Article

Measuring Resilience and the Importance of Resource Connectivities: Revising the Adult Resilience Measure (RRC-ARM)

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Abstract: There have been many efforts to measure and quantify resilience, and various scales have been developed. This article draws on a mixed methods study which involved the application of one particular scale—the Resilience Research Centre-Adult Resilience Measure (referred to throughout as the ARM). Rather than focus on the quantitative results, however, which have been presented elsewhere, this unique article draws on the qualitative results of the study—semi-structured interviews with victims-/survivors of conflict-related sexual violence in Bosnia–Herzegovina (BiH), Colombia and Uganda—to explore and discuss some of the ARM's shortcomings. It develops its empirical analyses around the crucial concept of connectivity, "borrowed" from the field of ecology, and the three elements of the study's connectivity framework—broken and ruptured connectivities, supportive and sustaining connectivities and new connectivities. Through its analyses, the article highlights aspects of the ARM that could potentially be improved or developed in future research, and it ultimately proposes some concrete revisions to the measure, including two additional scales relating to change and importance, respectively.

Keywords: Adult Resilience Measure; connectivity; conflict-related sexual violence; ecology; resilience

1. Introduction

Resilience is often described as "slippery" (e.g., Davoudi 2012, p. 299; Lendvay 2021, p. 377). One aspect of this slipperiness is that the concept is discussed in many different contexts, from violent extremism (Mirahmadi 2016) and health (Van de Pas et al. 2017) to power infrastructure systems (Schweikert and Deinert 2021) and food supply chains (Hobbs 2021). This ubiquity can make it difficult to pin down what exactly resilience is. Cultural and contextual factors, moreover, significantly shape what resilience "looks" like and how it is expressed (Ivanich et al. 2022; Theron et al. 2015; Ungar 2013), as well as the functioning and dynamics of particular protective factors in supporting resilience (Burnette 2018; Ungar 2008). Nevertheless, there have been many efforts to measure and quantify resilience—broadly defined here as positive adaptation[1] to significant stress and adversity (Luthar et al. 2000, p. 543; Theron 2016, p. 87)—and various scales have been developed over the years (see, e.g., Connor and Davidson 2003; Hjemdal et al. 2001; Smith et al. 2008). One such scale is the Resilience Research Centre-Adult Resilience Measure (RRC-ARM; RRC 2016), which will be referred to throughout as the ARM.

This interdisciplinary article draws on a highly original—and mixed methods—study that was the first to apply the ARM in the context of conflict-related sexual violence (CRSV) (see Clark 2022a). It is also significant to underline that while there exists a rich corpus of scholarship focused on CRSV (e.g., Boesten 2014; Davies and True 2015; Dolan et al. 2020; Oliveira and Baines 2022; Schulz 2021), this is an area of research in which references to resilience—let alone substantive engagement with the concept—are rare. The purpose of

this article is not, however, to report on the study's quantitative data (which the second author analysed); this has been done elsewhere (see Clark et al. 2022a, 2022b). Instead, it does something more innovative. First, it draws on the study's qualitative data—consisting of semi-structured interviews with victims-/survivors[2] of CRSV in Bosnia–Herzegovina (BiH), Colombia and Uganda—to critically reflect on the ARM. Second, and in so doing, it engages with the concept of connectivity to suggest ways of further developing and improving the measure.

To elaborate further on these two points, the ARM measures the protective resources that individuals have available to them within their social ecologies (environments). In other words, it approaches resilience as a relational and interactive process "cofacilitated by individuals and their physical and social ecologies [including schools, families, friends and communities]" (Ungar and Theron 2020, p. 441). One of the article's key arguments, however, is that the ARM, in its current form, presents a very static picture of the relationships between individuals and their social ecologies that does not account for their potential changes and fluctuations over time. Herein lies the significance of connectivity, a concept which the article "borrows" from the field of ecology. Connectivity broadly refers to "the degree to which a landscape facilitates the movement of individuals or gametes" (LaPoint et al. 2015, p. 869).

To be clear, the application of ecological ideas to the social study of resilience is itself not new; there is extensive literature focused on social-ecological systems (SESs) and the adaptive responses of these complex "intertwined human and natural systems" to major shocks and stressors (Colding and Barthel 2019; see also Berkes et al. 2003; Bodin and Tengö 2012; Folke 2006; Walker et al. 2004). What is novel is the article's application of connectivity as a conceptual framework—which developed organically during the process of coding and analysing the qualitative data—for structuring its reflections on the ARM and suggestions for expanding the measure. The article presents examples from the interview data to illustrate the three dimensions of its connectivity framework—namely, broken and ruptured connectivities, supportive and sustaining connectivities and new connnectivities—and their potential significance for the ARM. In so doing, it demonstrates the utility of connectivity for thinking about the relationships between individuals and their social ecologies, and more specifically for exploring the dynamics of these relationships—in the sense of the shifts and "movement" within them—and, thus, their storied dimensions (Clark 2022a,2023).

There are strong synergies between this article's emphasis on relationships and connections and the concept of social capital, broadly meaning the "everyday networks" in which people are commonly embedded (Halpern 2005, p. 2). The article's connectivity framework resonates, for example, with the multi-systemic Community Capitals Framework (CCF). Encompassing different types of capital, from human and social capital to cultural and natural capital, CCF identifies "the assets in each capital (stock), the types of capital invested (flow), the interaction among the capitals, and the resulting impacts across capitals" (Emery and Flora 2006, p. 20). It is also important to acknowledge the wealth of scholarship focused on social capital and resilience (e.g., Aldrich 2012; Carmen et al. 2022; Torres et al. 2019; Ungar 2011). In the context of the study that underpins this article, however, connectivity emerged as a central idea based, in part, on the depth of connections and relationships that many of the interviewees spoke about; and the decision to use a concept that is so significant within ecology research was ultimately about demonstrating the scope for directly and creatively utilising ideas from the field of ecology to develop innovative new social-ecological approaches to resilience (Clark 2022a).

Section 1 discusses some of the main existing resilience measures. It also examines the ARM in more detail and outlines some of the ways that scholars have used the scale. Section 2 gives important background information about the study on which this article is based and the data on which it draws. It also elaborates on the study's connectivity framework. It should be noted from the outset that using this framework and the qualitative data to reflect on the ARM and possible ways of further strengthening it was not one of the

specific aims of the study. This was an idea that gradually emerged and took shape as the data analysis and work on the conceptual framework advanced. The article's empirical sections, focused on the three aforementioned dimensions of the connectivity framework, use illustrative vignettes from the qualitative data to highlight aspects of the ARM that could potentially be improved or developed in future research. Building on these, the final section proposes some concrete revisions to the ARM (which the authors aim to take forward and operationalise in future work), including two additional scales relating to change and importance, respectively.

