

The Assessment of Multisystemic Resilience in Conflict-Affected Populations

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Introduction

Violent social conflict occurs within a web of negative feedback loops and maladaptive societal trajectories, which taken together constitute a cascade of stressors and shocks that can entirely overwhelm individuals, households, communities, and institutions. Violent social conflict is both driven by and contributes to interethnic hostility, extreme poverty, food insecurity, and exclusion from services and opportunities, as well as failure of governance at the local and national level (United Nations & World Bank, 2018). In the aftermath of violent conflict, populations are additionally called to address the challenges posed by destruction of productive capacity, forced displacement, posttraumatic distress of civilians and combatants, and disrupted developmental trajectories of children, adolescents, and young adults who found themselves near the epicenter of hostilities (Betancourt & Khan, 2008; Fazel et al., 2012). The incidence and intensity of violent social conflict have both been on the rise in recent years. This upsurge can primarily be attributed to a sharp increase in conflicts between nonstate actors, which grew from just under 30 active nonstate conflicts in 2010 to more than 70 in 2016 (see Figure 22.1; United Nations & World Bank, 2018). Furthermore, the number and diversity of nonstate actors that have been participating in each violent conflict have also been rising significantly since 2010 (Allansson, Melander, & Themner, 2017; Sundberg, Eck, & Kreutz, 2012), including, among others, an expanding range of militias, rebel groups, violent extremist groups, and armed trafficking groups. Partly as a result of the complexity of such multisided conflict systems, which are deeply rooted in the interaction of social, economic, and cultural forces, conflicts have also become more protracted. While the average

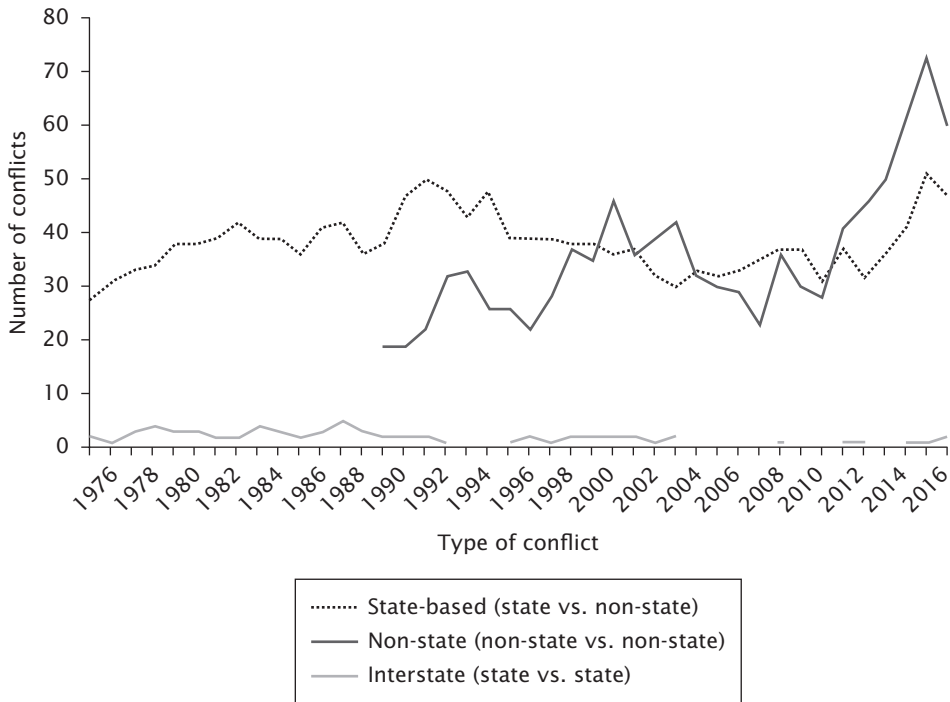


FIGURE 22.1 Trends in violent conflict, 1975–2016. Reprinted from Pathways for Peace Report (United Nations & World Bank, 2018) under Creative Commons License CC BY 3.0 IGO. Sources: For interstate and state-based conflicts, data from Uppsala Conflict Data Program (UCDP) and Peace Research Institute Oslo (Allansson, Melander, & Themner, 2017; Gleditsch et al., 2002); for nonstate conflicts, data from UCDP (Sundberg, Eck, & Kreutz, 2012; Allansson, Melander, & Themner, 2017).

duration for conflicts ending in 1970 was approximately five years, this has jumped to an average of 20 years for conflicts ending in 2015 (see Figure 22.2; United Nations & World Bank, 2018).

The increased severity and frequency of violent social conflicts, and the inability of countries to resolve such domestic arenas of contestation underlines a key challenge that the global community is gradually coming to terms with—namely, that the conflict prevention and mitigation toolkit that had been instituted after two world wars and that revolved around building harmonious relations between states through diplomacy, trade, and international norms is no longer fit for purpose in addressing emergent forms of asymmetric conflicts, hybrid conflicts, and civil wars. As these become protracted through lack of effective resolution, they are joined by newly emergent conflicts, which, taken together, are overwhelming the capacities of humanitarian response systems. Notably, it is estimated that 85% of aggregate demand for humanitarian emergency assistance currently comes from conflict-affected countries (Development Initiatives, 2018). While the core mandate of humanitarianism has always been to provide short-term relief through the process of recovery, such organizations are now finding themselves to be staying in emergency contexts for much longer, with the distinctions between emergency relief, long-term assistance, and maladaptive aid dependency increasingly becoming blurred.

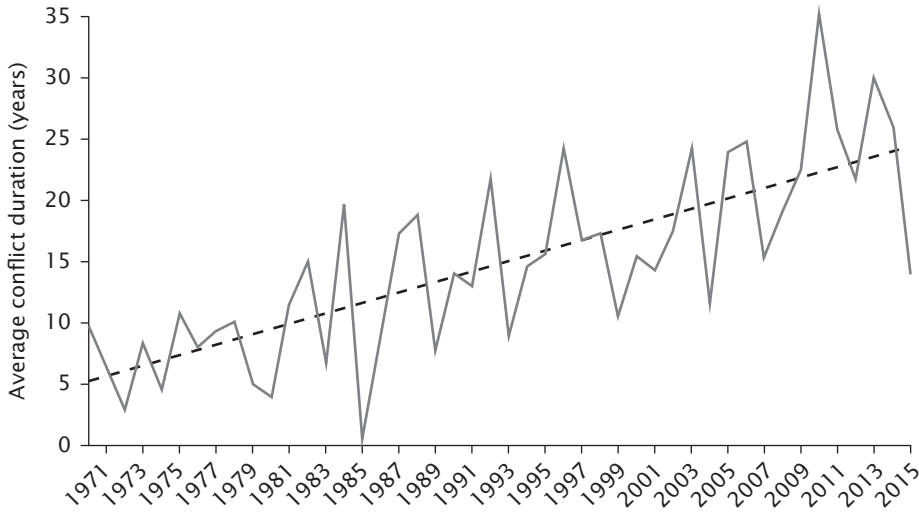


FIGURE 22.2 Average duration of conflicts worldwide, 1970–2015. Reprinted from Pathways for Peace Report (United Nations & World Bank, 2018) under Creative Commons License CC BY 3.0 IGO. Source: Uppsala Conflict Data Program (UCDP) and Peace Research Institute Oslo (Allansson, Melander, & Themner, 2017; Gleditsch et al., 2002).

In the context of these stressors to the international system for peace consolidation and humanitarian support, a transformative policy agenda that places resilience at center stage is gradually replacing traditional institutional responses. If violent social conflict, in its contemporary manifestation, is a “wicked problem”—defined as a problem that is difficult or impossible to solve because of incomplete, contradictory, or changing requirements that are often difficult to recognize (McCandless, 2013)—then persisting with linear thinking and traditional planning tools is unlikely to have adequate impact on peace and development outcomes. In contrast, systems thinking, complexity theory, resilience and social-ecological models of adaptation are all concepts that have, in the past decade, been gaining traction. From a humanitarian perspective, the promise of resilience lies in the possibility of building local capacity and agency for emergency response and return to normality, in ways that will gradually reduce dependence on external aid (Hilhorst, 2018). From a peacebuilding perspective, nurturing of resilience capacities can constitute a positive agenda for transformative social change around which multiple societal, civic, and institutional stakeholders can convene (Simpson et al., 2016). Likewise, from a development perspective, investments in resilience contribute to curtailing economic and human losses in the event of a crisis, thus protecting development gains while reducing human suffering (United Nations, 2019). The upside of such approaches is widely accepted: By investing in resilience, it will become possible to reduce long-term spending on emergency humanitarian response and free resources to strengthen prevention-oriented spending elsewhere that can help mitigate the crises of the future.

While much of this thinking was acknowledged at the World Humanitarian Summit in 2016 and captured in that summit’s maxim “Change People’s Lives: From Delivering Aid to Ending Need” (United Nations General Assembly, 2016), and despite substantial

scholarly research (e.g., Betancourt & Khan, 2008; Eggerman & Panter-Brick, 2010) and practitioner-oriented frameworks (e.g., Organization for Economic and Co-operation and Development [OECD], 2014; UNDP, 2014) that have been published over the past several years, the field still lacks agreed conceptualizations, robust metrics, and effective analytic strategies to support the assessment of resilience and implement resilience-enhancing actions for the benefit of conflict-affected populations. In this chapter, we will attempt to synthesize the diverse scholarly and practitioner thinking around conflict resilience, identify areas of progress as well as current gaps, and outline principles as well as emerging strategies for the conceptualization and assessment of resilience in contexts of violent social conflict, with practical case-based illustrations where feasible. The ultimate objective of this chapter is to contribute to a gradual integration of the conflict resilience field, from its current experimental status to a coherent theoretical and applied discipline.

