LITERATURE REVIEW

Assessing Resilience in War-Affected Children and Adolescents: A Critical Review

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Resilience is a heterogeneous construct that has only recently begun to be explored in the context of complex emergencies. War-affected children and adolescents in developing countries represent a vulnerable group that has long been neglected in trauma research. The current review is a critical stage-by-stage assessment of the quantitative and qualitative methodologies in the field. Studies conducted in middle- or low-income countries and published between 2007 and 2013 were considered for inclusion. Conceptual and methodological discrepancies between the two research approaches were identified. Future studies should examine the complexity and dynamics of resilience and apply theoretically informed rigorous assessment techniques. Above all, research should aim to understand the unique needs and experiences of war-affected individuals.

Armed conflict around the world has contributed to millions of deaths of soldiers and civilians (United Nations, 2013). War has resulted in the destruction of the political systems, social structures and infrastructure of war-affected countries, and has also had detrimental effects on the physical, socio-emotional and psychological functioning of survivors. Children, the most vulnerable group of survivors, have been affected in many ways including maiming, sexual assault, abduction, forced military recruitment, psychological trauma and the denial of humanitarian aid (United Nations, 2013). In 2006, the Office of the Special Representative of the Secretary-General for Children and Armed Conflict reported that more than 250,000 children were exploited as soldiers globally (United Nations, 2013). As of May, 2013, children have been recruited, trained and exploited as combatants and/or suicide bombers, and/or spies in countries such as Afghanistan, Pakistan, Somalia, the Central African Republic and many more (United Nations, 2013).

Overview of the Political, Theoretical and Empirical Contexts of Resilience

The multitude of theoretical models, settings and populations studied in the field of resilience following exposure to war warrants a structured overview of the main conceptual and methodological issues. Two types of psychological outcomes following adversity caused by war will be discussed: *the psychopathological outcome* or *trauma* (with a particular focus on post-traumatic stress disorder (PTSD)

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and *the resilient outcome* or simply *resilience*. Exposure to war will be defined as either exposure as civilians or as the participation in war activity as a soldier, bomber or spy. A significant proportion of the literature on the psychological consequences of the exposure to war has focused on estimating the prevalence, severity and risk factors of PTSD. The current work will argue that the research on PTSD seems necessary but insufficient to account for the full range or responses to traumatic experiences such as war. As a result, the importance of exploring resilience, particularly in the context of war, will be highlighted. The complexities associated with defining resilience, together with a few notable attempts, will be outlined. Finally, a brief historical overview of the empirical literature will be presented to demonstrate the challenges of operationalizing and measuring resilience.

Literature Review

According to the American Psychiatric Association (APA, 2000), a traumatic stressor is a stressor which endangers the individual's physical and/or psychological health and well-being. Such stressors usually represent adverse traumatic events (physical, sexual or emotional) accompanied by subjective experiences of fear and powerlessness (APA, 2000).

Exposure to war and involvement in war represent extreme traumatic experiences that could involve sexual or physical abuse, torture, mass killing, the destruction of homes and other infrastructure, the loss of family and economic insecurity (Peltonen & Punamaki, 2010). PTSD refers to the maladaptive psychological response to the experience of intense traumatic events (APA, 2013). PTSD is characterized by intrusive and distressing memories

of the incident, which can be accompanied by somatic symptoms including sweating and increased heart rate, recurrent feelings of anger and avoidance or withdrawal symptoms (APA, 2013).

The research on war-related PTSD has focused predominantly on assessing the relationship between war characteristics (duration, type, severity, socio-economic context) and PTSD characteristics (prevalence, time of onset, phenomenology, prognosis; Bayer, Klasen, & Adam, 2007; Kohrt et al., 2008). The PTSD literature has contributed to the comprehensive description and contextualization of PTSD symptoms, to the estimation of the prevalence of PTSD in multiple regions of conflict and to the recognition of mental health problems of war-affected young individuals as a major contributor to the global burden of disease (Remschmidt, Nurcombe, Belfer, Sartorius, & Okasha, 2007). However, studies focusing solely on PTSD symptoms do not seem to be able to account for the war-affected individuals who do not develop psychopathology and who even show positive psychosocial and emotional adjustment (Werner & Smith, 1992). For instance, the World Mental Health Survey showed that well-established risk factors such as economic and political adversity (poverty, low education, conflict) in disadvantaged populations worldwide are typically associated with low incidence of mental disorders (Demyttenaere et al., 2004). In addition, PTSD research cannot explain the considerable differences in the rates of PTSD between refugee populations having experienced seemingly comparable levels of economic hardship and war-related trauma (Moss et al., 2006). In other words, war-related factors alone seem insufficient to explain the variability of post-traumatic mental disorders (Boothby, Crawford, & Halperin, 2006; Kohrt et al., 2008). Therefore, there appear to be relatively under-researched socio-cultural factors as well as coping and adaptive processes that can moderate the effects of potentially traumatizing war-related experiences on psychological well-being (Betancourt, Brennan, Rubin-Smith, Fitzmaurice, & Gilman, 2010; Klasen et al., 2010).

Studies investigating resilient outcomes of war-related adversity seem to address the aforementioned inadequacies of the PTSD research (Klasen et al., 2010). According to Masten (2001), a resilient outcome generally refers to the positive socio-emotional and psychological adjustment in the context of extreme environmental stressors. Studies on resilience and resilient outcomes explore the protective and recovery processes associated with successful socio-emotional adaptation following trauma exposure (Earvolino-Ramirez, 2007). Thus, proponents of resilience research seem to shift the attention away from the negative effects of war and towards positive health outcomes (Laursen, 2000).

The construct of resilience has been studied both theoretically and empirically. Recognising the heterogeneity of conceptualizations of resilience over time, Earvolino-Ramirez (2007) attempted to synthesize the most commonly cited antecedents, defining attributes and consequences of resilience. Adversity (disruptive and/or challenging life events or circumstances) is the main antecedent of resilience. The defining or context-independent

attributes of resilience identified by Earvolino-Ramirez's (2007) literature synthesis include the recovery or restoration of the individual's life prior to the adversity, a strong belief in the self, determination and positive expectations, adaptability to changing circumstances and the existence of at least one positive relationship. A resilient outcome has usually been defined as one of successful coping, recovery and positive adaptation. However, there has been disagreement as to whether a resilient outcome should be defined as one that leads to the restoration of the level of functioning prior to the occurrence of the adversity or as one that produces such a level of mastery (a great skill or knowledge) that surpasses the individual's performance prior to the adversity (Luthar, Doernberger, & Zigler, 1993).

The triarchic model has been another commonly utilized organizing framework for the construct of resilience (Betancourt & Khan, 2008; Davydov, Stewart, Ritchie, & Chaudieu, 2010). This model assesses resilience factors on an individual level (personality traits, a balance between dependence on others and independence), on the level of familial and community interactions, norms and support structures (relationships, gender roles, safety and security needs, government support), and on a cultural level (adaptive cultural characteristics, religiousness, life philosophy, cultural identity).

Significant effort has been devoted to the classification of the determinants of resilience—those traits or processes that can increase the likelihood of a resilient outcome (see Davydov et al., 2010 for a review). To demonstrate, protective factors such as personality dispositions and social support structures can reduce the negative impact of adversity and lead to a quick recovery (harm-reducing factors). Alternatively, such variables may decrease the likelihood of experiencing the negative effects of adversity by, for instance, reducing the organism's reactivity to stress (protective and promotive factors; Davydov et al., 2010).

