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Status symmetry effect: The association of exposure and PTS in Israel-Palestine and  
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**Abstract**

A multi-national sample was used to investigate mechanisms that were hypothesized to moderate the relationship between exposure to political violence and symptoms of posttraumatic stress (PTS). We hypothesized that a) the phase of the conflict and b) the status asymmetry of the conflicting parties would moderate the relationship between exposure and PTS symptoms. We use original data from four groups - Israelis and Palestinians (n=2,572), and Protestants and Catholics in Northern Ireland (n=343). Looking at these two conflicts, we found that the positive relationship between exposure to violence and posttraumatic stress symptoms ceases to exist in a post-conflict setting ( $F(1, 2053)=4.95, p<.05, \eta^2=0.002$ ). Interestingly, we found that PTS symptoms were highest among minority group members in an ongoing conflict irrespective of exposure to political violence ( $F(1, 2053)=120.74, p<.001, \eta^2=0.06$ ). We provide explanations for these findings and discuss their psychological implications for victimized groups and the wider geopolitics of intergroup conflict.

**Keywords:** Israel, Palestine, Northern Ireland, Exposure to political violence, Posttraumatic stress symptoms.

The posttraumatic stress literature has provided numerous insights into the mental health impact of exposure to political violence (exposure).<sup>1</sup> Exposure to political violence is linked to higher levels of posttraumatic stress disorder,<sup>2</sup> and while recent research has seen substantial progress in explaining the variance in certain posttraumatic stress symptoms such as risk and resilience,<sup>3</sup> it is only in the last decade that the socio-political and group dimensions of trauma exposure and symptomatology have been theorised and studied.<sup>4</sup> By virtue of this added macro analysis, the structural forces that shape the expression of posttraumatic stress can be considered alongside the psychological ones.

This particular research investigates several group level moderators that may determine the relationship between exposure and individual-level PTS (posttraumatic stress) responses, namely the status of respondents' group affiliation and the phase of the conflict (i.e. an ongoing conflict vs. one that has been politically or militarily resolved). We draw on unique longitudinal data from two regions that have been subjected to substantial and prolonged political violence and conflict - Israel/Palestine (IL-PA) and Northern Ireland (NI). Specifically, we examine the consequences of exposure to

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<sup>1</sup> Bleich, Avraham, Marc Gelkopf, and Zahava Solomon. "Exposure to terrorism, stress-related mental health symptoms, and coping behaviors among a nationally representative sample in Israel." *Journal of the American Medical Association* 290, no. 5 (2003): 612-620;

Garfin, Dana Rose, Michael J. Poulin, Scott Blum, and Roxane Cohen Silver. "Aftermath of terror: a nationwide longitudinal study of posttraumatic stress and worry across the decade following the September 11, 2001 terrorist attacks." *Journal of traumatic stress* 31, no. 1 (2018): 146-156.

Hobfoll, Stevan E., Daphna Canetti-Nisim, and Robert J. Johnson. "Exposure to terrorism, stress-related mental health symptoms, and defensive coping among Jews and Arabs in Israel." *Journal of consulting and clinical psychology* 74, no. 2 (2006): 207;

Shalev, Arieh Y., and Sara Freedman. "PTSD following terrorist attacks: a prospective evaluation." *American Journal of Psychiatry* 162, no. 6 (2005): 1188-1191.

<sup>2</sup> Herman-Lewis, Judit. *Trauma and recovery: the aftermath of violence-from domestic abuse to political terror*. Basic Books, 1992;

McCann, I. Lisa, and Laurie Anne Pearlman. "Vicarious traumatization: A framework for understanding the psychological effects of working with victims." *Journal of traumatic stress* 3, no. 1 (1990): 131-149.

<sup>3</sup> Bowman, Marilyn L. *Individual differences in posttraumatic response: Problems with the adversity-distress connection*. Routledge, 2013.

<sup>4</sup> Muldoon, Orla T., and Robert D. Lowe. "Social identity, groups, and post-traumatic stress disorder." *Political Psychology* 33, no. 2 (2012): 259-273.

violence on psychological distress in Jewish Israelis, Palestinians, NI Protestants and NI Catholics. Over the past two decades, these two conflicts have been articulated in the literature as classic examples of asymmetric, ethno-national conflicts,<sup>5</sup> however they are at markedly different phases in terms of resolution. The IL-PA conflict remains active, with violence and fatalities occurring with unfortunate regularity. Although NI has enjoyed an uneasy peace since the 1998 agreement, it still experiences sporadic violence. For this reason, it can be difficult to characterize NI's political landscape, although it can be considered at a 'post conflict' phase when compared to IL-PA.

### **Background and Rationale for the Study**

PTS is a key consequence of exposure to political violence and among the most investigated mental health issues in conflict zones.<sup>6</sup> PTS symptoms include heightened anxiety, re-experiencing conflict-related trauma, subjective insecurity, and hyper-arousal. This range of symptoms sustains a PTS diagnosis in cases where symptoms are severe and interfere with ongoing social or occupational functioning.<sup>7</sup> Unsurprisingly, the severity of psychological distress tends to rise with the severity of exposure, such as the death or injury of a loved one.<sup>8</sup> Early conceptualizations of PTS often considered the

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<sup>5</sup> Lustick, Ian. *Unsettled States, Disputed Lands: Britain and Ireland, France and Algeria, Israel and the West Bank-Gaza*. Cornell University Press, 1993.

<sup>6</sup> Canetti, Daphna, Sandro Galea, Brian J. Hall, Robert J. Johnson, Patrick A. Palmieri, and Stevan E. Hobfoll. "Exposure to prolonged socio-political conflict and the risk of PTSD and depression among Palestinians." *Psychiatry* 73, no. 3 (2010): 219-231.

<sup>7</sup> Diagnostic, A. P. A. "statistical manual of mental disorders DSM-IV-TR, American Psychiatric Association Task Force on DSM-IV." (2000).

<sup>8</sup> Chipman, Katie J., Patrick A. Palmieri, Daphna Canetti, Robert J. Johnson, and Stevan E. Hobfoll. "Predictors of posttraumatic stress-related impairment in victims of terrorism and ongoing conflict in Israel." *Anxiety, Stress, & Coping* 24, no. 3 (2011): 255-271.

impact of a trauma by assessing the temporal extent of the traumatic exposure.<sup>9</sup>

Additionally, the contemporary literature often considers PTS sequelae that arise as a consequence of acute incidents of political violence, such as in NYC 9/11, Madrid 3/11, London 7/7, or Oslo 7/22. Studying chronic and ongoing conflict, however, prompts new questions about the relationship between exposure to political violence and PTS.