2. Measuring Resilience and the Development of the ARM

Given the ambiguity and subjectivity of simply asking individuals whether they consider themselves to be resilient, many measures of resilience have been developed over the past three decades to try to assess the construct in a more nuanced and robust way (e.g., Smith-Osborne and Whitehill Bolton 2013; Windle et al. 2011). What precisely is measured, however, depends on how resilience is conceptualised. For example, the Brief Resilience Scale (Smith et al. 2008) is a six-item self-report survey that considers resilience in perhaps its most succinct or simple form—the ability or capacity to "bounce back" (see also the CD–RISC2; Vaishnavi et al. 2007). As such, it contains items that enquire about an individual's ability to "recover" from or "get over" stressful events. However, ideas of "bouncing back" or "snapping back" are themselves highly subjective (see Jefferies 2021), and the utility of the measure needs to be seen in this context. Indeed, few other resilience measures enquire directly about a capacity to bounce back or measure resilience in this way. Instead, the majority address the construct more indirectly.

An early set of resilience measures adopting an indirect approach associated resilience with the presence of particular personality traits (e.g., Ergo Resilience; Klohnen 1996; The Resilience Scale; Wagnild and Young 1993). In contrast, more modern conceptualisations approach it as a modifiable construct and focus on the presence (or absence) of various protective factors which help to "cushion" some of the effects of adversity (see Fritz et al. 2018; Ungar 2019; Ungar and Theron 2020; Werner 2000). Thus, higher scores on such measures reflect a greater presence of protective factors, in turn indicating higher resilience. The Connor–Davidson Resilience Scale (CD–RISC; Connor and Davidson 2003) is one of the most widely used resilience measures that functions in this way. Originally a 25-item self-report survey, the CD–RISC enquires about the presence of protective factors such as optimism, capability to act under pressure and a strong sense of purpose. Although there is a large evidence base supporting the inclusion of many of these factors, measures such as the CD–RISC tend to favour or focus on protective factors of a psychological nature.

There is growing research, however, indicating the overwhelming importance of social-ecological protective factors that accentuate individual-environment interactions as crucial for resilience (e.g., Afifi and MacMillan 2011; Masten et al. 2021; Rutter 1985). Such research, and its emphasis on wider contextual factors, led to the development of the original Child and Youth Resilience Measure (CYRM; Ungar and Liebenberg 2011) and, as an adaptation of it, the ARM (Liebenberg and Moore 2018; RRC 2016).

Turning first to the CYRM, this was created as part of the International Resilience Project (RRC 2003), which sought to uncover important protective factors associated with resilience in an individual's proximal and distal environment. Initial qualitative fieldwork was conducted in 14 communities in 11 countries, which were selected for their cultural variability and spread across both majority and minority worlds (Ungar and Liebenberg 2011). This fieldwork, which involved focus groups with children and adults, explored what helps young people to "do well despite adversity" (Ungar and Liebenberg 2011, p. 132). The data were analysed to identify distinct factors, and these were subsequently developed into statements with which young people were asked to indicate their level of agreement or disagreement.

Subsequent self-report surveys involving these items, administered across the 14 communities and elsewhere, led to 28 items that were found to work well across all locations.

A confirmatory factor analysis (Liebenberg et al. 2012), involving a Canadian sample of multiple service-using[3] youth, corroborated the grouping of these 28 items into three types of social-ecological protective factors: those of an individual nature pertaining to personal and social skills, those relating to physical and psychological caregiving and those linked to context, such as having a sense of community belonging and participating in organised religious activities.

The widespread use of the CYRM, in turn, led to interest—reflecting the need "for greater understanding of resilience processes in adulthood" (Liebenberg and Moore 2018, p. 4)—in the potential value of an adult version. The crucial work in this regard was undertaken by May-Chahal et al. (2012; see Liebenberg and Moore 2018, p. 7), as part of a study investigating adults in the criminal justice system involved in gambling. The same 28 items were retained in the ARM, with small modifications (e.g., closeness to caregivers was changed to closeness to family or partners). The same three subscales were also retained, although some researchers have identified alternative factor structures (e.g., Arslan 2015; Clark et al. 2022b; Liebenberg and Moore 2018; Robinson 2013). In short, the ARM is "an adapted version of the Child and Youth Resilience Measure" (RRC 2016, p. 2)—although there are only minimal differences between the two scales—and its 28 items,[4] divided into individual, relational and contextual subscales, include "I have people I can respect in my life", "I talk to my family/partner about how I feel" and "I feel I belong in my community".

The ARM has been used in studies exploring, inter alia, resilience to prenatal depression following adverse childhood experiences (Howell et al. 2020); the resilience processes of survivors of clerical institutional abuse in Ireland (Liebenberg and Moore 2018); the impact of a resilience programme on healthcare professionals in the Bergamo province of Italy during the height of the COVID-19 pandemic (Giordano et al. 2022); and the links between life satisfaction and meaning among survivors of the 2010 earthquake in Haiti (Rich et al. 2018). As an indirect measure of resilience, the ARM gives important insights into the relational interplay between individuals and their resource environments that support the capacity to adapt, transform or recover following experiences of adversity. Furthermore, given its focus on social-ecological protective factors and the evidence implicating their criticality in resilience processes (see Herrenkohl 2013; Vaughn and DeJonckheere 2021), it may be considered one of the most robust measures of resilience available to researchers. Indeed, the underpinning research on which this article is based used the ARM, rather than an alternative resilience measure, for precisely this reason.

All resilience scales have shortcomings, however. This article specifically uses the concept of connectivity, adapted from the field of ecology, to empirically explore some of the limitations of the ARM and how these might be addressed. While these limitations do not detract from the overall utility of the ARM as a social-ecological measure of resilience, they do point to potential ways of further strengthening it and to important new areas of development that could make the ARM a more distinctive scale in its own right—rather than being just an extension of the CYRM (which has itself undergone revision; see Jefferies et al. 2019).

3. Methodology and Conceptual Framework

3.1. The Research Data

This article is based on a five-year mixed methods research study, led by the first author, which took as its basic point of departure the neglect of resilience within research on CRSV. Zraly and Kagoyire (2021, p. 208) reflect that "the uniqueness of each humanitarian setting and the diversity of cultures and socio-historic contexts make it challenging to specify prescriptions for resilience promotion". The objective of the study, however, was not to promote resilience as a desirable policy objective. Indeed, there are trenchant criticisms of normative approaches to resilience—a concept that has been described as a "policy fad" (Tierney 2015, p. 1325)—within extant scholarship (see, e.g., Chandler 2013; Joseph and Juncos 2019; Reid 2019). The aim of the research, rather, was to explore some of the ways

that victims-/survivors of CRSV—through their everyday relationships and interactions with their social ecologies—express resilience, rebuild their lives and move forward. This, in turn, created a strong rationale for the study's comparative case study design. Its focus on three very different countries that have all experienced CRSV—BiH, Colombia and Uganda—maximised the analytical and empirical space for unpacking resilience as a social-ecological process shaped by multi-systemic cultural and contextual factors.