While not exhaustive, the aforementioned theoretical models illustrate the challenges of defining and researching resilience. Naturally, this has led to a plurality of methodological approaches to resilience research. A brief historical review of trauma and resilience studies demonstrates the complexities of the conceptualization, identification and measurement of resilience in diverse cohorts. The early developmental studies of Rutter (1990) and Garmezy (1991) examined children who had experienced adverse developmental conditions (parental neglect and/or abuse, poverty) but who had not developed psychopathology in later life. Those early studies assumed that the protective factors operate in an independent, additive manner (Agaibi & Wilson, 2005). Later meta-analyses of resilience, however, identified significant interactions between proximal factors and distal factors (Agaibi & Wilson, 2005). Proximal factors include acute stressors such as psychological trauma and family tragedy; distal factors refer to the indirect sources of stress such as socio-economic status.

Longitudinal research has been employed to fully understand how the strength and direction of the interactions among the multiple protective and risk factors for resilience change over time (Werner & Smith, 1992). Betancourt and

Khan (2008) argued that the study of children and adolescents is particularly challenging as the recovery from trauma occurs in a developmental context. Prospective studies of resilience seem well-grounded in classic developmental models, most notably Bronfenbrenner's (1994) ecological model of human development. Bronfenbrenner's (1994) model emphasizes the importance of analyzing development at multiple levels (e.g., the family, the neighbourhood, the culture) as well as the transactions between the individual and the individual's various environments. The model has contributed to the development of socio-ecological frameworks for analyzing resilience, with a particular focus on distal factors such as culture (Betancourt & Khan, 2008).

More recently, Tol, Song, and Jordans's (2013) systematic review of studies on resilience in children and adolescents in low- and middle-income areas of armed conflict highlights the current conceptual and methodological challenges in the field. After systematic examination of quantitative, qualitative and mixed methods studies, the authors conclude that resilience is not simply a trade-off between risk and protective factors but the product of the complex interaction between the socio-ecological context of the individual and the individual's developmental stage. Tol et al.'s (2013) review also concludes that the conceptualization of desired mental health outcomes and the mechanisms resulting in successful adaptation are culture-specific rather than universal. The authors recommended the utilization of longitudinal designs measuring multi-level protective factors and heterogeneous expressions of recovery within and across populations.

The resilience construct has been successfully applied to the study of war-affected children and adolescents to (a) produce a paradigm shift away from describing the epidemiology and characteristics of trauma towards focusing on the mechanisms of adaptability and recovery, (b) investigate a multitude of psychological and sociocultural factors associated with positive outcomes and (c) utilize extant knowledge to develop intervention programmes (Agaibi & Wilson, 2005; Jordans, Tol, Komproe, & de Jong, 2009).

Aims and Objectives of the Current Review

The current critical review was motivated by (a) the heterogeneity of conceptualizations of resilience, (b) the methodological inconsistencies in the field, which creates difficulties for conducting of meta-analyses, and (c) the theoretical and methodological importance of studying war-affected children and adolescents in middle- and low-income countries. The assessment of resilience is a crucial component in the development of intervention programmes, the evaluation of their effectiveness and in policy-making (Fisher et al., 2011). The current paper is a qualitative critical review of a subset of available armed conflict studies. The current paper will provide an arbitrary classification of extant resilience research and will produce stage-by-stage comparisons of the major methodologies in the field. Recommendations for increasing methodological rigour and ethical standards will also be proposed.

Method
Search Strategy and Inclusion Criteria
Systematic searches were conducted in Web of Science, PubMED and EBSCOhost (PsycARTICLES and PsycINFO) using the key words 'resilience', 'war', 'children', 'adolescents' and 'trauma'. The reference sections of recent reviews (Agaibi & Wilson, 2005; Betancourt & Khan, 2008; Davydov et al., 2010; Fisher et al., 2011; Theron & Theron, 2010; Tol et al., 2013; Williams, 2007) were also searched for studies of children and/or adolescents exposed to war, either as civilians or as militants (bombers, soldiers, spies, etc.) published between 2007 and 2013. Due to the heterogeneous conceptualizations of resilience, both studies that measured resilience as the absence of psychopathology and those that measured resilience indirectly (through its risk and protective factors, and antecedents) have been included for analysis. Studies that measured resilience indirectly are consistent with the scope of the current review because, as Luthar and Zelazo (2003) proposed, resilience cannot be measured directly; rather it can be inferred from combinations of risk and protective factors of posttraumatic mental health recovery. Furthermore, to be considered for inclusion, studies needed to contain a detailed rationale of the methodology of choice in addition to comprehensive contextualization of the sample, data-gathering and data-analytic procedures in order to allow for meaningful analyses and comparisons.

Based on the inclusion criteria, five studies (two quantitative and three qualitative) were selected for critical analysis (**Table 1**; **Table 2**). This allowed for a systematic comparison between the quantitative and the qualitative methodologies in the field. The sample sizes of the selected studies range from 6 to 1,011 (age range: 10–17). The investigations were conducted in diverse settings including Sierra Leone, Afghanistan, Palestine, Colombia and Uganda (**Table 1**). For brevity, the current review will refer to psychological resilience as merely *resilience*. The main aims and findings of each key study are presented in **Table 2**.

Evaluation Criteria
A critical analysis of *the methodologies* of the selected studies investigating resilience in children/adolescents in war-stricken regions is the focus of the current work. For the critical analysis of the two quantitative studies, the set of evaluation criteria was primarily compiled from the method sections of three literature reviews on psychosocial outcomes and trauma in conflict settings— Hollifield et al. (2002), Peltonen and Punamaki (2010), and Theron and Theron (2010). Given the multidimensional nature of the concept of resilience described above and its implications for the methodological plurality in the field, the operational definition of resilience utilized in each study will first be considered including its rationale and relationship with extant conceptual models. Sample characteristics (type of war involvement, age, gender balance, sample size and recruitment procedure) and data generation techniques (theoretical basis, questionnaire versus interview techniques, rationale, cultural and age-appropriateness, temporal pattern of data generation-cross-sectional

Authors, Year of Publication	Journal of Publication	Region of Conflict	Methodology	Sample Size	Age Statistics	Gender Balance	Sample Type
Betancourt et al. (2010)	Journal of the American Academy of Child & Adolescent Psychiatry	Sierra Leone	Quantitative-dominant mixed methods; longitudinal; purposive, convenience sampling	$N = 260$	Mean age = 15.13 (SD = 2.22); Range 10–17	88.8% male	Former child soldiers
Cortes & Buchanan (2007)	International Journal for the Advancement of Counselling	Colombia	Qualitative; purposive, convenience sampling	$N = 6$	Mean age = 14.8 (SD = 0.7); Range 12–18	66.6% male	Former child soldiers
Eggerman & Panter-Brick (2010)	Social Science and Medicine	Afghanistan	Qualitative; community-based random sampling	$N = 1011$	Mean age = 13.5 (SD = 1.6); Range 11–16	77% male	Afghani children
Klasen et al. (2010)	Child Development	Uganda	Quantitative, cross-sectional; purposive, convenience sampling	$N = 330$	Mean age = 14.44 (SD = 1.57); Range 11–17	51.5% male	Former child soldiers
Nguyen-Gillham, Giacaman, Naser, & Boyce (2008)	Health and Social Care in the Community	Palestine	Qualitative; convenience sampling	$N = 321$	Mean age = N/A (SD = N/A); Range 11–16	42.68 % male	Palestinian 10th and 11th graders

Table 1: Overview of the studies selected for in-depth critical analyses.

or longitudinal) will be discussed. The implications those methodological aspects have for the validity and reliability of the findings of the selected studies will also be stated.

