Perceived Threat, Social Identification, and Psychological Well-Being: The Effects of Political Conflict Exposure

Katharina Schmid
University of Oxford, United Kingdom

Orla T. Muldoon
University of Limerick, Ireland

Using data drawn from the adult population in Northern Ireland (N = 1,515), this article examines the relationship between perceived intergroup threat and psychological well-being, taking into consideration the mediating role of social identification and the moderating role of political conflict exposure. Results by and large confirmed our predictions that perceived threat would be directly associated with poorer well-being but would also exert a positive indirect effect on well-being via increased social identification. However, these relationships were dependent on individuals’ prior conflict exposure, such that the positive indirect relationship between perceived threat and psychological well-being emerged only for two subpopulations: individuals who had high direct and high indirect exposure to conflict, and individuals who had low direct, but high indirect conflict exposure. No indirect effects emerged for individuals with relatively lower conflict exposure. Results are discussed with regard to their implications for research on the consequences of intergroup threat in political conflict settings and beyond.

KEY WORDS: perceived intergroup threat, social identification, psychological well-being, political conflict exposure, latent class analysis.

Intractable intergroup conflicts are typically characterized by extreme intergroup violence that can prevail over many years and thus constitute a very real source of threat to individuals subjected to such experiences (e.g., Bar-Tal, 2004; Rouhana & Bar-Tal, 1998). Despite this, only recently has research begun to focus on the potential consequences of experiencing such threat for psychological health-related outcomes (e.g., Palmieri, Chipman, Canetti, Johnson, & Hobfoll, 2010).

This article focuses on a particular type of threat, perceived intergroup threat, and its consequences for psychological well-being. We propose that perceived threat can have direct negative consequences for psychological health, yet that it can also lead to greater social identification and, consequently, exert positive indirect effects on well-being. However, we argue that the effects of perceived intergroup threat in situations of intergroup conflict depend critically on exposure to political conflict, a key background variable that should not only affect psychological well-being directly but should also qualify the extent to which perceived intergroup threat affects psychological well-being.
In this article, then, we examine not only direct effects of perceived intergroup threat on well-being but also indirect effects via increased social identification with the group perceived to be under threat. Moreover, we examine this set of relationships whilst factoring in the effects of political conflict exposure, which is long known to affect psychological well-being. Specifically, this article examines both independent effects of political conflict exposure on psychological well-being, as well as the extent to which conflict exposure moderates the relationship between perceived threat and psychological well-being. We test these predictions using a general-population sample in a setting that has a long history of violent intergroup conflict, Northern Ireland.

*Political Conflict Exposure, Perceived Threat, and Psychological Well-Being*

A substantial body of research documents the adverse consequences of exposure to violent political conflict for psychological health (e.g., Hobfoll, Canetti-Nisim, & Johnson, 2006; Johnson, Canetti, Palmieri, Galea, Varley, & Hobfoll, 2009; Muldoon, 2004; Palmieri, Canetti-Nisim, Galea, Johnson, & Hobfoll, 2008). However, little prior research has considered the interplay between political conflict exposure and perceived threat, despite the fact that threat perceptions play a key role in violent intergroup conflict settings (see, e.g., Tausch, Schmid, & Hewstone, 2010). An exception to this is a study by Schmid, Tausch, Hewstone, Hughes, and Cairns (2008), showing that exposure to conflict was related to higher realistic threat perceptions surrounding physical safety. Similarly, Canetti-Nisim, Halperin, Sharvit, and Hobfoll (2009) found exposure to political violence to be indirectly associated with increased threat perceptions via psychological distress. Both studies suggest that political conflict exposure can act as a distal background factor to threat, yet neither of these studies considered the effects of threat on psychological well-being nor potential interactive effects between threat perceptions and conflict exposure.

Perceived intergroup threat is conceptualized as the belief that a given out-group is in some way detrimental to one’s in-group. Intergroup threats can take many forms (see, e.g., Riek, Mania, & Gaertner, 2006 for a review), including threats surrounding positive distinctiveness or status (e.g., Scheepers, 2009; Scheepers, Ellemers, & Sintemaartensdijk, 2009), or symbolic threats surrounding worldviews, values, and beliefs (e.g., Stephan and Stephan, 2000). Crucially, and of particular relevance in situations of intractable intergroup conflict where relations between groups often reflect zero-sum perceptions (Kelman, 1999), intergroup threats may also concern real or tangible issues, which arise due to concerns surrounding physical or material safety (e.g., Cottrell & Neuberg, 2005) or due to competition over power, resources, or territory (e.g., Esses, Jackson, & Armstrong, 1998; Stephan & Stephan, 2000).

Research on threat perceptions in intergroup conflict has to date focused almost exclusively on their consequences for intergroup relations, showing intergroup threat to play a central role in fostering prejudice and perpetuating conflict (e.g., Canetti-Nisim, Ariely, & Halperin, 2008; Stephan, Ybarra, & Morrison, 2009; Maoz & McCauley, 2009; Schmid et al., 2008; Tausch, Hewstone, Kenworthy, Cairns, & Christ, 2007). Yet despite intergroup threats constituting, at their core, adverse intergroup stressors, relatively little attention has been paid to their potential consequences for psychological health outcomes. In this article, we focus explicitly on the potential effects of perceived intergroup threat on psychological well-being and argue that such threat should be thought of as a key negative intergroup stressor, which may bring about negative consequences for psychological well-being. Thus, although we conceive of intergroup threat as a distinct group-based phenomenon which challenges the well-being of the group per se (as is implied in conventional conceptualizations of intergroup threat), we also predict that it holds the potential to challenge individual psychological well-being, particularly if the threat holds a self-threatening component as is often the case in violent political conflicts.
Although perceived threat may adversely affect individuals’ psychological well-being, the effects of experiencing such threat may not be exclusively negative. Indeed, prior research has found that upon perceiving a threat to their group individuals tended to show an increase in strength of identification with their threatened group (e.g., Branscombe, Ellemers, Spears, & Doosje, 1999a; Ethier & Deaux, 1994). Moreover, a growing body of research attests to the positive relationship between social identification and psychological health (see, for example, Applied Psychology: An International Review 58(1) for a special issue devoted to research on identity, health, and well-being; see also Jetten, Haslam, & Haslam, 2012 for a recent edited volume on the same topic). One may thus expect that increased social identification alleviates some of the negative effects of perceived threat. In other words, perceived threat, by virtue of its positive relationship with social identification, may also be indirectly, and positively, associated with better psychological well-being.

