Complexity of risk: Mixed methods approach to understanding youth risk and insecurity in post-conflict settings

Laura K. Taylor  
Queen’s University, Belfast  
Christine E. Merrilees  
State University of New York – Geneseo  
Dinka CorkaloBiruski  
University of Zagreb  
Dean Ajdukovic  
University of Zagreb  
E. Mark Cummings  
University of Notre Dame

Corresponding author: Laura K. Taylor, Centre for Identity and Intergroup Relations, School of Psychology, David Keir Building, 18-30 Malone Rd, Queen’s University, Belfast BT9 5BN; l.taylor@qub.ac.uk; +44 028 9097 4217 (tel); +44 028 9097 5486 (fax).

Keywords: youth risk factors, interethnic tension, community violence, protracted conflict, emotional security, Croatia

Acknowledgements: This research was supported by grants from the American Psychological Foundation (APF) and the University of Notre Dame Faculty Scholarship Award Program, Office of the Vice President for Research; the Institute for Scholarship in the Liberal Arts; the Kroc Institute for International Peace Studies; and the Nanovic Institute for European Studies. We thank the focus group and survey participants for their collaboration, as well as the school administrators, psychologists, and teachers in Vukovar. We also express our appreciation to the project staff and graduate students at the University of Zagreb, Croatia.
Author Biographical Statements:

Laura K. Taylor (PhD) is a Lecturer (Assistant Professor) in the Centre for Identity and Intergroup Relations, School of Psychology, at Queen’s University, Belfast. She applies a risk and resilience framework to examine the impact of political violence on children, families, and communities in Colombia, Croatia and Northern Ireland, and with immigrant and refugee youth in the United States. Her research advances two themes which may contribute to the perpetuation or cessation of protracted conflict: (1) individual factors, such as adolescent aggression, prosocial behaviours, and civic engagement, and (2) broader psychosocial processes, such as intergroup relations and school dynamics.

Christine E. Merrilees (PhD) is an Assistant Professor in Psychology at the State University of New York – Geneseo. Her program of research examines the effects of political, community, and family conflict on youth development. Her current focus within this research centers on the multiple positive and negative impacts that group-based identities have on youth in divided communities. As a developmental methodologist, she uses multiple statistical techniques to measure the many ways that individuals, families and communities change and to assess how these changes impact youth and community development.

Dinka CorkaloBiruski (PhD) is a Professor of Psychology at the University of Zagreb, Croatia. She has been involved in numerous research and training projects dealing with psychosocial consequences of war and post-war recovery. Her research interests are in the area of inter-group relations, with emphasis on divided communities, development of minority/majority identity, minority rights and minority education, and post-war social reconstruction.

Dean Ajdukovic (PhD) is a Professor in Social Psychology at the University of Zagreb, Croatia. He uses social reconstruction framework to study intergroup processes in post-conflict communities and recovery from adverse and traumatic experiences in adults and children. This helped identify factors to which people attribute their recovery from conflict-related trauma and clarify the role of social context in healing after organized violence. He also studies psychosocial prerequisites of forgiveness among the youth growing up in communities ridden with ethnic tensions after conflict.

E. Mark Cummings (PhD) is Professor and Notre Dame Endowed Chair in Psychology at the University of Notre Dame. He applies a developmental psychopathology framework in research on the effects of political violence and armed conflict on children, families, and communities. In a series of studies in Northern Ireland he and his colleagues have provided evidence for emotional security about family and community as related to children’s risk and resilience in community contexts of political violence. He has published widely in journals concerned with child clinical psychology and psychiatry, and developmental psychology.
Abstract

In settings of intergroup conflict, identifying contextually-relevant risk factors for youth development in an important task. In Vukovar, Croatia, a city devastated during the war in former Yugoslavia, ethno-political tensions remain. The current study utilized a mixed method approach to identify two salient community-level risk factors (ethnic tension and general antisocial behavior) and related emotional insecurity responses (ethnic and non-ethnic insecurity) among youth in Vukovar. In Study 1, focus group discussions (N=66) with mother, fathers, and adolescents 11 to 15-years-old were analyzed using the Constant Comparative Method, revealing two types of risk and insecurity responses. In Study 2, youth (N=227, 58% male, M=15.88 SD=1.12 years old) responded to quantitative scales developed from the focus groups; discriminate validity was demonstrated and path analyses established predictive validity between each type of risk and insecurity. First, community ethnic tension (i.e., threats related to war/ethnic identity) significantly predicted ethnic insecurity for all youth (β=.41, p<.001). Second, experience with community antisocial behavior (i.e., general crime found in any context) predicted non-ethnic community insecurity for girls (β=.32, p<.05), but not for boys. These findings are the first to show multiple forms of emotional insecurity at the community level; implications for future research are discussed.
Complexity of risk: Mixed methods approach to understanding youth risk and insecurity in post-conflict settings

Young people growing up in a post-conflict environment face a host of challenges, despite the formal end to violence (Ajdukovic & Corkalo Biruski, 2008; Betancourt, McBain, Newnham, & Brennan, 2013; Cummings, Goeke-Morey, Merrilees, Taylor & Shirlow, 2014). Risk factors in the community may manifest themselves in a variety of ways. Not only must young people grapple with the legacy of war or lingering social division, but they also face new threats that are unrelated to the history of intergroup tension (Cummings et al., 2014). Each of these forms of risk may affect youth feelings of security in different ways. That is, youths’ experiences with or exposures to distinct risk factors may be related to different types of responses across domains of functioning (Cummings & Davies, 2011). Moreover, studying the effects of diverse risk factors in communities (e.g., through school, neighborhood, social areas) may be particularly important during the transition from late childhood to adolescence as young people begin to spend more time outside of the home (Bentancourt & Khan, 2008).