Situations of chronic conflict differ from acute contexts in a number of important ways.<sup>10</sup> In the most advanced industrial societies, comparatively few people have any direct experience of political violence. In contexts of ongoing conflict, residents experience repeated exposure to violence over sustained periods of time, and such exposure is endemic within the population. Bleich, Gelkopf & Solomon found that nearly half of a nationally representative sample of Israelis reported direct or indirect exposure (through family member or friend).<sup>11</sup> Similarly, Hayes and McAllister's analysis demonstrates that by the time of the NI Peace Agreement in 1998, approximately one in five individuals reported having had a family member or close relative injured or killed as a consequence of the conflict, and more than half of the population personally knew someone who had been injured or killed as a result of the conflict.<sup>12</sup>

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<sup>9</sup> Spitzer, Robert L., Michael B. First, and Jerome C. Wakefield. "Saving PTSD from itself in DSM-V." *Journal of anxiety disorders* 21, no. 2 (2007): 233-241.

<sup>10</sup> Cummings, E. Mark, Marcie C. Goeke-Morey, Alice C. Schermerhorn, Christine E. Merrilees, and Ed Cairns. "Children and political violence from a social ecological perspective: Implications from research on children and families in Northern Ireland." *Clinical child and family psychology review* 12, no. 1 (2009): 16-38;

Hobfoll, S. E., Canetti-Nisim, D., & Johnson, R. J. (2006). Exposure to terrorism, stress-related mental health symptoms, and defensive coping among Jews and Arabs in Israel. *Journal of consulting and clinical psychology*, 74(2), 207.

<sup>11</sup> Bleich, Gelkopf, Solomon, "Exposure to terrorism, stress-related mental health symptoms, and coping behaviors among a nationally representative sample in Israel".

<sup>12</sup> Hayes, Bernadette C., and Ian McAllister. "Sowing dragon's teeth: Public support for political violence and paramilitarism in Northern Ireland." *Political Studies* 49, no. 5 (2001): 901-922.

Despite the extent of this exposure in society's experience prolonged conflict, a number of studies have provided evidence that the majority of individuals, even in populations that face continued exposure and chronic conditions of deprivation, do not display PTS.<sup>13</sup> Chipman et al. found that almost a third of Israelis who had been directly and indirectly exposed to rocket attacks reported some form of impairment caused by posttraumatic stress, with one-fifth (19%) of these respondents meeting the full criteria for diagnosis for PTS.<sup>14</sup> The prevalence of PTS and depression among Palestinians in the West Bank is estimated to be higher, with one study indicating that 25% of the population suffers from PTS.<sup>15</sup> In NI, prevalence estimates based on a representative sample of the population suggest that between 9-12% of the population possess symptoms severe enough to warrant a diagnosis of PTS.<sup>16</sup> Interestingly, the highest rates of posttraumatic stress symptoms appeared among those who were unemployed, poor, and possessing the lowest levels of education. The variance among the numerically smaller Catholic community can be attributed to their poorer socio-economic position.<sup>17</sup>

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<sup>13</sup> Hall, Brian J., George A. Bonanno, Paul A. Bolton, and Judith K. Bass. "A longitudinal investigation of changes to social resources associated with psychological distress among Kurdish torture survivors living in Northern Iraq." *Journal of traumatic stress* 27, no. 4 (2014): 446-453;

Kimhi, Shaul, and Yohanan Eshel. "The missing link in resilience research." *Psychological Inquiry* 26, no. 2 (2015): 181-186.

<sup>14</sup> Chipman, Palmieri, Canetti, Johnson, Hobfoll, "Predictors of posttraumatic stress-related impairment in victims of terrorism and ongoing conflict in Israel".

<sup>15</sup> Canetti, Galea, Hall, Johnson, Palmieri, Hobfoll. "Exposure to prolonged socio-political conflict and the risk of PTSD and depression among Palestinians."

<sup>16</sup> Bunting, Brendan P., Finola R. Ferry, Samuel D. Murphy, Siobhan M. O'Neill, and David Bolton.

"Trauma associated with civil conflict and posttraumatic stress disorder: evidence from the Northern Ireland study of health and stress." *Journal of Traumatic Stress* 26, no. 1 (2013): 134-141;

Muldoon, Orla T., and Ciara Downes. "Social identification and post-traumatic stress symptoms in post-conflict Northern Ireland." *The British Journal of Psychiatry* 191, no. 2 (2007): 146-149.

<sup>17</sup> Bunting, B. P., S. D. Murphy, S. M. O'Neill, and F. R. Ferry. "Lifetime prevalence of mental health disorders and delay in treatment following initial onset: evidence from the Northern Ireland Study of Health and Stress." *Psychological medicine* 42, no. 8 (2012): 1727-1739;

Muldoon, Downes, "Social identification and post-traumatic stress symptoms in post-conflict Northern Ireland."



There is evidence to suggest that group belonging, and the resources and political status available to those groups, affect the manner in which PTS manifests.<sup>18</sup> Studies that have examined the occurrence of trauma within population groups also support the contention that individual experience is not randomly determined. Rather, it is shaped and structured by membership in racial and religious groups.<sup>19</sup> Within NI, there is considerable evidence that violent experiences have not been evenly distributed across the population. Those from lower socio-economic backgrounds generally report have experienced more political violence than their middle-class counterparts. Likewise, members of the Catholic minority report have experienced more political violence than the Protestant majority.<sup>20</sup> As yet, there is limited evidence documenting how these differences affect the the relationship between exposure and PTS symptoms. Minority or subordinate groups often have access to collective identity resources that can reduce the impact of their distress, by banding together to deal with adversity.<sup>21</sup> As it does not necessarily follow that increased experience of political violence will have the same trajectory for all groups that are party to the conflict, the role of group status in driving PTS symptom expression is a substantively interesting and under-explored issue.

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<sup>18</sup> Hobfoll, Stevan E. "Conservation of resources: A new attempt at conceptualizing stress." *American psychologist* 44, no. 3 (1989): 513.

<sup>19</sup> Muldoon, Orla T. "Understanding the impact of political violence in childhood: A theoretical review using a social identity approach." *Clinical psychology review* 33, no. 8 (2013): 929-939; Fay, Marie-Therese, Mike Morrissey, and Marie Smyth. *Mapping Troubles-related Deaths in Northern Ireland, 1969-1994*. Coleraine: Incore, 1997.

<sup>20</sup> Muldoon, Orla T., and Karen Trew. "Children's experience and adjustment to political conflict in Northern Ireland." *Peace and Conflict: Journal of Peace Psychology* 6, no. 2 (2000): 157; Muldoon, Downes, "Social identification and post-traumatic stress symptoms in post-conflict Northern Ireland."

<sup>21</sup> Muldoon, Orla T., Katharina Schmid, and Ciara Downes. "Political Violence and Psychological Well-Being: The Role of Social Identity." *Applied Psychology* 58, no. 1 (2009): 129-145; Schmitt, Michael T., Nyla R. Branscombe, Tom Postmes, and Amber Garcia. "The consequences of perceived discrimination for psychological well-being: a meta-analytic review." *Psychological bulletin* 140, no. 4 (2014): 921.