Similar findings have been obtained in work considering the effects of other intergroup stressors, such as perceived discrimination (e.g., Branscombe, Schmitt, & Harvey, 1999b). Research has thus found that although perceiving discrimination can bring about negative consequences for a range of psychological health outcomes (e.g., Finch, Kolody, & Vega, 2000; Jasinskaja-Lahtti, Liebkind, Jaakkola, & Reuter, 2006; Liebkind & Jasinskaja-Lahtti, 2000), such negative intergroup stressors do not always affect well-being adversely (e.g., Verkuyten, 1986, 2001; see, for example, Porter & Washington, 1993 for a review). Branscombe et al.’s (1999b) rejection-identification model provides an explanation for such dual effects: perceiving rejection may not only exert negative effects on well-being, but it can also prompt individuals to identify more strongly with their in-group, which can then serve as a coping mechanism (see, e.g., Cronin, Levin, Branscombe, van Laar, & Tropp, 2012; Haslam, O’Brien, Jetten, Vormedal, & Penna, 2005; Schmitt, Spears & Branscombe, 2003; see also Crocker, Luhtanen, Blaine, & Broadnax, 1994).

Based on prior work on the consequences of perceived threat and extrapolating from prior research on perceived discrimination, we predict a similar dual-pathway model concerning the effects of perceived threat on psychological well-being. We thus argue that perceived intergroup threat can be negatively associated with psychological well-being but can also covary positively with social identification, by virtue of which some of its negative effects may be alleviated. Perceived threat may therefore exert a negative direct effect but also a positive indirect effect—via increased social identification—on psychological well-being. Crucially, however, we do not expect these effects to occur universally but argue that the extent to which intergroup threat affects psychological well-being depends on individuals’ prior exposure to intergroup conflict.

The Present Research

The present research extends prior research in important ways. We propose and test a threat-identification model to examine the extent to which perceived threat is not only directly related with well-being, but also indirectly, via its positive effects on social identification. Moreover, our research seeks to advance understanding on the interplay between perceived threat and political conflict exposure in explaining psychological well-being. We thereby extend prior work by not only considering, in isolation, linear relationships between political conflict exposure and psychological well-being (see, e.g., Hobfoll et al., 2006; Johnson et al., 2009) or between conflict exposure and perceived threat (e.g., Canetti-Nisim et al., 2009; Schmid et al., 2008) but by also considering the interactive effects of perceived threat and conflict exposure on well-being. Specifically, we consider political conflict exposure as a moderator of the proposed threat-identification model, such that we expect both the direct and indirect effects of perceived threat on psychological well-being to be qualified by variations in exposure to political conflict.
Prior research on identity-based threats has found, for example, that for individuals for whom the threat is meaningful (e.g., for highly identified individuals) the relationship between threat and prejudice is stronger (e.g., Bizman & Yinon, 2001). We extend this reasoning to argue that in situations of violent conflict, conflict exposure should act as a key moderator of threat effects on well-being, since individuals who have had higher exposure to conflict will attach greater substantive meaning to the threat and perceive it as more salient than individuals with relatively lower conflict exposure. In other words, we argue that the intensity with which threat affects psychological well-being can depend on variations in conflict exposure to the extent that individuals who have had relatively higher conflict exposure will show stronger threat effects than individuals with low exposure.

In conceptualizing conflict exposure, a key distinction can be made between direct and indirect exposure to political conflict (see Hayes & McAllister, 2002), an aspect, which has, as yet, not been sufficiently factored into previous research in this area. Direct exposure pertains to individuals’ personal experiences of conflict-related events, while indirect exposure pertains to vicarious conflict-related experiences of family members or close friends, which indirectly affect the individual. Conflict exposure then is typically assessed by means of (more or less comprehensive) event lists that capture presence or absence of a range of experiences among a given cohort of individuals. While this is standard and acceptable practice, subsequent treatment of such data needs to be carefully considered (Netland, 2005). Indeed, research examining conflict exposure often employs event summation, whereby the number of events indicated to have been experienced is simply summed to create a quantitative exposure index. However, since conflict exposure typically reflects not only quantitative but also qualitative variations (such that individuals may experience different types of events and of differing intensities), event summation may not only give rise to multiplicity effects that may result in biased estimates, but it may also mask important qualitative nuances in conflict experience (see Netland, 2005). Since acknowledging both dimensions of variability in experience of violence is important to advance research in this field (see also Muldoon & Lowe, 2012), we employed a novel approach to dealing with exposure data, using latent class analysis (e.g., McCutcheon, 1987; Muthén, 2001), which allowed us to identify specific subpopulations with distinct patterns of conflict exposure to achieve a more nuanced understanding of the consequences of such exposure, both direct and indirect. Our research thus attends not only to the extent but also to the nature of individuals’ exposure to conflict.

We tested our predictions using data collected from the general population in Northern Ireland. In line with aforementioned considerations surrounding the treatment of exposure data, our research first sought to capture the construct of political conflict exposure using a more adequate analytical approach (using latent class analysis allowing for the identification of heterogeneous subpopulations differing in conflict exposure). We then tested the independent effects of political conflict exposure on perceived threat, social identification, and psychological well-being, before moving on to test our predicted dual pathway model on the relationship between perceived intergroup threat and psychological well-being, moderated by prior political conflict exposure (see Figure 1).