This paper contributes to the growing literature on how political violence affects youth (e.g., Barber & Schluterman, 2009), particularly in a post-conflict setting. Our goal is to identify salient community-level risk factors and responses to these risks for adolescents in Vukovar, Croatia, a city devastated during the war in the former Yugoslavia. Understanding the risk and insecurity responses in this context of lingering ethnic tension has important implications for individual youth outcomes as well as for efforts to constructively engage young people in fostering social cohesion (Corkalo Biruski & Ajdukovic, 2016).

Social Context of the Study: Vukovar, Croatia
Vukovar is a “textbook example of a disrupted multi-ethnic community that used to be well integrated and proud of its ethnic diversity before the 1991-1995 war” (Ajdukovic & Corkalo Biruski, 2008, p. 338). Located in eastern Croatia bordering Serbia, Vukovar is a mid-sized city affected by the ethnic violence following Croatia’s declaration of independence in 1991. The war that followed not only caused thousands of deaths and destroyed infrastructure, but also tore the social fabric that had united this once peaceful city. Today, physical markers of the war remain; the shelled 15-story water tower stands out as a stark reminder of the bombing, while businesses and houses in the downtown area are pocked with artillery fire. Moreover, lingering feelings of betrayal and mistrust among Croats (57%) and Serbs (35%) (Croatian Bureau of Statistics, 2013) reflect the deterioration of intergroup relations (Ajdukovic & Corkalo Biruski, 2008; Sekulić, Massey, & Hodson, 2006).

The continuation of ethnic tension in Vukovar is reflected in the relatively separate patterns of daily life. As a protection of minority rights specified in the 1995 Erdut Agreement, separate schooling for minority children is offered (Corkalo Biruski, 2012). As a result, many Croat and Serb youth attend separate school shifts or are taught on separate floors in primary school (Ajdukovic & Corkalo Biruski, 2008). In secondary school, most youth transition to more mixed-ethnic schools where intergroup contact may occur through regular classes and extracurricular activities. However, youth social patterns remain largely separated; even social venues such as coffee shops are designated as Croat or Serb (Reidy et al., 2015). Like other post-conflict societies, despite being born after the height of the war, young people continue to be socialized in a context of intergroup division (Reidy et al., 2015).

**Post-conflict Community-Level Risks**
Understanding youth’s perceptions of risk and how they respond to adverse events is an essential piece in developing a fuller picture of youth experiences in post-conflict settings (Barber, 2008). Moreover, adolescence is a critical time to assess youths’ experiences outside the home (Bentancourt & Khan, 2008). Previous qualitative research has explored some of these risk factors related to youth psychological processes and responses in a setting of ethnic tension (Hammack, 2006; Muldoon, McLaughlin, & Trew, 2007). In addition, quantitative research in other post-conflict settings has identified two types of risk (Taylor et al., 2011). First, despite signing a peace accord or ceasefire agreement, lingering intergroup threat and overt political violence often remain. These forms of intergroup threat are not limited to physical violence, but may also be manifested in socially-salient markings or social cues that are perceived as dangerous or intimidating (Goeke-Morey et al., 2009). For example, greater internalizing and externalizing problems were predicted by perceived social stigma for former child soldiers in Sierra Leone (Betancourt et al., 2013). Lingering intergroup antisocial behavior has also been shown to predict maladjustment, including aggression and emotion problems in adolescents (Merrilees et al., 2014a; Taylor et al., 2014).

Second, although research in post-conflict settings tends to narrowly focus on continuation of intergroup violence, youth also face risk factors that are not necessarily related to intergroup dynamics or the past war. These additional forms of crime or antisocial behavior might be found in any community, not defined by salient social identities or occurring along ethnic group lines (Burgess, Ferguson, & Hollywood, 2007). For example, social disorder, or criminal activity and the lack of general safety, has been shown to relate to negative youth outcomes in post-war Sierra Leone (Betancourt et al., 2013). By distinguishing between different types of risks, the goal is not to definitively state that one form over another is more or less
distressing, but rather, to expand the range of stressors that is typically studied at the community level. That is, a fuller understanding of youths’ lived experiences, and how they respond to these risks, may inform more comprehensive interventions for young people in post-conflict settings.

**Emotional Security at the Community Level**

In situations of ethnic conflict, daily life is often shaped by loss of security, contextual volatility, and unpredictability in the shifting post-war environment (Betancourt & Khan, 2008). Emotional security theory may be one theory to help to understand youths’ responses to different types of risks in these unstable settings (Cummings & Davies, 2011). An extension of attachment theory, emotional security theory describes how a need for security in social relations motivates youths’ responses to perceived threat. That is, when safety is in question, youth may engage in a series of emotional, cognitive, and/or behavioral responses that attempt to regain a sense of security (Cummings et al., 2014; Cummings, Taylor, Merrilees, Goeke-Morey, & Shirlow, 2016). Youths’ responses have implications for their social and emotional functioning; for example, what is adaptive in one context may be maladaptive in another, thereby relating to internalizing and externalizing behaviors over time (Cummings & Davies, 2011). Feeling insecure may also heighten youths’ responses to neutral or non-threatening cues (Cummings & Davies, 2011). Therefore, more research is needed to understand emotional insecurity responses to different risks or threats.