Since there is no definitive set of evaluation criteria for qualitative studies, the current review will apply evaluation criteria assembled from the works of Ungar (2003, 2008) and Braun and Clarke (2006), as well as from the guidelines produced by Spencer, Ritchie, Lewis, and Dillon (2003). Such criteria include the appropriateness of the theoretical approach, the defensibility and rigor of the research methodology (sampling, data collection, data analysis), the validity and reliability of the findings and the richness and novelty of the findings. Ethics will crucially be considered for both quantitative and qualitative studies given the extremely sensitive topics of war and trauma in regions of armed conflict. Specific ethics evaluation criteria developed from research in conflict settings include non-discrimination and representativeness, empowerment and agency, age- and cultural appropriateness of tools, intra-group dynamics and gender dimensions, researcher-participant power relations, the cultural competence of the research team, confidentiality and anonymity, and informed consent (Hart & Tyrer, 2006). Those will be supplemented by the critiques of Fassinger and Morrow (2013) and of Yeh and Inman (2007), which provide frameworks for qualitative data analysis and for the conduct of research from a social justice perspective.

Discussion
Quantitative Investigations of Resilience
The distinction between quantitative and qualitative paradigms of resilience serves as an organising framework for the current critical review. Quantitative investigations of resilience usually conceptualize resilience as the absence of psychopathology following exposure to trauma or as the availability of a range of protective factors and resources (Windle, Bennett, & Noyes, 2011). One longitudinal study and one cross-sectional study were selected for an in-depth critical analysis (**Table 1**; **Table 2**). The comparison of those two approaches within a quantitative framework is important as the temporal dynamics of resilience was identified as one of the central challenges to resilience research by Davydov and colleagues (2013) in their recent review. Specifically, the life-course approach aims to evaluate the differential interactions between protective and risk factors at multiple time points (Rutter, 1990). For instance, changes in socio-economic factors over time have been argued to exert an effect on resilience (Ritchie et al., 2009).

While research into war-affected children has primarily studied civilians (Tol et al., 2013), Klasen et al. (2010) and Betancourt et al. (2010) utilized former child soldier samples. In his review of the psychosocial outcomes for children affected by mass violence, terrorism and disasters, Williams (2007) argues that the inclusion of child soldiers into trauma research has the theoretical potential of understanding how children who were forced to commit violence make sense of their involvement in brutality.

Klasen et al.'s (2010) study of posttraumatic resilience in former Ugandan child soldiers is a particularly detailed and theoretically supported demonstration of the quantitative methodology. The authors acknowledge the heterogeneous nature of the concept of resilience. Klasen and colleagues (2010) distinguish between promotive factors (generic factors that increase psychological well-being across contexts) and protective factors (factors that

Study	Author(s) and Year of Publication	Study Aims	Operational Definition of Resilience	Main Findings
Sierra Leone's former child soldiers: A longitudinal study of risk, protective factors, and mental health	Betancourt et al. (2010)	To investigate the temporal dynamics of internalizing and externalizing problems, and adaptive/prosocial behaviours	Adaptive/prosocial behaviours following exceptionally prolonged and intense exposure to violence	Increases in adaptive/prosocial behaviours associated with being in school and with higher levels of community acceptance; decreases in adaptive/prosocial behaviours associated with social and economic hardship and post-conflict stigma
Posttraumatic resilience in former Ugandan child soldiers	Klasen et al. (2010)	To investigate resilience in children and adolescents following war trauma	Absence of psychopathology or clinically significant behavioural and emotional problems	Postraumatic resilience in participants (27.6%); posttraumatic resilience correlated with lower exposure to domestic violence, lower guilt cognitions, less motivation to seek revenge, better socioeconomic situation in the family and more perceived spiritual support
The experience of Colombian child soldiers from a resilience perspective	Cortes & Buchanan (2007)	To understand mechanisms and resources that resilient children utilize	Exhibition of mild or no trauma-related symptoms at the time of data collection	Resilience facilitated by sense of agency, social intelligence, empathy, affect regulation, sense of future, hope and growth, and connection to spirituality; the importance of shared experience, caregiving figures, community connection and maintaining respect for human life.
Suffering, hope, and entrapment: Resilience and cultural values in Afghanistan	Eggerman & Panter-Brick (2010)	To understand how communities in war-affected areas make sense of adversity and build resilience	Positive emotional adjustment and good social functioning of communities while experiencing prolonged political and military conflict	Protective factors: hope, cultural affiliation, ideological commitment and networks of social support; risk-factors: stress in realising cultural values, unstable economy and inequitable access to basic facilities
Normalising the abnormal: Palestinian youth and the contradictions of resilience in protracted conflict	Nguyen-Gillham et al. (2008)	To understand how adolescents conceptualize resilience and recovery in dehumanizing and abnormal conditions	A collective phenomenon relating to the resources within individuals and communities that contribute to a positive health outcome	Value of supportive relationships, political participation and education are integral to sense of identity and political resistance; resilience fostered by normalization of everyday life; resilience as a dynamic, fluid construct with multiple contradictions and tensions; importance of local context and social processes.

Table 2: Aims and main findings of the studies selected for in-depth critical analyses.

minimize the negative consequences of adversity). This is consistent with the research demonstrating that variables at the individual, family and community levels can influence the likelihood of a resilience outcome via diverse pathways (Davydov et al., 2010). Quantitative studies have relied on the proposition that resilience cannot be measured directly but can only be inferred from the measurement of risk and protective factors, and positive adjustment following trauma (Luthar & Zelazo, 2003).

Klasen et al. (2010) utilize a clear definition of resilience as characterizing individuals who failed to show symptoms of psychopathology following exposure to trauma at the time of assessment. They also employ a battery of questionnaires (Child Soldiers Trauma Questionnaire (Klasen et al., 2010), the Mini International Neuropsychiatry Interview (Sheehan et al., 1998), the Connor-Davidson Resilience Scale (Connor & Davidson, 2003) and others to assess various demographic and trauma variables, person variables and perceived social support. One problem

is that resilience was operationalized as the absence of psychopathology because no measures of positive adjustment such as academic achievement could be obtained for legal and logistic reasons. Thus, this study utilized a narrow definition of the concept precluding the examination of the diverse manifestations of resilience shown in recent studies (Eggerman & Panter-Brick, 2010).

Klasen et al. (2010) conducted a retrospective, cross-sectional study that measured resilience outcomes at one particular point in time-at least six months after the children served as soldiers. The study produced an estimate of posttraumatic resilience (27.6%) in the sample of Ugandan child soldiers. The authors thus assume that resilience is a static, time-independent concept. Those assumptions are in conflict with the growing recognition of resilience as a dynamic, time-bound phenomenon (Theron & Theron, 2010). Longitudinal designs are therefore recommended to investigate the mechanisms that sustain or disrupt resilience from childhood to adulthood, and how the

key developmental transitions affect those processes. For instance, Green, Rhodes, Hirsh, Suarez-Orozco, and Camic (2008) conclude that youths' engagement with school and their perceived social support showed considerable year-to-year fluctuations. The dynamic nature of those relationships is likely to affect resilience outcomes (Theron & Theron, 2010). Green et al. (2008) argue that studies of resilience in youths should conceptualize the utilization of support resources and adaptation as dynamic, non-linear processes.

Klasen and colleagues (2010) did establish a variety of personality, attitudinal and socio-economic variables that tend to increase the likelihood of a resilient outcome (**Table 2**). However, the use of quantitative instruments measuring a limited, pre-specified number of potential moderators of resilience in a cross-sectional design seems to preclude any valid conclusions that could be made with regards to the context-specificity or temporal dynamics of those factors. Moreover, the study produced limited evidence about the specific mechanisms via which those variables affect resilience or about any potential multi-variable interactions.