Another important consideration for our study is the relationship between trauma exposure and PTS symptoms across phases of the conflict. In a cross-national study within a representative sample of NI respondents in 2013, Bunting et al. identified an elevated lifetime and 12-month incidence of PTS that could be attributed to exposure to political violence.<sup>22</sup> Importantly, this was a cross sectional study and potential recall of the traumatic events may have inadvertently trigger heightened reporting of symptoms. Our study benefits from a longitudinal design that overcomes this potential obstacle. Nonetheless, findings such as these suggest that the psychological burden continues after the ostensible cessation of hostilities. On the other hand, where conflict is ongoing, the potential for recurrent traumatisation remains, and the resources to deal with additional exposure can become increasingly depleted. In this way, the phase of the conflict may interact with group status. For example, Hobfoll et al. found that the expected population prevalence of post conflict-related PTS and major depression was estimated to be at least 10% for Jewish Israelis, 25% for Israeli Palestinians, and close to 30% for Palestinians in the West Bank and Gaza.<sup>23</sup> These groups, possessing different social statuses, suffer different PTS rates while living in the same region. For the Palestinian groups, this figure may be attributable to recurrent exposure to violence, heavy losses, and insufficient resources.<sup>24</sup> While it commonly accepted that PTSD symptoms slowly fade as the length of time since the precipitating exposure increases, group status may be important to

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<sup>22</sup> Bunting, Ferry, Murphy, O'Neill, Bolton, "Trauma associated with civil conflict and posttraumatic stress disorder: evidence from the Northern Ireland study of health and stress."

<sup>23</sup> Hobfoll, Stevan E., Daphna Canetti- Nisim, Robert J. Johnson, Patrick A. Palmieri, Joseph D. Varley, and Sandro Galea. "The association of exposure, risk, and resiliency factors with PTSD among Jews and Arabs exposed to repeated acts of terrorism in Israel." *Journal of traumatic stress* 21, no. 1 (2008): 9-21.

<sup>24</sup> Canetti, Galea, Hall, Johnson, Palmieri, Hobfoll. "Exposure to prolonged socio-political conflict and the risk of PTSD and depression among Palestinians."

consider alongside the phase of the conflict - a hypothesis that we can assess here due to the comparative nature of this study.<sup>25</sup>

### **The Present Study**

In the subsequent analysis, we consider the impact of exposure to political violence on residents of NI, Israel and Palestine by looking at PTS symptoms at different times in the conflict. While many studies on exposure have adopted a broad definition of the concept, a narrower approach that incorporates the individual indices of exposure (the direct or indirect harm and political violence experienced by individuals amid ongoing conflict) is now well recognized,<sup>26</sup> and is the approach taken here. This operational definition of exposure, at the level of the individual, is based on the assumption that political violence deliberately creates and sustains fear and anxiety among the group members of victims, particularly in situations of ongoing conflict.<sup>27</sup> And so, as well as considering individual indices of exposure to violence, we assessed the impact of group membership on both exposure and PTS.

Status asymmetry in conflict reflects the divergent military, economic and diplomatic capabilities of parties to a conflict, a feature that has characterized the increasing number of localized conflicts.<sup>28</sup> It has been well-established that power-

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<sup>25</sup> Solomon, Zahava. *Combat stress reaction: The enduring toll of war*. Springer Science & Business Media, 2013;

Solomon, Zahava, and Moris Kleinhauz. "War-induced psychic trauma: An 18-year follow-up of Israeli veterans." *American Journal of Orthopsychiatry* 66, no. 1 (1996): 152.

<sup>26</sup> Hobfoll, Canetti-Nisim, Johnson, "Exposure to terrorism, stress-related mental health symptoms, and defensive coping among Jews and Arabs in Israel".

<sup>27</sup> Hirsch-Hoefler, Sivan, Daphna Canetti, Carmit Rapaport, and Stevan E. Hobfoll. "Conflict will harden your heart: Exposure to violence, psychological distress, and peace barriers in Israel and Palestine." *British Journal of Political Science* 46, no. 4 (2016): 845-859.

<sup>28</sup> Friedman, Gil. "Commercial pacifism and protracted conflict: Models from the Palestinian-Israeli case." *Journal of Conflict Resolution* 49, no. 3 (2005): 360-382. Østby, Gudrun, Ragnhild Nordås, and Jan

asymmetry affects the motivations that group members bring to situations of contact in the context of conflict.<sup>29</sup> In addition to the military and diplomatic effects of this asymmetric phenomenon, we argue that the majority / minority status of a victim's in-group can have an effect on the manifestation of PTSD in response to trauma. Relations between societal groups are shaped by power differences, and this is especially the case in relations that are framed by an ongoing conflict.

In our Israeli/Palestinian sample, Israelis are designated as the majority group-members, and Palestinians as the minority group members not only because of the relative numerical size of the populations within Israel, but also due to the higher level of material resources available to Israelis and the lower levels of casualties and fatalities experienced by the Israeli population compared to the Palestinian population over the course of the conflict. We are aware that Jews are a minority in the Middle East and so Israelis can be considered a minority, however here we have oriented the study to the particular nature of the trauma exposure.

In NI, construing Protestants or Catholics as majority or minority is perhaps even more controversial given the phase of the conflict. Various commentators have noted the rhetorical complexities of groups in NI claiming majority or minority status for themselves.<sup>30</sup> Numerically, Catholics remain the minority overall in NI (although this

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Ketil Rød, "Regional Inequalities and Civil Conflict in Sub-Saharan Africa." *International Studies Quarterly*, Volume 53, 2, (2009): 301–324.

<sup>29</sup> Saguy, Tamar, John F. Dovidio, and Felicia Pratto. "Beyond contact: Intergroup contact in the context of power relations." *Personality and Social Psychology Bulletin* 34, no. 3 (2008): 432-445; Dovidio, John F., Tamar Saguy, and Nurit Shnabel. "Cooperation and conflict within groups: Bridging intragroup and intergroup processes." *Journal of Social Issues* 65, no. 2 (2009): 429-449.

<sup>30</sup> Stevenson, Clifford, Susan Condor, and Jackie Abell. "The Minority- Majority Conundrum in Northern Ireland: An Orange Order Perspective." *Political Psychology* 28, no. 1 (2007): 105-125.

gap is closing),<sup>31</sup> but the distribution of the Catholic and Protestant population is not evenly spread across NI. Catholics are also in the majority on the island of Ireland. Although a multitude of UK legislative reforms have improved the material position of Catholics, there are still markers that suggest political, social and historical minority status. At the time of data collection, Catholic-associated political parties were the minority partners in the government, and still today they possess fewer economic resources than their Protestant counterparts.<sup>32</sup> Casualties and fatalities across the conflict were higher amongst Catholics than Protestants.<sup>33</sup> Therefore, consistent with our framing of the Palestinians as a minority, we considered the Catholic group the minority in NI for the purpose of our analyses. Given the greater equality that precluded the 1998 agreement, we hypothesize that group position and phase of conflict will together have important implications for the exposure-PTS relationship.