Existing Scholarly and Practitioner Efforts to Assess Resilience in Conflict-Affected Populations

To capture the diversity in the existing literature on conflict resilience, two distinct search strategies were used. First, a scholarly search engine (SCOPUS) was used to identify peer-reviewed papers which included in their titles, abstracts or keywords, the words *conflict* and *resilience*, and second, a focused search was undertaken of the official websites of international organizations and development agencies that are known to be working in conflict-affected countries for resilience assessment frameworks. As a result of these complementary search strategies, 41 scholarly papers were reviewed and deemed to be representative of diverse methods, strategies, and subpopulations under the chapeau of conflict resilience while six practitioner frameworks for the conceptualization and/or assessment of resilience were similarly considered. Findings of the two reviews reveal a heterogeneous field, with diverse conceptualizations regarding stages of the conflict (i.e., resilience before a conflict has occurred, while a conflict is ongoing, or in the aftermath of conflict), the system level, which is the focus of analysis (i.e., whether one refers to the resilience of individuals, households, communities, institutions, or the state as a whole), the understanding of what might constitute a resource for resilience (e.g., personal attributes, social capital, material assets, institutional practices), and the assessment methods that are recommended or demonstrated (e.g., participatory, quantitative, qualitative, framework-guided case study).

At the broadest level, the scholarly literature on conflict resilience was found to be divided into two primary strands: studies that conceptualize resilience as the capacity to prevent violent conflict by maintaining collaborative strategies as community stressors increase (e.g., Carpenter, 2012; Ratner et al., 2013); and studies that conceptualize resilience as the capacity of individuals, communities, and institutions to cope with the consequences of violent conflict that has already erupted, without deterioration of mental health, social

functioning or essential institutional capacities (e.g., Ager et al., 2015; Betancourt & Khan, 2008; Eggerman & Panter-Brick, 2010; Zraly & Nyirazinyoye, 2010). Figure 22.3 summarizes these two broad strands of the literature, along with their substrands, on a continuum from preconflict (resilience for conflict prevention) to ongoing and postconflict (resilience to the consequences of conflict).

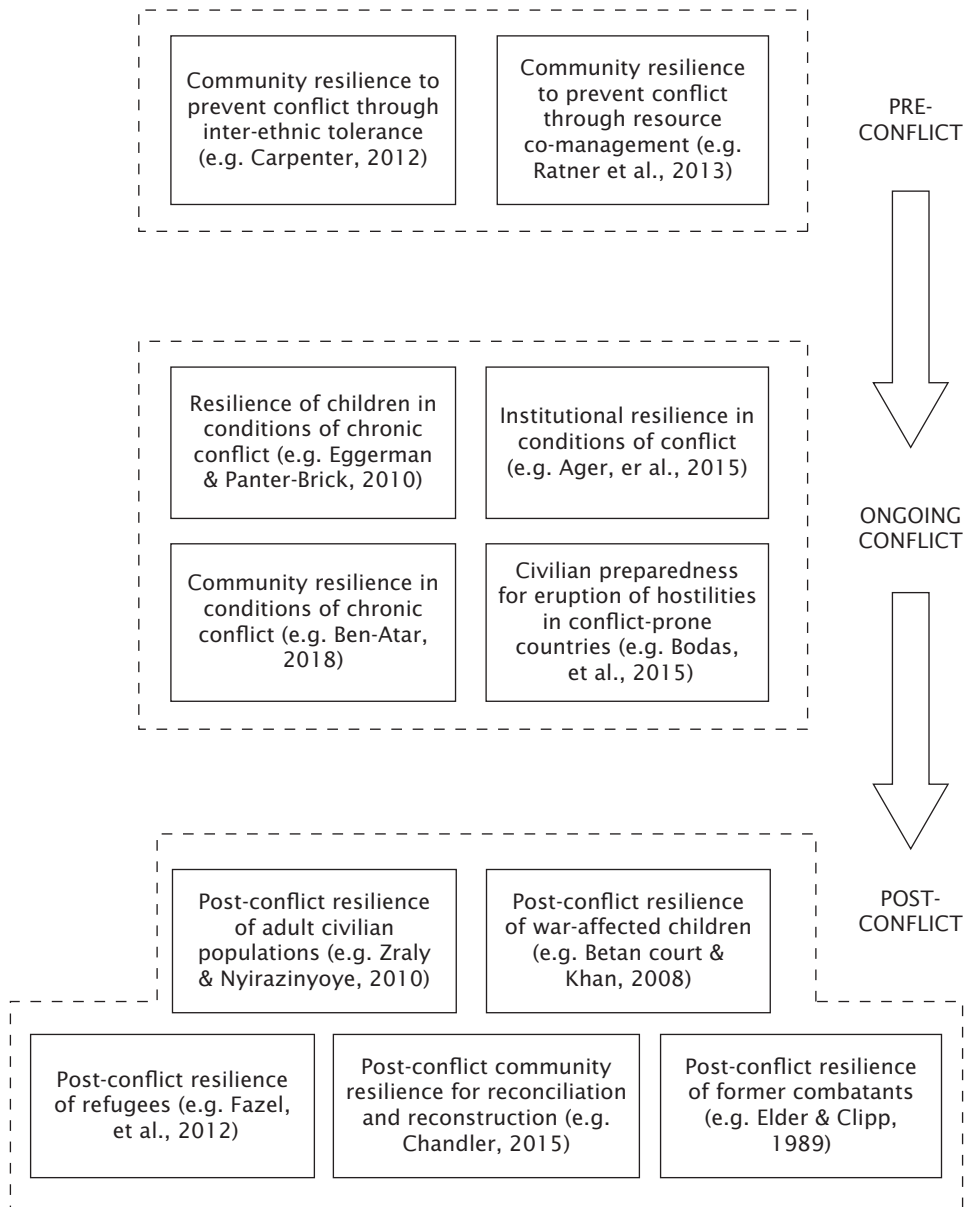


FIGURE 22.3 Main strands of the conflict resilience literature organized by stage of conflict they focus on, with illustrative publications in each category.

Investigations Into Resilience for Conflict Prevention

Studies that focus on resilience for conflict prevention mostly originate from a social-ecological research tradition, and typically focus on the level of community as the primary unit of analysis. Risk is understood as exposure to broader ethnocultural tensions and/or scarcity of natural resources, which put pressure on a community to abandon prior collaborative strategies and transition into regimes of violent contestation. Specific examples that were cited in the literature include neighborhoods in Baghdad under pressure to adopt sectarian attitudes and behaviors (Carpenter, 2012), villages in the context of a water resource conflict in Bhutan (Gurung, Bousquet, & Trebuil, 2006), communities in a contested fisheries area in Cambodia (Ratner, Mam, & Halpern, 2014), small-scale agricultural stakeholders in Guatemala (Hellin et al., 2018), and populations at risk of violent conflict due to climate change in Nepal (Vivekananda, Schilling, & Smith, 2014b). Climate change is thought to be associated with conflict through the mediation of climate-induced resource scarcity (e.g., reduced rainfall affecting crop yield) that results in food insecurity, which in turn forms the context for violent contestation by societal stakeholders over a dwindling natural resource base (Vivekananda, Schilling, & Smith, 2014a). In such risk landscapes, factors that have been found to enhance resilience include processes and resources across multiple social and ecological systems. At the level of natural systems, resilience can be enhanced by supporting farmers to switch to seeds and crops that are more resistant to draught, pests, and diseases (Hellin et al., 2018; Vivekananda et al., 2014b). This reduces the food insecurity that can be brought on by climactic events and other externalities and therefore the pressure toward community competition that can trigger conflict. At the level of social systems, the cultivation of bridging social networks between resource stakeholders, where a comprehensive overview of whole system dynamics can be co-developed, can pave the way toward a shared vision for the collaborative use of community resources (Butler et al., 2015; Gurung, Bousquet, & Trebuil, 2006), while the creation of resource co-management institutions that are reputable, trusted, scientifically sound, financially resourced and possessing adequate managerial capacity, can provide sustainability to the effort of peacefully mediating stakeholder claims on scarce community resources in the longer term (Hellin et al., 2018). In cases where the conflictivity pressure on the community is coming from polarization of ethnocultural identities, resilience against outbreaks of violence can be enhanced by nurturing other layers of identity beyond the sectarian, such as by emphasizing familial heritage and identity or by developing super-ordinate (i.e., cross-cutting) identities through intersect sporting games, making available shared public spaces, and establishing communitywide, nonsectarian self-defensive organizations. Furthermore, the nurturing of supportive and respectful relationships across the community, under the guidance of community elders who actively encourage respect while discouraging sectarian attacks, can also play a significant role in preventing sectarian polarization (Carpenter, 2012). While the proximal ingredient for the prevention of violent social conflict is community resilience, the role of individual human systems in promoting adaptive community functioning should not be underestimated. Specific individual skills that have been found to underpin resilience for conflict prevention include: the ability to adopt

another person's perspective, the capacity to learn effectively from experience, being able to deal flexibly with new situations, and possessing skills to effectively lead groups through processes of transformation (Butler et al., 2015; Folke et al., 2005; Gurung, Bousquet, & Trebuil, 2006). On the basis of such skills, individuals can take on complementary roles within institutional or multi-stakeholder processes, for instance as knowledge retainers, visionaries, interpreters, inspirers, innovators, experimenters, followers, or reinforcers (Folke et al., 2005), thus contributing to adaptive community functioning in times of resource scarcity or ethnocultural tensions.

Investigations into Resilience to the Consequences of Violent Conflict

In contrast to the “resilience for conflict prevention” field that was previously briefly summarized and that is driven by social-ecological thinking, the literature on “resilience to the consequences of conflict” derives most of its inspiration from the disciplines of psychological science and social anthropology. Relevant studies have been taking place in contexts that are suffering from conditions of chronic conflict, such as Israel (e.g., Shoshani & Stone, 2016), Palestine (e.g., Nguyen-Gillham et al., 2008), and Afghanistan (e.g., Panter-Brick et al., 2011); countries where intense violent conflict occurred in their recent history such as Liberia (e.g., Levey et al., 2016) and Rwanda (e.g., Zraly & Nyirazinyoye, 2010); and among populations that have been displaced from their country of origin in the aftermath of violent conflict (e.g., Siriwardhana et al., 2014) or are attempting to reintegrate in their home countries as former combatants (e.g., Segovia et al., 2012). In such studies, risk is understood as exposure to violent conflict, which can lead to a cascade of negative feedback loops through death or disability of family members, disrupted social networks, loss of livelihoods, institutional failure, and mental health problems among exposed populations. Resilience, in such contexts, is typically conceptualized as maintaining individual, community and institutional survival, and adaptive functioning under conditions of extreme duress while the conflict is ongoing, while embarking on trajectories of full recovery and normalization once hostilities have ceased.