We derive the following hypotheses from the above:

**H1**: Individuals will be characterized by variations in political conflict exposure as defined by a set of heterogeneous subpopulations (latent classes) reflecting quantitative and qualitative variations in political conflict exposure.

**H2**: Individuals who have had relatively greater exposure to conflict will report poorer psychological well-being. They will also hold higher threat perceptions.

**H3a**: Greater perceived intergroup threat will exert a direct negative effect, but an indirect positive effect via greater social identification, on psychological well-being.
H3b: The direct, as well as the indirect, relationships between perceived intergroup threat and psychological well-being will depend on variations in conflict exposure. Individuals who have had relatively higher conflict exposure will show stronger relationships between perceived intergroup threat and psychological well-being.

Method

Context, Participants, and Design

Northern Ireland has a long history of violent intergroup conflict between those who want Northern Ireland to remain part of the United Kingdom (Unionists/Loyalists, generally supported by Protestants) and those who want Northern Ireland to be reunited with the Republic of Ireland (Republicans/Nationalists, generally supported by Catholics; see, for example, Cairns & Darby, 1998). The conflict has been accompanied by periods of intense political violence during the so-called “Troubles” (a period of violent conflict typically dated between 1969 and 1998, although violence has also occurred outside this period), which resulted in over 3,500 deaths, over 35,000 injuries, 16,000 people charged with terrorist offences, 34,000 shootings, and 14,000 bombnings.

We sampled at random 2,000 adults (aged 18 years and above) from the Northern Irish population; 485 respondents either refused to indicate their ethno-religious/ethno-national background or were not originally from Northern Ireland, resulting in a final sample size of \( N = 1,515 \) (\( M_{\text{age}} = 48.49, \ SD = 16.06, \text{ age range 18–92} \)); 685 respondents were Catholic (297 males, 388 females), and 919 respondents were Protestant (379 males, 540 females).

Data collection was subcontracted to a professional survey organization that employed computer-assisted telephone interviewing by trained social survey interviewers. A quota control based on adult population statistics from the most recent Census results was employed to ensure a
representative sample. Due to the sensitive nature of the questions asked in the survey, we further provided respondents with a free phone-counseling service, which remained active for three months after completion of data collection. No calls were received.

Measures

Since data were collected as part of a larger research project, respondents completed measures of political conflict exposure, perceived intergroup threat, social identification, and psychological well-being, alongside other measures unrelated to the present research. For perceived intergroup threat and social identification, questions referred to ethno-religious group membership.

Political conflict exposure was measured using 28 items of particular relevance within the Northern Ireland context. We measured both direct (18 items) and indirect (10 items) exposure to conflict and violence. Using a binary response format (0 = no, 1 = yes), respondents indicated whether they had ever directly experienced 18 possible events/situations and indirectly experienced 10 possible events/situations. Example items capturing direct exposure were: “During the Northern Irish conflict were you ever caught up in a bomb explosion?”; “During the Northern Irish conflict were you ever injured as a result of any incident?”; or “During the Northern Irish conflict were you ever threatened by a paramilitary group?” Example items capturing indirect exposure were: “During the Northern Irish conflict was a member of your family or a close friend injured as a result of any incident?” or “During the Northern Irish conflict was a member of your family or a close friend held in detention?” Table 1 shows the full list of direct and indirect conflict experiences assessed.

Perceived intergroup threat was measured using five items that tapped different types of threat that were of contextual relevance to the Northern Irish conflict: realistic threat concerning political power, realistic threat concerning physical safety, and symbolic threat surrounding identity. Using 5-point Likert scales ranging from 1 = strongly disagree to 5 = strongly agree, respondents rated their agreement with the following two items capturing realistic threat surrounding political power: “I feel threatened if the political parties representing [Out-Group] are in power in Northern Ireland” and “If the political parties that [Out-Group] vote for got into power, they would work toward the benefit of all people in Northern Ireland, whether [In-Group] or [Out-Group]” (reverse coded). On the same Likert-scale, respondents also answered the following item capturing realistic threat concerning physical safety: “In certain areas I would be afraid of being identified as [Out-Group].” Finally, respondents also answered two symbolic threat items: “When I see a [Out-Group Flag] flown in an area, I feel as though my [In-Group] identity is under threat.” and “I feel threatened when [Out-Group] express their identity and celebrate their cultural traditions.” The five items capturing different realistic and symbolic threats were highly correlated and defined by a single-factor solution, a finding not untypical in this context (e.g., Tausch et al., 2007), where symbolic threats can often take on more realistic components. The items formed a reliable scale (Cronbach’s $\alpha = .70$). Higher scores reflect greater intergroup threat perceptions.

Social identification was measured using six items, taken from Luhtanen and Crocker’s (1992) collective self-esteem scale. Using 5-point Likert scales (1 = strongly disagree, 5 = strongly agree), respondents rated their agreement with the following items: “You often regret that you are [In-Group]” (reverse coded); “In general, you are glad that you are [In-Group]”; “Overall you feel that being [In-Group] is not worthwhile” (reverse coded); “You feel good about being [In-Group]”; “Being [In-Group] is an important reflection of who you are”; and “In general, being [In-Group] is an important part of your self-image.” The items formed a reliable scale (Cronbach’s $\alpha = .77$), with higher scores reflecting greater social identification.