## **Hypotheses**

We hypothesize that (H1) phase of conflict will act to moderate the relationship between exposure and PTS (two-way interaction). With respect to the impact of status asymmetry, we hypothesize (H2) that group status (minority vs. majority) will act to moderate the relationship between exposure and PTS (two-way interaction). Finally, we expect (H3)

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<sup>31</sup> Hayes, McAllister, "Sowing dragon's teeth: Public support for political violence and paramilitarism in Northern Ireland";

Hayes, Bernadette C., and Ian McAllister. "Religion, identity and community relations among adults and young adults in Northern Ireland." *Journal of Youth Studies* 12, no. 4 (2009): 385-403.

<sup>32</sup> Wright, David M., Michael Rosato, Gillian Raab, Chris Dibben, Paul Boyle, and Dermot O'reilly. "Does equality legislation reduce intergroup differences? Religious affiliation, socio-economic status and mortality in Scotland and Northern Ireland: A cohort study of 400,000 people." *Health & place* 45 (2017): 32-38.

<sup>33</sup> Hayes, McAllister, "Sowing dragon's teeth: Public support for political violence and paramilitarism in Northern Ireland";

that the effect of group status (minority) on the relationship between exposure and PTS will be stronger for those in the conflict phase than for those in the post-conflict phase (three-way interaction).

### **Research Context**

The present work draws on unique longitudinal data from two regions (IL-PA and NI) where exposure has been both substantial and prolonged. Specifically, we examine the effect of exposure to violence on PTS among four population groups (Jewish Israelis, Palestinians, Protestants and Catholics).

Over the past two decades, the two conflicts have been coupled in the literature as classic examples of asymmetric, ethno-national conflicts.<sup>34</sup> While the conflicts are different in many ways, they do bear certain similarities. Since the turn of the century, NI's conflict has claimed over 3,500 fatalities, more than half of them civilians. Over 30,000 civilians were injured between 1969 and 2003.<sup>35</sup> Many individuals continue to live with long-term disability and poor physical and mental health.<sup>36</sup> Similarly, the daily stress of existing in a reality of occupation for the Palestinians, or being vigilant against

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<sup>34</sup> Lustick, "*Unsettled States, Disputed Lands: Britain and Ireland, France and Algeria, Israel and the West Bank-Gaza*".

<sup>35</sup> Sutton, M. "Bear in Mind these Dead: an Index of Deaths from the Conflict in Ireland, 1969-1993". Beyond the Pale Publications, (1994).

<sup>36</sup> Ferry, Finola, Brendan Bunting, Samuel Murphy, Siobhan O'Neill, Dan Stein, and Karestan Koenen. "Traumatic events and their relative PTSD burden in Northern Ireland: a consideration of the impact of the 'Troubles'." *Social psychiatry and psychiatric epidemiology* 49, no. 3 (2014): 435-446; Muldoon, Schmid, Downes, "Political Violence and Psychological Well- Being: The Role of Social Identity".

stabbings, suicide bombings or rocket attacks for Israelis, takes its toll on ordinary individuals' mental and physical health.<sup>37</sup>

## **Method**

### *Participants and Procedure*

In NI, the data was collected as a single data collection exercise. This was appropriate because Catholic and Protestant participants often live in nearby locations, albeit with some degree of segregation. Quota sampling strategy was employed at an electoral ward level to ensure that our sample of participants included varying levels of socio-economic status and resource deprivation,<sup>38</sup> religious composition and experience of violence.<sup>39</sup> Households were selected from the electoral list using the random sample function of SPSS. Data collection was subcontracted to a professional survey company (IPSOS-Mori), whose trained social survey interviewers conducted face-to-face interviews using computer assisted personal interviewing techniques. Data was collected in 40 electoral wards and interviewers used the last-birthday technique to select individual participants from households. Wave 1 consisted of 359 participants (self-categorized religious background: Protestant = 143, Catholic = 200, Other = 16). For wave 2 of this sample, we attempted to reach the 301 individuals who agreed to be contacted for follow-up interviews. These occurred with 221 participants approximately

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<sup>37</sup> Lavi, Tamar, and Zahava Solomon. "Palestinian youth of the Intifada: PTSD and future orientation." *Journal of the American Academy of Child & Adolescent Psychiatry* 44, no. 11 (2005): 1176-1183;

Solomon, Z., & Lavi, T. (2005). Israeli youth in the second Intifada: PTSD and future orientation. *Journal of the American Academy of Child & Adolescent Psychiatry*, 44(11), 1167-1175.

<sup>38</sup> Robson, Bradford, Deas, "Relative Deprivation in Northern Ireland." Belfast: Northern Ireland Statistics and Research Agency. 1994.

<sup>39</sup> Fay, Morrissey, Smyth. "Mapping Troubles-related Deaths in Northern Ireland".

four months later during June-July of 2008 (self-categorized religious background: Protestant = 98, Catholic = 120, Other = 3; 61% re-interview rate of the original sample).

In Israel, respondents were interviewed on two separate occasions. In T1, respondents were recruited through a random telephone survey between May 30 and July 18, 2007. Those who agreed and were available were surveyed again approximately six months later (November 18, 2007-January 31, 2008), with a 53% response rate. Wave 1 consisted of 1,292 respondents. Wave 2 included 962 of the first wave respondents (80% re-interview rate).

In the Palestinian Territories, we employed a stratified 2-stage cluster random sampling strategy for Palestinian adults living in the West Bank, Gaza Strip, and East Jerusalem. At T1, face-to-face interviews were conducted between September 16 and October 16, 2007, and six-month follow-up interviews were conducted between April 24, 2008 and May 17, 2008. Wave 1 consisted of 1196 individuals (a response rate of 63%). Of the original sample, we attempted to reach the 999 individuals who agreed to be contacted at 6-month follow-up. This sample yielded a response rate of 89%.

Our final condensed two wave sample included Jewish Israelis (N=1,365), Palestinians (N=1197), Protestants (N=143) and Catholics (N=200) in NI. In all the samples, people who recently migrated were included, but accounted for less than two percent of the total sample. Characteristics of each dataset can be seen in Table 1, which shows that there was no statistically significant difference in gender ratios among the four different samples, with male to female percentages ranging from 47.5 to 50.5. On average 68.5 percent of the overall sample was married with this percentage representing Protestants, Palestinians, and Jewish Israelis. Catholics were less likely to be married



(only 56.3%). The main difference between the samples in relation to age is that the Protestant sample includes a larger percentage of older respondents, especially in comparison to the Palestinian sample, of which 90% of the respondents were younger than 50 years old.