In divided communities, emotional security at the community level, or “feelings [that individuals] and their family members are physically and psychologically safe” (Cummings et al., 2010, p. 216), has been identified as an important link in the pathway between child exposure to adversity and adjustment (e.g., Bar-Tal & Jacobson, 1998). For example, in Northern Ireland, a context of ethno-political divide, children’s emotional insecurity about community mediated
the impact of sectarian antisocial behavior, or intergroup threat, on internalizing and externalizing problems in both boys and girls (Cummings et al., 2010); insecurity also moderated the impact of family conflict on youth delinquency over time (Cummings et al., 2016). Moreover, trajectories of emotional insecurity about community were also related to later adjustment problems (Cummings et al., 2013). In addition, emotional insecurity about community has been found to change with age and be related to youth’s strength of ingroup identity in the later teen years (Merrilees et al., 2014b). These findings suggest that emotional insecurity about community has implications for youth outcomes, is a dynamic construct that changes during the transition from late childhood through adolescence, and may be related to other regulatory processes in contexts of ethnic divide.

However, the previous research has only focused on emotional insecurity at the community level in relation to intergroup threat or tension. For example, non-ethnic antisocial behavior did not predict emotional insecurity about community in Northern Ireland (Cummings et al., 2010). Yet, as noted above, other forms of antisocial behavior emerge and become salient (Goeke-Morey et al., 2009), with implications for youth adjustment. These forms of risk not associated with the history of war or current ethnic tensions, may also be related to emotional insecurity processes. Therefore, more research is needed to identify how youth’s emotional insecurity may vary in response to both ethnic and non-ethnic antisocial risks at the community level in a post-conflict society.

**Current Mixed Methods Approach**

The current project sought to understand two related questions: for adolescents in a setting of ethnic divide, what are the salient risk factors and insecurity responses (Study 1); and how do these risk factors relate to community-level emotional insecurity (Study 2)? A mixed
method, exploratory sequential design which involved distinct phases of data collection was used (Creswell, 2014) to deepen understanding about and develop survey instruments for the constructs of community-level risk and insecurity. This form of mixed method research is ideally suited for field-based studies, as well as the development of socially-relevant scales through the integration of both qualitative and quantitative data (Creswell, 2014). Study 1 aimed to use an inductive approach of qualitative focus groups to gather rich information about participants’ lives, establish construct validity, and allow potential relations among constructs to emerge from the data. Using a deductive approach with a new sample, Study 2 was designed to establish the internal consistency of newly developed measures and to test the discriminant and predictive validity among these variables. Thus, understanding the relations among community-level risk and insecurity may be advanced with the integration of these two sets of findings.

**Study 1**

Focus groups were designed to learn about the viewpoint of the participants, and to strike a balance between informal talk and structured interviews. Focus groups allow for a flexible and fluid conversation (Denzin & Lincoln, 2005). Through these discussions, emergent themes were substantiated by participants’ experiences for youth in Vukovar.

**Participants & Procedures**

The University of Zagreb team has well-established collaboration with local schools and non-governmental organizations; these partners helped to purposefully recruit a sample that balanced ethnicity (Croats/Serbs) and gender among the youth in each target age group. Focus group participants also received a modest compensation ($20). All youth and parent participants provided signed assent and consent, respectively for Studies 1 and 2, and all procedures were approved by the IRB at participating universities.
This process led to ten focus groups, each with 5 to 9 participants, homogenous by ethnicity (N=66; 47% Croat, 53% Serb). To get a more complete picture of the risks facing young people, we conducted two mixed-gendered youth focus groups (50% male) for each of three age groups (11-, 13- and 15-years old). This range was selected because young people this age are reliable reporters of their emotional and cognitive states and experiences (Cummings et al., 2014). In addition, youth of this age are able to make social distinctions between salient ethnic identities and they increasingly spend more time outside the home which may expose them to varying degrees of risk with age (Cummings et al., 2014). However, family perspectives still play an important role in this age group (Reidy et al., 2015); since the majority of the children came from two-parent households (74%), we also conducted two focus groups for mothers (age: $M=41.17; SD=6.90$) and two for fathers (age: $M=41.75; SD=4.33$). The parental perspectives inform how families shape youth perceptions of risk and their responses. Only one child from each family could participate.

All focus groups were conducted in May 2010 by University of Zagreb professors and trained graduate students. The semi-structured focus group guide (see Appendix A) was developed for both parents and youth and included a series of catalyst questions and follow-up prompts to help participants share rich, contextual details (Smith & Dunworth, 2003). To ensure the comprehensibility and applicability of the guide, all questions were pre-tested in focus groups with youth and parents in a community with a similar ethnic composition as Vukovar. In Vukovar, focus groups were convened in a neutral site at a local hotel. Each focus group discussion was recorded and lasted between 60 to 90 minutes. Dialogues were transcribed by Croatian graduate students and translated into English by the Croatian co-investigators.

**Constant Comparative Method Analysis**
The Constant Comparative Method (Maykut & Morehouse, 1994; Smith & Dunworthy, 2003) is a process of systematic coding through sensitive and reliable inspection of qualitative data. In the first stage of analysis, the transcripts are reviewed, any identifying information is omitted, and the entire dialogue is *unitized into chunks of meaning*. Each unit of data receives a descriptive tag that closely captures the essence of the participants’ words as well as an ID.¹ A list of recurring themes, concepts and patterns is created in the second stage, the *process of discovery*. In the third stage, *continuous refinement and inductive category coding*, each unit of data is reviewed and placed in a provisional category, referencing the preliminary themes identified at stage 2. In the fourth stage, as 6 to 8 units of data are compiled into each provisional category, a *rule for inclusion*, or a propositional statement that functions as the basis for including or excluding units, is created. This process is repeated until all units of data are in a group with a rule for inclusion. The fifth and six stages involve *exploring patterns across categories* followed by a *comprehensive review of differences and similarities across categories*. These final steps highlight emergent themes and connections across provisional categories. All stages of data analysis were jointly conducted by a trained graduate and an undergraduate student, both with backgrounds in psychology and intergroup conflict. Both researchers agreed on the final categories and overarching themes (Muldoon, McLaughlin, & Trew, 2007), which were also shared with and agreed upon by all co-investigators.