In the quantitative part of research—which involved the design, piloting and application of a study questionnaire aimed at measuring experiences, attitudes and attribution of meanings considered relevant to the central construct of resilience—a total of 449 women and men (BiH n = 126, Colombia n = 171, Uganda n = 152) completed the ARM between May and December 2018. All of them had suffered at least one form of CRSV (most commonly rape), in addition to multiple other types of direct and indirect violence (including beatings, forced displacement, detention/captivity and forced witnessing of brutality against others). Some of them had also experienced violence, including from spouses and family members, outside of war/armed conflict. The sample size was sufficiently large to capture some of the diverse demographic profiles of victims-/survivors of CRSV in each country (which the empirical sections highlight). However, only 27 of the participants were men, an admittedly small number that attests to some of the particular challenges of establishing contact with male victims-/survivors. This is not to say that men do not speak about their experiences (Touquet 2022), but they may have less inclination (and support) to do so, not least because sexual violence can potentially have a significant impact on their "masculine gender identities" (Schulz 2019, p. 174).

Participants' total ARM scores were used to create quartiles for each country (those in quartile 1 had the lowest scores and those in quartile 4 had the highest scores). In the qualitative part of the study, interviewees were chosen from across the quartiles. The rationale for this was to explore how the spread of ARM scores might translate into the qualitative data and how, in turn, the qualitative data might ultimately help to elucidate and give greater context to participants' ARM scores. A further rationale was to identify possible linkages between ARM quartiles and particular themes developed from the interview data.

In total, 63 women and men (21 in each country) selected from the larger quantitative dataset were interviewed between January and July 2019 by the first author and two researchers. The interviews were semi-structured and an interview guide was used. This included the following questions: "If you were to tell the story of your life, what title would you give it?", "Are there parts of your war story which are important to you and which you are never asked about?", "Who or what are the sources of support in your life?". Several in-country organisations played a crucial role in facilitating the interviews and providing support to those participants who required it. In most cases, this need for support arose not from the research itself, but, rather, from particular problems and challenges that some of the participants were facing (e.g., housing issues, financial difficulties). The interviews, undertaken in the local languages, were recorded (with interviewees' consent) using fully encrypted digital voice recorders, transcribed verbatim and translated into English. The transcripts were uploaded into NVivo and the first author created the coding book, led the coding process and developed all of the themes and the conceptual framework (see Clark 2022a).

All research participants gave informed consent to participate (for a discussion of how informed consent was taken, see Clark 2022b, pp. 469–70). The study received full ethics approval from the host institution, the research funder and relevant authorities in the three case study countries, including the Uganda National Council for Science and Technology. Some of the many complex ethics issues that had to be comprehensively addressed—including securing informed consent from individuals with low literacy levels, minimisation of harm, incidental findings and data storage—have been discussed in detail elsewhere (see, e.g., Clark 2022a, 2023). Consistent with the strict protocols that were followed, no actual names or other identifying information are used in this article.

3.2. The Significance of Connectivity

During the long process of coding and analysing the interview data, one of the themes that emerged strongly was the significance of relationships. Interviewees frequently spoke about the different relationships in their lives—including with family, with children, with local organisations, with God, with land—from which they drew strength to move forward and to deal with ongoing challenges. Resilience scholars often use terms such as "protective resources", "protective factors" or "protective processes" to broadly refer to different things, people or environments in an individual's life that potentially help to "cushion" some of the impact of shocks and adversities (Betancourt and Khan 2008; Hjemdal et al. 2006; Ungar 2019). One of the limitations of such terminology, however, is that it does not capture or convey the particular emotions, feelings and attachments that may be integral to something or someone having a "protective" function. Hence, rather than simply thinking about the relationships that interviewees talked about in terms of protective resources/factors/processes, the research conceptualised them as connectivities, to emphasise the sense of deep connection and connectedness between individuals and different parts of their social ecologies (see Clark 2022a, 2023). This is not, however, to overlook the important fact that some connectivities may be harmful or malicious, as highlighted by the concept of "hyperconnectivity" (Crooks and Suarez 2006, pp. 452–53; Edwards et al. 2021, p. 2). Certainly, there were several examples of "bad connectivities" in the interview data (see Clark 2022a, p. 176, 179).

As the idea of relational connectivity began to take shape as a theme, it also became clear that there was a larger story to tell within the data about connectivity and resilience. Hence, rather than just emphasise the relationships between individuals and their social ecologies, this research tells a bigger and more complex story about those relationships through its focus on different dimensions and trajectories of connectivity, including what they do and what happens to them. If, as Quinlan et al. (2016, p. 679) argue, "Resilience assessment involves a process of identifying how resilience is created, maintained or broken down", the crucial point is that thinking about resilience through connectivity supports such assessment.

Connectivity has been explored in many different contexts, from neurology and economics to communications and artificial intelligence. This article's use of the concept, however, draws specifically on ecology scholarship. It should be noted in this regard that some of the early pioneering work on resilience had an ecology focus (see, e.g., Holling 1973). Indeed, resilience has become one of the most important topics—and a "key conservation priority" (Capdevila et al. 2021, p. 3103)—within ecology (see, e.g., Gunderson et al. 2010; Nyström et al. 2000; Van Meerbeek et al. 2021). Furthermore, there are significant linkages between resilience and connectivity. To cite Field and Parrott (2017, p. 32), for example, "theory would suggest that an ecologically connected landscape that facilitates spatial movement of species and environmental flows should be more resilient than a fragmented landscape". Connectivity, therefore, is a recurring concept within ecology research, including research on SESs (see, e.g., Aquilué et al. 2020; Brown et al. 2016; Fuller et al. 2017; Webster et al. 2002).

The study on which this article is based was the first to discuss connectivity in the context of CRSV. It also developed its own connectivity framework which directly utilises and adapts several ideas drawn from ecology research. First, ecology scholarship frequently discusses the concepts of structural and functional connectivity, the former referring to the physical properties of a landscape and the latter to how species actively use connectivity (Crooks and Sanjayan 2006, p. 3). These ideas were translated into the *supportive and sustaining connectivities* element of the study's framework, to emphasise some of the important connectivities that interviewees had in their lives and how they made active use of them. Second, fragmentation in ecology refers to the loss of connectivity, which can negatively affect biodiversity and species' ability to deal with threats and stressors (Auffret et al. 2015, p. 51). The idea of fragmentation as a loss of connectivity was also prominent in many of the interviewees' stories; their experiences of CRSV and war/armed conflict more

broadly had affected and damaged important connectivities in their lives. This is reflected in the *broken and ruptured connectivities* element of the conceptual framework. Third, and accentuating that fragmentation need not be permanent or irreversible, connectivity is highly dynamic, and "dynamic connectivity analyses are on the rise" (Zeller et al. 2020). In the qualitative data, the idea of dynamic connectivity came through strongly in the ways that some interviewees were seeking to build or rebuild connectivities with parts of their social ecologies, as captured in the *new connectivities* element of the conceptual framework (for a more detailed discussion of the framework, see Clark 2022a, chp. 2).