In line with the recommendation for longitudinal investigation, Betancourt and colleagues (2010) assessed positive resources and protective factors in former child soldiers in Sierra Leone. Betancourt et al.'s (2010) study implicitly supports the triarchic model of resilience by measuring individual-level, familial and community variables. Betancourt et al. (2010) conducted survey interviews at three time points spanning over seven years (2002–2008). Betancourt et al.'s (2010) study demonstrates the potential of longitudinal investigations to assess the dynamics of resilience. However, Willoughby (2010) argues that time-adjacent comparisons do not accurately describe the developmental trajectories of phenomena. Instead, longitudinal research needs to examine intra-individual change following key developmental transitions particularly the onset of adolescence and the transition from adolescence to adulthood. In resilience research, for instance, it would be useful to investigate how the utilization of resilience resources changes as the individual's needs and social status change.

Betancourt et al. (2010) did not utilize a comparison group of youth in the same population that had never been involved in the armed forces. Those methodological limitations preclude the meaningful conclusions about the interaction among the experience of trauma, developmental transitions and resilience outcomes. In contrast, Kohrt et al. (2008) compared the mental health of former Nepalese child soldiers with that of Nepalese children uninvolved in the armed forces and found that the former group was at a higher risk of developing psychopathology.

The high attrition rates remain an inherent problem of longitudinal studies. In Betancourt et al.'s study (2010), 47.3% of the initially assessed participants were measured at all three time points, whereas 30.8% were assessed at only two time points. Those attrition rates further limit the generalizability of the findings.

Similar to Klasen et al. (2010), Betancourt and colleagues (2010) identified a set of variables associated with successful adaptation following war-related trauma (**Table 2**). By measuring the effects of those variables at multiple time points, however, Betancourt et al. (2010) were able to assess the effects of post-war changes in the socio-economic circumstances and attitudes toward child soldiers on the participants' resilience. In other words, their investigation produced evidence of the temporal dynamics of factors in the local socio-political and attitudinal environment that can influence resilience.

One important methodological problem shared between cross-sectional and longitudinal quantitative studies seems to be the limited cultural appropriateness and reliability of the assessment tools utilized (Hollifield et al., 2002). The cultural appropriateness of instruments used in resilience and trauma research seems crucial to the validity of the findings because, as Harvey and Delfabbro (2004) posit, there seem to be social and cultural variations in the outcomes associated with positive adaptation. Therefore, resilience researchers need to ensure the cultural meaningfulness of measurement protocols by utilizing instruments developed in trauma and refugee research such as the Harvard Trauma Questionnaire (Mollica et al., 1992), or by adapting and testing non-refugee instruments in refugee samples (The Hopkins Symptom Checklist; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974).

For instance, Betancourt et al. (2010) employed the Oxford Measure of Psychosocial Adjustment (MacMullin & Loughry, 2000), which was developed and validated from former child soldiers in Sierra Leone and northern Uganda. Furthermore, the authors adapted several standardized measures for the application in Sierra Leone by the use of focus groups that assessed their cultural relevance. In particular, the authors argued that because the Community Acceptance scale of the Inventory of Socially Supportive Behaviours (Barrera & Ainlay, 1983) is likely to show considerable cross-cultural variability, the scale was modified based on local subjects' perceptions of community acceptance. Overall, there are currently few well validated measures based on research with war-torn populations (Klasen et al., 2010), which poses threats to the validity and reliability of results, and makes the comparison of studies extremely challenging.

Finally, whereas the Western model of stress views trauma as an individual phenomenon, in many collectivist, war-torn societies, trauma seems best understood in terms of social processes (Boothby, 1996). Furthermore, the pre-determined limited-choice questions used in quantitative research to assess personal, trauma-related and social factors do not provide the respondents with the opportunity to express their individual interpretations of the traumatic events. Indeed, Punamaki (1987) demonstrated that a child's reactions to extreme stressors depend on the meanings the child ascribes to those experiences. In particular, he argues that the difference in the psychological responses to war of Bosnian and Palestinian youth could be explained by the difference in the meaning attached to war- the former expressing

acute disturbance at the atrocities of war while the latter showed strong ideological commitment. By the reliance on primarily standardized instruments, retrospective and self-report techniques, and by the attempt to quantify experiences and responses to trauma, the quantitative approach seems to neglect the effects of context and the experiential aspect of resilience.

To summarize, the above discussed quantitative studies seem to utilize a conceptualization of resilience that may be reductionist in that it seems to neglect the role of context and the multi-level interaction of resilience factors. While ensuring statistical rigor, standardized tools assume that children from different cultures follow a standard, predictable developmental trajectory. Methodological advancements are needed to ensure the cultural sensitivity of instruments.

Qualitative Investigations of Resilience

In contrast to quantitative studies, qualitative studies conceptualize resilience as a subjective experience, the product of a dynamic process of meaning-making, and aim to explore the cultural and contextual mediators of a resilient response (Harvey, 2008). Qualitative or idiographic methodological approaches assume that different individuals may employ unique combinations of personal assets and environmental resources to achieve positive adaptation following trauma (Harvey, 2008). Accordingly, idiographic research utilizes open-ended questioning, ethnographic, ecological and participatory approaches in order to gain an insight into the depths of those meaning-making processes and transactions between the individual and the social context which promote resilient functioning (Harvey, 2008).

The current review will examine three qualitative studies (**Table 1**) that utilized narrative analysis techniques: a small-scale study of Colombian child soldiers ($N = 6$; Cortes & Buchanan, 2007) and two larger-scale studies of civilian Palestinian youth ($N = 321$; Nguyen-Gillham et al., 2008) and of civilian Afghani children and adult caregivers ($N = 1011$; Eggerman & Panter-Brick, 2010; **Table 1**; **Table 2**). The three qualitative studies were selected for an in-depth critical analysis because (a) they represent three geographically, politically and culturally distinct areas; this is important as it allows for the recognition of the various socio-political and socio-cultural influences on resilience; (b) they utilize a variety of data generation techniques (a narrative autobiographical approach, focus groups, structured interviews); each of those methods seems to be associated with rather different sets of ethical challenges; and because (c) altogether, those three studies demonstrate the richness and context-dependence of the multiple strengths, resources and processes that shape the fluid and dynamic nature of resilience.

Cortes and Buchanan (2007) explored the construct of resilience beyond the triarchic model (Luthar & Zigler, 1991) by conducting fieldwork into the meaning ascribed to the traumatic events, the social dimensions of resilience and the individual processes of psychological recovery. The authors conceptualize protective factors as a diverse repertoire of both inner psychological competencies (sense of agency, empathy) and resources derived from the cultural values and traditions of the local community (community connection, spirituality, morality). In addition, while Klasen et al. (2010) measured positive future orientation (a potential resilience factor) using five Likert-type items from the Positive Future Orientation Scale of the Adolescent Resilient Scale (ARS; Oshio, Kaneko, Nagamine, & Nakaya, 2003), Cortes and Buchanan (2007) utilized broad open-ended questions about the factors that helped each child overcome the trauma. Thus, Cortes and Buchanan (2007) empowered their participants to provide more intimate, ecologically valid and richer accounts of their sense of future, hope and growth.

Cortes and Buchanan (2007) produced a detailed account of the mechanisms that allowed their participants to overcome trauma and achieve a resilient outcome (**Table 2**). In this qualitative study, the researchers were able to gain an insight into the depths of the lived experience of child soldiering. The findings from this study are particularly rich in that they show the importance of such complex concepts as community cohesion, spirituality, dignity and hope. Some of the novel and somewhat counter-intuitive findings from this study include the participants viewing their soldiering experience as a growth experience rather than trauma and their viewing themselves as agents of their own fate rather than as victims.

The generalizability of Cortes and Buchanan's (2007) findings is limited by multiple factors including the small sample ($N = 6$) of Colombian child soldiers participating in one reintegration programme and the employment of a narrow definition of resilience as the absence of psychopathology, which restricted the number of participants selected for interviewing.