**Results**

The qualitative analysis identified four themes: two risk factors – community ethnic tension (CET) and community antisocial behavior (CAB), and two related insecurity responses – ethnic community insecurity (ECI) and non-ethnic community insecurity (NCI). Each theme will be presented below as a distinct construct. These constructs were further tested in Study 2.
Risk Factors

Community ethnic tension (CET). In response to questions that asked youth participants to describe the salient threat and risk factors in Vukovar, two clear sets of concepts were discussed. The first set of risk factors were related to tension between Croats and Serbs, or community ethnic tension. Discrimination based on nationality can be seen at school activities and in the distribution of resources. For example, one Serb mother explained, “when two shifts switch, they can see that the Croatian pupils are allowed to wear shoes in school, the same they came from home in. In those same classrooms in which Serbs are forced to wear slippers” [S-M-13]. A 15-year-old Croatian girl noted, “I’ve trained sports for 9 years, and now one Serbian guy took over training and he, like, threatened the whole team on Croatian/Serbian basis, he sent us Croats to the bench the whole time, and he constantly pushed the Serbs to the front” [C-15-1/2]. These excerpts note forms of perceived discrimination in both school and extra-curricular activities.

In addition, tensions rise around annual commemoration of war-related events. "It's only strange that, everyone knows when the fall of Vukovar is commemorated and the children of Serbian nationality simply don't show up at school on that day. Even though they should come to school like any other day, they don't show up. For the last two years I've paid attention to that" explained a Croat mother [C-M-17]. In addition, one father described how a Serb youth was banned from playing in a soccer game to commemorate the war, describing how “the Croats took advantage of [the war] to defend themselves, ‘that kid, the Chetnik child, he can’t play at our memorial’” [S-F-31-32]. Two mothers explained how they feel “bombarded from all sides. // I know what it’s like to lose someone. And it should definitely be commemorated. But I think that it’s too much, as you say, bombardment, for five days, without pause. And then my little girl
becomes tempted to say, ‘Mom: I am…you are, daddy was a Chetnik” [S-M-28]. Yet, these annual patterns of intergroup tension punctuate more present forms of ethnic interactions.

On a daily basis, participants note the presence of ethnic markers, or cues that indicate ethnicity; the expression of ethnic markers is often perceived as provocative. For example, although the pronunciation of words and sayings is slightly different in Croatian and Serbian, the way of speaking bears a strong symbolic meaning and thus can be a source of conflict. “When I play volleyball, there are also those Cro…(stutters) those Croats. And then, when I play and I say how it’s ‘lepo’ (nice, in Serbian) and all that, then they correct me, they say, like ‘it’s said lijepo’ (nice, in Croatia) and stuff. Yeah, and before they used to hit me too, and err… beat me up because of it” [S-15-12]. In addition, parents also note these ethnic markers in relation to their children; “for years, I have been buying from the same woman at the vegetable market. She’s Serbian. And we get along fine. I did some sewing for her. But there was this one time when her son was with her, and he wore a Zvezda club shirt. That just didn’t feel right. My son got hit in the head with a bottle, in Croatia, for wearing a Dinamo club shirt. And that boy wore that shirt in broad daylight just like that” [C-M-10]. Youth participants elaborated upon some of these symbols: “(Y1) If we don't 'Serbing around' (glorify and brag about own ethnic membership) everything's okay. // [Moderator: What does ‘Serbing around’ mean exactly?] // “Well, holding up three fingers, singing Serbian songs. // (Y2) Wearing shirts and hats. … [Moderator: And the other side?] // (Y1) Holding up two fingers, the flag. // (Y2) And shirts” [S-15-07]. The flags refer to the national flags and salutes refer to the three-finger sign used by Serbs and two-finger by Croats. Though language and accent are signs of ethnic differences, other symbols are described as provocative across participants of different ages, gender and ethnicities.
These types of visual ethnic divisions also lead to isolation between the groups; youth often attend social events and go to coffee shops/bars with mostly in-group members. Outside of these bars there are symbols and ethnic markers, and the music played may also be a sign of the ethnic make-up of patrons. For example, one girl explained, “we go to cafes in which they play folk music, and they [Croats] in turn don’t want to, they go where techno is, anywhere as long as it’s not folk, like ‘I can’t listen to this’” [S-15-14]. That is, “there are, for instance, there are a lot of coffee shops in Vukovar which are Serbian and then Croats don’t go there…” [C-15-16]. The parents also recognized this avoidance between groups: “In the town of Vukovar you have cafes and nightclubs which are exclusive and entered only by Serbs or exclusive and entered only by Croats” [S-F-05].

In addition to perceived discrimination, tensions around war commemoration, and ethnic markers that are seen as provocative such as name calling, ethnic slurs, and music, there were also more severe examples of physical conflicts between Croat and Serb youth. However, youth participants noted that there was variability in the frequency of such events based on age and gender. Name calling, for example, is common among younger children. One participant described: “I was going home from school and boys, so, there were in fourth grade, I was in eighth grade, so he liked turned to me and said ‘F**k your Croatian mother!’; and I said, like, ‘What?’ and the boy, so he was [in] fourth grade, so little you could barely see him” [C-15-22]. “That happens more often between the older ones, secondary school kids. My sister tells me, she’s in secondary school. In her class, there were a couple of Serbs and then they (Croats) were beating them; they were fighting all the time so they had to transfer” [C-13-09].