As this was a field study, we could not manipulate levels of exposure to violence. Our goal was to examine whether the relationship between past exposure and PTS would be affected by group status and phase of conflict. However, as political violence may currently affect those in an ongoing conflict phase, we used data from the two waves. We examined exposure at one point in time and PTS symptoms (of the same participants) at a later time point. Thus, even if exposure was recent when respondents answered the questions in the first phase, PTS was not an immediate reaction, as it was examined in the second phase.

### *Measures*

We assessed exposure to political violence at T1, in all samples, using items mirroring the approach in Hobfoll's previous work.<sup>40</sup> In the NI sample, the inclusion of exposure was 'ever previously happened to you' and in the IL-PA samples 'since the first intifada (i.e. 1987)'. Thus, in all cases the measure relates to exposure from the past.

Respondents in the IL-PA samples were asked whether they had experienced the following conflict-related events: (1) the death of a family member or friend; (2) witnessing an attack or being present at a site where there were injuries or fatalities;

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<sup>40</sup> Hobfoll, Canetti-Nisim, Johnson, "Exposure to terrorism, stress-related mental health symptoms, and defensive coping among Jews and Arabs in Israel."

and/or (3) injury to oneself, a family member, or a friend. Responses were coded as 0 if all three items were answered “No” (i.e. “Not exposed to any of these events”) or 1 if any of the above items received a “Yes”, (i.e. “Exposed to at least one event”). In the NI sample, six items were asked with more specific items associated with the Troubles in order to enhance the likelihood of recalling past events.<sup>41</sup> Due to the close similarity to conflict-based experiences, the measures can be considered to pertain to the same construct as the Jewish Israeli and Palestinian questions. More specifically, the NI respondents were asked whether they had ever experienced any of the following conflict-related events: (1) caught in a bomb explosion; (2) caught in a shooting; (3) witnessing violent acts against others; (4) injured as a result of any incident; (5) affected by serious handicap/injury; (6) bereaved as a result of The Troubles. Responses were coded 0 if all six items were answered “No” (i.e. “Not exposed to any of these events”) or 1 if any of the items received a “Yes”, (i.e. “Exposed to at least one event”).

*A 17-item Posttraumatic Symptoms Scale Interview format was utilized to assess PTS in all samples. This format demonstrated 86% sensitivity and 78% specificity when compared to clinician interviews (PSS-I; Foa, et al., 1993). It has been previously used in non-Western, low income regions,<sup>42</sup> within the Israeli population (including both*

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<sup>41</sup> Faller, Kathleen Coulborn. *Interviewing children about sexual abuse: Controversies and best practice*. Oxford University Press, 2007.

<sup>42</sup> Hall, Brian J., Stevan E. Hobfoll, Patrick A. Palmieri, Daphna Canetti-Nisim, Oren Shapira, Robert J. Johnson, and Sandro Galea. "The psychological impact of impending forced settler disengagement in Gaza: Trauma and posttraumatic growth." *Journal of Traumatic Stress* 21, no. 1 (2008): 22-29; Johnson, Howard, and Andrew Thompson. "The development and maintenance of post-traumatic stress disorder (PTSD) in civilian adult survivors of war trauma and torture: A review." *Clinical psychology review* 28, no. 1 (2008): 36-47.

Palestinians and Jews)<sup>43</sup> and NI populations.<sup>44</sup> Respondents were asked to rate items on a scale ranging from 0 (not at all) to 3 (very much) regarding the extent to which they suffered from each symptom recently (i.e. within the last month). Scores were calculated as the average of all 17 responses. Cronbach's alpha for this continuous scale in the current study was 0.88 for Jewish Israelis, 0.86 for Palestinians, 0.95 for Catholics, and 0.93 for Protestants.

We coded the *Phase of conflict* as 1 if the participant was from the Israeli or Palestinian sample (i.e. ongoing conflict) or 0 if the participant was from the NI sample (i.e. post- conflict).

*Group Status* was coded as 1 if the participant was from the Catholic community in NI or from the Palestinian sample (i.e. minority) and 0 if the participant was from the Protestant community in NI or Jewish Israeli sample (i.e. majority).

We accounted for a number of *Covariates/Control Variables* that have been shown to be related to PTS. We controlled for sex (coded 1 = male, 2 = female), age, and marital status (1=married/living together 0=single/divorced/separated/widowed).

### *Data Analysis*

To test the above hypotheses, we began by running a three-way ANOVA test. This starting point is due to the fact that our hypotheses relates to three nominal variables – individual exposure to political violence, phase of conflict and belonging to minority or

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<sup>43</sup> Hobfoll, Stevan, Canetti-Nisim, Daphna & Johnson, Robert. "Exposure to terrorism, stress-related mental health symptoms, and defensive coping among Jews and Arabs in Israel." *Journal of consulting and clinical psychology* 74, no. 2 (2006): 207.

Muldoon, Orla & Downes, Ciara. "Social identification and post-traumatic stress symptoms in post-<sup>44</sup> conflict Northern Ireland." *The British Journal of Psychiatry* 191.2 (2007): 146-149; Schmid, Katharina, Orla, Muldoon & Ciara, Downes. "Political violence and psychological well-being: the role of social identity." *Journal of Applied Social Psychology* (2009).

majority group status. This resulted in a classic 2X2X2 ANOVA structure. We used IBM SPSS's (version 23) GLM procedure, which allowed us to include the control variables as covariates while conducting the univariate procedure. We also provide partial eta squares ( $\eta^2$ ) as effect size estimates for these covariates. Based on Cohen's work, an eta squared ranging between 0.06 and 0.13 is regarded a medium effect size with smaller values regarded as small effects and larger values regarded as large effects.<sup>45</sup> Person means have been shown to be the best substitute for missing data from scales where more than half the items are present,<sup>46</sup> and we used this method in the 4% of the cases where respondents did not fill in all the PTS items.

## Results

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**Insert Table 1 Here**

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Table 2 includes overall means standard deviations and correlations among all study variables. As relationship status, phase of conflict, group status and exposure were all coded as 0/1 variables, the means are indicative of the percentage of each demographic in our sample. The data indicates that 69% of our sample were married, 12% were from the post conflict phase, 52% belonged to the majority group and 52% had been exposed to political violence. Examining the correlations between the different variables and PTS, it

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<sup>45</sup> Cohen, Jacob. "Statistical power analysis for the behavioral sciences 2nd edn." (1988).

<sup>46</sup> Hawthorne, Graeme, Graeme Hawthorne, and Peter Elliott. "Imputing cross-sectional missing data: comparison of common techniques." *Australian & New Zealand Journal of Psychiatry* 39, no. 7 (2005): 583-590.

is apparent that being a woman ( $r=0.09$ ,  $p < .01$ ), being of a younger age ( $r=-0.19$ ,  $p < .01$ ), living in an ongoing conflict zone ( $r=-0.19$ ,  $p < .01$ ), being part of a minority ( $r=-0.62$ ,  $p < .01$ ), and being exposed to political violence ( $r=0.29$ ,  $p < .01$ ) are all associated with higher PTS scores.