Eggerman & Panter-Brick (2010) employed a highly complex, multi-layered conceptual base that transcends the triarchic model and extends Cortes and Buchanan's (2007) conceptualization of resilience as a social phenomenon. Eggerman and Panter-Brick (2010) conducted an in-depth exploration of the social structures and social relationships in the communities of northern Afghanistan. The emphasis on aspects of the social dynamics as potential mediators of resilience is supported by the work of Miller, Omidian, Rasmussen, Yaqubi, and Daudzi (2008), who proposed that it is not only trauma variables (severity, duration, personal involvement) but also aspects of the post-traumatic everyday experiences that account for mental health outcomes. Such experiences include social injustice, discrimination and the access to services. Similarly, in his review of cross-cultural resilience research, Ungar (2008) advocates community-focused research by summarizing empirical evidence that (a) resilience has both universal and culture-specific components, that (b) the specific developmental context of the child influences the expression of aspects of resilience and most interestingly, that (c) the interaction among aspects of resilience depend on the resolution of the tensions between the individual and the community. Those tensions include adherence to cultural practices, the distribution of power and control, social equality, relationships

and the access to material resources. Such a socio-ecological perspective of resilience seems particularly relevant to war-torn Afghanistan, which is characterized by poverty, social injustice and violence (United Nations Development Programme, 2004).

Eggerman and Panter-Brick (2010) employed semi-structured interviewing prompting participants to identify problems and solutions thus enabling participants to reflect on their current everyday lives but also on their aspirations. This data collection approach seems high in catalytic validity in that it seemed to energise participants and motivate them to build their own future based on the hope and ideological commitment they expressed. Thus, qualitative investigations of resilience assume that children and adolescents are the agents of their lives, that they are resourceful and capable of producing positive social change (Hart & Tyrer, 2006). Idiographic researchers should investigate the local population with an open, inquiring mind and produce data that most accurately reflect the participants' voices (Ungar, 2003).

Eggerman and Panter-Brick (2010) analyzed their data using thematic analysis. Thematic analysis is particularly applicable to research in war-affected communities as this method is flexible, useful within participatory research designs, capable of generating unexpected insights and of summarizing large data sets in addition to informing public policy (Braun & Clarke, 2006).

Eggerman and Panter-Brick (2010) demonstrate that the in-depth exploration of psychological and social processes and random representative sampling are not necessarily a trade-off. The researchers recruited 1011 Afghani children (age 11–16) and 1011 Afghani caregivers from a school-based nationally representative survey. While the findings can be generalized to the wider Afghani population of schoolchildren and their caregivers, limited conclusions could be drawn about the children not enrolled in school or to other war-torn countries. Ultimately, Ungar (2008) argues that there are both culturally-specific and universal aspects of resilience. Accordingly, efforts should be directed to comparing and contrasting context-specific findings from different communities while utilizing culturally-appropriate definitions of resilience. This is likely to aid the development of treatment programmes and services that are sensitive to a wide variety of ethnic, political and religious contexts.

The findings from Eggerman and Panter-Brick's (2010) study seem especially complex and insightful as they accommodate the inherent contradictions of phenomena such as resilience, hope and social life dynamics (**Table 2**). Eggerman and Panter-Brick (2010) found that as a resilience factor, culture seems to be 'a double-edge sword' (Wessells & Strang, 2006), that is, it can act as a source of morality, dignity, honour and a sense of unity, but also as a source of conflict. This finding is particularly important because it reveals the dual nature of factors associated with resilience; therefore, the seemingly straightforward categorisation of protective, promotive and risk resilience factors may be an oversimplification of the dynamic and context-dependent interplay of the multitude of variables.

Similar to the two aforementioned qualitative studies of resilience in political conflict settings, Nguyen-Gillham and colleagues (2008) conceptualize resilience as a subjective, dynamic and context-dependent *process*. The authors were particularly interested in exploring both individual and collective interpretations and experiences of resilience. This theoretical underpinning warranted an exploration of how war-affected youth perceived not only their personal strengths and support structures but also the different social processes, everyday life challenges, and the economic, political and educational realities of their lives at the time of data collection.

While Cortes and Buchanan (2007) and Eggerman and Panter-Brick (2010) employed semi-structured individual interviews in order to obtain in-depth autobiographical narratives, Nguyen-Gillham et al. (2008) employed focus group meetings thus utilizing the advantages of this data collection technique over traditional one-to-one interviewing (Wilkinson, 1998). Wilkinson (1998) advocates the use of focus groups in health research as this method allows for the deeper and more naturalistic disclosure of sensitive content in an environment of empathy and genuineness. Furthermore, the interactive nature of the focus group enables the co-construction of knowledge by the participants, which simulates the natural production of ethno-concepts and folklore. Last but not least, the environment of encouragement and solidarity of the focus groups seems to minimize the effects of social desirability bias typically associated with one-to-one interviewing (Wilkinson, 1998). The data analytic method of choice in Nguyen-Gillham et al.'s (2008) study is grounded theory. Grounded theory (Strauss & Corbin, 1990) seems an appropriate choice for the identification of novel aspects of understudied phenomena such as resilience and hope.

However, Nguyen-Gillham et al. (2008) included insufficient procedural detail. In particular, the study does not provide formal criteria for theme generation such as prevalence, novelty or emotional significance. Also, the study does not state whether themes were generated based on the semantic (surface) meanings of the data or based on the assumed latent (underlying) content. This aspect of thematic analysis indicates the level of interpretative work involved in the analysis. This indicator is important as data produced from a higher level of interpretation are likely to be subject to lower inter-coder reliability as opposed to data that merely describe the semantic content (Braun & Clarke, 2006). Last, none of the three qualitative studies produced an account of iteration (multiple re-examination of the evidence). A detailed description of the iterative procedure is an important aspect of transparency as it provides an insight into the researchers' engagement with the material and into the development of the thematic structure (emerging themes, excluded themes, re-named themes). Overall, Braun and Clarke (2006) emphasize that higher levels of explicitness in qualitative data analysis is likely to increase its transparency and credibility.

Despite the aforementioned methodological drawbacks, Nguyen-Gillham et al.'s (2008) conceptualization of resilience as a collective phenomenon and their use of the less intrusive and more naturalistic focus group methodology

produced especially rich evidence (**Table 2**). Their findings represent the product of an in-depth exploration of the meaning and importance attached to a number of forms of community engagement in the context of war and post-war recovery, specifically political participation and the pursuit of educational realization. Last but not least, the researchers discovered that their participants perceived successful adaptation following war-related trauma as the restoration of the pre-war everyday life. In other words, it could be tentatively posited that resilience was conceptualized by the participants as the rebuilding of normality as opposed to the achievement of mastery at a particular skill or domain as it had been previously argued (Luthar, et al., 1993).

The debate between the different data gathering approaches used by the three qualitative studies discussed above has an important ethical dimension. In particular, Cokley and Awad (2013) caution that the choice of the method of gathering data might have adverse effects on the community under study. They argue that since the interview technique is essentially an individual-focused approach, it is likely to interfere with a collectivist worldview. This seems a particularly salient methodological issue for Eggerman and Panter-Brick's study (2010), where the Afghani students and caregivers were interviewed separately. Another potential ethical problem seems to be Nguyen-Gillham et al.'s (2008) employment of mixed-sex focus groups. Nguyen-Gillham and colleagues (2008) recruited students from single-sex as well as from mixed student population schools, and both single-sex and mixed focus groups. However, the researchers provided no account of how the students were sorted into focus groups. For instance, the placement of students from single-sex schools into mixed focus groups could not only limit disclosure but also cause discomfort to the participants. Future investigations conducted in war-torn societies should carefully consider whether the distribution of sex, social class and ethnicity in the focus group conflicts local traditions and practices.