The younger Serb youth also noted the shift toward more overt tension with age: “Well, it's mostly among the older children, the eighth-graders. Children in seventh and eighth grade.
They've always been trouble” [S-11-10]. This perception among the younger participants was confirmed by the 15-year-olds in the study. For example, they noted that “close to, almost every week two or three fights” [C-15-07]. A more extreme case, relating to the ethnic markers above, was accounted by another participant. “A boy was attacked in a bus. There wasn't really any reason, just because he was a Croat. He sang songs, provocative ones, and this guy took a knife and I don't know. He did something to him. And the bus stopped. They called the police. And they went to court because of it” [S-15-02]. Finally, although boys and girls observed ethnic conflict, some participants distinguished between those who participated in such acts: "I think not, at least not us girls, because the guys from the B-class definitely won't come and start beating girls; that happens between boys” [C-13-07]. Thus, despite possible variation by age or gender, community ethnic tension was identified as important risk factors for young people in Vukovar.

**Community antisocial behavior (CAB).** The second set of salient risk factors in Vukovar were related to community antisocial behavior (i.e., threats not associated with ethnicity that might be found in any community). For example, some of the young people felt safe living in Vukovar and the surrounding towns. “It’s easy for us, our town is smaller, so we all know each other and if something bad happens there’s always someone on the street, so we can call” [S-13-02]. A Croat youth echoed this sentiment, explaining, "we all know each other, it's a small village, so there aren't any problems, and I'm okay with everyone” [C-15-03]. Despite some youth expressing a lack of exposure to antisocial behaviors, the majority of youth identified a number of aspects of social life that were threatening and unsettling.

There was a range of perceived forms of community antisocial behavior, from being uneasy walking at night, particularly if alone, to robberies, to physical violence and use of
weapons. Particularly girls and younger children reported being afraid to walk around at night. When asked about walking home, one girl explained, around 11 PM “when you go toward my street, these junkies are right there, so it’s not very safe for me,” [S-13-2] to which a boy responded: “Not to me, to me it’s normal, I’m used to it” [S-13-2]. Though, some boys did express fear at night; “Well, it depends on whom we are with when we’re out. If it’s someone older, then we’re not afraid. Maybe. But if we’re alone, then maybe we’re scared that someone who’s drunk might hit us or something like that” [S-15-1]. Although more pronounced for some, across age and gender, youth participants identified a number of risks with being out at night.

Related to this first theme, there was also a clear awareness of robbery and petty theft. For example, one participant recounted how friends “were in the city center in the evening, it was Saturday, they were going home and two guys stopped them, a lot older, and they asked them for cell phones and money, and they didn't give it, so these guys beat them up, I think a couple of them” [C-13-02]. But theft can also occur in more subtle ways; “we don't hear if someone comes in, like enters this corridor, where we leave our things, and then this girl's things disappeared, so, money, cell phone, even her ticket, so her whole wallet was taken” [C-15-06]. These types of risk were also accompanied by more direct confrontation between people.

An example of more violent forms of community antisocial behavior, youth mentioned the use of weapons. One 11-year-old described, “a friend of mine got attacked by someone's mother, because he threatened her with knife.” [C-11-03], while another noted that "my friend got attacked by about five or six bigger boys, how do I say this, grownups, they kind of attacked him with those bats. As he was returning home from school” [S-11-03]. It was not uncommon for alcohol and drinking to be mentioned in relation to these more severe forms of community antisocial behavior. For example, one Serb youth explained, “well, where I live there isn't very
much crime, there's only one bar, it happens often that they get drunk and then the police gets called, but that's happened maybe three times in five years, but still, I'm still afraid…” [S-13-04]. Thus, across youth focus groups, there were examples of more violent forms of community antisocial behavior, including physical attacks, particularly around bars at night.

Developmental differences may also be seen for this type of risk. For example, the 11- and 13-year-olds talked about hanging out more around their homes and schools, such as neighborhood sport fields and parks. One girl described how, “there are three courts at the school playground and so the boys play soccer there, and some play basketball, and us girls, we go on the smallest court, the one for volleyball… I’m often with them, we go out every day” [C-11-8]. However, the 15-year-olds tend to go to town and city centers, and may stay out until 2 or 3 am [S-15-4]. Another girl described how “the coffee shops we go out are mostly pubs where older people go out too” [C-15-1]. These excerpts depict that by 15-years-old, youth were more likely to be going out into public spaces in the city center such as cafes and pubs, putting them at potentially greater risk for exposure to community antisocial behavior.

The parents’ perspectives mapped on closely to the youth accounts of community antisocial behavior. For example, parents echoed teenagers’ concerns about mixing with older adults: “It all comes down to cafes… instead of finding a solution where children could go out. Something like a discotheque where alcohol would be prohibited; where one goes to have fun – not to stand by the bar… // It’s sad because both 13-year-olds and 20 to 30-years olds venture out to that place… you can find everything there…” [C-F-15]. The parents also described situations in which they were more concerned about their female children, including dropping off and picking them up when they did go out. One mother described: “At first we were against [going to cafes] and I still am. Listen, I have to wait for her, drive her there, drive her back. Now, two
week ago my husband agreed that we should let her go. However, it should be at about 11 or 10:30 PM that we take her home. She’s still a minor, I don’t need problems with the social workers. So we took them, her girlfriends from school, three to four girls, and they came back” [C-M-3]. These forms of community antisocial behavior identified by participants in Vukovar, such as curfew violations, stolen cell phones, or under-age drinking, are not related to ethnic divide.