Several factors at the individual, household, community, and institutional levels have been empirically found to contribute to such positive adaptation in the context of exposure to violent conflict. At the individual level, resilience to conflict has been associated with different life skills and character strengths, including: executive skills, cognitive flexibility and persistence; emotion regulation, acceptance, self-expression, and cognitive reframing; temperance and self-control; capacity for sense-making; a hopeful outlook and optimism; social intelligence and collaborative skills; tolerance of diversity and interdependent values; sense of responsibility and commitment; capacity to appreciate resources and successes; personal agency; creativity; and a growth mindset (Ben-Atar, 2018; Betancourt & Khan, 2008; Bodas et al., 2017; Brodsky et al., 2011; Cummings et al., 2017; Eggerman & Panter-Brick, 2010; Hobfoll et al., 2012; Lavi & Stone, 2011; Levey et al., 2016; Lordos et al., 2019; Segovia et al., 2012; Shoshani & Stone, 2016; Tol, Song, & Jordans, 2013; Zraly & Nyirazinyoye, 2010). Various aspects of community support have also been extensively investigated as potential

sources of resilience in war-affected populations. Experiencing connectedness, social warmth, social support, and a sense of cohesion in the various microsystems that individuals participate in, such as the family, the workplace, or school, appears to be a general protective factor during conflict-related adversities (Ager et al., 2015; Betancourt & Khan, 2008; Cummings et al., 2017; Eggerman & Panter-Brick, 2010; Fazel et al., 2012; Levey et al., 2016; Lordos et al., 2019; Nguyen-Gillham et al., 2008; Panter-Brick et al., 2011; Siriwardhana et al., 2014; Slone & Shoshani, 2017; Zraly & Nyirazinyoye, 2010). Looking into more specific community-level protective factors, several studies have identified the importance of acceptance by the community as a source of resilience for former combatants who are otherwise at risk of experiencing a negative feedback loop between stigmatization and self-exclusion (Barber, 2001; Betancourt et al., 2013; Cummings et al., 2017; Tol et al., 2013), while processes of monitoring and coaching, whether by peers at work, parents, or elders in the community, seem to play an important role in protecting community members that might be faltering under the burden of adversities (Barber, 2001; Slone & Shoshani, 2017; Tol et al., 2013; Witter et al., 2017). Additional community-based sources of resilience include ensuring that caregivers themselves possess adequate mental health to be able to support their children in times of distress (Betancourt & Khan, 2008; Fazel et al., 2012; Tol et al., 2013), a spirit of intergenerational partnership and collaboration (Eggerman & Panter-Brick, 2010), having access to spiritual resources (Barber, 2001; Betancourt & Khan, 2008; Eggerman & Panter-Brick, 2010; Fazel et al., 2012; Siriwardhana et al., 2014; Tol et al., 2013), and the normalizing effect of daily life in the community, whether than involves play (Nguyen-Gillham et al., 2008) or a focus on educational and professional pursuits in defiance of the abnormality and unpredictability that come with chronic and violent conflict (Eggerman & Panter-Brick, 2010; Levey et al., 2016; Nguyen-Gillham et al., 2008).

While individual characteristics and elements of community cohesion dominate the literature on sources of resilience among conflict-affected populations, it is notable that these two research questions—namely, which individual characteristics and which community resources contribute to resilience—remain largely disconnected. The tendency of the literature is to generate evidence for specific resilience factors, at one or the other level, which are then aggregated into lists of promising entry points for resilience-enhancing interventions. Studies that empirically investigate the interaction between resilience factors across different systems and levels have yet to emerge in the conflict resilience literature, although they could contribute to answering policy-relevant research questions, such as, Which aspects of community-based support can contribute to the development of specific individual characteristics that are associated with resilience in times of conflict? To what extent do individual characteristics and community characteristics exercise their effects separately, or co-act to produce resilience? And, which individual characteristics play a role in the emergence of community-based resilience factors? The field of conflict resilience could benefit from a thorough investigation of such research questions in future studies.

Beyond the mainstream literature on conflict resilience that has been previously summarized, which emphasizes the role of psychosocial factors as sources of resilience in times

of conflict, other emerging approaches highlight the role of more concrete and functional sources of resilience, such as possessing appropriate material resources, having access to relevant information, possessing technical know-how, or utilizing adaptive organizational procedures (Ager et al., 2015; Alameddine et al., 2019; Ben-Atar, 2018; Bodas et al., 2015; Brodsky et al., 2011; Cummings et al., 2017; Fazel et al., 2012; Glass et al., 2014; Panter-Brick et al., 2011; Tol et al., 2013; Witter et al., 2017). In most cases, these studies go beyond the person as unit of analysis to focus on the resilience of households or of critical institutions and infrastructures that are under threat in conflict-affected countries. For instance, studies have been conducted to evaluate war preparedness of households, which requires owning essential equipment such as a fire extinguisher, emergency flashlight, first aid kit, radio with batteries, gas masks, and adhesive tape and nylon to seal the family's safe room; preparing and practicing a family emergency response plan; and maintaining stocks of canned foods and bottled water (Bodas et al., 2015). Such emphasis on more concrete sources of household preparedness is not in competition with psychosocial approaches to resilience. In a follow-up study, which considered the role of individual characteristics as predictors of household preparedness, it was found that optimism, rationality, and reduced level of anxiety as well as of denial coping were all found to contribute to increased household preparedness, in the sense of making sure to own the appropriate equipment and stockpiles of supplies, as previously described (Bodas et al., 2017).

Other literature strands have focused on the resilience of health services in conflict-affected countries, a critical system on which the resilience of several downstream human and social systems depends. Specifically, health system resilience in times of violent conflict was found to depend on numerous factors, including staff solidarity, mental preparation of staff before going to work, support from senior managers; reconfiguration of staff roles, introducing systems to improve patient registration process, decentralization of drug supply, educating staff on infection prevention and control, and dual professional practice by health system staff to maintain livelihoods whenever external funding is disrupted due to the conflict. In this case, psychosocial factors such as family support, sense of responsibility, spirituality, and a hopeful outlook were also found to complement the more "concrete" factors as previously described, to further enhance the resilience of staff in conflict-affected health systems (Alameddine et al., 2019; Witter et al., 2017).

This fledgling literature on household and institutional resilience in times of conflict holds great promise to add new impetus to the conflict resilience field, but more research is needed in additional domains of household and institutional functioning under conditions of conflict-related adversity, for instance, through studies to understand factors that contribute to the livelihoods of households during times of conflict (i.e., how food and economic security of households can be maintained despite conflict exposure), as well as the resilience of other critical institutions whose integrity is at risk in times of violent conflict, such as the education system, the food production and distribution system, water and sewage systems, energy generation and distribution systems, the security and justice system, and local administrative authorities.

Approaches and Methods for the Investigation of Conflict Resilience

Regarding the methods and approaches for investigating conflict resilience, we discern two divergent approaches in the scholarly literature. The social-ecological research tradition explores multi-stakeholder dynamics from the lens of systems theory to achieve a holistic understanding of resilience to stressors that might potentially trigger conflict, while the psychological and social anthropological traditions are more interested to understand how specific agents at specific levels of the social system are reacting to conflict-associated adversities. These differences are underpinned by distinct epistemological assumptions: psychologists, and social anthropologists are looking for ways to measure the perspectives, intentions, actions, and characteristics of specific agents, whereas social ecologists attempt to organize and interpret observed processes and events from the lens of systems theory. Thus, the research methods that the two traditions use in studying conflict resilience diverge significantly. Social-ecological investigations of conflict resilience focus on case studies of discreet events, people, and interactions across diverse temporal and spatial scales, as they attempt to negotiate the challenges posed by a potential conflict. Such studies typically superimpose an analytic framework over the case as an interpretive lens (Hellin et al., 2018; Mitra et al., 2017; Ratner, Mam, & Halpern, 2014) and may or may not include primary data collection to verify specific elements of the system's structure and function, before proceeding with system analysis. Primary data collection in social-ecological studies can involve focus group discussions at the community level, as well as in-depth interviews with key decision makers or clandestine community informants (Carpenter, 2012; Mitra et al., 2017; Vivekananda et al., 2014a). Often, stakeholders to the conflict are incorporated as active agents in the process of interpreting empirical findings and conducting a system analysis, with the hope that more holistic understanding of the system's properties will encourage affected stakeholders to select cooperative strategies (Butler et al., 2015; Gurung, Bousquet, & Trebuil, 2006). When stakeholders are included in such a manner, the social-ecological research process can additionally be described as participatory and action oriented.

In contrast, psychological and social anthropological studies of conflict resilience tend to be extractive rather than participatory in the way they approach knowledge generation. The emphasis is typically placed on understanding a specific agent or class of agents within a conflict system (e.g., war-affected children, health workers, refugees, former combatants) through the use of empirical research methods—quantitative or qualitative—to investigate which specific conflictivity shocks and stressors are threatening an agent's functioning and which sources of resilience are being drawn upon to cope. Qualitative and quantitative methods are highly complementary in the specific field. While qualitative methods contribute to rich insight and novel hypotheses about the assets and resources that conflict-affected agents utilize to enhance their resilience, quantitative methods make it possible to actually test such hypothesized mechanisms, detect additional naturally occurring resilience mechanisms that are beyond the perceptual threshold of study participants, and develop an awareness of the prevalence of resilience-promoting assets and resources in diverse segments of a conflict-affected population.