A number of ethical challenges seem inherent to idiographic research with vulnerable individuals in conflict settings regardless of the specific data-generation technique used (Hart & Tyrer, 2006). First and foremost, sharing sensitive information about war experiences and forced military recruitment can potentially endanger children and their families, particularly in politically unstable communities (Hart & Tyrer, 2006). Therefore, it is crucial that participation be anonymized and that written, audio, video and photographic material be stored with utmost care and consideration of the third parties that may require access to the material for political purposes. Furthermore, the in-depth exploration of painful experiences is likely to cause distress, shame and embarrassment in participants (Hart & Tyrer, 2006). Also, especially in a focus group setting, disclosure may lead to discrimination and oppression (Fassinger & Morrow, 2013). Accordingly, all the three qualitative studies examined in this section had established crisis teams comprised of counsellors, medical staff and teachers to provide support in case a participant became upset during the data collection

process. To minimize the risk of re-traumatizing participants, Nguyen-Gillham et al. (2008) and Eggerman and Panter-Brick (2010) employed broad questions about everyday life experiences. Thus, participants were provided with the opportunity to decide upon the content of their disclosure.

Another essential aspect of the ethical conduct of both quantitative and qualitative resilience research is informed consent (Hart & Tyrer, 2006). Hart and Tyrer (2006) caution that even when the purposes, the procedural details and the potential adverse consequences of the research are carefully explained to the participants in the local community, they may not fully comprehend this information due to linguistic and cultural differences. Also, participants may agree to participate not because they have considered and agreed upon the research aims but because they view foreign researchers as authority figures (Fassinger & Morrow, 2013). The power dynamics of the relationship between the research team and the local community is of particular importance in developing countries research. Foreign researchers are often perceived as dominant figures by virtue of being highly educated and of middle- or upper-class (Fassinger & Morrow, 2013). Therefore, researchers should strive to understand their participants' motives and communicate the research goals in an explicit and transparent manner.

Cortes and Buchanan (2007) did obtain consent from their participants; in contrast, Eggerman and Panter-Brick (2010) and Nguyen-Gillham et al. (2008) gained access to their samples through the participants' school authorities. While this is legally admissible in Afghanistan and Palestine, this procedural aspect might imply that not all participants understood the research aims and freely chose to participate. Hart and Tyrer (2006) emphasise that the obtaining of an informed consent in conflict settings should be a continuous effort (rather than a single act) involving an examination of the expectations, norms and motivation of the each individual.

Despite those ethical drawbacks, proponents of the qualitative framework argue that one of the most significant contributions of qualitative resilience research in war-affected regions is of ethical or moral nature- that idiographic resilience research advances a social justice agenda (Fassinger & Morrow, 2013; Hart & Tyrer, 2006). First, idiographic inquiries in the field empower marginalized communities. Eggerman and Panter-Brick (2010) and Nguyen-Gillham and colleagues (2008) resided in the local community for a substantial period of time in order to establish rapport and trust with the participants, and to gain an understanding of the indigenous practices and beliefs. This is likely to have reduced the intrusiveness associated with the recruitment of vulnerable individuals (children and adolescents) and the collection of accounts of sensitive and potentially re-traumatizing topics. Establishing rapport with the local community is a crucial element of the research process in developing countries as Western researchers are often perceived as outsiders and treated with mistrust thus limiting disclosure (Fassinger & Morrow, 2013). Additionally, Eggerman and Panter-Brick's (2010) study was conducted

by a multicultural research team including experienced Afghani interviewers (three male and three female). This enabled the researchers to construct age- and culturally-appropriate research instruments and also to facilitate the participants' disclosure.

All in all, transferability (generalizability) of findings in qualitative (idiographic) research is a controversial issue (Ungar, 2003). Traditionally, qualitative research attempts to provide exhaustive descriptions of the sample and sufficient contextualization of the recruitment and data collection procedures to ensure the transferability of findings to similar research settings and, ultimately, to inform intervention approaches and public policy. Simultaneously, idiographic, community-based studies of resilience have been based on the assumptions of context-relatedness and temporal instability of phenomena (Ungar, 2003). Generalizability seems to be an inherent limitation of idiographic studies exploring specific political and cultural processes in rare, hard-to-reach populations.

Qualitative resilience research offers a richer, socio-ecological conceptualization of resilience as a context-dependent phenomenon. The qualitative methodologies discussed above explore the interconnectedness of resilience factors and their ambiguous nature. In other words, the idiographic approach to resilience examines processes (rather than variables) as elements of a complex system; emphasis is placed on the measurement of the dynamic, flexible aspects of resilience. However, research in the field has been plagued by issues of generalizability and credibility, and by serious ethical challenges.

Conclusion

The current critical review systematically assessed the methodologies of two quantitative and three qualitative studies of resilience and war-related trauma in children and adolescents by applying a pre-defined set of theoretically and empirically grounded evaluation criteria. The current review process was biased on various levels including the operationalization of resilience, the search and selection procedures and the choice of an organizing framework. In addition, as there are no golden standards for the evaluation of qualitative methodologies, the current review employed arbitrarily selected assessment criteria that the current review considered most applicable to resilience studies.

Quantitative studies of resilience appear to have focused predominantly on the identification of isolated factors that increase the likelihood of a successful psychological recovery following trauma in war settings. This has important implications for developing interventions that target empirically supported posttraumatic lifestyle risk factors such as domestic and community violence. While this work has yielded a considerable amount of statistically supported candidate 'resilience factors' employing large samples of children and adolescents in numerous settings, they may neglect the significance of contextual (cultural and socio-political) influences on the conceptualization, manifestation and dimensions of resilience. Challenges for future empirical investigations include

capturing the dynamic and fluid nature of resilience by utilizing a combination of culturally-adapted instruments and longitudinal approaches and by exploring its experiential aspects by open-ended questioning.

Qualitative investigations of resilience in the context of war seem to have, to a considerable degree, addressed the conceptual and methodological weaknesses of quantitative approaches. Studies such as Eggerman and Panter-Brick's (2010) and Nguyen-Gillham et al.'s (2008) appear to have explored dimensions of resilience that are difficult to quantify by psychometrics and/or conceptualize as individual phenomena. Those dimensions include the concepts of hope, dignity, respect for human life, sense of agency and sense of purpose. Therefore, holistic intervention approaches to increase resilience should integrate strategies to improve living conditions, promote hope through increasing social cohesion in addition to individual, family and group counselling.

Comprehensive guidelines on mental health and psychosocial support in complex emergencies have been produced by the Inter-Agency Standing Committee (2007). Specifically, this document provides action plans for building community capacity-identifying local resources, organizing community activities, promoting self-support, utilizing humanitarian aid effectively, and facilitating conditions for conducting communal cultural, spiritual and religious rituals and healing practices. With regards to trauma counselling, Cortes and Buchanan (2007) recommend that it should form an integral part of reintegration programmes for former child soldiers. According to the authors, such programmes should stimulate connectedness to the community and community values, the formation of social bonds, community and family education and empowerment. Overall, to achieve a holistic approach to psychosocial care in war-effected regions from a resilience perspective, a paradigm shift seems to be required in order to conceptualize and address war-related trauma and suffering as collective experiences. This necessitates the further exploration of such concepts as *community resilience* and *community rehabilitation* (Maguire & Hagan, 2007). The implementation of those strategies would require the collaborative efforts of researcher, policymakers, non-governmental organisations and of all other humanitarian actors.

In conclusion, both the quantitative and qualitative methodologies in the field have contributed to the understanding of the complexity of the resilience concept and of the practical challenges involved in conducting research in conflict settings. However, inherent methodological problems need to be overcome by the employment of comprehensive, culturally valid and unintrusive assessment tools.