1 Catholic respondents were asked about the Union Jack flag, while Protestant respondents were asked about the Irish Tricolour flag.
Table 1. Conditional Item Probabilities for Each of the 18 Direct and the 10 Indirect Conflict Experience Items Across Classes

<table>
<thead>
<tr>
<th>Direct Experiences</th>
<th>CLASS 1</th>
<th>CLASS 2</th>
<th>CLASS 3</th>
<th>CLASS 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Direct and Indirect Exposure</td>
<td>Moderate Direct and Indirect Exposure</td>
<td>Low Direct/High Indirect Exposure</td>
<td>Low Direct and Indirect Exposure</td>
</tr>
<tr>
<td>1. Bombing</td>
<td>0.561</td>
<td>0.322</td>
<td>0.268</td>
<td>0.171</td>
</tr>
<tr>
<td>2. Riot</td>
<td>0.794</td>
<td>0.459</td>
<td>0.247</td>
<td>0.054</td>
</tr>
<tr>
<td>3. Shooting</td>
<td>0.525</td>
<td>0.256</td>
<td>0.069</td>
<td>0.022</td>
</tr>
<tr>
<td>4. Intimidated</td>
<td>0.676</td>
<td>0.443</td>
<td>0.196</td>
<td>0.053</td>
</tr>
<tr>
<td>5. Member of security forces</td>
<td>0.140</td>
<td>0.063</td>
<td>0.077</td>
<td>0.018</td>
</tr>
<tr>
<td>6. Threatened by security forces</td>
<td>0.428</td>
<td>0.134</td>
<td>0.055</td>
<td>0.010</td>
</tr>
<tr>
<td>7. Member of paramilitary group</td>
<td>0.076</td>
<td>0.022</td>
<td>0.002</td>
<td>0.000</td>
</tr>
<tr>
<td>8. Threatened by paramilitary group</td>
<td>0.420</td>
<td>0.213</td>
<td>0.085</td>
<td>0.013</td>
</tr>
<tr>
<td>9. Witnessed violent acts</td>
<td>0.805</td>
<td>0.486</td>
<td>0.163</td>
<td>0.042</td>
</tr>
<tr>
<td>10. Perpetrator of violent acts</td>
<td>0.098</td>
<td>0.020</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>11. Injured</td>
<td>0.341</td>
<td>0.097</td>
<td>0.030</td>
<td>0.004</td>
</tr>
<tr>
<td>12. Serious handicap</td>
<td>0.091</td>
<td>0.019</td>
<td>0.009</td>
<td>0.001</td>
</tr>
<tr>
<td>13. Separated from family</td>
<td>0.226</td>
<td>0.043</td>
<td>0.011</td>
<td>0.004</td>
</tr>
<tr>
<td>14. Forced to leave NI</td>
<td>0.044</td>
<td>0.016</td>
<td>0.007</td>
<td>0.002</td>
</tr>
<tr>
<td>15. Bereaved</td>
<td>0.401</td>
<td>0.015</td>
<td>0.324</td>
<td>0.010</td>
</tr>
<tr>
<td>16. Left without food/shelter</td>
<td>0.152</td>
<td>0.028</td>
<td>0.011</td>
<td>0.006</td>
</tr>
<tr>
<td>17. Material alteration</td>
<td>0.373</td>
<td>0.134</td>
<td>0.075</td>
<td>0.016</td>
</tr>
<tr>
<td>18. Held in detention</td>
<td>0.259</td>
<td>0.035</td>
<td>0.006</td>
<td>0.001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indirect Experiences</th>
<th>CLASS 1</th>
<th>CLASS 2</th>
<th>CLASS 3</th>
<th>CLASS 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Killed</td>
<td>0.797</td>
<td>0.104</td>
<td>0.850</td>
<td>0.036</td>
</tr>
<tr>
<td>2. Member of security forces</td>
<td>0.324</td>
<td>0.273</td>
<td>0.536</td>
<td>0.167</td>
</tr>
<tr>
<td>3. Member of paramilitary group</td>
<td>0.368</td>
<td>0.108</td>
<td>0.044</td>
<td>0.002</td>
</tr>
<tr>
<td>4. Injured</td>
<td>0.801</td>
<td>0.300</td>
<td>0.439</td>
<td>0.033</td>
</tr>
<tr>
<td>5. Serious handicap</td>
<td>0.416</td>
<td>0.104</td>
<td>0.230</td>
<td>0.009</td>
</tr>
<tr>
<td>6. Forced to leave NI</td>
<td>0.224</td>
<td>0.077</td>
<td>0.026</td>
<td>0.008</td>
</tr>
<tr>
<td>7. Bereaved</td>
<td>0.774</td>
<td>0.100</td>
<td>0.761</td>
<td>0.017</td>
</tr>
<tr>
<td>8. Witness of violent acts</td>
<td>0.875</td>
<td>0.492</td>
<td>0.292</td>
<td>0.052</td>
</tr>
<tr>
<td>9. Perpetrator of violent acts</td>
<td>0.311</td>
<td>0.063</td>
<td>0.023</td>
<td>0.001</td>
</tr>
<tr>
<td>10. Held in detention</td>
<td>0.560</td>
<td>0.201</td>
<td>0.074</td>
<td>0.011</td>
</tr>
</tbody>
</table>
Psychological well-being was measured using the 12-item version of the General Health Questionnaire (GHQ-12; Goldberg, 1978), which is a widely used psychological screening instrument, generally used to detect mild psychiatric morbidity and disruption in psychological functioning. The GHQ-12 includes items such as “How often have you recently lost much sleep over worry?” (reverse coded); “How often have you felt you are playing a useful part in things?”; or “How often have you recently been feeling unhappy or depressed?” (reverse coded; for the full GHQ-12 scale, see Goldberg, 1978). Responses on the GHQ-12 were made using the following response options: 1 = never/ not at all, 2 = a little, 3 = sometimes, 4 = always/ a lot. The 12 items formed a reliable scale (Cronbach’s $\alpha = 0.84$); higher scores reflect better psychological well-being.

Results

A Latent Class Model of Political Conflict Exposure

In order to test our predictions derived in Hypothesis 1, we used latent class analysis (LCA) on our political conflict experience items, allowing us to identify unobserved subpopulations characterized by variations in conflict exposure (based on individuals’ probability of having experienced each of the 28 direct and indirect conflict experiences). LCA rests upon the premise that there exists a latent categorical variable $c$ that underlies a number of categorical manifest variables $u$ (Muthén, 2001). The categorical nature of the latent variable $c$ is substantiated by the subsumed presence of a number of $K$ classes that can be understood as heterogeneous subpopulations, which are not directly observed, but inferred from the data (Lubke & Muthén, 2005). LCA is thus a statistical technique used to classify individuals within a larger sample into a set of different subpopulations based on individuals’ probability of endorsing each set of items (McCutcheon, 1987; Muthén, 2001).