All qualitative studies of conflict resilience utilize one or other technique for collection of narrative data, such as in-depth interviews (Ager et al., 2015; Alameddine et al., 2019; Brodsky et al., 2011; Levey et al., 2016; Witter et al., 2017; Zraly & Nyirazinyoye, 2010), open-ended questions in surveys (Eggerman & Panter-Brick, 2010), transcripts of focus groups (Nguyen-Gillham et al., 2008), or transcripts of media communications (Ben-Atar, 2018). Such texts are then processed using thematic analysis, which involves text coding to detect emerging themes around the phenomenon of conflict resilience. While some qualitative inquiries utilize a problem-and-response template for data collection and analysis, asking participants what problems they typically face and how they respond to them (Eggerman & Panter-Brick, 2010), other studies construct a life history of participants to understand trajectories of adversity and adaptation they experienced at different stages in their life and since the conflict commenced (Witter et al., 2017). Most such qualitative studies conclude with a grounded theory of resilience in the specific conflict-affected population, which typically sheds new light within the field in terms of salient features of resilience and their interrelationships (Brodsky et al., 2011; Levey et al., 2016).

In contrast, quantitative studies of conflict resilience investigate a predefined shortlist of potential resilience factors, which are converted into quantifiable indicators using psychometric and/or sociometric principles, with data collected from a sufficiently large sample of the population to permit use of inferential statistics. Most cross-sectional quantitative studies of conflict resilience use moderation analysis to identify assets and resources, which, when present, nullify the association between exposure to conflict adversity and maladaptive system transition (Barber, 2001; Lavi & Stone, 2011; Lordos et al., 2019; Glass et al., 2014; Shoshani & Stone, 2016; Slone & Shoshani, 2017). Longitudinal quantitative studies of conflict resilience attempt to answer more sophisticated research questions where the variable of time is of critical significance, for instance, what trajectories of adaptation can we discern in different segments of a population affected by conflict and how can we further investigate correlated dimensions to understand direction of causality between different assets, resources, and aspects of adaptation. Methodologies that have been used to answer such questions include general growth mixture modeling followed by logistic regression analysis to explore trajectories of post-conflict adaptation in Sierra Leonean youth (Betancourt et al., 2013) and cross-lagged structural equation modeling to confirm the direction of causality between cognitive social capital and social networks in the context of preventing mental health problems among conflict-affected youth in Burundi (Hall et al., 2014).

Each of these scholarly methods for the assessment of resilience in conflict-affected populations displays notable strengths, but all have significant limitations when practiced in isolation. Qualitative studies, when done properly through diligent coding of themes and construction of grounded theories, can provide richly textured insights into the coping strategies people and institutions employ in times of conflict-related adversity but do not provide evidence as to whether these strategies effectively contribute to resilience. Quantitative studies use rigorous statistical modelling to verify resilience hypotheses and provide actionable evidence for policy design but typically measure only a handful of potential sources of resilience, with selection of indicators usually based on international literature rather than a grounded, ecological, and multisystemic understanding of the specific conflict context. In

addition, both quantitative and qualitative studies tend to be extractive in their approach and typically do not integrate methods to provide feedback to study participants so that resilience-enhancing action can be locally enabled. Social-ecological studies are better at appreciating the complexity of multisystemic interactions in a specific conflict context and involving stakeholders as active participants in the research process but tend to use rudimentary empirical methods—if at all—to explore the capacity and intentionality of specific agents within the system.

With these distinct profiles of strengths and limitations in quantitative, qualitative, and social-ecological approaches, the argument in favor of methodological integration is intuitive. Studies of conflict resilience conducted within a social ecological framework would benefit by initially relying on qualitative research to develop a grounded theory of resilience across different levels and scales of the social system, then follow up with rigorously designed quantitative studies to empirically validate emerging theoretical perspectives, with stakeholders to the conflict being included as active participants in the research design, data analysis, and policy generation process. Combined, these methods would undoubtedly constitute a promising approach toward an integrated science of resilience for conflict-affected populations.

Practitioner Frameworks for the Assessment of Conflict Resilience

In contrast to the diverse landscape of conflict resilience scholarly studies, practitioner frameworks for the assessment of resilience in conflict affected populations display much greater homogeneity and provide consistent guidance to field specialists, which is broadly inspired by systems theory. Reflecting the growing interest in resilience across the humanitarian, peacebuilding, and development nexus, several international organizations and development agencies have recently formulated their own resilience assessment frameworks. These include, among others, the United Nations (2019) Common Guidance on Helping Build Resilient Societies, the OECD (2014) Guidelines for Resilience Systems Analysis, the UNDP Community Based Resilience Analysis (CoBRA; UNDP, 2014); the GOAL Analysis of the Resilience of Communities to Disasters (ARC-D; McCaul & Mitsidou, 2016); USAID's Resilience Measurement Practical Guidance (Vaughan & Henly-Shepard, 2018); and Interpeace's Frameworks for the Assessment of Resilience (Simpson et al., 2016). Table 22.1 briefly summarizes the definition of resilience each framework is operating under, levels of the social system that are the focus of analysis, and the approach to assessment which is proposed in each case. An integrative definition of resilience, based on synthesis of largely convergent definitions provided by each framework, could be as follows: resilience is the ability of agents at different levels (i.e., individuals, households, communities, institutions, nations) in a complex social system to respond to stressors and shocks in timely and effective ways, without compromising long-term prospects to achieve sustainable development and inclusive growth, reduce chronic vulnerability, prevent new conflict, sustain peace and security, promote human rights, and ensure that means of living and well-being are enjoyed by all.

TABLE 22.1 Overview of Practitioner Frameworks to Guide the Assessment of Resilience in Conflict-Affected Countries and Other Humanitarian or Development Contexts

Framework	Definition of Resilience	System Levels Addressed	Assessment Approach
UN Common Guidance on Helping Build Resilient Societies (United Nations, 2019)	Resilience is the ability of individuals, households, communities, cities, institutions, systems and societies to prevent, resist, absorb, adapt, respond and recover positively, efficiently, and effectively when faced with a wide range of risks, while maintaining an acceptable level of functioning and without compromising long-term prospects for sustainable development, peace and security, human rights, and well-being for all	Indicators can be chosen at different levels depending on targeted systems, including household, community, regional, and national	Secondary analysis of existing assessment results and official statistics to support collaborative resilience analysis by UN agencies, followed by integration of insights into mainstream planning tools such as the Development Assistance Framework, Humanitarian Response Plans, Integrated Strategic Frameworks, and Disaster Recovery Frameworks.
OECD Guidelines for Resilience Systems Analysis (OECD, 2014)	The ability of households, communities, and nations to absorb and recover from shocks, while positively adapting and transforming their structures and means for living in the face of long-term stresses, change, and uncertainty	Indicators can be chosen at different levels depending on targeted systems, including individual, household, community, provincial, national	Secondary analysis of existing data of all types on the basis of a scoping question, leading to preparation of briefing packets on risks, shocks, and capacities, leading to a multi-stakeholder workshop to define a resilience roadmap
UNDP Community Based Resilience Analysis (CoBRA; UNDP, 2014)	An inherent as well as acquired condition achieved by managing risks over time at individual, household, community, and societal levels in ways that minimize costs, build capacity to manage and sustain development momentum, and maximize transformative potential	Household, community	Community-level focus groups to develop and score contextualized indicators of resilience, interviews with households designated as resilient based on contextualized indicators to understand in-depth factors, which drive resilience, utilization of results as a decision support tool for policy stakeholders in the assessment area
GOAL Analysis of the Resilience of Communities to Disasters (ARC-D; McCaul and Mitsidou, 2016)	The ability of communities and households living within complex systems to anticipate and adapt to risks, and to absorb, respond and recover from shocks and stresses in a timely and effective manner without compromising their long-term prospects, ultimately improving their well-being	Community	Community-level focus groups to score the community's readiness to respond to a preselected hazard scenario, on 30 predefined indicators that cover several dimensions of social and institutional functioning, with data uploaded on a global dashboard to inform resilience planning in the assessment area

(continued)

TABLE 22.1 Continued

Framework	Definition of Resilience	System Levels Addressed	Assessment Approach
USAID Resilience Measurement Practical Guidance (Vaughan and Henly-Shepard, 2018)	The ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth	Individual, household, community	Initial planning to determine purpose and scope of assessment, identification of knowledge gaps leading to research plan to respond to key questions, primary and/or secondary data collection, and quantitative and qualitative analysis using best practices from psychological science and social anthropology (e.g. regression, moderation, positive deviance analysis, life history analysis, social network analysis). Results are used to design evidence-based theories of change, monitoring, and evaluation frameworks and resilience-enhancing programmatic strategies
Interpeace Frameworks for the Assessment of Resilience (Simpson, et al., 2016)	Resilience for peace refers to the diverse endogenous attributes, capacities, resources, and responses that potentially enable individuals, communities, institutions, and societies to deal peacefully with the impact of past conflict and violence, as well as to prevent new and emerging patterns of conflict and violence	Individual, household, community, institutions, state and society; with special emphasis on what connects the different systems and levels	An inclusive, participatory and stakeholder-led process, beginning with contextualization through the help of country experts, then mixed methods research through focus groups, key informant interviews and surveys, leading to integrated insights into processes of resilience at multiple system levels, to inform the design of peacebuilding strategies that build on the endogenous resilience of the population

Resilience becomes manifested in a variety of responses of agents within complex systems, depending on the temporal relationship with the stressor (i.e., prevention before the stressor; resistance during the stressor; recovery after the stressor) and the level of innovation embedded in the response (i.e., whether it is absorptive, adaptive, or transformative).

As to the specific capacities that contribute to a resilient response, several assessment approaches cite the sustainable livelihoods framework (Scoones, 1998) as a practical rubric for a holistic understanding of assets and resources that might be available to different agents within a social system. Specifically, the sustainable livelihoods framework incorporates five types of capitals that agents may or may not possess, contributing to their resilience: human capital, which includes the skills and competencies that individual persons possess; social capital, which includes the social networks and institutions to which people belong; physical capital, which refers to all manmade assets such as tools, houses, and roads that people own or have access to; natural capital, which refers to biophysical elements that people can utilize for their livelihoods such as water, sunlight, and livestock; and financial capital, which is a

convertible asset that symbolically stores value and serves as a medium of exchange. Capital can be leveraged to meet threats or benefit from opportunities and, in that sense, can be a source of resilience, but only if it is actually accessible and utilized to this end. The attractiveness of the sustainable livelihood framework as a lens to understand resilience capacities lies in that it is multidisciplinary and versatile, covering the full spectrum from human to material assets. Types of capital can be converted or traded for one another (e.g., converting financial capital to human capital by purchasing access to education), while a combination of types of capital can be used to generate a third type of capital (e.g., using human skills and natural capital, such as access to stone and woodlands, to generate physical capital, in the form of a built home). From this perspective, the sustainable livelihoods framework can contribute to a multisystemic understanding of sources of resilience.