To summarise, the qualitative data generated the initial idea for the study's conceptual framework, and engagement with discussions about connectivity in the field of ecology helped to further develop it. This article now seeks to demonstrate the practical utility of the framework. During the process of thinking backwards and forwards between, and across, the quantitative and qualitative datasets, and reflecting on how they enhanced and enriched each other, an important question (which was not one of the actual research questions driving the study from the start) started to emerge about the significance of connectivity in relation to the ARM. Specifically, how might the study's connectivity framework, and the data underpinning that framework, contribute to further development of the ARM? The article's remaining sections will offer some answers.

4. Broken and Ruptured Connectivities (Family)

The statements in the ARM are largely about individuals' protective resources. A recurrent trope within the qualitative data, however, was broken and ruptured connectivities—linked to the theme of fragmentation within ecology-based discussions of connectivity. Again, the term "connectivities" is more fitting here than the word "resources", in the sense that it is better at conveying what these women and men had lost. As many of their broken and ruptured connectivities were family-related, the following discussion focuses on the relational subscale of the ARM. This consists of seven statements (see Table 1), which, like the other statements in the measure, are scored between 1 (= "Not at all") and 5 (= "A lot").

Table 1. The Relational Subscale of the ARM.

	Not at All (1)	A Little (2)	Somewhat (3)	Quite a Bit (4)	A Lot (5)
ARM 5. My family has usually supported me through life					
ARM 6. My family knows a lot about me					
ARM 7. If I am hungry, I can get food to eat					
ARM 12. I talk to my family/partner about how I feel					
ARM 17. My family stands by me during difficult times					
ARM 24. I feel secure when I am with my family					
ARM 26. I enjoy my family's/partner's cultural and family traditions					

4.1. Adnan's Story

"Adnan", a Bosniak man, was 54 years old at the time of the interview in 2019. He is a craftsman by trade and lives with his wife, mother and one of his two grown-up children. His total ARM score was 117 out of 140 (quartile 3). His score on the relational subscale was particularly high—30 out of a possible 35. On one hand, his answers to the seven statements were consistent with the strong accent that he placed on family during the qualitative stage of the research. He answered "a lot", for example, to the statement "My family stands by me during difficult times" (ARM 17); and during the interview, he described his wife and children as "the engine that drives me through life" (interview, BiH, 10 April 2019). On the

other hand, his family relationships were more complex than his relational subscale score suggested.

The thematic of breakage was very pronounced in his interview. Early in the 1992–1995 Bosnian war, which for Adnan was when "life was cut in half", he was taken to a camp (with his father and two brothers) and held for several months. He never saw his brothers again and still does not know what happened to them. Talking about the more recent death of his father, Adnan reflected: "his life also broke in half. He probably had a hard time living the rest of his life, in his thoughts, and . . . And he died without knowing if his sons were alive, whether they were killed, where their bones are". Referring back to the ARM, it is important to acknowledge that the measure focuses on the positives and strengths in an individual's life. From this perspective, it makes sense that it does not address losses. The broken and ruptured connectivities that were a significant and recurring theme within many of the interviewees' stories, however, are about more than just losses. They also highlight issues of temporality that merit attention.

Carpenter et al. (2001, p. 767) underline that "to measure resilience, one needs to specify the time scale". This article argues that there is considerable scope for exploring potential ways of incorporating cross-temporal questions and statements into the ARM, to reflect the fact that resources are not stable. While Adnan fully endorsed the statement "My family has usually supported me through life" (ARM 5), for example, he had recently lost a very important member of his family who would have supported him ("When you have a parent, he has your back, he is your support"). In this regard, the measure would benefit from statements addressing both how things were and how they are now, as well as more prospective statements about how things might be (e.g., "If times became very hard, my family would support me"). Such statements would help to give a more complete picture of the connectivities in an individuals' life and whether they are strong, ruptured or at risk.

4.2. Gloria's Story

"Gloria" is a mixed race (Mestizo) Colombian woman and mother of three children. She was 45 years old at the time of the interview and was living with her partner. Her ARM score of 96 placed her in quartile 2. Her score on the relational subscale, however, was high—31 out of 35—consistent with the emphasis that she put on family and family support during the interview stage of the research. When asked, for example, which factors have been most important in helping her to rebuild or start to rebuild her life, she answered: "Well, I think it's been . . . my family, now my grandchildren too. Seeing my family grow has been a support to me" (interview, Colombia, 4 February 2019).

Particularly interesting was Gloria's response to the ARM statement "I feel secure when I am with my family" (ARM 24). She answered "a lot". Yet, part of the story that she told during her interview was precisely about the rupture of her family's security. She reminisced that:

> Well, there was a time when . . . we lived very peacefully, as a family. I mean, I had a beautiful family. A family where . . . how can I explain? They were so, so protective and I thought I'd have that environment forever. I mean, I grew up with such a sense of security, with so much love from my family, that I never thought it could be any different.

She also talked about the "huge damage" that armed groups had done to her family during more than 50 years of armed conflict in Colombia,[5] thus further illuminating the theme of broken and ruptured connectivities. Gloria was living in an area where the army and the guerrillas (she did not specify which guerrilla group) had been fighting each other and she explained that her husband had been killed and her son disappeared (he has never been found).

The larger point is that security is a fluid concept; according to Ciută (2009, p. 304), "the *definition of security* is a matter of context" (emphasis in the original). Although Gloria expressed feeling secure with her family when answering the ARM, in her interview she talked about the volatile and dangerous security situation within her wider ecology, noting

that "Every day, people get killed and people are threatened. Every day ... that's how we live. Can you imagine?" These everyday security issues that she had to live with constituted a further and ongoing ruptured connectivity with the life that she had once known—which her response to the security-related question in the relational subscale could not capture. Any future development of the ARM would arguably benefit from a more contextualised approach to security, and a statement about feeling secure in one's neighbourhood and/or community would be valuable in this regard. Feeling secure with one's family is important, but thinking in a broader sense about security may be a more appropriate way of addressing the underlying protective factor and its significance. A sense of physical security, for example, is not only relevant to individual wellbeing (Belgrade et al. 2022; Dwyer 2022), but also to freedom to access available resources.

4.3. Betty's Story

"Betty" is a married Lango woman, mother of five and subsistence farmer living in northern Uganda. She was aged 36 at the time of the interview. Her total ARM score was 99 and this put her in quartile 2. On the relational subscale, she scored 27 out of 35. Like many of the Ugandan research participants, Betty had been abducted by the Lord's Resistance Army (LRA), led by Joseph Kony, and forcibly recruited into its ranks. She was 18 years old when she was abducted and spent three months in the bush with the LRA before returning home.