We estimated parameters for all models reported in this article using the Mplus version 4.2 statistical package (Muthén & Muthén, 1998–2007), using maximum-likelihood estimation with robust standard errors. We subjected our 28 binary exposure items to LCA, assessing model fit in iterative stages by adding classes to the estimated model in a consecutive manner. Results revealed that a four-class solution fit the data best (model fit indices: $-2LL = -14865.08$, $BIC = 30604.27$, $AIC = 29960.16$, entropy = .84 and $LRT = 0.02$, based on 115 free parameters; see the online appendix for a detailed overview of the latent class estimation and model fit indices). In order to define and substantiate the meaning of the four heterogeneous subpopulations identified, we considered the conditional item probabilities. These reflect the degree of association between the items $u$ and the latent variable $c$ (McCutcheon, 1987) and refer to the probability of the observed item $u$ being endorsed by individuals in each of the four classes (i.e., the probability of individuals in each of the four classes having experienced each of the 28 conflict-related events, where higher scores reflect higher probability of item endorsement). Table 1 shows the conditional item probabilities across the four classes; we defined Class 1 as a “high direct/ high indirect exposure” class; Class 2 as a “moderate direct/ moderate indirect exposure class”; Class 3 as a “low direct/ high indirect exposure” class; and Class 4 as a “low direct/ low indirect exposure” class.

In Class 1, most of the 28 conflict-related events were endorsed with relatively high probability, while in Class 4 the probabilities of having experienced any of the 28 events were generally low, by and large approaching zero. As might be expected in a general population sample, approximately half of our sample fell into Class 4 (low direct/low indirect exposure), while only a small proportion of respondents reported both high direct and high indirect exposure (Class 1). The remaining sample fell to almost equal parts into Classes 2 and 3 respectively, with individuals in Class 2 showing moderate probabilities of having experienced any of the direct and indirect conflict-related events, while individuals in Class 3 held relatively high probabilities of indirect experience, yet only low
probabilities of direct experience. For a detailed overview of cell sizes as well as a breakdown by religion and gender, see Tables 2 and 3 in the online appendix.

**Effects of Political Conflict Exposure on Threat, Identification, and Well-Being**

In order to examine the hypothesized (H2) effects of political conflict experience on perceived threat and psychological well-being, we conducted latent class factor analysis (LCFA; also referred to as factor mixture modelling). LCFA can be thought of as an integration of LCA and standard confirmatory factor analysis (CFA) techniques, such that it consists of the simultaneous estimation of two submodels, in the form of a continuous latent variable model (i.e., CFA), as well as the categorical latent variable model involving the use of latent classes representing unobserved population heterogeneity (i.e., LCA; see Bauer & Curran, 2004; Lubke & Muthén, 2005). LCFA allows then for the comparison of factor means across classes, making it possible for us to examine the effects of political conflict exposure on perceived threat, social identification, and psychological well-being.

Prior to estimating the LCFA model, we first confirmed the factor structure of perceived intergroup threat, social identification, and psychological well-being by estimating a CFA. We used item-parceling techniques based on “item-to-construct balance” procedures (see Little, Cunningham, Shahar, & Widaman, 2002; MacCallum & Austin, 2000) to reduce the number of manifest indicators for each latent factor. This resulted in two item parcels for the threat factor and three parcels for the identification and well-being factors, respectively. We entered data as a covariance matrix and assessed model fit by means of the $\chi^2$ test, the Comparative fit index (CFI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Squared Residual (SRMR). A satisfactory fit is typically indicated by a nonsignificant $\chi^2$ value (or a $\chi^2/df$ ratio $\leq$3–4 if sample size is large), a CFI $\geq$ .95, a RMSEA $\leq$ .06, and a SRMR $\leq$ .08 (Hu & Bentler, 1999). The estimated measurement model yielded good fit, $\chi^2 (17) = 48.88, p < .001, \chi^2/df = 2.875, \text{CFI} = .99, \text{RMSEA} = .03, \text{and SRMR} = .02$.

Having confirmed the factor structure for the continuous latent variables, we then proceeded to estimate our LCFA model using a fully confirmatory approach (see Jedidi, Jagpal, & DeSarbo, 1997). We regressed each of our latent factors (perceived threat, social identification, and psychological well-being) on the categorical latent class conflict exposure variable, constraining measurement parameters surrounding each factor to be equal, yet allowing factor means to freely vary across classes (model fit indices$^2$: $\text{LnL} = -28912.28, BIC = 58930.96, AIC = 58126.57, \text{entropy} = .85, \text{and LRT} = .01$, based on 151 free parameters). Comparison of factor means in multiclass comparisons typically involves comparison in relation to a reference class in which the factor means are fixed to zero. We thus estimated three LCFA models, rotating the reference class in each model in order to facilitate all possible two-way comparisons of factor means between the four classes. In the first model, we therefore set Class 4 (“low direct/low indirect” conflict experience) to be the reference class, while in models two and three, we set Class 3 (“low direct/high indirect” conflict experience) and Class 2 (“moderate direct/moderate indirect” conflict experience) as the reference classes, respectively.

As can be seen in Table 2, individuals in Class 1 reported higher intergroup threat perceptions than individuals in Class 2 ($b = .18, SE = .09, p = .04$), individuals in Class 3 ($b = .35, SE = .10, p < .001$), and individuals in Class 4 ($b = .52, SE = .09, p < .001$). Comparing Class 2 to the remaining two classes revealed that individuals in this class reported greater intergroup threat perceptions than individuals in Class 4 ($b = .34, SE = .07, p < .001$) but comparable levels of threat to individuals.