Having said that, the sustainable livelihoods framework and its application in conflict resilience assessment is not without its limitations: References to human and social capital tend to be simplified and generic, for instance by referring in general terms on the importance of education while overlooking the rich literatures on life skills (UNICEF, 2017), social cohesion (Cox & Sisk, 2017), and adaptive management (Allen et al., 2011) that scholarly studies discussed in this chapter suggest are salient to conflict resilience. Furthermore, some have argued that access to information should be considered a type of capital in its own right, alongside human, social, natural, physical, and financial (Odero, 2006).

While the practitioner-oriented resilience assessment frameworks that emerged in recent years have undoubtedly been contributing to a mindset shift toward systems-and-resilience thinking among policymakers and field practitioners, they have at the same time been less successful in providing concrete guidance on how resilience assessment can take place in practice. Despite the call of most frameworks to situationally assess risk exposure and resilience capacities at multiple levels of the social system, very little concrete guidance is provided as to the expected risk landscape of specific subpopulations at specific system levels in the context of conflict, as these are known from the scholarly literature (e.g., the challenges faced by war-affected youth, threats posed to critical institutions in times of active hostilities, pathways from ethnocultural tensions and resource scarcity to violent conflict). Thus, every new conflict resilience assessment is expected to start from first principles, with a resilience analyst or stakeholder group making basic inquiries to determine what should be assessed by following the rubric “whose resilience, against which adversities, and to what end,” disregarding the cumulative scientific progress that could have made the research process more efficient.

As to assessing sources of resilience, while the sustainable livelihoods framework does provide some basic guidance as to what type of variables to look for, limited insight is offered on how exactly to conceptualize or measure indicators within each dimension and what to do if an indicator is found to be at a low or high score. In some of the authors’ own past work, such as the Social Cohesion and Reconciliation Index (Centre for Sustainable Peace and Democratic Development & UNDP, 2015) and the Positive Peace Index (Institute for Economics & Peace, 2017), we conceptualized and developed metrics to assess various aspects of positive societal and institutional functioning in conflict-affected countries, but without explicitly contextualizing these dimensions within a framework of resilience assessment.

Having said that, lessons learned from such efforts, could usefully be leveraged to more effectively operationalize the assessment of resilience in conflict-affected populations.

Principles and Guidelines for an Integrated Science of Conflict Resilience

The review of scholarly studies and practitioner frameworks for the assessment of resilience in conflict-affected populations has revealed a vibrant field of inquiry that aspires to be multisystemic but still lacks the conceptual and methodological sophistication to rise to the status of a coherent and integrated science of resilience for conflict-affected populations. While achieving such integration is a broader challenge and aspiration in the study of resilience (Masten, 2015; Ungar, 2018), making progress in the specific field of conflict resilience is contingent on bridging gaps and integrating perspectives between: scholars and practitioners; investigators utilizing social-ecological, psychological, and anthropological approaches; qualitative, quantitative, and participatory methodologies; studies of conflict resilience at the individual, household, community, and institutional levels; studies that primarily focus on psychosocial systems versus studies that focus on material systems as sources of resilience; and approaches that investigate resilience for conflict prevention, resilience for mitigation of conflict consequences, and resilience for postconflict recovery and reconciliation. Building on the current literature and anticipating emerging trends, we propose in the following discussion a set of assessment principles with the hope that these will stimulate a conversation among scholars and practitioners, ultimately leading to multisystemic studies of conflict resilience that build toward an integrative and cumulative science.

Principle 1: Integrate a System-Wide Perspective With Agent-Focused Research

Violent social conflicts are characterized by exposure to a complex cascade of stressors and shocks at different levels and sub-systems, which sequentially put pressure on downstream systems that can either adapt successfully or transition into dysfunctional states. The first step in resilience assessment should be to develop a systemwide understanding of the dynamic risk landscape that the population is exposed to, through a process of participatory modelling (see Figure 22.4), which includes diverse local stakeholders that are knowledgeable about various aspects of the conflict. Such modelling would reveal several specific risk pathways within the broader conflict system, affecting different segments of the population at different stages of the conflict and levels of the social system. These specific risk pathways can then be reconceptualized into targeted, agent-specific, and resilience-oriented research questions, which can be the focus of systematic empirical inquiry (see Table 22.2) using the tools of qualitative and quantitative social research. It should be emphasized that agent-focused research does not necessarily imply emphasis on the resilience of individuals. Institutions, communities, and families can also be considered as agents in a conflict and peace system, that can be the focus of empirical research if appropriate methods and tools are utilized.

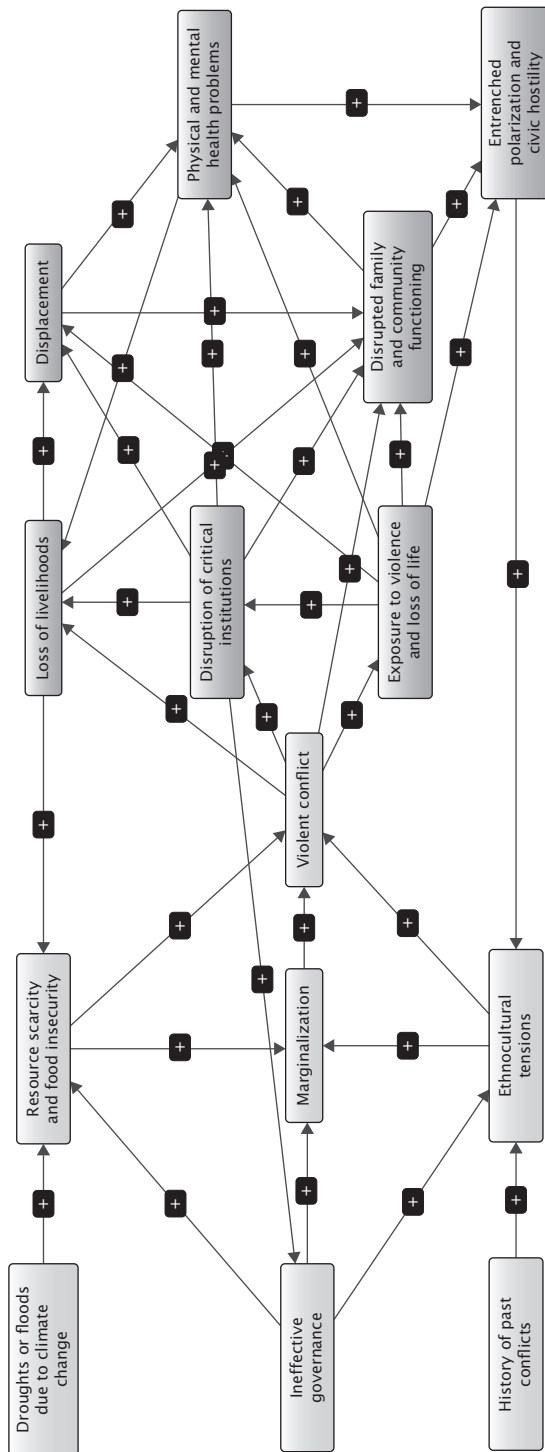


FIGURE 22.4 Conceptualization of a generic conflict system, outlining risk pathways, and feedback loops that precipitate or perpetuate violent conflict, its drivers (color-coded as orange), and its consequences (color-coded as green). Visualization was created using Mental Modeler (www.mentalmodeler.org), a participatory modeling tool that enables stakeholders to collaboratively represent their assumptions about a system in real-time. This conceptualization is intended as an illustration. Specific conflicts and their actual parameters can be modeled in a similar way through a local participatory process, to enable a prioritization of specific research questions regarding which risk pathways to focus on from a resilience perspective.

TABLE 22.2 An Illustrative Agenda for Agent-Focused Resilience Research, Based on Prioritization of Specific Risk Pathways

Stressor	Affected System Agents	Maladaptive System Transition	Resilience Research Question
Droughts or floods due to climate change	Households	Resource scarcity and food insecurity	How can we maintain food security of rural households whose agricultural activities are threatened by droughts and floods?
Resource scarcity and food insecurity	Communities	Violent conflict	How can communities be supported to collaboratively regulate the allocation of scarce food resources, without descending into violent conflict?
Violent conflict	Institutions	Disruption of critical institutions	How can critical institutions, such as hospitals and schools, effectively continue their operations in times of violent conflict?
Violent conflict	Households and communities	Exposure to violence and loss of life	How can households and communities prepare themselves and take protective measures to not suffer loss of life when violent conflict erupts?
Exposure to violence and loss of life	Individuals and households	Physical and mental health problems	How can individuals and households that have been exposed to violence be protected, so as not to develop, or to recover from, physical and mental health problems?

Note: Pathways were selected from a participatory model of a whole-conflict system, as shown in Figure 22.4.