It is Betty's response to the statement "If I am hungry, I can get food to eat" (ARM 7) that particularly merits comment. How this statement fits with the other six statements in the relational subscale, all of which refer to family, needs to be seen in the broader context of the CYRM (discussed in Section 1). The statement is about family in the sense that children and young people will probably rely on caregivers for food; and viewed in relation to the subscale, it can be read as a statement about a family's ability to get food and to feed a child, thus illustrating a linkage between food (and more specifically food security) and resilience (e.g., Bullock et al. 2017; Hanazaki et al. 2013). Given that adults are much less likely than children and young people to depend on family for food, however, the rationale for including ARM 7 in the adult version of the measure is less clear.

Betty's response to this particular statement was "quite a bit". In her interview, however, she spoke about some of the difficulties that she faced in finding food. "These days", she explained, "there is scarcity in terms of what to eat" (interview, Uganda, 11 June 2019). It is significant to note that she completed the ARM several months earlier during rainy season, when food in Uganda is often more plentiful, while the interview took place during dry season. This raises further questions regarding the stability of some of the resources that the ARM seeks to tap. It also, thus, reiterates the importance of exploring ways of incorporating temporality into the ARM, to recognise that resources such as food will have seasonal aspects and dynamics in some contexts. That Betty attributed her current challenges in finding food to the lateness of the previous rainy season, moreover, illuminates how climate change can further contribute to resource instability (Apraku et al. 2021; Mbuli et al. 2021) and to breakages and ruptures in individuals' relationships with the land, in the sense of what they are able to harvest from it.

5. Broken and Ruptured Connectivities (Community)

While the previous section focused on family and the relational subscale of the ARM, community was another common broken and ruptured connectivity (or at least an altered connectivity) in interviewees' stories in all three countries. In the ARM, it is the contextual subscale that includes several statements about community (see Table 2).

Table 2. The Contextual Subscale of the ARM.

	Not at All (1)	A Little (2)	Somewhat (3)	Quite a Bit (4)	A Lot (5)
ARM 1. I have people I can respect in my life					
ARM 3. Getting and improving qualifications or skills is important to me					
ARM 9. Spiritual beliefs are a source of strength to me					
ARM 10. I am proud of my ethnic background					
ARM 16. I feel I belong in my community					
ARM 19. I am treated fairly in my community					
ARM 22. I participate in organised religious activities					
ARM 23. I think it is important to support my community					
ARM 27. I enjoy my community's culture and traditions					
ARM 28. I am proud to be a citizen of . . . [country]					

Like family, the meaning of community is fluid and culturally variable (see, e.g., Mannarini and Fedi 2009, p. 211; Panter-Brick et al. 2006, p. 2815). The ARM manual accordingly recommends that "researchers hold meetings with select members of the community in which the research is being conducted"; and it advises consulting with a group of around five locals "who have something important to say about their community" (RRC 2016, p. 6).[6] What particularly stood out in this research, however, was the relationship between adversity and community, as the following two vignettes illustrate.

5.1. Danica's Story

"Danica" is a Bosnian Croat woman who was 64 years old when interviewed. She lives alone and was only one of three respondents in the full BiH dataset (n = 126) who had been to university. Her total ARM score of 120 placed her in the third highest quartile, and she scored 39 out of 50 on the contextual subscale. The answers that she gave to community-related statements in the scale were generally positive. She responded "quite a bit", for example, to the statements "I feel I belong in my community" (ARM 16) and "I enjoy my community's culture and traditions" (ARM 27).

During the interview, however, what she also underscored were some of the profound changes that had taken place in her community as a legacy of the Bosnian war. A lot of residents had left, she explained, including many of her Croat friends, and she found this very hard. She also stressed that community life had changed, in the sense that people no longer came together in the way that they once did. In her words:

> Before, we had, well . . . parties, dancing nights, other things. Different kinds of entertainment. And picnic areas, and everything. Now, I don't know, everything came down to . . . Well, the war left its marks. It disrupted our lives, our everyday living and normal life. (interview, BiH, 30 January 2019)

The statements in the contextual subscale reflect a very static view of community as a resource. What Danica's story illustrates is that shocks and stressors can substantially affect this resource in the sense of what it offers. A diminished resource, however, is not necessarily a negative; Danica gave some positive answers about community, suggesting that she still drew support from this connectivity in her life. What is significant is that her community was no longer the same as a consequence of the Bosnian war, and both her relationship with it (including the breakages and ruptures) and how she had adapted to the changes within it are relevant to resilience. In other words, there is a case to be made for

incorporating into the ARM statements that acknowledge the dynamic nature of resources and some of the many ways that adversities may impact on the quality of these resources and their "protective" function.

5.2. Stella's Story

"Stella", an ethnic Acholi, was aged 54 and had an overall ARM score of 106 (quartile 3). As a result of the time that she had spent in forced captivity with the LRA, she was now infected with the HIV virus and this, combined with the fact that she had suffered sexual violence in the bush, had made her a frequent target for stigma. Her relationship with people in her community had been spoiled by their "bad tongue" (verbal abuse), she explained, and she described how potential suitors would immediately reject her upon learning that she has HIV; "'Eeh! So go away with your sickness'" (interview, Uganda, 12 June 2019).

Despite experiencing stigma, Stella also spoke about valuable support that she had received from some members of the community, notably in the form of "advice" and "counselling". In particular, certain people had helped her to realise that she herself was not to blame for what she went through during the war in northern Uganda; "They told me that the [sexual] abuse wasn't of my own wish, that what happened was an opportunity for God to move with me on a dark road, that this is why those things happened". She additionally spoke about crucial financial assistance that she had received from a politician (a member of her community), which had enabled her to secure medical treatment for one of her children (also living with HIV); and about the support that she could count on from women in her local church.

Stella scored 39 out of 50 on the contextual subscale of the ARM and her answers included "a lot" to the statement "I feel I belong in my community" (ARM 16). The support that she had received was important in this regard, but so too was how she had dealt with and managed the broken and ruptured community relations resulting from her time in the bush. We risk simplifying the concept of community support, therefore, if we overlook what individuals might have had to go through to get that support. It could be argued that these struggles do not matter as they do not alter the fact that community support exists and helps to buffer the effects of adversity. If part of resilience, however, involves navigating towards and negotiating for resources (Ungar 2008, p. 225), the difficulties and hurdles that individuals may have to overcome as part of this process are highly relevant.

The larger point is that if the same resource offers support while also presenting challenges, and if community support is entangled with rejection, stigma and so on, this might affect how that resource functions and how "protective" or available it actually is. This is something that future research on the ARM could usefully address. It would be particularly interesting to qualitatively explore the range of community experiences within the same response category (e.g., "a lot"). Individuals who give the same answer to a particular statement may have very diverse relationships with their respective communities, and analysing these relationships would add greater nuance and complexity to the broad idea that communities are protective.