**Responses to Risk**

**Community ethnic insecurity (CEI).** Related to the first set of risk factors of ethnic tensions and threats, participants described a number of emotional, cognitive, and behavioral responses to them. For example, a young boy described: “They tell me things like ‘Hey, you Serb, what's up?’ and other rude things. And I don't feel good then. It makes me kind of sad, it's not like I do not care” [S-11-05]. One youth explained that “sometimes when I, for example, go to school, the Croats are returning from school, because they are always in the first [morning] shift. And as they walk passing me, I get a little scared that they might start teasing me and telling me things, so I just passed them and walk through a different street because they're walking through mine” [S-11-06]. This excerpt demonstrates the link between cognitive assessments of risk, even though nothing bad has happened to him, and behavioral avoidance. However, other youth respond to those feelings of insecurity with behaviors that may lead to direct confrontation or potential retaliation. For example, a Croat boy described how “in technical school a lot of them carry, I don’t know, knives or something… It’s just for defense. If someone attacks you; you have something to defend yourself with” [C-15-11]. In addition to individual responses to insecurity, these responses may also be seen in intergroup interactions.
Young people also described how what may begin as harmless or neutral conflicts quickly escalate if the disagreement is along Croat/Serb lines. That is, “once when I was playing, the Serbs came and started talking about the war… In fact, I don’t really know what happened. Someone started talking about the war and then the Serbs started saying how they were better, and we stood up to what they were saying. We started arguing and almost got into a fight” [C-11-17]. Other youth discussed their responses to intergroup confrontations: “(Y1) Well you ignore it. // (Y2) You try to avoid them. To separate yourself from them. // (Y3) You go into fight. // (Y4) We go around them… // (Y1) Well if there are more of them, you call your colleagues. So if there’s a fight, there’s a fight” [S-15-8]. These examples include elements of escalation which may reflect a sensitization to threat when interpreting acts by members of the other community. In fact, both sides blame the other group as responsible for provoking or starting fights. For example, “I think that such conflicts that happen, they are mostly provoked from the Croatian side” [S-13-16] and, alternatively, “well, mostly the Serbian side. They begin provoking us and say ugly things and so on” [C-13-03]. These findings suggested that community ethnic insecurity may be a youth response to Croat/Serb tensions.

Parents report that they often worry or fear their children will experience threat from the other group. Some parental responses include restricting movement or intervening at the school. For example, “[my son] went to the vicinity of the Sixth Primary, a Croatian school, with one of his Croatian buddies, and the two of them are really close. The rest of the children there yelled, 'what did you bring that Gypsy here for,' and chased my son off. Then I told him, 'you went there this time, and from now on I forbid you to go.' It is for his own safety” [S-M-11]. However, a limited number of families did encourage their children to fight if confronted by a member of the other ethnic group. One mother explained how “my husband is greatly responsible for that [sons
getting into fights]. He encourages them: 'fight back, measure for measure.' I never approved of that” [M-C-01]. Other youth reported that their fathers told them to “(Y1) get back at them in the same manner. // (Y2) that you should put a knife to his neck” [S-13-5].

**Non-ethnic community insecurity (NCI).** In response to community antisocial behavior that did not fall along ethnic lines, one of the most common responses was making sure to be with a group when out at night. “I’m not afraid. I’m never outside alone. All my friends are there… At least ten of them” [C-11-02]. Another explained, “we're always going in groups so we're safe" [S-13-02]. These kinds of planful behaviors, such as planning routes home or traveling in groups, are some examples of how young people in Vukovar navigate social interactions to regain a **sense of security in the community.**

Parents also reported fear and worry about their children’s experiences of community antisocial behavior, especially when their children are out at night. "I feel safer when he's in the vicinity of the house, in our street, here - there. When he's nearby at all times. I can't fall asleep until I hear him come home. And I keep texting him over the cell phone, 'where are you, is it raining, is it this, is it that?' just so I can know where he is" [S-M-06]. Some families try to get their kids involved in extra-curricular activities to keep them off the streets and out of trouble. "I think we need to direct them to other things and not just leave them out in the street, and not just here but anywhere else. Look, this kid plays the saxophone, if he weren't involved in that, he would go out into the street, end up in the street, in the cafes, and then there would be problems - not only because he's a Serb or a Croat, but because he has no interests" [S-F-04]. These parental worries are particularly pronounced for their female children: "If they get into a dispute, that doesn't concern me. Let her defend herself, not physically, but let her fight back with words, say what she has to say. But if someone was to attack her physically, someone much stronger, that's
a whole different matter. And you can't touch him, so to speak, because he has someone covering his back. After all, he doesn't necessarily need someone covering his back, since men are twice as strong as women. That's what worries me most, now and in the future" [M-C-04]. Overall, both youth and parents reported a number of adaptive and maladaptive responses related to the non-ethnic community insecurity related to experiencing antisocial behavior.

**Study 2**

Study 2 was designed to assess the internal validity of the two community risk factors and two insecurity responses, as well as deductively test the relations among these variables. Based on Study 1, we predicted that the two risk factors, community antisocial behavior and community ethnic tension, would be distinct constructs. Moreover, we expected that each risk in turn, would be uniquely related to its respective insecurity response.

**Participants & Procedures**

Recruitment of Serb and Croat youth across multiple classrooms was conducted through face-to-face meetings with local community and school partners by the University of Zagreb research team. The primary inclusion criterion was students either in the final year of primary school (48% primary) or the first year of secondary school (52% secondary). Only youth without parental consent were excluded; youth provided assent prior to the survey in accordance with the IRB approval. The University of Zagreb team administered quantitative surveys in one class period (45 minutes) across seven schools where classes are taught separately in either Croatian or Serbian language. Two hundred and twenty-seven adolescents (N=227; 59% male; 51% Croat) participated; 84% of participants came from two-parent households and their average age was 15.88 years old (SD = 1.12).