Principle 2: Contribute Toward a Cumulative Science of Conflict Resilience around an Agreed Taxonomy of Resilience Capacities

Conflict resilience occurs when agents draw on their capacities to adaptively respond to challenges brought on by conflict-associated adversities. Therefore, understanding the extent to which diverse capacities have been acquired, are situationally activated, and effectively contribute to adaptation in adverse circumstances is central to the assessment of conflict resilience. While a wide range of capacities can be utilized to counter adversities, with some of these being culturally specific, it is nonetheless feasible and desirable to build on existing literature to conceptualize system capacities within an extensive but finite taxonomy, around which a cumulative science of measurement, theory, and practice can begin to emerge. Building on the Sustainable Livelihoods Framework (Scoones, 1998) while also incorporating relevant findings from the scholarly literature on conflict resilience, we propose an integrated capacities framework (see Table 22.3), which outlines specific indicators under the following categories: human capital, divided into transferable life skills and task-specific competencies; social capital, divided into social cohesion and adaptive institutional practices; material capital, divided into natural and physical capital; and digital capital, divided into financial and information capital. While remaining open to structural revisions and not intended to be exhaustive, the taxonomy of capacity indicators can serve as a starting

TABLE 22.3 Integrated Capacities Framework, to Assess Aspects of Human, Social, Material and Digital Capital That Might Potentially Contribute to Resilient Responses in Different Scenarios of Conflict-Associated Adversity

Human Capital		Social Capital		Material Capital		Digital Capital	
Transferable Life Skills	Task-Specific Competencies	Social Cohesion	Adaptive Institutional Practices	Natural Capital	Physical Capital	Financial Capital	Information Capital
Emotion Regulation	Food growing	Inclusive sense of identity	Mission clarity	Agricultural land	Fire extinguisher	Income from work or wealth	Information about threats
Distress Tolerance	Shelter construction	Respect of diversity	Service orientation	Fertile soil	First aid kit	Bank savings	Information about opportunities
Implementation Persistence	Providing first aid	Gender equality and partnership	Problem-solving orientation	Suitable seeds	Stocks of canned food	Remittances	Access to general education
Sense-making	Sterilization and preventing infection	Inter-generational partnership	Institutional versatility	Livestock	Access to computer or smartphone	Insurance plans	Access to technical training
Critical Thinking	Palliative treatment of common mental health problems	Family coherence	Culture of empowerment	Grazing land	Access to electricity	Access to e-banking	Access to diagnostic information
Flexibility	Palliative treatment of common physical ailments	School Connectedness	Functional Redundancy	Rivers and waterholes	Access to medication	Access to loans	Information about personal strengths and weaknesses
Growth mindset	Preparedness for emergency response	Community dialogue	Institutional preparedness	Land for habitation	Access to sanitation	Access to grants	Information about other people and their capacities
Creativity	Parenting skills	Community solidarity	Science-based practices	Access to drinking water	Farming and construction tools	Access to charitable support	Information about institutions and services they provide
Perspective taking	Conflict mediation skills	Participation opportunities	Reflective management	Community forest	Access to means of mobility	Access to social protection nets	Information about rights and duties
Negotiation	Mentoring and coaching	Local-national collaboration	Future orientation	Community biodiversity	Access to a community hub	Access to markets	Information about historical events

Note: The list of capacities within each category is not intended to be exhaustive.

point for developing a cumulative science on how resilience-promoting capacities can be effectively assessed and nurtured in times of conflict. Ongoing dialogue between scholars and practitioners, underpinned by open sharing of methods, data, and findings, is an essential prerequisite for the development of such a cumulative science of conflict resilience.

Principle 3: Become Versatile in the Use of Appropriate Qualitative and Quantitative Methodologies

The study of conflict resilience is a youthful discipline, with several still unknown or unverified processes. In this context, versatility in research methodologies can significantly contribute to advancing our collective understanding. Qualitative studies, and, more specifically, use of the life history approach (Zeitlyn, 2008) and construction of grounded theories (Charmaz, 2014), can shed new light on previously unknown processes of adaptation, while quantitative studies that, at the very least, incorporate factor analysis (Brown, 2015) and moderation analysis (Hayes, 2018) can contribute to verifying the potential effectiveness of specific resilience-enhancing strategies. Leveraging the distinct advantages of qualitative and quantitative approaches through mixed method study designs, for instance, by selecting or constructing quantitative indicators for adversity exposure and resilience capacities after establishing a grounded theory of resilience in the specific conflict context, would significantly contribute to advancing the science of conflict resilience.

Principle 4: Develop distinct Research Protocols and Approaches for the Assessment of Individual, Household, Community, Institutional, and National Resilience

Resilience in times of conflict is a property of systems at diverse levels of scale, including the individual, household, community, institutional, and national levels. To operationalize this understanding in the way we assess resilience, distinct research protocols need to be developed for assessment at each level of the social system. While qualitative research, through interviews and focus groups, can easily be adapted to investigating the resilience of different system levels, quantitative multilevel assessment requires a more thoughtful approach. This can include population surveys for the individual level, but collaborative scoring approaches for other system levels, as showcased for instance in the CoBRA (UNDP, 2014) and ARC-D (McCaul & Mitsidou, 2016) assessment frameworks. Importantly, nested sampling strategies should be utilized, keeping in mind the interconnectedness of different system levels, for genuine multilevel and multisystemic analysis to be possible (Sastry et al., 2003). Individuals, for instance must be assessed as members of their households and institutions, while households and institutions must be assessed as constituent members of their communities. As for national resilience, this can be assessed using a case study approach, after combining and synthesizing the quantitative and qualitative findings of all other in-country resilience assessments. Recent literature on applying the concept of the social contract as a path to resilience in conflict-affected countries (Lordos & Dagli-Hustings, 2018; McCandless et al., 2018) provides relevant guidance on how such case studies could be approached.

Principle 5: Leverage Analytic Methods That Are Suitable for Detection of Cross-Systemic Linkages

To investigate connections and pathways between diverse resilience capacity dimensions and system levels, advanced analytic methodologies are required, and in this respect the conflict resilience field will be required to experiment and innovate in coming years. Verification of specifically hypothesized risk pathways, before proceeding with resilience analysis, can be done through structural equation modeling where multiple risks and multiple outcomes that might be experienced within the population are put to the test simultaneously (Kline, 2015; Lordos et al., 2019). Investigating effects across system levels can benefit from the rich methodological literature on multilevel modeling (Hox, Moerbeek, & van de Schoot, 2018; Lazega & Snijders, 2019) that has already been utilized extensively in educational and management research. Exploring connections between dimensions of resilience capacities, for instance, to investigate which specific life skills are associated with which specific types of social support, can be approached through complex network analysis methodologies (Sayama, 2015; Zinoviev, 2018) or more simply through correlation analysis. Investigating the potential co-action of diverse capacities in promoting resilience would first require calculating a resilience statistic using the residuals approach (Miller-Lewis et al., 2013) to use as an outcome in statistical models, then testing mediation and moderation models to investigate the interaction between capacities in predicting resilience. Running such analyses properly, however, would require large samples and possibly use of machine learning and data mining techniques (Attewell & Monaghan, 2015; Kelleher, Mac Namee, & D'Arcy, 2015), since the number of potential interactions rises geometrically with each additional resilience capacity being considered.

Principle 6: Engage with Stakeholders Across Multiple Systems and Levels, to Maximize Resilience-Enhancing Insight, Planning, and Action

For impactful resilience-enhancing action, assessors of resilience in a conflict setting need to be aware that change in a complex adaptive system cannot take place through top-down processes only. From a systems perspective, individuals, households, communities, and institutions are understood to be mutually evolving and adapting in meeting oncoming challenges through processes that can best be described as panarchic (Allen et al., 2014). To achieve systemwide resilience would require that diverse layers of society, from the individual level all the way up to communities and institutions, are each empowered with appropriate capacities, as described earlier, that can be drawn upon as needed in times of adversity. Consequently, ownership and agency over the reflection, planning, and decision-making process needs to be distributed across all system levels (i.e., individuals, households, communities, institutions). In practice, this would involve creating systems for individuals and households to self-assess their own resilience, while encouraging participatory approaches for community, institutional, and national reflection based on resilience assessment findings. Furthermore, resilience-enhancing action can be promoted by integrating resilience assessment metrics into the monitoring and evaluation systems of humanitarian, peacebuilding, and development organizations.

Principle 7: Adjust Resilience Assessment Priorities as the Conflict and Peace System Evolves over Time, and as Local Understanding of Resilience Processes Matures

Resilience assessment in conflict contexts should always be focused on addressing the challenges posed by active risk pathways. As a system of conflict and peace evolves, previous risk pathways might become deactivated while others grow in salience. The research questions that underlie the resilience assessment process (e.g., as per Table 22.2) should be modified to reflect such shifts in the risk landscape, with concomitant downstream modifications also made to research protocols, analytic approaches, and stakeholder engagement strategies. Assessment priorities should additionally be modified as insight into sources and systems of resilience matures over time. For instance, a study of resilience at the level of individuals may reveal an important community or institution-level protective factor, which could, in turn, trigger an interest to focus investigations onto the resilience of that higher-level system.

Assessment of Multisystemic Resilience in Conflict-Affected Eastern Ukraine: A Case Study

Violent conflict erupted in Eastern Ukraine in spring 2014, after antigovernment protests in Donetsk and Lugansk oblasts (administrative regions) rapidly escalated into an armed insurgency by pro-Russia separatist groups, who took control of both oblasts, the industrial base of each region and Donetsk International Airport. These acts were met by a vigorous government counteroffensive, but after heavy fighting throughout the summer and autumn of 2014, the situation on the ground gradually stabilized into a simmering conflict which left the Donetsk and Lugansk region divided into government-controlled and separatist-held areas. Sporadic fighting along a grey zone that separates the two areas has since been ongoing. The conflict has led to more than 5,000 casualties, significant internal displacement, exacerbation of sociocultural divisions, disruption of infrastructure and economic activity in the region, and depopulation in areas proximal to the grey zone. Meanwhile, a generation of children and adolescents have been deeply affected by the conflict and its consequences, including through death of parents, siblings, or other relatives; disrupted family functioning; poverty and economic distress; exposure to soldiers and armaments; and frequent and unpredictable shelling of communities, homes, and schools.

Our research group at the Centre for Sustainable Peace and Democratic Development was invited to Ukraine in the Autumn of 2015 to conduct assessments that might inform the international community's response to the unfolding crisis in the east. Our study was conducted in accordance with several—although not all—of the principles outlined earlier. We sought to integrate a system-wide perspective with agent-focused research by commencing the study with a process of participatory modeling in which representatives of several UN agencies, including UNICEF, UNDP, and the International Organization for Migration contributed their perspectives for a more holistic understanding of risk pathways, based on

which specific agent-focused research questions were formulated. Such questions included, among others, the following: How can residents of Eastern Ukraine be made resilient against the pressure to abandon the region, while the conflict is ongoing? What factors can contribute to ongoing intergroup harmony and a peaceful civic orientation among citizens of Eastern Ukraine, in spite of the polarizing narratives and conflict experiences that are driving communities apart? And, how can the mental health and broader psychosocial adaptation of adults and young people in the region be protected, in a context of ongoing insecurity and traumatizing events? To answer these resilience-oriented research questions, we incorporated in the study several types of capacities from among those included in the proposed taxonomy, although with a greater emphasis on human capital and social capital. Project stakeholders and partners actively contributed in the conceptualization and design of specific capacity indicators based on their knowledge of the local context.