6. Supportive and Sustaining Connectivities

The following discussion focuses on some of the supportive and sustaining connectivities that were prominent within the qualitative data. As previously noted (see Section 2), the article's connectivity framework links the idea of supportive and sustaining connectivities to the concepts of structural and functional connectivity in the field of ecology. It underlines both the connectivities that individuals have in their lives (structural connectivity) and how they actively use them (functional connectivity).

6.1. Luz Maria's Story

"Luz Maria", a Colombian woman who did not identify with any specific ethnic group, was one of the younger interviewees (born in 1991). She had a total ARM score

of 85 (quartile 1), was alone with a young baby and was struggling to look after him. In her words, "I do all I can for my baby. My own life has been put to one side . . . I need to buy him so many things. Right now, he has nothing. I put him in a nappy when he woke up and I haven't been able to change him" (interview, Colombia, 29 January 2019). Her story, and the desperateness of her situation, evoke one of the common criticisms of resilience—namely, that some individuals and communities are *forced* to demonstrate resilience because structural inequalities and systemic failings mean that they have no other option or alternative. As Smyth and Sweetman (2015, p. 410) accentuate, "women living in poverty in contexts threatened by complex crises are required each day to be resilient and withstand stresses and shocks which threaten the wellbeing—and sometimes the very lives—of themselves and their dependents". The larger point is that those who have little must rely on themselves and "use whatever resources they have to survive in the present" (Maîtrot et al. 2021, p. 901).

Luz Maria had very few resources within her social ecology, as reflected in her low ARM score. In other words, there was limited structural connectivity, and it will be recalled from the discussion in Section 2 that structural connectivity facilitates movement between different ecosystems. What also stood out from her interview, however, was her devotion to her son and her determination to provide for him, which were driving her to fight and to keep moving, including in a very literal sense. She explained, for example, that: "now I'm going to see . . . going to the market to see if I can find someone who'll give us something . . . anything, if I can do some cleaning or whatever, to get him [her son] something to eat". This is very relevant because the ARM (similar to other scales like the CD–RISC) is concerned with the quantity of protective resources that an individual has; a larger number of such resources is deemed to be most conducive to supporting resilience. Yet, in Luz Maria's case, the issue was much more about quality over quantity. She had one overarching connectivity in her life, her son, which meant everything to her.

In any future development of the ARM, thus, it would be useful to ask individuals not only about the *availability* of particular resources in their lives, but also about the *importance* that they attach to them. The fact that someone has access to a particular resource, for example, does not reveal anything about the weight that they give to that resource, including relative to other resources. In short, modifying the ARM to account for both the presence and significance of resources and connectivities in individuals' lives would give a more accurate numerical account of their protective function.

During the process of analysing the data, thinking about interviewees' supportive and sustaining connectivities also drew attention to some omissions in the ARM. Of course, no measure can cover everything that may be meaningful in an individual's life as a source of support, and inevitably some items were dropped during the exploratory factor analysis stage of the CYRM's development (the measure originally had 58 items; Ungar and Liebenberg 2011, p. 136). It is also important to reiterate that there is a process built into the ARM manual for identifying more context-specific resources, which, in turn, means that gaps in the measure can potentially be easily addressed in practice. These caveats notwithstanding, it is salient that the ARM, as a social-ecological measure of resilience, does not include any statements about the natural environment. Some interviewees spoke about land as a fundamental resource in their life. This was especially the case in Uganda, where many of the interviewees were subsistence farmers who relied on the land for food and to earn a living. There were also some striking examples where interviewees expressed a sense of connectedness to the natural environment in ways that were helping them to deal with their experiences of war and armed conflict (Clark 2022c). In BiH, one particular interviewee stood out.

6.2. Edin's Story

"Edin", a Bosniak man, was born in 1964 and his total ARM score was 105 (quartile 2). During the Bosnian war, he spent 15 months in several different camps. One of the camps was worse than the others, he recalled, and when he started to speak about it, he said "XXX

[name of the camp][7] was . . . " and then threw up his hands, without finishing the sentence. He later maintained that he had "survived Golgotha" in this particular camp and stressed that what he experienced was a "*sramota*" (disgrace) (interview, BiH, 10 April 2019). He had never spoken to his wife about what he went through.

After his release from the camp, Edin was internally displaced in a different part of BiH and what aided him in getting through that period was going for daily walks in a nearby forest. He ultimately returned to his own village and the local lake was one of the key factors that drew him back there. As he reflected, "I possibly would not have returned here ever, but it is my birthplace and this lake that I have had since I was a child. As they say, I was born in the lake". He spoke about how the lake helped him to deal with constant reminders of the past, from his health issues to annual memorial events and the discovery of missing persons; "This is now my life, you know. Like this, I go down to the lake and, as they say, I think of nothing, like . . . I go to forget". The fact, moreover, that he enjoyed being alone—something that he mentioned several times during the interview—had further cemented his sense of connectivity to the lake. "This is something that keeps me going here".

There are many examples within extant scholarship of the relevance of nature and the environment to resilience (e.g., Buikstra et al. 2010, p. 984; Cullen-Unsworth et al. 2014, p. 388). Moreover, there exists abundant resilience research focused on the behaviour and transformability of SESs (e.g., Leslie and McCabe 2013; Olsson et al. 2006), which are "constituted by interactions between diverse people and elements of diverse ecosystems" (Schlüter et al. 2019). Viewed in the context of such research, and of the data from this study, the lack of any statements about the natural environment in the ARM stands out not just as a missing item, but also as an important social-ecological relationship that one might reasonably expect the measure to include. That Edin described the lake as the main resource in his life, moreover, reinforces the earlier argument that the *quality* of the connectivities in an individual's life may be just as important, if not more so, than their quantity.

7. New Connectivities

The third dimension of the connectivity framework introduced in Section 2 is new connectivities, linked to the concept of dynamic connectivity in ecology literature (see, e.g., Zeller et al. 2020). While all of interviewees had experienced multiple broken and ruptured connectivities, many of them, in different ways, were building new connectivities in their lives in order to move forward. In some cases, doing so was about more than just helping themselves. It was also about helping others within their social ecologies. This idea was particularly prominent in Colombia, although it is essential to acknowledge that there was a significant skew in the data in the sense that many of the Colombian interviewees were social leaders and/or led their own associations.

Anna's Story

"Anna" is an Indigenous (Nasa) woman who was born in 1956. She had a high total ARM score of 123 (quartile 4). She had previously lived in an area of Colombia where the Revolutionary Armed Forces of Colombia (FARC), the National Liberation Army (ELN, also a left-wing guerrilla group) and right-wing paramilitaries were active. She spoke about violence that she had witnessed, about the kidnapping of her daughter (whom she previously did not see for two years) and about the forced disappearances of her husband, brothers and brother-in-law. Anna said little about what she herself had personally experienced, but she revealed that "I've not had a relationship with anyone since then [meaning since she was raped], that all died for me, it died, it's *dead*" (interview, Colombia, 6 March 2019).