**Measurement Development and Refinement**
Based on the focus groups, quantitative scales for the four constructs of interest were developed by all of the authors. Each member independently read the transcripts and identified potential content for scale items. These lists were combined and final items were developed based on consensus across the research team, with emphasis on local understanding. The resulting scales were pre-tested in a community with a similar ethnic composition as Vukovar; only minor wording changes were needed.

In the newly developed risk scales, community ethnic tension (CET) and community antisocial behavior (CAB), participants are asked how frequently over the last 6 months they have experienced a series of events on a six-point scale: 0 = never to 5 = every day. For the insecurity scales, ethnic community insecurity (ECI) and the non-ethnic community insecurity (NCI), participants indicate on a five-point Likert scale the degree to which they agree with each item, ranging from 1 = completely disagree to 5 = completely agree. Higher scores indicate more frequent experience of risk factors and greater insecurity, respectively.

Exploratory factor analyses (EFA) were conducted to assess to what degree the participants distinguished between the four scales. Maximum likelihood estimation was used as was promax rotation which allowed for factors to be correlated. First, the initial 10-item community antisocial behavior and 11-item community ethnic tension scales were analyzed together. The community antisocial behavior items loaded onto the first factor (average loading .64, range .50 to .71), except for item 10 (spray painted on property) which was dropped from further analyses; the revised 9-item community antisocial behavior scale had good internal consistency (α=.85). Distinct from community antisocial behavior, the community ethnic tension items loaded onto two factors (average loading .65, range .50 to .87), except item 2 (I’ve been teased because of my ethnicity) which was dropped from subsequent analyses. After examining
the items in detail, there was no apparent conceptual or methodological distinction between the
two potential sub-factors, so the community ethnic tension scale was left as an intact unit and the
alpha for the revised 10-item scale was good (α=.86). Thus, the community antisocial behavior
and community ethnic tension scales had good internal consistencies and captured distinct risk
factors that were also significantly correlated (r(227)=.65, p<.001).

Second, a similar EFA process of comparison and refinement was repeated for the
insecurity scales, each of which was initially 12-items. The combined EFA had a few cross-
loadings between the two factors; any cross-loadings were less than .4, and each of the items
loaded more strongly onto its original scale. Next, a single-factor EFA was conducted for ethnic
community insecurity and suggested that only five of the original items loaded onto the factor
(average .62, range .37 to .91). The final 5-item ethnic community insecurity had adequate
internal consistency (α=.73). A separate single factor solution for non-ethnic community
insecurity revealed acceptable loadings (averaged .63, range .42 to .81) except for two low
loadings: item 10 (I feel safe in my town) and 11 (My peers and I are well aware of places in
town that are safer than others) which were dropped; the final 10-item non-ethnic community
insecurity scale had good internal consistency (α=.88). The two forms of emotional insecurity at
the community level were distinct, yet correlated (r(227)=.28, p<.01). Thus, each of the four
constructs from Study 1 were adequately measured by the newly developed scales.

**Relations between Risk and Insecurity Responses**

Table 1 includes the bivariate correlations among the final scales (Appendix B). A set of
preliminary t-tests on demographic variables revealed that boys reported higher levels of
exposure to non-ethnic community antisocial behavior (t(222) = 3.11, p < .01; boys: M = 14.29,
SD = 8.71; girls: M = 10.89, SD = 7.01), although girls reported greater sense of non-ethnic
insecurity \( t(222) = -.849, p < .001; \) boys: \( M = 16.91, SD = 7.08; \) girls: \( M = 25.23, SD = 7.46). \)
Croat youth reported higher levels of community ethnic tension \( t(210) = 2.76, p < .01; \) Croats: \( M = 19.82, SD = 11.42; \) Serbs: \( M = 15.89, SD = 9.15), \) but the rest of the comparisons by ethnicity were non-significant. Regarding age, the only significant difference was that youth in secondary schools reported more community ethnic tension compared to elementary schools \( t(225) = -3.16, p < .01; \) elementary: \( M = 15.62, SD = 9.85; \) secondary: \( M = 19.95, SD = 10.70). \)

To test the second research question related to the predictive and discriminant validity of the risk and insecurity responses, a path analysis was conducted in AMOS Graphics 18 using full information maximum likelihood (Figure 1). In this model, there were no significant age or ethnicity effects on insecurity. Triangulating the predictions derived from qualitative data, ethnic tensions positively predicted ethnic community insecurity \( (\beta = .44, p < .001); \) this demonstrates predictive validity between these two constructs. However, the direct effect for community antisocial behavior on non-ethnic community insecurity was only significant for girls. That is, gender moderated the effect of the path between non-ethnic forms of risk and responses. For girls, consistent with the qualitative analysis, there was a positive relation between non-ethnic community antisocial behavior and non-ethnic insecurity \( (\beta = .32, p < .05). \) Finally, discriminate validity was established as community ethnic tension did not predict non-ethnic community insecurity, nor did community antisocial behavior relate to ethnic insecurity.