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$^2$ For an overview of model fit indices, see the online appendix.
in class 3 (\(b = .17, SE = .09, p > .05\)). Finally, comparing class 3 with class 4 revealed that individuals in Class 3 held greater intergroup threat perceptions (\(b = .17, SE = .07, p = .02\)).

Comparing factor means for social identification revealed that individuals in Class 1 reported higher levels of social identification than Class 4 (\(b = .17, SE = .07, p = .01\)) and Class 3 (\(b = .19, SE = .08, p = .02\)), but only marginally higher levels than Class 2 (\(b = .13, SE = .07, p = .06\)). No difference emerged in levels of social identification between Class 2 and Class 3 (\(b = .06, SE = .09, p > .05\)) or between Class 2 and Class 4 (\(b = .04, SE = .06, p > .05\)). Class 3 and Class 4 also held comparable social identification levels (\(b = .02, SE = .05, p > .05\)).

Finally, considering psychological well-being, individuals in Class 1 held the lowest levels of psychological well-being, reporting lower levels of well-being than Class 2 (\(b = -1.33, SE = .35, p < .001\)), Class 3 (\(b = -1.69, SE = .33, p < .001\)), and Class 4 (\(b = -2.07, SE = .30, p < .001\)). Individuals in Class 2 had poorer psychological well-being than individuals in Class 4 (\(b = -1.74, SE = .19, p < .001\)) but similar levels of psychological well-being to individuals in Class 3 (\(b = -1.37, SE = .24, p > .05\)). Respondents in Class 3 had poorer psychological well-being than respondents in Class 4 (\(b = -1.38, SE = .16, p = .02\)).

In sum, these results show that individuals who had high direct and indirect exposure (Class 1) held the highest threat perceptions, followed by respondents with moderate direct and indirect exposure (Class 2) and respondents with low direct but high indirect exposure (Class 3) who held comparable threat levels. Respondents with low direct and indirect exposure had the lowest threat perceptions. Levels of identification were higher for individuals in Class 1; no differences in identification emerged between the other three classes. Finally, psychological well-being was poorest for individuals in Class 1, followed by Classes 2 and 3, which had similar levels of well-being. Respondents in Class 4 held the highest levels of well-being across all four classes.

<table>
<thead>
<tr>
<th>Table 2. Results of LCFA Showing Factor Mean Differences Between Classes</th>
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<td><strong>CLASS 1</strong></td>
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<tr>
<td>High direct/high indirect</td>
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<td>Perceived threat</td>
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<td><strong>CLASS 2</strong></td>
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<td>Moderate direct/moderate indirect</td>
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<td>Perceived threat</td>
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<tr>
<td>Social identification</td>
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<td>Psychological well-being</td>
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<tr>
<td><strong>CLASS 3</strong></td>
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<tr>
<td>Low direct/high indirect</td>
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<tr>
<td>Perceived Threat</td>
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<tr>
<td>Social identification</td>
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<td>Psychological well-being</td>
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<tr>
<td><strong>CLASS 4</strong></td>
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<tr>
<td>No or little direct/no or little indirect</td>
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<tr>
<td>Perceived threat</td>
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<tr>
<td>Social identification</td>
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<tr>
<td>Psychological well-being</td>
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Note. Model 1 shows factor mean comparisons to reference Class 4, Model 2 shows factor mean differences in relation to reference Class 3, and Model 3 shows factor mean differences in relation to reference Class 2. *\(p < .05\), **\(p < .01\), ***\(p < .001\).
Testing the Threat-Identification Model and Its Moderation by Political Conflict Exposure

In order to test Hypotheses 3a and 3b, respectively, we first estimated a structural equation model (SEM) to test our hypothesized threat-identification model for the full sample before proceeding to test the hypothesized moderated-mediation model. In line with Hypothesis 3a, greater perceived threat was associated with poorer psychological well-being \((b = -0.76, SE = 0.13, p < .001)\) but also with greater social identification \((b = 0.17, SE = 0.04, p < .001)\). Social identification was positively associated with greater psychological well-being \((b = 0.26, SE = 0.13, p = .04)\). When probing for the indirect relationships between perceived intergroup threat and psychological well-being via social identification, our results show, however, that the indirect relationship merely approached statistical significance \((b = 0.04, SE = 0.03, p = .07)\), although the effect was in the expected positive direction.3

In order to then test the predicted moderating effects of political conflict experience on the relationships between perceived threat, social identification, and psychological well-being (H3b), we estimated a structural equation mixture model (SEMM). Similar to LCFA, SEMM allows for the integration of continuous and categorical latent variables techniques to estimate simultaneously two submodels: in this case the aforementioned SEM as well as the LCA model (see Bauer & Curran, 2004; Lubke & Muthén, 2005). This approach allowed us to simultaneously estimate our threat-identification model for each of the four latent classes of conflict experience identified above. SEMM may thus be likened to multigroup analyses, yet it involves a more generalized form of multigroup comparisons that are estimated simultaneously, and not a priori, to the SEM (see Jedidi et al., 1997; Lubke & Muthén, 2005). Ultimately, the latent class variable in SEMM therefore acts as a moderator variable, in that the structural relationships between factors can be compared across classes (Bauer & Curran, 2004; Jedidi et al., 1997). SEMM thus allowed us to estimate the latent exposure class specific structural relations between intergroup threat, identification, and psychological well-being.

We estimated our SEMM using a fully confirmatory approach (see Jedidi et al., 1997), holding factor loadings, intercepts, and residual variances equal across classes, yet allowing the structural parameters to freely vary across classes (model fit indices: \(LnL = -28874.03, BIC = 58920.39, AIC = 58068.05, \text{entropy} = .86, \text{and} \ LRT = .17, \text{based on} 160 \text{free parameters}\)). As can be seen in Figure 2, perceived threat was only directly associated with poorer psychological well-being for individuals in Class 1, the “high direct/high indirect” exposure class \((b = -5.29, SE = 4.0, p < .001)\). Perceived intergroup threat was also associated with greater social identification in Class 1 \((b = 5.0, SE = .22, p = .02)\), class 2 \((b = .31, SE = .11, p = .01)\), and Class 3 \((b = .25, SE = .11, p = .02)\), but not Class 4. Finally, greater social identification was associated with better psychological well-being in Class 1 \((b = 2.20, SE = .26, p < .001)\) and Class 3 \((b = .85, SE = .20, p < .001)\), but not in Class 2 or in Class 4.