The heterogeneity of theoretical bases and assessment techniques in resilience research is necessary for establishing the validity of the concepts. At the same time, however, this plurality appears to preclude the meaningful comparison between studies and the construction of a unified theory. Nonetheless, the identification of conceptual and methodological inadequacies is likely to stimulate the validation of instruments in diverse cohorts

and the development of effective emergency intervention programmes. Ultimately, those efforts should advance a social justice agenda founded on the core principles of human rights and equity, participation, ethical sensitivity and integrated support systems (Inter-Agency Standing Committee, 2007).

Competing Interests

The author declares that they have no competing interests.

References

Agaibi, C., & Wilson, J. P. (2005). Trauma, PTSD and resilience: A review of the literature. *Trauma, Violence and Abuse, 6*, 195–216. DOI: http://dx.doi.org/10.1177/1524838005277438

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders:* DSM-IV-TR (4th ed.). Washington, DC: Author.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*, (5th ed.). Washington, DC: Author.

Barrera, M., & Ainlay, S. L. (1983). The structure of social support: A conceptual and empirical analysis. *Journal of Community Psychology, 11*, 133–143. DOI: http://dx.doi.org/10.1002/1520-6629(198304)11:2<133::AID-JCOP2290110207>3.0.CO;2-L

Bayer, C. P., Klasen, F., & Adam, H. (2007). Association of trauma and PTSD symptoms with openness to reconciliation and feelings of revenge among former Ugandan and Congolese child soldiers. *Journal of the American Medical Association, 298*, 555–559. DOI: http://dx.doi.org/10.1001/jama.298.5.555

Betancourt, T. S., Brennan, R., Rubin-Smith, J., Fitzmaurice, G., & Gilman, S. (2010). Sierra Leone's former child soldiers: A longitudinal study of risk, protective factors, and mental health. *Journal of the American Academy of Child and Adolescent Psychiatry, 49*, 606–615. DOI: http://dx.doi.org/10.1016/j.jaac.2010.03.008

Betancourt, T. S., & Khan, K. T. (2008). The mental health of children affected by armed conflict: Protective processes and pathways to resilience. *International Review of Psychiatry, 20*(3), 317–328. DOI: http://dx.doi.org/10.1080/09540260802090363

Boothby, N. (1996). Mobilizing communities to meet the psychosocial needs of children in war and refugee crisis. In R. J. Apfel & B. Simon (Eds.), *Minefields in their hearts: The mental health of children of war and communal violence.* New Heaven, CT: Yale University Press, pp. 149–164.

Boothby N., Crawford J., & Halperin J. (2006). Mozambique child soldier life outcome study: Lessons learned in rehabilitation and reintegration efforts. *Global Public Health, 1*, 87–107. DOI: http://dx.doi.org/10.1080/17441690500324347

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. DOI: http://dx.doi.org/10.1191/1478088706qp063oa

Bronfenbrenner, U. (1994). Ecological models of human development. *Readings on the Development of Children, 2*, 37–43.

Cokley, K. O., & Awad, G. H. (2013). In defense of quantitative methods: Using the "master's tools" to promote social justice. *Journal for Social Action in Counseling and Psychology, 5*(2), 26–41.

Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and Anxiety, 18*(2), 76–82. DOI: http://dx.doi.org/10.1002/da.10113

Cortes, L., & Buchanan, M. J. (2007). The experience of Columbian child soldiers from a resilience perspective. *International Journal of Advanced Counselling, 29*, 43–55. DOI: http://dx.doi.org/10.1007/s10447-006-9027-0

Davydov, D.M., Stewart, R., Ritchie, K., & Chaudieu, I. (2010). Resilience and mental health. *Clinical Psychology Review, 30*, 479–495. DOI: http://dx.doi.org/10.1016/j.cpr.2010.03.003

Demyttenaere, K., Bruffaerts, R., Posada-Villa, J., Gasquet, I., Kovess, V., . . . Lepine, J. P. (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *The Journal of the American Medical Association, 291*(21), 2581–259. DOI: http://dx.doi.org/10.1001/jama.291.21.2581

Derogatis, L. R., Lipman, R. S., Rickels, K., Uhlenhuth, E. H., & Covi, L. (1974). The Hopkins Symptom Checklist (HSCL): A self-report symptom inventory. *Behavioral Science, 19*(1), 1–15. DOI: http://dx.doi.org/10.1002/bs.3830190102

Earvolino-Ramirez, M. (2007). Resilience: Concept analysis. *Nursing Forum, 42*(4), 73–82. DOI: http://dx.doi.org/10.1111/j.1744-6198.2007.00070.x

Eggerman, M., & Panter-Brick, C. (2010). Suffering, hope, and entrapment: Resilience and cultural values in Afghanistan. *Social Science and Medicine, 71*, 71–83. DOI: http://dx.doi.org/10.1016/j.socscimed.2010.03.023

Fassinger, R., & Morrow, S. (2013). Toward best practices in quantitative, qualitative, and mixed-method research: A social justice perspective. *Journal for Social Action in Counselling and Psychology, 5*(2), 69–83.

Fisher, J., Cabral de Mello, M., Izutsu, T., Vijayakumar, L., Belfer, M., & Omigbodun, O. (2011). Mental health and psychosocial consequences of armed conflict and natural disasters. *International Journal of Social Psychiatry, 57*(1 Suppl), 57–78. DOI: http://dx.doi.org/10.1177/0020764010397324

Garmezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavior Scientist, 34*(4), 416–430. DOI: http://dx.doi.org/10.1177/0002764291034004003

Green, G., Rhodes, J., Hirsch, A., Suarez-Orozco, C., & Camic, P. M. (2008). Supportive adult relationships and the academic engagement of Latin American immigrant youth. *Journal of School Psychology, 46*, 393–412. DOI: http://dx.doi.org/10.1016/j.jsp.2007.07.001

Hart, J., & Tyrer, B. (2006). *Research with Children Living in Situations of Armed Conflict: Concepts, Ethics & Methods.* Oxford: University of Oxford.

Harvey, J., & Delfabbro, P. H. (2004). Psychological resilience in disadvantaged youth: A critical overview.

Australian Psychologist, 39(1), 3–13. DOI: http://dx.doi.org/10.1080/00050060410001660281

Harvey, M. R. (2008). Towards an ecological understanding of resilience in trauma survivors: Implications for theory, research, and practice. *Journal of Aggression, Maltreatment & Trauma, 14*(1–2), 9–32. DOI: http://dx.doi.org/10.1300/J146v14n01_02

Hollifield, M., Warner, T., Lian, N., Krakow, B., Jenkins, J., Kesler, J., & **Westermeyer, J.** (2002). Measuring trauma and health status in refugees: A critical review. *Journal of the American Medical Association, 22*(5), 611–621. DOI: http://dx.doi.org/10.1001/jama.288.5.611

Inter-Agency Standing Committee. (2007). IASC guidelines on mental health and psychosocial support in emergency settings. Retrieved from http://www.who.int/mental_health/emergencies/guidelines_iasc_mental_health_psychosocial_june_2007.pdf.

Jordans, M., Tol, V., Komproe, I., & **De Jong, J.** (2009). Systematic review of evidence and treatment approaches: Psychosocial and mental health care for children in war. *Child and Adolescent Mental Health, 14*(1), 2–14. DOI: http://dx.doi.org/10.1111/j.1475-3588.2008.00515.x

Klasen, F., Oettingen, G., Daniels, J., Post, M., Hoyer, C., & **Adam, H.** (2010). Posttraumatic resilience in former Ugandan child soldiers. *Child Development, 81*(4), 1096–1113. DOI: http://dx.doi.org/10.1111/j.1467-8624.2010.01456.x

Kohrt, B. A., Jordans, M. J. D., Tol, W. A., Speckman, R. A., Maharjan, S. M., Worthman, C. M., & **Komproe, I. H.** (2008). Comparison of mental health between former child soldiers and children never conscripted by armed groups in Nepal. *Journal of the American Medical Association, 300*, 691–702. DOI: http://dx.doi.org/10.1001/jama.300.6.691

Laursen, K. E. (2000). Strength-based practice with children in trouble. *Reclaiming Children and Youth, 9*(2), 70–75.