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**Insert Table 2**

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*Covariate Effects*

The 2 (phase of conflict: ongoing vs. post-conflict) X 2 (group status: minority vs. majority) X 2 (Exposure: exposed vs. not exposed) ANOVA on PTS at T2 revealed that the three control variables were significant. Female participants possessed higher incidences of PTS than male participants ( $F(1, 2053)=44.40$ ,  $p<.001$ ,  $\eta^2=0.02$ ). Older participants reported lower incidences of PTS than younger participants ( $F(1, 2053)=21.45$ ,  $p<.001$ ,  $\eta^2=0.01$ ). While married participants reported lower incidences of PTS than unmarried ones ( $F(1, 2053)=5.36$ ,  $p<.05$ ,  $\eta^2=0.003$ ). As can be seen from the partial Eta squared values, these control variables account for only small portions of the variance.

*Main Effects*

As expected, we found that the phase of conflict variable had a significant effect,  $F(1, 2053)=171.35$ ,  $p<.001$ ,  $\eta^2=0.08$ , which suggests that participants in post-conflict setting suffer less PTS ( $M=4.33$ ,  $SD=8.98$ ), than participants in ongoing conflict settings

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( $M=12.37$ ,  $SD=11.04$ ). We also found a significant effect for status asymmetry,  $F(1, 2053)=123.67$ ,  $p<.001$ ,  $\eta^2=0.06$ , with participants in the minority groups reporting higher PTS ( $M=19.27$ ,  $SD=10.18$ ) than participants in the majority groups ( $M=5.51$ ,  $SD=7.31$ ). In addition, we found a significant effect for exposure,  $F(1, 2053)=23.38$ ,  $p<.001$ ,  $\eta^2=0.01$ , with those who were exposed to political violence before T1 reporting higher levels of PTS at T2 ( $M=14.76$ ,  $SD=11.45$ ) than those who had never been exposed before T1 ( $M=8.21$ ,  $SD=8.52$ ). These means are presented in a Table format in Appendix 1.

### *Moderation Effects*

Our first hypothesis claimed that phase of conflict would moderate the relationship between exposure and PTS. The difference in mean levels of PTS was calculated among those exposed to political violence before T1, and those not exposed. This interaction between phase of conflict and exposure revealed significant differences in subjects' PTS ( $F(1, 2053)=4.95$ ,  $p<.05$ ,  $\eta^2=0.002$ ). This supports our hypothesis that PTS will occur more frequently among participants within an ongoing conflict than in a settled conflict ( $M_{\text{ongoing conflict exposed}} - M_{\text{ongoing conflict never exposed}} = 6.54$ ;  $M_{\text{post-conflict exposed}} - M_{\text{post-conflict never exposed}} = 4.84$ ). Boxplots showing the difference in PTS between those exposed and those not exposed, by phase of conflict, are presented in Figure 1.

The two-way interaction between status (i.e. majority/minority) and exposure and the three-way interaction between phase of conflict, status and exposure were not found to be significant ( $F(1, 2053)=0.126$ , n.s. and  $F(1, 2053)=0.251$ , n.s.). Thus, we did not find

support for hypotheses 2 and 3. Appendix 2 shows the means and standard deviations of PTS for all the eight groups resulting from our 2X2X2 analysis.

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**Insert Figure 1**

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While not hypothesized, the two-way interaction between phase of conflict and status was significant  $F(1, 2053)=120.74, p<.001, \eta^2=0.06$ . Participants from the minority group in the ongoing conflict (i.e. Palestinians) reported much higher levels of PTS on average ( $M=1.22, SD=0.53$ ) than the other three groups (Jews:  $M=0.33, SD=0.42$ ; Protestants  $M=0.25, SD=0.53$  and Catholics  $M=0.25, SD=0.53$ ). Thus, the minority in an ongoing conflict has an overall level of PTS that is much higher than any other group regardless of exposure. However, the non-significant three-way interaction emphasizes that the effect of being exposed and not being exposed to violence was not larger for the minority group in the ongoing conflict than for the other groups.

As the above hypotheses were examined using uneven sample sizes, with many more participants from the Palestinian and Jewish Israeli samples, we reran the analysis presented above on a smaller sample. Using a random sample generator, we randomly sampled 200 cases from the Palestinian sample and 143 cases from the Jewish Israeli sample to match, accordingly, the number of cases we had from the Protestants and Catholics Irish samples. This analysis provided similar results to those presented above.

## **Discussion**

## RUNNING HEAD: EXPOSURE TO POLITICAL VIOLENCE AND PTS

This study analyzed two conflicts in different phases in order to reveal the ongoing impact of exposure on individuals and groups. We found, as hypothesized, that in ongoing conflict settings PTS is higher as a result of exposure to violence than in post-conflict settings. We also found that minority status group members in the ongoing conflict suffered from the highest level of PTS in comparison to all other groups regardless of exposure. Thus while phase of conflict indeed serves as a moderator of the exposure-PTS relationship, it seems that group status plays a different role. While it did not moderate the exposure-PTS relationship, it had a different effect on the level of PTS depending on the specific phase of conflict.

Our findings demonstrate the importance of including multiple levels of analysis when considering the impact of political violence. We show that even within the same context, individuals *differ* in their experiences of conflict, and that this has consequences for PTS. Drawing on data from four samples representing two regions where exposure has been both substantial and prolonged, we show that exposure generally amplifies PTS. However, by incorporating a second level of analysis, we can see how the group level is also an important factor. Groups differ in terms of their risk factor; here we demonstrate this using a comparative analysis that shows how the *phase* of the conflict moderates the relationship between exposure and PTS. The link between these two factors is stronger where the conflict is ongoing.

This finding has important practical and theoretical implications. First, it suggests that although early formulations of PTS relied on an understanding that trauma was time-limited and discrete, in actuality, chronic exposure to the trauma of conflict has consequences for symptom severity. One hypothesis worthy of future research is that this



impact is mediated by a sense of identification with one's in-group in the conflict.

Essentially the effect of political violence is magnified when we share group membership and identify with the victims of the conflict.

The second practical implication of our findings is that the resolution of political violence is likely to have mental health benefits for those most directly affected by the violence. In NI, at the time of the ceasefires, there were concerns that cessation of hostilities would reveal many health problems that had been obfuscated by the conflict.<sup>47</sup> Our data suggests that this is not the case. Thus, beyond exposure, the actual conflict matters. This is the first evidence of these effects using longitudinal cross-national comparisons in populations affected directly by political violence.

