infrastructure, and wider economic and political conditions that were conducive of PPTG. Recent literature notes the potential influences of the wider built and natural environments (Rashidfarokhi & Danivska, 2023), and the broader sociopolitical context (Kahraman & Kına, 2024) on well-being. The RPM could be expanded to include an ecological strengths domain, and future research could identify other resources in the natural and built environments that may serve as strengths for collective violence survivors. This approach would shift resilience discourse from individual-level coping mechanisms to systemic factors and their potential role in facilitating PPTG.

The review identified measurement issues in the way some strengths and collective PPTG were captured in studies. Some studies inferred strengths through traditional trait-based measures of resilience, including toughness (Şimşir et al., 2021), hardiness (Bartone & Bowles, 2021), and sense of coherence (Forstmeier et al., 2009), which oversimplify the nature of resilience. In addition, other studies focused solely on isolated meaning-making, regulatory, or interpersonal strengths (Erbes et al., 2005; Ogden et al., 2011), rather than a wide range of individual and ecological resources and assets from all RPM domains. Future research should adopt a portfolio approach to the study of resilience with clearly validated measures of strengths and the inclusion of multiple strengths to identify individual and structural protective factors that could inform prevention and intervention efforts for survivors of collective violence. There were similar issues in the measurement of collective PPTG across the reviewed studies. Some research (Exenberger et al., 2022; Richardson, 2023) discussed collective PPTG but used measures of individual-level PPTG, although this was supplemented with qualitative data. Future research in this area could consider using measures of collective growth, such as the Individual and Collective Posttraumatic Growth Scale (Wlodarczyk et al., 2017), alongside qualitative studies, to better capture collective and societal level changes in PPTG.

The findings of this review provide greater nuance to protective factors conducive of PPTG. Several strengths in this review demonstrated mixed relations with PPTG, as evidenced by null or contradictory findings across studies. For instance, social support may be broadly regarded as useful for promoting well-being, although its effectiveness could vary over time (Feder et al., 2008), can depend on the context in which it is used (Jaramillo & Felix, 2021), and may not always be conducive to well-being (Rimé et al., 2010). Some of the discrepancies may also be an artifact of study design, in that many of the studies were cross-sectional in nature and as such are unable to assess the usefulness of strengths over time or in specific contexts. More mixed-method and longitudinal work in this area is needed to identify the conditions where strengths may be helpful or harmful to PPTG and longer-term well-being. Furthermore, the review identified additional strengths that warrant further exploration as they are not widely captured in existing strength-based measures (see Hamby et al., 2013) aligned with the RPM domains. For example, "sociocultural context" (Shah & Mishra, 2021) or "taking actions post-violence" (Jaramillo & Felix, 2021) were related to more PPTG following collective violence; however, these strengths were not clearly defined in the papers. Future research should develop strength-based measures at the collective level that build upon qualitative findings (Exenberger et al., 2022; Matos et al., 2021; Richardson, 2023), including collective meaning making, participation in society, and the wider economic and societal climate. This would complement more established measures, including collective efficacy (Sampson et al., 1997) and collective self-esteem (Luhtanen & Crocker, 1992), and

support ongoing work to develop measures of collective participation (Morton et al., 2024). Moreover, mixed-method research is needed to explore how these (and other) strengths relate to PPTG in survivors of collective violence within their cultural contexts, the conditions under which such strengths may be helpful or harmful, and to identify other potential strengths that may exist outside of Western perspectives of resilience and growth.

Practical Implications

The societies that often experience high dosages of collective violence may have structural inequalities, poor health infrastructure, and limited resources that could enhance people's well-being (Schnyder et al., 2016; Sousa, 2013). Yet, this review finds that survivors were able to identify a multitude of strengths across a wide range of socioeconomic contexts associated with PPTG. This is an encouraging finding with important implications for providing support and interventions after collective violence. Although facilitating PTG may not be the sole outcome of any one intervention (Tedeschi et al., 2018), allowing survivors to explore strength-oriented narratives in their recovery as part of holistic support that also manages negative sequelae may enhance well-being. Work on interventions that foster PPTG is limited, but there is a natural synergy between the focus on strengths that may facilitate PPTG as part of existing strength-based approaches (Tedeschi et al., 2018).

Our results suggest that putting in place or strengthening certain interventions at the individual and community levels may be useful in facilitating PPTG. At the individual level, protective factors observed in the reviewed studies could be incorporated into support initiatives for survivors, such as opportunities to promote meaning making. Collective violence can devastate not only individual but communal resources (Sousa, 2013), and so support efforts could orientate survivors to resources that may be available through community and national organizations to promote agency and collective efficacy. Strength-based community-driven support for collective violence survivors may offer one avenue to alleviate the psychosocial harms in those burdened by collective violence (Wessells, 2016). In addition, increasing or facilitating emotional and practical support among individuals and communities could benefit those who may have resettled in third countries (Abraham et al., 2018; Maung et al., 2021).

Healthcare professionals require a more complex and culturally sensitive understanding of the consequences of collective violence and its manifestations to inform support and intervention efforts. This may be demonstrated through abiding by cultural practices of the wider society that may facilitate PPTG (Doherty et al., 2020), and being mindful that some strengths may be interpreted differently depending on the historical context. For instance, "reconciliation" has been challenged by some survivors of violence perpetrated by the

Pinochet dictatorship in Chile, as it perpetuates the notion of a unified society and dismisses the voices of survivors seeking justice against the perpetrators (Cárdenas-Castro et al., 2021). An increased awareness of cultural and historical contexts among healthcare professionals could inform interventions that screen survivors for potential strengths in addition to risk factors that may influence adjustment following collective violence.

Conclusion

To summarize, this is the first review that integrates the fields of research and practice on collective violence, resilience, and PPTG. Despite the high prevalence of collective violence internationally, we identified a portfolio of strengths that demonstrate the individual and collective resilience of survivors in the face of such adversity, which has received comparatively less attention in literature compared to the focus on negative psychosocial outcomes. Using the RPM as a framework, we consolidated existing knowledge and provided useful ways to conceptualize strengths following collective violence, including ecological/systemic strengths not included in the RPM. Future studies should explore strengths outside of Western/individualistic perspectives, alongside the development of measures of collective strengths, and work to understand the multifaceted nature of some strengths. Tailored interventions that identify and promote strengths in response to collective violence need to consider the cultural and historical contexts in which the violence has taken place, which may facilitate greater well-being and PPTG.

Summary of Key Implications.

- More qualitative and mixed-method research is needed to identify other potential strengths that may exist outside of Western and/or individualistic perspectives of resilience and growth.
- The resilience portfolio model framework could be amended to include a focus on ecological and collective-level strengths.
- Future studies in this area should use measures of collective PPTG, analyze a wider portfolio of assets simultaneously, and develop measures to capture collective resources identified in qualitative work, such as collective meaning making.
- Given mixed findings for the effectiveness of some strengths on PPTG, more mixed-method and longitudinal work is needed to identify the conditions in which some strengths may be more or less useful.
- Emphasizing strengths aligned with PPTG may already align with current strength-based approaches aimed at improving well-being.
- Protective factors such as meaning making and social support could be incorporated into interventions for collective violence survivors.
- Support efforts could orientate survivors to community and national resources that may help mitigate the psychosocial consequences for survivors of collective violence.
- To effectively guide support and intervention efforts, healthcare professionals need to be sensitive to different cultural and historical contexts when understanding of the consequences of collective violence.

Note. PPTG = perceived posttraumatic growth.

Declaration of Conflicting Interests

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Supplemental Material

Supplemental material for this article is available online.

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