She also emphasised, however, how far she had come, maintaining: "It has been a transformation—like a butterfly coming out of its chrysalis and spreading its wings". She spoke in this regard about some of the important supportive and sustaining connectivities in her life, including her faith, women's associations and the psychological care that she

had received through them. Moreover, like Edin, she talked about support that she drew from the natural environment; "It might be some little creature that keeps you company –hearing the sound of a bird singing in the morning. It's a little bit of companionship and it's the everyday things that keep you wanting to live each moment". What came across particularly strongly was her determination, as part of her own "transformation", to make a difference and to support others.

Anna had established her own women's association in 2016 and her work was something that she spoke a great deal about during the interview, evidencing the importance that she attached to it. She had 130 women in her association and was focused on helping them to move on with their lives. As she explained, "I try to get the people around me to . . . keep busy and believe in themselves; that they do their thing, whatever. If you're a craftsperson, make crafts; if you sew, start dressmaking. I try to get them the space where they can relax and have their therapy". Helping other women was also about keeping herself busy—a word she used six times—and she described herself as "super active". Indeed, her interview felt quite frenetic and conveyed a palpable sense of energy and movement. Her work, in turn, was quintessentially about building new connectivities with the women in her association, with prospective new members and with individuals and institutions that could potentially support her in her endeavours. In her words, "If I don't have what I need, I have to look for someone who does have the resources. To help someone else, I have to go looking, at least knocking on doors".

There are two statements in the ARM that are particularly relevant to this discussion, namely "I know where to get help in my community" (ARM 15) and "I think it is important to support my community" (ARM 23). These statements—to which Anna answered "somewhat" and "a lot", respectively—are important because they widen the focus beyond resources that individuals *have*. The second statement, moreover, recognises crucial two-way dynamics of support. However, there is also a case to be made for further developing these statements. Just because individuals know where to get help in the community, for example, does not mean that they are in fact seeking help. Also pertinent in this regard is whether they feel comfortable seeking help, particularly if, as in the case of some of the interviewees in this study, they have experienced/are experiencing social stigmatisation. More broadly, there are fundamental reciprocal feedbacks operating within SESs (Folke 2007; Hamilton et al. 2022); and the ARM itself could quantitatively capture some of these feedbacks in the sense of individuals' interactions with their social ecologies and the extent to which they themselves contribute to building protective resources within these ecologies.

8. Future Development of the ARM

The empirical sections have pointed to particular aspects of the ARM that could be revised. This final section further develops some of these suggestions, to show how they would strengthen the measure and enhance the data that could be collected from its application.

8.1. Practical Suggestions and Considerations for Researchers

The findings of this study suggest that the ARM could be revised in several ways. First, the theme of broken and ruptured connectivities draws attention to the instability of resources and their variation and fluctuation over time. We therefore recommend an additional related response scale (change scale), to accompany the current scale, that would query temporal differences in the strength or presence of the resource. For example, a prompt could be given for each item asking: "To what extent has this changed over time for you?" The available answer options could range from "much worse" to "much better", with a middle response indicating "no change". Such a scale would help to identify potentially broken or ruptured connectivities, as in Adnan's story. It was previously noted that he answered "a lot" in response to the statement that his family had stood by him in difficult times. If he had been asked an additional statement about family support, however, he

might have indicated that it had changed (perhaps becoming "much worse") following the death of his brothers and the more recent passing of his father.

Second, it was clear from the discussion about supportive and sustaining connectivities that the quality of an individual's resources may be far more important than their quantity, as the stories of Luz Maria and Edin particularly illustrated. Accordingly, we also recommend a further response scale (importance scale) that focuses on the significance that an individual assigns to a particular resource. This is an extension of functional connectivity and how an individual uses a resource. To maintain consistency and expedite analysis of responses, this importance scale could comprise the same five response options as the ARM.

It is necessary to acknowledge that the ARM is designed to be a largely objective measure, and statements about importance are subjective. Having a set of more objective and subjective statements, however, could be extremely useful, depending on the particular aims of a given study. Cases of disparity between the presence of a resource and the weight that an individual attaches to it would be especially illuminating and worthy of further exploration. An individual might, for example, feel a sense of belonging in a community yet attach little importance to this. Conversely, a resource that an individual deems to be important might be absent (or lacking) in their life.

The findings of this study also suggest that some minor adjustments to the protective factors currently listed in the ARM could be made. First, the item about food availability should be reworded. This item, originally included in the caregiver/relational subscale of the CYRM, was designed, as already noted, to assess whether a child is receiving sufficient sustenance and, thus, whether its caregivers (who will typically provide food) are delivering adequate quality of care. In the rewording of the item for the ARM, the item became more about food availability in general. While the availability of food is sometimes relevant for resilience in contexts of food scarcity, as Betty's story demonstrated, it is arguably more important and relevant to ask whether an individual's "basic needs" are generally being met and to include a range of these basic needs together, such as food and shelter.

Second, and relatedly, Gloria's story illustrated the importance of expanding the ARM item about sense of security beyond just family. Again, this particular item was a rewording of the statement in the CYRM that enquired about feeling secure with parents/caregivers. Although relevant for a child, it is appropriate for adult respondents to have the opportunity to reflect more broadly about their feelings of safety and security in their home environment and community (e.g., "I feel safe where I live"). These suggested minor changes are likely to be context-invariant.

Finally, the article has noted that the manual for the ARM encourages a process of contextualisation, whereby further items can be added to the list of statements following suggestions from a panel of individuals who are knowledgeable about the local milieu. Such a process can help to uncover resources that may be important to some groups, cultures or individuals in a particular context. Even with this inherent flexibility built into the measure, however, it is likely that there will always be individuals who draw strength from particular resources not covered in any contextually expanded list, yet which are crucial to their resilience. Edin's relationship with the local lake, for example, was a very specific connectivity, and it is not certain that an expert panel of individuals in BiH would have necessarily identified the natural environment as an additional item to be incorporated into the ARM. We therefore recommend including space within the measure that prompts individuals to identify up to three further resources/connectivities that are not covered in the list of items which give them strength and help them during difficult times. This suggestion is linked to supportive and sustaining connectivities but also to new connectivities, in the sense that it allows for new or developing foci to be noted. Respondents would be prompted to rate these unique items using the ARM scale and the two additional scales (i.e., change and importance scales) which have been proposed.