Based on the study's conceptualization, we collected data from specific segments of the population (community adolescents; community adults; residents of nongovernment-controlled areas), although almost all the data we have collected so far is at the level of individuals, which restricts our capability to assess the resilience of other system levels and formulate recommendations accordingly. Incorporating additional layers to the data collection, for instance, by collecting school-level data along with adolescent-level data, or community-level data along with citizen-level data, is currently being considered in collaboration with the study's stakeholders. Even with data collected at a single level, it is still possible to detect cross-systemic effects if appropriate analytic methods are used, as will be illustrated using the example of the most recent data collection with adolescents ($n = 7,834$ girls and boys, aged 12 to 17). Specifically, factor analysis was initially utilized to develop a nuanced understanding of potential detrimental outcomes of conflict exposure, looking beyond mental health to also investigate social and civic dimensions of adaptation (see Table 22.4). Based on identified detrimental outcome dimensions, structural equation modeling was used to empirically identify risk pathways (see Figure 22.5).

To the extent that conflict and other associated adversities were found to affect multiple systems of functioning, and since resilience is the ability to interrupt the impact of a specific risk pathway to prevent a maladaptive transition, we can consider that an agent—in this case, an adolescent—would need to possess multiple resiliencies to interrupt pathways from adversity exposure to each of the detrimental outcomes. To detect these resiliencies, we regressed each outcome (e.g., emotional problems, social hostility) against the various types of adversities (i.e., conflict hardship, violence in the microsystem, sociodemographic adversity) and then took the residual of the regression—that is, the difference between actual score of the detrimental outcome versus predicted score of the detrimental outcome—as a continuous statistic of resilience (Miller-Lewis et al., 2013). In this manner, we constructed five resilience variables, namely, emotional resilience—maintaining emotional well-being despite conflict exposure and associated adversities; behavioral resilience—resisting paths to delinquency in times of conflict adversity; resilience against suicidality—resisting the contemplation of suicide or self-harm in times of extreme adversity; resilient peacefulness—remaining peaceful, prosocial and committed to human rights and intergroup harmony

TABLE 22.4 Factor Analysis of Detrimental Adolescent Outcomes Revealing Five Distinct Dimensions of Psychosocial and Civic Maladjustment

	Emotional Problems	Risk-Taking and Aggressive Behaviors	Suicidality and Self-Harm	Social Hostility	Social Disengagement
Anxiety	0.91				
Depression	0.68				
Posttraumatic stress disorder	0.50				
Conduct disorder		0.75			
Oppositional defiant disorder		0.54			
Bullying		0.53			
Substance use		0.53			
Aggression		0.50			
Unsafe sexual behavior		0.49			
Readiness for political violence		0.27			
Suicidality			0.74		
Self-harm			0.71		
Multicultural outlook (R)				0.65	
Endorsement of human rights (R)				0.62	
Feelings to outgroups (R)				0.47	
Gender equality mindset (R)				0.37	
Sense of well-being (R)					0.53
Self-Esteem (R)					0.45
Academic performance (R)					0.41
Readiness for civic participation (R)					0.36
School dropout tendency					0.22

Note: Analysis is based on a sample of 7,834 adolescents in Ukraine. Extraction method: maximum likelihood. Rotation method: Promax with Kaiser normalization.

despite conflict exposure; and resilient participation—continuing to participate in school and civic life and experience a sense of purpose, despite accumulated challenges and adversities. With these resilience variables in place, we then proceeded to screen several candidate sources of resilience across the human capital and social capital capacity indicators we assessed to see whether they are associated with resilience, and if so which type (see Tables 22.5 and 22.6 for detailed findings). Importantly, divergent capacities appear to contribute to the different types of resiliencies. As an example, emotional resilience is predicated on skills such as emotion regulation, distress tolerance, and planning, alongside social capital elements such as paternal involvement and teacher support whereas resilient peacefulness is contingent on a totally different repertoire of skills, which includes communication, negotiation, critical thinking, kindness, and respect for diversity, with maternal involvement,

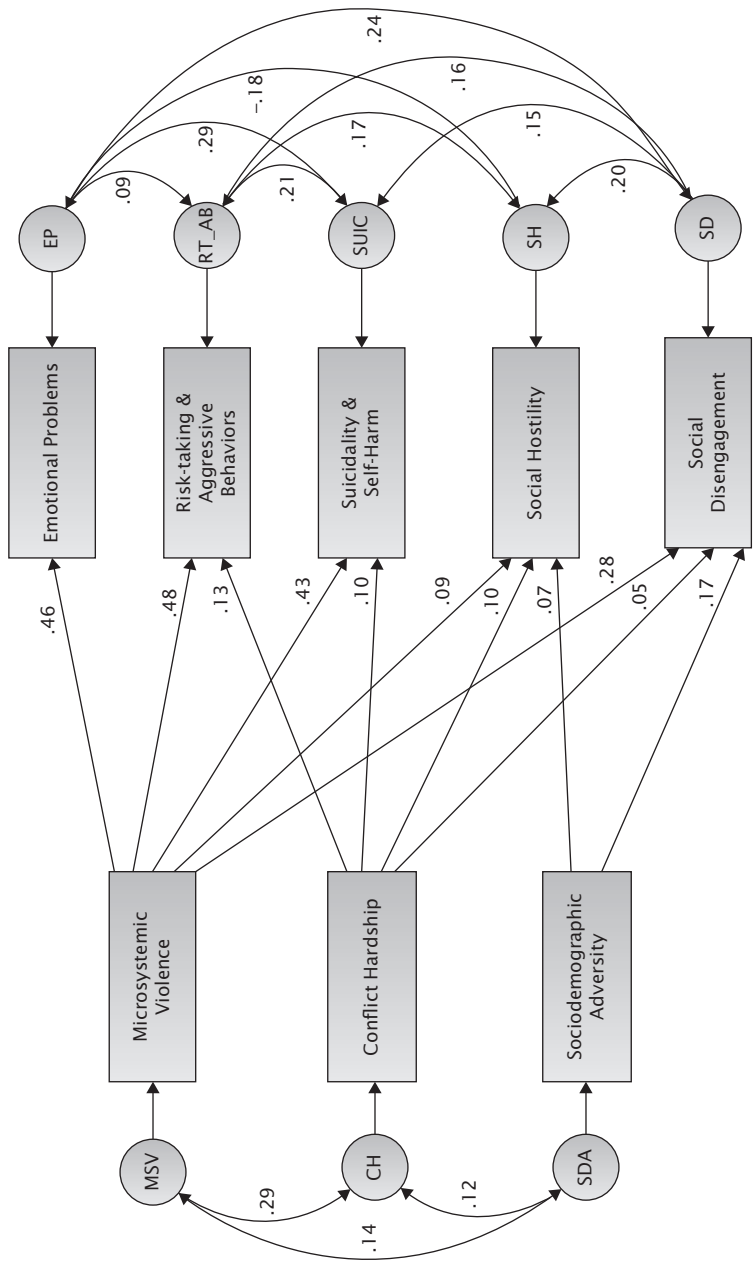


FIGURE 22.5 Structural equation model of risk pathways from conflict hardship and other associated adversities, to psychosocial and civic adolescent detrimental outcomes. Analysis is based on a sample of 7,834 adolescents in Ukraine. Model fit indices: Chi Square = 52, df = 5, comparative fit index = 0.996, root mean square error of approximation = 0.035, standardized root mean square residual = 0.013.

TABLE 22.5 Correlations of Resilience Dimensions with Specific Human Capital Capacities

	Emotional Resilience	Behavioral Resilience	Resilience against Suicidality	Resilient Peacefulness	Resilient Participation
Communication	ns	ns	ns	0.26	0.29
Negotiation	ns	0.15	ns	0.25	0.23
Cooperation	0.10	0.10	0.08	0.16	0.36
Distress tolerance	0.17	ns	0.12	0.11	0.30
Emotion regulation	0.43	0.05	0.16	-0.18	0.13
Self-management	0.09	0.11	ns	0.08	0.31
Problem-solving	ns	ns	0.08	0.15	0.25
Decision making	0.07	ns	ns	0.11	0.22
Planning	0.25	0.07	0.07	-0.07	0.13
Critical thinking	-0.07	ns	ns	0.25	0.18
Creativity	ns	0.07	ns	0.20	0.24
Kindness	-0.11	0.19	ns	0.26	0.22
Respect for diversity	ns	0.19	ns	0.31	0.18
Aerobic exercise	0.11	ns	0.05	ns	0.20
Balanced nutrition	0.15	ns	0.06	ns	0.24
Sleep hours weekly	0.15	ns	0.08	-0.09	0.14

Note: Analysis is based on a sample of 7,834 adolescents in Ukraine. ns = not significant after correction for multiple testing.

positive peer relations, and competency-based teaching standing out as community-based sources of resilient peacefulness. These findings illustrate an important methodological point: by conducting a comprehensive screen of potential resilience capacities through local adaptation of a global taxonomy, while at the same time investigating multiple risk pathways from the perspective of specific system agents, in this case conflict-exposed adolescents, it becomes possible to generate local evidence of high specificity that can guide targeted resilience-enhancing action by community stakeholders.