The other important finding our study presents is that there is not only a significant two-way interaction between minority/majority group status and phase of conflict, but also a non-significant three-way interaction with exposure. It seems that regardless of exposure, the minority group in an ongoing conflict suffers from much more extreme PTS. This evidence demonstrates the severe consequences of both living in an era of an ongoing conflict, as well as being part of the minority -subordinate, low power group. Societies which are involved in ongoing conflicts, are required to live for extended periods of time under difficult conditions and negative experiences such as threat, stress, pain, exhaustion, grief, traumas, misery, hardship, and cost, both in human and material terms<sup>48</sup>. Yet, members of subordinate – minority groups (compared to the majority-

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<sup>47</sup> Gilligan, Chris. "Traumatized by peace? A critique of five assumptions in the theory and practice of conflict-related trauma policy in Northern Ireland." *Policy & Politics* 34, no. 2 (2006): 325-345.

<sup>48</sup> Keynan, Irit. "Collective trauma and national behavior in times of threat—The Israeli public and the 2014 war in Gaza." *Cultural and Religious Studies* 4.5 (2016): 300-309.; Soffer-Dudek, Nirit. "Sleep-related experiences longitudinally predict elevation in psychopathological distress in young adult Israelis exposed to terrorism." *Personality and Individual Differences* 100 (2016): 131-139.

dominant, high power group) tend to get an even smaller share of the good things in life (e.g., powerful roles, good housing, good health) and a disproportionate share of the bad things in life (e.g., relatively poor housing and poor physiological and psychological health)<sup>49</sup>. Such a lack of personal, social, and material resources deeply influence minority's psychological outcomes. This finding adds to the growing body of work that highlights how social and structural conditions are important determinants of health. As such, fostering positive change among people who live in situations informed by political violence will rely on providing solutions to mental health concerns. Indeed, this is reinforced by findings that suggest that the myriad legislative reforms introduced in NI that promoted equality have done much to improve health and well-being in this post-conflict society.<sup>50</sup>

In an attempt to understand the higher PTS levels experienced by our Palestinian sample, we examined whether, for minority groups in an ongoing conflict, resource depletion is so high that exposure to violence simply does not have a compound effect, or if perhaps our analysis is missing part of the picture. In order to develop a deeper understanding, we conducted post hoc analysis on this sample group. As presented in Appendix 3, when we examined the extent to which an individual was exposed to political violence, as opposed to simply examining *if* they had been exposed in the past, we found a positive effect. The greater the extent of exposure, the higher the level of

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<sup>49</sup>Kimhi, Shaul, Dror, Gal & Sterne, Sapir. "Resilience among Students from the Majority and Minority Group: The Israeli Case." *Journal of Psychology* 5.1 (2017): 37-46.; McCutcheon, Robert, Michael AP Bloomfield, Tarik Dahoun, Marina Quinlan, Sylvia Terbeck, Mitul Mehta, and Oliver Howes. Amygdala reactivity in ethnic minorities and its relationship to the social environment: an fMRI study. *Psychological medicine*. (2018): 1-8.; Sidanius, Jim, and Felicia Pratto. Social dominance: An intergroup theory of social hierarchy and oppression. *Cambridge University Press* (2001).

<sup>50</sup> Wright, Rosato, Raab, Dibben, Boyle, O'reilly, "Does equality legislation reduce intergroup differences? Religious affiliation, socio-economic status and mortality in Scotland and Northern Ireland: A cohort study of 400,000 people."

PTS. Thus, it seems that for minority groups in an ongoing conflict, resources can further be depleted with continued exposure<sup>51</sup>. While PTS for all individuals in the Palestinian sample was much higher than that of the other three groups included in our study, a high degree of personal exposure to political violence further increases PTS.

From a public health perspective, the evidence indicates that the direct and indirect costs associated with exposure to political violence are staggering, especially in ongoing conflict zones.<sup>52</sup> Further, it highlights the importance of regularly assessing the factors associated with PTS in order to alleviate, or even prevent, psychopathology in highly traumatized populations. Our research points to the importance of the experiences of those most affected by political violence for the development of peace in situations of ongoing conflict. Certainly, removing the real threat of violence is crucial to progress, but it is not sufficient, if future violence is considered likely. Indeed, recent history in both NI<sup>53</sup> and IL-PA<sup>54</sup> illustrates that agreements between policymakers are insufficient for reconciliation and stable peace. Rather, such agreements must be accompanied by people-to-people dynamics that both reflect and engender social and psychological change.<sup>55</sup> Put differently, peace depends on a social infrastructure capable of sustaining formal political agreements, which must be based on the recognition of the psychological toll of continued exposure. Thus, peacemakers must work towards increasing resilience

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<sup>51</sup> Asal, Victor, Findley, Michael, Piazza, James & Walsh, James. Political exclusion, oil, and ethnic armed conflict. *Journal of Conflict Resolution*, (2016). 60(8), 1343-1367.

<sup>52</sup> Besser, Avi, et al. "Intrapersonal resilience moderates the association between exposure-severity and PTSD symptoms among civilians exposed to the 2014 Israel–Gaza conflict." *Self and Identity* 14.1 (2015): 1-15.

<sup>53</sup> Arthur, Paul. "Multiparty mediation in Northern Ireland." *Herding cats: Multiparty mediation in a complex world* (1999): 471-501.

<sup>54</sup> Maoz, Ifat. "Power relations in intergroup encounters: A case study of Jewish–Arab encounters in Israel." *International Journal of Intercultural Relations* 24, no. 2 (2000): 259-277.

<sup>55</sup> Bar-Tal, Daniel. *Intractable conflicts: Socio-psychological foundations and dynamics*. Cambridge University Press, 2013.

and the coping mechanisms of those most affected by violence. If left unaddressed by policy makers, these open psychological wounds may bounce back and feed into the cycle of violence.<sup>56</sup>

As with any research, our work has limitations. Firstly, the study had uneven sample sizes. As mentioned above, in an attempt to overcome this problem we used a random sample generator for the IL-PA sample to match the size of the NI sample. While this did not impact our results, a study with equitable sample sizes is preferable and likely to strengthen our results. Secondly, survey and interview methods are always subject to the danger that participants' answers are not entirely objective. This is particularly problematic in face-to-face interviews where participants may give answers based on what they believe the interviewer wishes to hear. Thirdly, the exposure measures used in both samples were not identical. These measures were formulated in such a way to assist the NI sample in recalling past instances of exposure.<sup>57</sup> While the construction of the final variable in both cases asks whether the person has previously been exposed to political violence, future research might want to examine whether this additional detail is necessary. Finally, while the IL-PA conflict has more distinct geographical borders, this was not the case in post-conflict NI. Yet in both cases the two sides of the conflict are clear regardless of geography.

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Canetti, Daphna, Sivan Hirsch-Hoefler, Carmit Rapaport, Robert D. Lowe, and Orla T. Muldoon. <sup>56</sup> "Psychological barriers to a peaceful resolution: Longitudinal evidence from the Middle East and Northern Ireland." *Studies in Conflict & Terrorism* 41, no. 8 (2018): 660-676.

<sup>57</sup> Fallor, "Interviewing children about sexual abuse: Controversies and best practice".