Computation of indirect effects revealed significant indirect relationships between intergroup threat and psychological well-being via social identification for individuals in Class 1 \((b = 1.10, SE = .49, p = .02)\), as well as for individuals in Class 3 \((b = .21, SE = .20, p = .04)\). No significant indirect relationships emerged for Classes 2 and 4. In line with predictions, the expected positive indirect effect of perceived threat via social identification on psychological well-being emerged only for subpopulations with comparably higher exposure to conflict. In this case, these subpopulations comprised individuals with high direct and high indirect exposure (Class 1) and individuals with low direct, but high indirect exposure (Class 3).

3 We also estimated a multigroup model, comparing relationships between Catholic and Protestant respondents. Results from this analysis suggested invariance in both the measurement as well as the structural parameters.
Discussion

Our research examined the previously unexplored relationship between perceived intergroup threat, social identification, and psychological well-being, moderated by political conflict exposure. Our results show that perceived threat was associated both directly (negatively) and indirectly (positively) via social identification, with psychological well-being, albeit primarily for individuals who had higher direct and/or indirect experience of political conflict-related events. We discuss our findings first with regard to the moderated relationship between perceived threat, social identification, and psychological well-being; second, with regard to theoretical and conceptual contributions of this research; and third, by discussing limitations of the study and offering future directions for research.

Perceived Intergroup Threat and Psychological Well-Being: A Threat-Identification Model and Its Moderation by Conflict Exposure

This study corroborates that in situations of intergroup conflict perceived intergroup threat can come to constitute a key negative intergroup stressor that can bring about important consequences for psychological well-being. We found that threat perceptions were associated with poorer levels of psychological well-being among a general population sample, thereby extending prior research considering the consequences of intergroup stressors on psychological well-being, which has to date focused primarily on the consequences of perceived discrimination (e.g., Branscombe et al., 1999b; Haslam et al., 2005) or political conflict experience (e.g., Hobfoll et al., 2006; Johnson et al., 2009; Palmieri et al., 2008).

Moreover, our research extends prior research by taking into consideration individuals’ prior exposure to political conflict and violence. Prior research has either examined the relationship between political conflict exposure and psychological well-being (e.g., Johnson et al., 2009; Palmieri et al., 2008) or between political conflict exposure and perceived threat (e.g., Canetti et al., 2009; Schmid et al., 2008). In this study, we not only examined the effects of political conflict exposure on well-being, and indeed on perceived threat and social identification, but we also considered the

Figure 2. Estimated threat-identification model, for full sample and class-specific comparisons. Total N = total (full) sample; Class 1 = high direct/high indirect conflict exposure, Class 2 = moderate direct/moderate indirect conflict exposure, Class 3 = low direct/high indirect conflict exposure, Class 4 = low direct/low indirect conflict exposure; *p < .05, **p < .01, ***p < .001.
The interplay between perceived threat and conflict exposure in affecting psychological well-being. Our results show that individuals with relatively higher levels of conflict exposure—in particular respondents with high direct and high indirect conflict exposure—reported higher threat perceptions as well as poorer levels of psychological well-being in comparison to individuals with low direct or indirect conflict exposure. In addition, we found that the effects of threat on well-being were not universal: The direct effects of threat on psychological well-being were moderated by political conflict exposure, such that we only witnessed a direct negative relationship between threat and well-being for individuals with the highest levels of conflict exposure, both direct and indirect.

Furthermore, our findings extend the small but growing body of research, which has mainly considered direct effects of perceived threat on psychological health outcomes (e.g., Palmieri et al., 2010), and especially widens our understanding of the effects of perceived intergroup threat on psychological well-being in important ways: Our research was the first to test a threat-identification model, describing how effects of perceived intergroup threat on psychological well-being may be mediated by increased social identification with the threatened group. Perceived intergroup threat was thus also associated with higher identification with one’s group (see Branscombe et al., 1999a; Ethier & Deaux, 1994), which alleviated at least some of the direct negative effects of threat on psychological well-being. However, these relationships were qualified by respondents’ prior exposure to political conflict, such that the hypothesized indirect effect of perceived threat on psychological well-being emerged primarily for individuals who had high direct and indirect exposure (Class 1), as well as for individuals who had low direct, but high indirect exposure (Class 3). For individuals who only held moderate (Class 2) or little (Class 4) exposure to conflict, no relationships between perceived threat and psychological well-being emerged. Identification may thus be conceived of as an important coping mechanism to dealing with intergroup threats for subpopulations with higher direct and/or indirect conflict exposure. These findings have important implications for future research on the consequences of intergroup threat in situations of intractable intergroup conflict. Importantly, in any given situation, the affected population is highly heterogeneous with regard to their exposure to conflict; i.e., any given conflict does not affect each and every individual evenly. Changing individual, social, and political circumstances may give rise to differences in exposure to violence and thus also affect perceptions of intergroup threat differentially. Our research suggests that perceived intergroup threats are thus likely to have the most profound effects on psychological well-being, but also on social identification, for subsets of the population with the most exposure to conflict. Exposure to conflict then constitutes a key background variable that needs to be accounted for in helping to explain when threat perceptions become particularly meaningful and exert effects in situations of conflict.