8.2. Implications

These suggested revisions to the ARM have implications for both participants and the researchers. They create space, for example, for participants to share more about their lives and the connectivities that they have/had and value. Giving participants the opportunity to list three important things or people in their lives not covered by the ARM, moreover, would potentially help to facilitate a sense of research ownership, by emphasising to participants the value of their contributions. Making individuals feel valued and appreciated can itself have significant buffering effects (Gordon et al. 2022, p. 1314). At the same time, however, additional scales and items necessarily present further response burdens, due to the extra time needed to complete them. There is an inherent tension in survey research when trying to balance depth and time, although we believe that the additional insights that could result from the implementation of our suggestions would outweigh the disadvantages. These additional burdens would, in any case, be limited compared to those associated, for example, with longitudinal research (see, e.g., Lazovski et al. 2009).

For researchers, the additional depth provided by the revisions would be substantial. If these revisions were only applied in a quantitative data-gathering study, researchers would be able to identify patterns in areas such as the kinds of resources that individuals value, or those that are most valued yet of limited accessibility. These sorts of insights could be gained from reviewing the responses of individual participants, which would likely also illuminate areas for discussion in follow-up interviews (in mixed method designs). Additional scoring procedures, moreover, could help to quantify some of this further information. For instance, when scoring an individual's overall resilience, we would recommend averaging responses to items rather than summing, as this would cater to variability in any additional resources listed by participants. Averages to each of the three scales (the ARM and the two suggested additional scales) would reveal the extent to which resources were generally present, valued or had changed. Scores could also potentially be combined. For instance, the response corresponding to the level of strength/presence of a resource (the original ARM response scale) could be multiplied by the response given by the participant on the new suggested importance scale, which, in turn, could also be multiplied by the response given on the change scale. The importance scale could use a 1–5 scoring system and the change scale could use a 0.5–2 scoring system. For example, a relatively available resource (reflected by a response of "3"), and which is highly valued by the individual ("5"), could receive an overall score of 7.5 if it had changed for the worse, or 30 if it had changed for the better ($3 \times 5 \times 0.5$ vs. $3 \times 5 \times 2$). This would provide a further overall metric to give a richer and more accurate appraisal of an individual's level of resilience.

The scoring system presented above would need to be examined empirically to assess its suitability and to determine whether adjustments were necessary. It is also important to stress that we are not advocating that these revisions would supplant careful qualitative enquiry. As the vignettes in this article illustrate, a quantitative tool, no matter how sophisticated, will always fall short of capturing the richness of experience that in-depth discussions with an individual can explore. That said, the revisions present a range of additional metrics that may guide and aid further inquiry.

9. Conclusions

The originality of this article is threefold. First, it is based on a mixed methods research study that was the first to apply and discuss the ARM in the context of CRSV. Second, it has drawn on the study's qualitative data—consisting of interviews with victims-/survivors of CRSV in BiH, Colombia and Uganda—to reflect on particular statements within the ARM and possible ways of further developing the measure. Third, it has used the ecological concept of connectivity to present a novel social-ecological approach to resilience and to empirically demonstrate the relevance of connectivity for thinking about the ARM and how it might be expanded in new directions.

Walker and Salt (2012, p. 67) underline that "resilience is not a single number or a result". All efforts to measure resilience, thus, necessarily have limitations. The empirically informed suggestions that this article has made, however, would substantially improve and strengthen the ARM. Resilience, Walker and Salt (2012, p. 67) further argue, "is contextual and it depends on which part of the system you are looking at and what questions you are asking". The changes that this research has proposed would enhance the contextual dimensions of the ARM. They are also based on asking different questions and on focusing not just on a "part of the system", but on the dynamic and storied connectivities between individuals and the different *parts* of their social and physical ecologies.

Author Contributions: Conceptualization, J.N.C. and P.J.; methodology, J.N.C. and P.J.; software, J.N.C.; validation, J.N.C. and P.J.; formal analysis, J.N.C.; investigation, J.N.C.; resources, J.N.C.; data curation, J.N.C.; writing—original draft preparation, J.N.C. and P.J.; writing—review and editing, J.N.C.; project administration, J.N.C.; funding acquisition, J.N.C. All authors have read and agreed to the published version of the manuscript.

Institutional Review Board Statement: The research study was conducted in accordance with the Declaration of Helsinki and approved by the following: the Humanities and Social Sciences Ethical Review Committee at the University of Birmingham (ERN_16-1560; 24 February 2017); the European Research Council Executive Agency (Ares(2017)1595734—ERC-2016-CoG—724518_CSRS; 5 May 2017 and reviewed periodically); the Sarajevo School of Science and Technology (16 January 2017); the Research Ethics Committee at Rosario University in Colombia (CEI-DVN021-2-026; 22 August 2017); the Lacor Hospital Institutional Research Ethics Committee in Uganda (012/05/17; 10 July 2017 and renewed annually); and the Uganda National Council for Science and Technology (SS4630; 12 June 2018).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data are not publicly available but the closed files are uploaded into a research repository (https://doi.org/10.25500/edata.bham.00000705, accessed on 1 April 2023).

Conflicts of Interest: The authors declared no conflicts of interest.

Notes

[1] Positive adaptation, however, does not simply mean "bouncing back" from adversity—a common way of thinking about resilience that has its roots in engineering. An engineering approach to resilience emphasises "the capacity to withstand external shocks and bounce-back to the prior stable equilibrium, which is considered as the state of 'normality'" (Davoudi 2018, p. 3). Such an approach is of limited application outside of the physical sciences. The idea of "bouncing back" suggests that individuals can simply return to how they were, and to their former lives, prior to experiencing major adversity. Not only is this simplistic but it may also be completely impossible, as in situations where individuals have lost, for example, homes, loved ones or limbs (Clark 2021). In short, an engineering conception of resilience "assumes that there is something fixed and persistent to bounce back to" (Pickett et al. 2014, p. 149). Yet, in many contexts, such as wars or natural disasters, this is unlikely to be the case. Thinking about the issue more systemically, there are shocks and stressors, such as climate change, that are "not just another problem or crisis to be 'solved' or 'bounced-back' from" (Chandler 2019, p. 305).

[2] This article uses the terminology of "victims-/survivors", to reflect the fact that some of the women and men who participated in the research viewed themselves first and foremost as victims, some regarded themselves as survivors and some identified with the terms "victim" and "survivor", on account of what they had gone through and what they had come through.

[3] These services included child welfare, mental health, juvenile justice, special educational supports and community programmes.

[4] There is also a shorter 12-item version of the ARM, just as there is a 12-item version of the CYRM.

[5] In 2016, a historic peace agreement was signed between the government and the FARC. Despite this, high levels of violence and insecurity persist, particularly in areas where armed groups and criminal gangs fight for control of territory and lucrative drug routes. According to the United Nations (UN 2022), "non-State armed groups and criminal organizations—often involved in drug trafficking, illegal mining and other illicit activities—have expanded their presence in various regions over the past two years".

6   In this study, the recommended consultation took place through discussions with several in-country organisations and focus groups with local people.

7   The name of the camp is redacted to protect the interviewee's identity.

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