**Discussion**

This study used mixed methods to investigate how contextually-relevant risk factors affected insecurity responses among youth growing up in Vukovar, a setting of intergroup divide. In this post-conflict context, two primary types of community-level risks for children and adolescents were identified in the qualitative study: community ethnic tensions (CET) and more
general community antisocial behavior (CAB). In response to these risk factors, and consistent with emotional security theory, young people responded with two distinct forms of insecurity: ethnic community insecurity (ECI) and non-ethnic community insecurity (NCI). This research advances past work in other protracted conflicts by distinguishing between two types of community-level emotional insecurity (e.g., Cummings et al., 2010; 2016). Moreover, the quantitative data of Study 2 triangulated these findings. The scales developed from the focus groups had adequate psychometric properties and, in turn, each type of community risk was distinctly related to its relevant form of insecurity. However, although boys reported more experience with community antisocial behavior and girls more non-ethnic community insecurity, this link between these factors was only significant for girls.

**Emotional Security at the Community Level**

This study builds on previous research on the importance of security perceptions to psychological adjustment for adults in contexts of political violence (e.g., Bar-Tal & Jacobson, 1998), by examining an adolescent sample and examining two forms of community insecurity. Past research with adolescents in such settings has found that emotional insecurity processes outside of the family environment have implications for youth well-being and adjustment (Cummings et al., 2010; 2013). Moreover, previous studies have also shown that multiple forms of emotional insecurity may interact with each other over time (Cummings et al., 2016). Notably, past research has found no gender differences in the relation between experiences of intergroup risk and related insecurity (Cummings et al., 2010), a finding that was replicated in this study. The current study also found that ethnic tensions remain salient for young people, consistent with findings based on similar factors in Northern Ireland (Cummings et al., 2014). Yet, previous
research has only focused on forms of emotional insecurity at the community level related to intergroup threat (Goeke-Morey et al., 2009).

Extending this past work, Study 1 allowed for the emergence of a related, yet distinct, form of emotional insecurity: non-ethnic community insecurity. That is, although the legacy of ethnic tension persists, young people growing up in Vukovar also face a host of challenges and forms of antisocial behavior that do not fall along group lines. Young people in Vukovar and their parents identified a number of emotional, cognitive, and behavioral responses to general forms of risk that could occur in any setting. Based on these findings, which were triangulated with and supported by the quantitative analyses in Study 2, future researchers and practitioners should also include more general forms of risk facing adolescents, for example, non-ethnic community antisocial behavior. Increasingly attention is being paid to the impact of these other types of community risks in countries plagued by political violence (Betancourt et al., 2013; Burgess et al., 2007; Taylor et al., 2011). In the current study, however, the link between community antisocial behavior and non-ethnic community insecurity only held for girls. Future research should aim to replicate these findings and ensure sufficient statistical power to detect what might be smaller effect sizes. Moreover, proposed interventions should consider multiple types of risk factors and insecurity responses. Thus, further study of contextually-situated measures of multiple risk factors in post-conflict settings is needed.

Limitations and Future Research

Despite the two-phase mixed method approach, the quantitative data in Study 2 was cross-sectional. Although we can compare ages, this design does not allow for testing developmental questions about change over time. Future longitudinal research should be conducted to assess how experience with risk may change with age and how those changes may
in turn affect the related emotional insecurity processes. To extend the current findings, more research is needed to explore the role of the two forms of insecurity as mediators of other youth outcomes, such as internalizing and externalizing problems. Moreover, the growing literature on youth resilience processes (Jordans, Pigott, & Tol, 2016; Ungar, 2015) suggests that future research should measure constructive outcomes and community-level resources such as social capital (Hall Tol, Jordans, Bass & de Jong, 2014).

**Conclusion**

Using mixed methods, the current study extends previous research to establish the contextual, discriminate, and predictive validity of new measures of community-level risk and insecurity among young people in Vukovar. The results may be considered in translational research or interventions that aim to protect youth from exposure to community risks. These findings may also have implications in other contexts of intergroup divide.
References


Corkalo Biruski, D. (2012). Lessons learned from the former Yugoslavia: The case of Croatia. In


Endnotes
Figure 1. Saturated path analysis of the risk factors predicting emotional insecurity responses of adolescents in Vukovar (N=227). Standardized path coefficients reported. Correlations between exogenous constructs, error variances, and control variables were omitted from the model for readability. Dashed lines indicate non-significant paths. Girls coefficient in **bold**; boys coefficient in **italics**; combined in normal font. *p<.05; **p<.01; ***p<.001.

1 For example, C-11-06 indicates that the speaker is an 11-year-old Croat and it is unit 06 in the transcript; S-M-25 indicates the speaker is a Serb mother and the excerpt is the 25th in the transcript.
2 An offensive name for Serbs referring to the collaborationist military units from the World War II.
3 // indicates a change in speaker within a unit.
4 Zvezda is a Serbian soccer team and Dinamo is a Croatian soccer team.
Table 1: Means, Standard Deviations and Bivariate Correlations for All Study Variables (N=227).

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Minority Status</td>
<td>51% Croat, 49% Serb</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Female</td>
<td>59% male, 41% female</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Age</td>
<td>15.88</td>
<td>1.12</td>
<td>-.107</td>
<td>-.018</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Community Antisocial Behavior (CAB)</td>
<td>12.82</td>
<td>8.17</td>
<td>-.021</td>
<td>-.205**</td>
<td>.111</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Community Ethnic Tension (CET)</td>
<td>17.87</td>
<td>10.50</td>
<td>-.112</td>
<td>.237**</td>
<td>.651**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Non-ethnic Community Insecurity (NCI)</td>
<td>20.28</td>
<td>8.30</td>
<td>.067</td>
<td>.495**</td>
<td>-.106</td>
<td>.012</td>
<td>.010</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7 Ethnic Community Insecurity (ECI)</td>
<td>14.19</td>
<td>4.50</td>
<td>.034</td>
<td>-.119</td>
<td>.040</td>
<td>.199**</td>
<td>.341**</td>
<td>.275**</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: *p<.05; **p<.01; ***p<.001.