Theoretical and Conceptual Contributions of the Research

Our research contributes in important ways to the existing literature on intergroup threat, as well as more generally to a growing body of research that seeks to understand the link between intergroup phenomena and psychological well-being. We have thus shown that perceived intergroup threat, a key negative intergroup process central to the intergroup relations literature (see e.g., Stephan & Stephan, 2000), not only has consequences for intergroup perception and attitudes but also affects intragroup processes such as identification (see Ethier & Deaux, 1994; Spears, Doosje, & Ellemers, 1997). Indeed, this study adds to a growing body of research demonstrating the positive effects of social identity processes on psychological health (e.g., Jetten et al., 2012), yet it offers important new insights by demonstrating how group-based threats positively relate to social identification. The adaptive function then of these identification processes for psychological well-being in response to threat is thus of central value for those living in violent sociopolitical contexts.
Moreover, prior research focusing on negative intergroup stressors such as perceived discrimination has primarily considered the effects of experiencing negative intergroup experiences among minority group members, since these are, of course, most likely to experience discrimination and rejection. Intergroup threat perceptions, however, can affect both minority and majority group members, especially in situations of intractable intergroup conflict. Interestingly, in our research we observed no difference between the two ethno-religious groups with regard to the extent to which intergroup threat was associated with psychological well-being. It thus appears that exposure to conflict and not solely, or necessarily, group status, at least in part, explains when perceived intergroup threat becomes meaningful in violent conflict settings.

Furthermore, our research highlights that the extent to which intergroup phenomena affect psychological well-being may depend critically on context-relevant experiences. In the realm of this research, conflict exposure constituted an important distal variable qualifying effects of perceived intergroup threat on psychological well-being. These results also hold wider implications for research on intergroup relations more generally as they corroborate a growing need for a more nuanced understanding of group processes. Taking account of the nature of variations in one’s samples by capturing population heterogeneity on key background variables allows for such a more differentiated understanding of intergroup processes.

Finally, our conceptualization of and analysis procedures surrounding political conflict exposure is of value for the literature on political conflict more generally. Our research has shown that conflict exposure is a variable that gives rise to specific subpopulations when studying general population samples to the extent that not each and every person in political conflict settings is equally affected by conflict and violence. Indeed, our study highlights that in intractable conflict situations, some individuals are disproportionally affected by conflict and violence. Understanding such variations is crucial for a more differentiated and comprehensive understanding of the consequences of political conflict.

Limitations and Future Directions

Notwithstanding the theoretical and conceptual contributions of our research, we also wish to address some limitations and make recommendations for future research. A key limitation of our research is that our data are cross-sectional, preventing us from drawing confident conclusions on the nature of causality. This limitation is offset, to a certain extent, by our large general population sample; samples such as this are typically difficult to get access to, especially considering the sensitive nature of our study. We nonetheless recommend for future research to employ longitudinal designs, which will allow for testing of crossed-lagged paths and thus for greater, although not unequivocal, approximation of the direction of relationships (experimental designs are hardly a possibility for studies examining effects of political conflict exposure).

Future research should also seek to replicate these findings in other contexts of intergroup conflict and should aim to compare the effects of perceived intergroup threat and other negative intergroup experiences (such as perceived discrimination) in the same analyses. This will allow researchers to assess the independent contribution of perceived threat over and above other identity-based stressors to psychological well-being. Moreover, we were unable to disentangle different types of threat, making it imperative for future research to incorporate a greater range of threat measures and to consider the effects of different types of threat on well-being (e.g., Cottrell & Neuberg, 2005; Riek et al., 2006).

In addition, future research may consider testing other potential coping mechanisms for dealing with perceived intergroup threats. In this study, we examined the effects of perceived threat on well-being via a general measure of social identification that tapped elements of positive evaluation as well as importance of respondents’ identity (see, e.g., Ashmore, Deaux, & McLaughlin-Volpe,
2004 for a review of the multidimensionality of social identification). However, it is likely that other aspects of social identification may equally, or even more strongly, constitute important coping mechanisms in the face of intergroup threats. For example, Haslam et al. (2005) have shown that individuals experiencing stress in their workplace can derive considerable social support from the social groups they belong to, which then acts as a buffer to negative effects on well-being. Similarly, Crabtree, Haslam, Postmes, & Haslam (2010) have shown that among individuals suffering from mental health problems, greater identification led to increased social support, with positive consequences for self-esteem. Future research may thus investigate such additional processes that will allow a more comprehensive understanding of how perceived threat affects psychological well-being. Beyond processes of social support, it is also likely, for example, that individuals develop a sense of collective agency, solidarity, or collective efficacy in response to intergroup threat, which may similarly buffer negative effects on well-being.

It should also be noted that our research examined the effects of perceived intergroup threat in a context that has witnessed considerable violence and unrest, and although our study was carried out in a largely postconflict society, potential effects of threat on well-being were obviously affected by variations in individuals’ prior conflict experiences. Thus individuals who had only low direct and indirect conflict exposure were not affected by threat perceptions to the same extent as individuals who had considerably more exposure to conflict. However, intergroup threat perceptions may also be felt in nonconflict settings, making it imperative for future research to examine the consequences of threat for psychological health outcomes in less extreme intergroup settings. We speculate that threat perceptions can impact psychological well-being even in nonviolent conflict settings, yet that prior intergroup experiences may similarly qualify the intensity of effects. For example, it may be that individuals who have had negative intergroup contact experiences show stronger perceived threat effects than individuals without such negative experiences (see, e.g., Barlow et al., 2012 for research on negative intergroup contact). It remains for future research to replicate and extend the findings of our research in other contexts.

To conclude, this study has shown that perceived threat has consequences for psychological well-being, yet its effects depend crucially on prior experiences of intergroup conflict. In uncovering the interplay between intergroup threat and political conflict experience, among a large general population sample in a setting that has witnessed extreme intergroup conflict, our research highlights the importance of considering context-relevant factors in examining the consequences of intergroup threat on well-being.

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REFERENCES


Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher’s web-site:

Table I. Model fit indexes for k class solutions of estimated latent class model of political conflict experience
Table II. Proportion of the sample in each of the four classes based on estimated posterior probabilities and most likely class membership
Table III. Most likely class membership broken down by religious group (Catholic and Protestant) and gender (male and female)