Luthar, S. S., & **Zelazo, L. B.** (2003). Research on resilience: An integrative review. In S. S. Luthar (Ed.), *Resilience and vulnerability: Adaptation in the context of childhood adversities.* Cambridge, England: Cambridge University Press, pp. 510–550. DOI: http://dx.doi.org/10.1017/CBO9780511615788.023; http://dx.doi.org/10.1017/CBO9780511615788

Luthar, S. S., & **Zigler, E.** (1991). Vulnerability and competence: A review of research on resilience in childhood. *Journal of Child Psychiatry and Psychology, 61*, 6–22. DOI: http://dx.doi.org/10.1037/h0079218

Luthar, S., Doernberger, C., & **Zigler, E.** (1993). Resilience is not a unidimensional construct: Insights from a prospective study on inner-city adolescents. *Development and Psychopathology, 5*, 703–717. DOI: http://dx.doi.org/10.1017/S0954579400006246

MacMullin, C., & **Loughry, M.** (2000). *Proposal to assess psychosocial adjustment of former child soldiers in Sierra Leone; Phase 1 Final Report: Construction of research instrument.* New York, NY: International Rescue Committee.

Maguire, B., & **Hagan, P.** (2007). Disasters and communities: Understanding social resilience. *The Australian Journal of Emergency Management, 22*(2), 16–20.

Masten, A. S. (2001). Ordinary magic. Resilience processes in development. *American Psychologist, 56*, 227–238. DOI: http://dx.doi.org/10.1037/0003-066X.56.3.227

Miller, K. E., Omidian, P., Rasmussen, A., Yaqubi, A., & **Daudzi, H.** (2008). Daily stressors, war experiences, and mental health in Afghanistan. *Transcultural Psychiatry, 45*, 611–638. DOI: http://dx.doi.org/10.1177/1363461508100785

Mollica, R. F., Caspi-Yavin, Y., Bollini, P., Truong, T., Tor, S., & **Lavelle, J.** (1992). The Harvard Trauma Questionnaire: Validating a cross-cultural instrument for measuring torture, trauma and posttraumatic stress disorder in Indochinese refugees. *The Journal of Nervous and Mental Disease, 180*, 111–116. DOI: http://dx.doi.org/10.1097/00005053-199202000-00008

Moss, W. J., Ramakrishnan, M., Storms, D., Henderson Siegle, A., Weiss, W. M., Lejnev, I., & **Muhe, L.** (2006). Child health in complex emergencies. *Bulletin of the World Health Organization, 84*, 58–64. DOI: http://dx.doi.org/10.1590/S0042-96862006000100015

Nguyen-Gillham, V., Giamacan, R., Naser, G., & **Boyce, W.** (2008). Normalising the abnormal: Palestinian youth and the contradictions of resilience in protracted conflict. *Health and Social Care in the Community, 16*(3), 291–298. DOI: http://dx.doi.org/10.1111/j.1365-2524.2008.00767.x

Oshio, A., Kaneko, H., Nagamine, S., & **Nakaya, M.** (2003). Construct validity of the Adolescent Resilience Scale. *Psychological Report, 93*, 1217–1222. DOI: http://dx.doi.org/10.2466/pr0.2003.93.3f.1217

Peltonen, K., & **Punamaki, R-L.** (2010). Preventive intervention among children exposed to trauma of armed conflict: A literature review. *Aggressive Behaviour, 36*, 95–116. DOI: http://dx.doi.org/10.1002/ab.20334

Punamaki, R. L. (1987). *Childhood under conflict: The attitudes and emotional life of Israeli and Palestinian children* (Research report). Tampere, Finland: Tampere Peace Research Institute.

Remschmidt, H., Nurcombe, B., Belfer, M. L., Sartorius, N., & **Okasha, A.** (Eds.). (2007). *The mental health of children and adolescents: An area of global neglect.* West Sussex: John Wiley & Sons. DOI: http://dx.doi.org/10.1002/9780470512555

Rutter, M. (1990). Competence under stress: Risk and protective factors. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology.* New York: Cambridge University Press, pp. 181–214. DOI: http://dx.doi.org/10.1017/CBO9780511752872.013

Sheehan, D. V., Lecrubier, Y., Sheenhan, K. H., Amorim, P., Janavs, J., Weiller, E., & **Dunbar, G. C.** (1998). The Mini-International Neuropsychiatric Interview (MINI): The development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry, 59*(20), 22–33. PMid: 9881538.

Spencer, L., Ritchie, J., Lewis, J., & **Dillon, L.** (2003). Quality in qualitative evaluation: A framework for assessing research evidence. London: Government Chief Social Researcher's Office. Retrieved from http://www.

civilservice.gov.uk/wp-content/uploads/2011/09/a_quality_framework_tcm6-38740.pdf.

Strauss, A., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Thousand Oaks, CA: Sage Publications, Inc.

Theron, L., & Theron, A. (2010). A critical review of studies of South African youth resilience, 1990–2008. *South African Journal of Science, 106*(7/8), 1–8. DOI: http://dx.doi.org/10.4102/sajs.v106i7/8.252

Tol, W., Song, S., & Jordans, M. (2013). Annual Research Review: Resilience and mental health in children and adolescents living in areas of armed conflict – a systematic review of findings in low- and middle-income countries. *Journal of Child Psychology and Psychiatry, 54*(4), 445–60. DOI: http://dx.doi.org/10.1111/jcpp.12053

Ungar, M. (2003). Qualitative contributions to resilience research. *Qualitative Social Work, 2*(1), 85–102. DOI: http://dx.doi.org/10.1177/1473325003002001123

Ungar, M. (2008). Resilience across cultures. *British Journal of Social Work, 38*, 218–235. DOI: http://dx.doi.org/10.1093/bjsw/bcn020

United Nations Development Programme. (2004). Human development report 2004. Retrieved from http://hdr.undp.org/sites/default/files/reports/265/hdr_2004_complete.pdf.

United Nations. (2013). Children of Armed Conflict. Retrieved from http://childrenandarmedconflict.un.org/

Werner, E. E., & Smith, R. S. (1992). Vulnerable but invincible: A longitudinal study of resilient children and youth. New York: McGraw-Hill.

Wessells, M., & Strang, A. (2006). Religion as resource and risk: The double-edged sword for children in situations of armed conflict. In N. Boothby et al (Eds.), *A world turned upside down: Social ecological approaches to children in war zones.* Bloomfield, CT: Kumarian Press, pp. 199–222.

Wilkinson, S. (1998). Focus groups in health research: Exploring the meanings of health and wellness. *Journal of Health Psychology, 3*(3), 329–348. DOI: http://dx.doi.org/10.1177/135910539800300304

Williams, R. (2007). The psychosocial consequences for children of mass violence, terrorism and disasters. *International Review of Psychiatry, 19*(3), 263–277. DOI: http://dx.doi.org/10.1080/09540260701349480

Willoughby, K. (2010). *The moderating influence of resilience on childhood trauma.* (Unpublished doctoral dissertation). University of Southampton, UK.

Windle, G., Bennett, K. M., & Noyes, J. (2011). A methodological review of resilience measurement scales. *Health and Quality of Life Outcomes, 9*(8), 1–18. DOI: http://dx.doi.org/10.1186/1477-7525-9-8

Yeh, C., & Inman, A. (2007). Qualitative data analysis and interpretation in counselling psychology: Strategies for best practices. *The Counselling Psychologist, 35*(3), 369–403. DOI: http://dx.doi.org/10.1177/0011000006292596