A frequent limitation of agent-focused resilience studies is that potential resilience capacities are listed and then targeted for intervention, but without considering how resilience capacities across different systems and levels are interlinked. One way to screen for such cross-systemic linkages is to test the partial correlations between diverse resilience capacities, while controlling for aggregate level of capacity. The resulting analysis reveals specific associations between pairs of capacities, over and above the typically expected positive correlation that all capacity indicators tend to display with one another through nonspecific virtuous interaction. In the Ukraine adolescent study, we tested the partial correlation of specific human capital capacities against specific social capital capacities, while controlling for aggregate human capital and aggregate social capital, which at their level display strong correlation (human capital with family-based social capital: $r = 0.35$, $P < 0.001$; human capital with community-based social capital: $r = 0.39$, $P < 0.001$). Findings of the partial correlation

TABLE 22.6 Correlations of Resilience Dimensions With Specific Social Capital Capacities

	Emotional Resilience	Behavioral Resilience	Resilience against Suicidality	Resilient Peacefulness	Resilient Participation
Maternal involvement	0.05	0.12	0.11	0.20	0.23
Maternal warmth	ns	0.08	0.12	0.14	0.19
Maternal monitoring	0.05	0.19	0.10	0.22	0.23
Paternal involvement	0.12	0.06	0.07	ns	0.17
Paternal warmth	0.09	0.07	0.08	0.05	0.17
Paternal monitoring	0.13	0.10	0.08	0.05	0.18
Family connectedness	0.06	0.08	0.09	0.18	0.25
Peer support	0.09	0.05	ns	0.20	0.22
Emotional connection to school	0.15	0.10	0.05	0.12	0.32
Teacher support	0.14	0.09	0.05	0.10	0.28
Competency-based teaching	ns	0.11	ns	0.20	0.28
Safe physical school Environment	ns	0.10	ns	0.09	0.19
Safe psychosocial school Environment	ns	0.11	ns	0.17	0.27
Participatory and inclusive School governance	0.08	0.11	ns	0.16	0.29
Child-friendly city	0.08	0.09	0.05	0.24	0.29

Note: Analysis is based on a sample of 7,834 adolescents in Ukraine. ns = not significant after correction for multiple testing.

analysis (see Tables 22.7 and 22.8) reveal interesting differential associations between specific capacities. For instance, critical thinking is associated with competency-based teaching, family connectedness, and maternal warmth while emotion regulation is associated with teacher support, paternal monitoring, and emotional connection to the school. Some aspects of social capital have both positive and negative associations with aspects of human capital. For instance, supportive peer relations are associated not only with improved communication skills, cooperation skills, and kindness, but also with poorer self-management skills, reduced sleep hours, and less balanced nutrition. It is important to note that the cross-sectional nature of the specific study does not permit making causal inferences as to the directionality of such associations and from there on to a firm understanding of multisystemic processes that contribute to conflict resilience. Having said that, discovering and verifying such associations, initially through cross-sectional data, are important steps toward the construction of more sophisticated causal hypotheses that can eventually be investigated through longitudinal and possibly multilevel research.

As mentioned earlier, studies of resilience in conflict affected populations must go beyond knowledge generation to engage stakeholders at diverse levels of the social system who are the ones that can take up the responsibility of resilience-enhancing action. In accordance

TABLE 22.7 Partial Correlations Between Human Capital Capacities and Family-Based Social Capital Capacities, after Controlling for Aggregate Levels of Both Capacity Dimensions, Age, and Gender, to Detect Specific Associations Between Specific Pairs of Capacities When All Else Is Held Equal

	Maternal Involvement	Maternal Warmth	Maternal Monitoring	Paternal Involvement	Paternal Warmth	Paternal Monitoring	Family Connectedness
Communication	0.07	0.04	ns	-0.05	ns	-0.07	ns
Negotiation	ns	ns	ns	ns	ns	ns	ns
Cooperation	ns	ns	ns	ns	ns	ns	ns
Distress tolerance	ns	ns	ns	ns	ns	-0.04	0.04
Emotion regulation	-0.07	-0.04	ns	ns	ns	0.07	ns
Self-management	ns	ns	ns	ns	ns	ns	ns
Problem-solving	ns	ns	ns	ns	ns	ns	ns
Decision-making	ns	ns	ns	ns	ns	ns	ns
Planning	ns	ns	ns	ns	ns	0.04	ns
Critical thinking	ns	0.04	ns	ns	ns	ns	0.04
Creativity	0.04	ns	ns	ns	ns	ns	ns
Kindness	0.05	ns	0.05	-0.05	ns	-0.05	ns
Respect for diversity	ns	ns	0.04	-0.05	ns	ns	ns
Aerobic exercise	ns	ns	ns	ns	ns	ns	ns
Balanced nutrition	ns	ns	ns	ns	ns	ns	ns
Sleep hours weekly	ns	ns	ns	0.04	ns	ns	ns

Note. Analysis is based on a sample of 7,834 adolescents in Ukraine. ns = not significant after correction for multiple testing.

with this principle, we have been working with stakeholders to consider the study's implications for policies and programs that aim to promote cohesion and stability in Eastern Ukraine. Specifically, we have been working with UNICEF and the Ukrainian Ministry of Education and Science, to incorporate the study's recommendations for enhancing adolescent resilience into the ongoing process of educational reform; with USAID, to tailor the allocation of microgrants to local nongovernmental organizations on the basis of study insights; and with several peacebuilding and civic action initiatives to integrate the study's capacity metrics into their monitoring and evaluation frameworks. Resilience-enhancing impact of the study would be even greater if we could devise methods to provide direct feedback to individuals, households and communities based on their own resilience self-assessment, but this requires overcoming several technical and methodological challenges. From a multisystemic perspective, the study's findings are raising new questions about other system levels that were not the focus of inquiry so far and that can best be addressed through multilevel research. Specifically, more focused investigations into the resilience of families, teachers and schools, local authorities, and local peacebuilding nongovernmental organizations would contribute to a more holistic and multisystemic understanding of conflict resilience in Eastern Ukraine.

Conclusion

The concept of resilience has recently become very popular among humanitarian, peacebuilding, and development practitioners. If used outside of a multisystemic lens, however, the interest in resilience is unlikely to lead to better outcomes and may even cause more harm than good. Examples of inappropriate use would include overly prioritizing the resilience of a specific system level (e.g., only focusing on individuals or only focusing on communities) or a specific type of capacity as a source of resilience (e.g., only considering the role of human capital or only considering the role of material capital). Such narrow approaches to resilience would fail to leverage its true potential, which is to integrate policies and programs across systems and levels, thus providing policy coherence to conflict prevention and peace consolidation efforts. Furthermore, narrow approaches to resilience could actually cause harm, if used as an excuse for denial of needed support on the argument that individuals and communities can draw on their own strengths to prevent conflict or recover from it (Hilhorst, 2018). Thankfully, "narrow resilience" does not appear to be the direction in which the conflict resilience field is taking. All practitioner frameworks acknowledge the multisystemic nature of resilience, while organizations that specialize in different subdomains within the humanitarian, peacebuilding, and development nexus are leveraging opportunities offered by the resilience lens to build cross-sectoral bridges.

The scholarly community has an important role to play in this emerging and multidisciplinary field of conflict resilience. While practitioners in the humanitarian, peacebuilding, and development nexus are strongly motivated to incorporate resilience-based approaches in their work, they are struggling with several conceptual and methodological challenges, including how to conduct a system-wide social ecological analysis; how precisely to conceptualize risk, adaptation, and resilience capacities; how to measure all these at diverse levels

TABLE 22.8 Partial Correlations Between Human Capital Capacities and Community-Based Social Capital Capacities, After Controlling for Aggregate Levels of Both Capacity Dimensions, Age and Gender, to Detect Specific Associations Between Specific Pairs of Capacities When All Else Is Held Equal

	Peer Support	Emotional Connection to School	Teacher Support	Competency-Based Teaching	Safe Physical School Environment	Safe Psychosocial School Environment	Participatory and Inclusive School Governance	Child-Friendly City
Communication	0.11	-0.04	-0.07	ns	-0.04	ns	ns	ns
Negotiation	ns	ns	-0.04	ns	ns	0.04	ns	ns
Cooperation	0.09	0.06	-0.05	ns	-0.07	ns	ns	ns
Distress tolerance	ns	ns	-0.04	ns	ns	ns	ns	ns
Emotion regulation	ns	0.06	0.09	-0.06	ns	-0.05	ns	ns
Self-management	-0.06	ns	ns	ns	ns	ns	ns	ns
Problem-solving	ns	-0.04	-0.04	ns	ns	0.04	ns	ns
Decision-making	ns	ns	ns	ns	ns	ns	ns	ns
Planning	ns	ns	0.05	ns	ns	ns	ns	ns
Critical thinking	ns	ns	ns	0.04	ns	ns	ns	ns
Creativity	ns	ns	ns	ns	ns	ns	ns	ns
Kindness	0.05	ns	-0.05	ns	ns	ns	ns	ns
Respect for diversity	ns	-0.04	-0.04	0.04	ns	ns	ns	ns
aerobic exercise	ns	ns	ns	ns	ns	ns	ns	0.04
Balanced nutrition	-0.04	ns	ns	ns	ns	ns	ns	ns
Sleep hours weekly	-0.07	ns	0.04	ns	0.05	ns	ns	ns

Note: Analysis is based on a sample of 7,834 adolescents in Ukraine. ns = not significant after correction for multiple testing.

of the social system; how to analyze qualitative and quantitative data to empirically discover or verify processes of adaptation and resilience; and how to capture methodological and substantive discoveries and innovations in the context of a cumulative science. Scholars of resilience can make important contributions in meeting these challenges through scholar–practitioner partnerships. Such partnerships require flexibility and a readiness for experimentation from both sides, as the scholarly emphasis on conceptual and methodological rigor engages with the practitioner emphasis on practical utilization of study results within a complex multi-stakeholder environment.

Key Messages

1. There is strong interest within the humanitarian, peacebuilding, and development sectors to integrate resilience thinking into their work on conflict prevention and postconflict recovery.
2. Resilience in conflict is widely accepted to be multisystemic and to require an integrative understanding of adaptation processes at the individual, household, community, and institutional levels, which draw on resources across dimensions of human, social, material, and digital capital.
3. Effectively assessing resilience in contexts of conflict would require an integration of social-ecological, psychological, and anthropological approaches, utilizing qualitative, quantitative, and participatory methods of inquiry.
4. The ultimate end-goal of resilience assessment in any given conflict context should be to enhance the capacity of agents across all system levels to take effective resilience-enhancing action.
5. Scholar–practitioner partnerships can contribute to addressing existing gaps in the conflict resilience field.

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