Our research builds on the previous literature relating to the psychological effect of individual-level exposure to violence. However, to the best of our knowledge, we are the first to undertake a cross-national comparison of both ongoing and post-conflict settings. As such, this work guides the field in a new direction and offers new implications and variables by which to understand the impact of exposure on PTS in ongoing and post conflict settings, as well as on majority and minority groups. Research on other comparable conflict phases and status asymmetries should be undertaken to further deepen our understanding of the long-term and possibly detrimental impact of exposure on mental well-being and possibilities for sustained peace.

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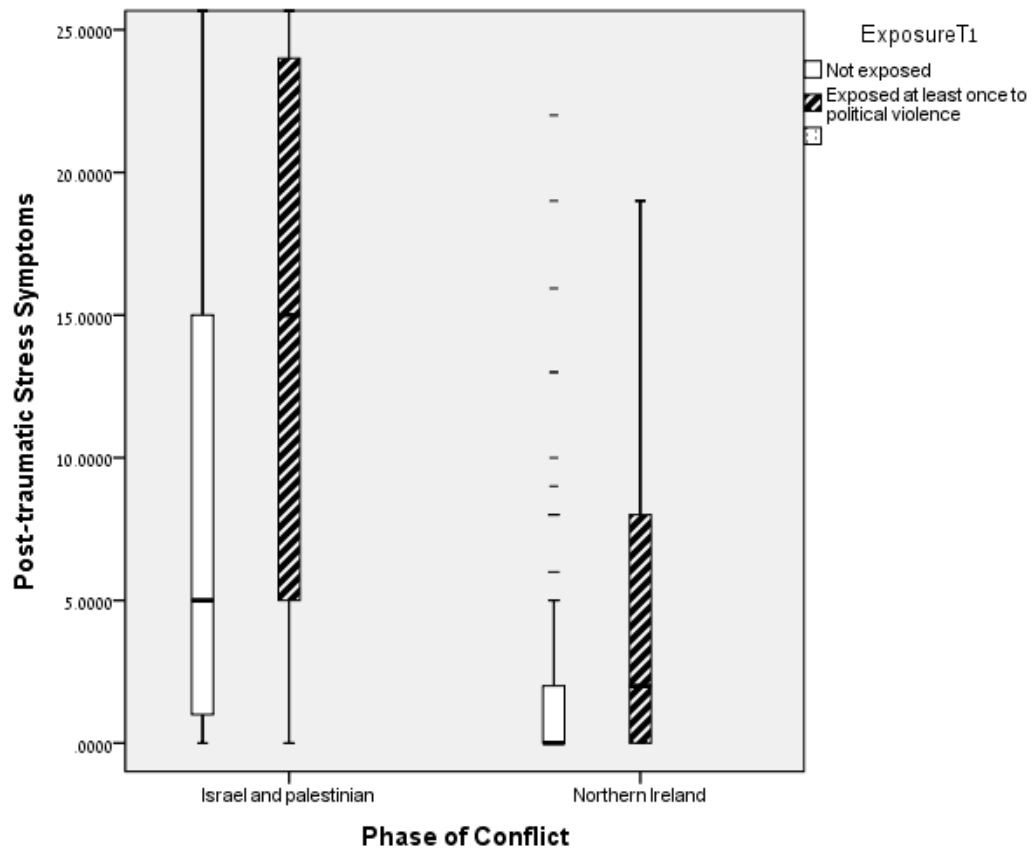


Figure 1. Boxplots of posttraumatic stress symptoms by phase of conflict and exposure

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Table 1  
*Sub-Sample Characteristics and Comparisons*

Variable	Total		Catholic		Protestant		Palestinians		Jewish Israelis		$\chi^2$
	(N=2893)		(n=200)		(n=140)		(n=1191)		(n=1362)		
	n	%	n	%	n	%	n	%	n	%	
Age (years)											418.55***
18-22	328	11.3	20	10	5	3.6	192	16.1	111	8.1	
23-29	474	16.4	33	16.5	14	10	287	24.1	140	10.3	
30-39	622	21.5	50	25	17	12.1	328	27.5	227	16.7	
40-49	566	19.6	29	14.5	35	25	236	19.8	266	19.5	
50-59	440	15.2	30	15	23	16.4	83	7	304	22.3	
60+	462	16.2	38	19	46	32.9	65	5.5	313	23	

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Male	1395	48	101	50.5	72	50.3	574	48	648	47.5	0.809
Married/partner <sup>1</sup>	1984	68.5	112	56.3	94	66.2	818	68.6	960	70.5	16.62**
Exposed	1497	52.4	79	39.9	43	30.3	831	71.9	544	39.9	302.42***

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<sup>1</sup> Additional analysis shows there is no statistically significant difference between the percent of those who are married in the Protestant, Palestinian and Jewish Israeli samples. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .



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Table 2

*Means, SD and N of All Measured Variables as well as the Correlations between All Variables*

	<i>M</i>	<i>S.D.</i>	<i>n</i>	1.	2.	3.	4.	5.	6.
1. Gender	1.52	.50	2904	-					
2. Age	3.59	1.59	2893	-0.02	-				
3. Married	.69	.46	2895	-0.003	.34**	-			
4. Phase of Conflict <sup>1</sup>	.12	.32	2905	-0.02	.08**	-.06**	-		
5. Group Status <sup>2</sup>	.52	.50	2905	0.01	.33**	0.04	-0.07***		
6. Exposure	.52	.50	2858	-0.10**	-0.11**	-0.01	-0.12**	-0.28**	
7. PTS	11.91	11.14	2108	0.09**	-0.19**	-0.02	-0.19**	-0.62**	0.29**

<sup>1</sup>Phase of Conflict is a dichotomous variable in which 0=Post conflict and 1=Ongoing conflict.

<sup>2</sup>Group Status is a dichotomous variable in which 0=minority and 1=majority.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

**Appendix 1**

*Mean and Standard Deviations of PTS at T2 relating to the main effects of the 2X2X2 factorial analysis*

Variable

	Post Conflict (n=151)		Ongoing Conflict (n=1913)	
Phase of Conflict	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
	4.33	8.98	12.37	11.04
	Majority (n=1124)		Minority (n=940)	
Group Status	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
	5.51	7.31	19.27	10.18
	Not exposed (n=940)		Exposed (n=1124)	
Exposure	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
	8.21	8.52	14.76	11.45

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**Appendix 2**

*Mean and Standard Deviations of PTS at T2 relating to the interaction effects of the 2X2X2 factorial analysis*

Phase of Conflict: Post Conflict								Phase of Conflict: Ongoing Conflict							
Group Status: Minority (Catholics)				Group Status: Majority (Protestants)				Group Status: Minority (Palestinians)				Group Status: Majority (Jewish Israelis)			
Not exposed		Exposed		Not exposed		Exposed		Not exposed		Exposed		Not exposed		Exposed	
(n=43)		(n=43)		(n=35)		(n=31)		(n=225)		(n=636)		(n=644)		(n=419)	
<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<b>2.28</b>	5.24	<b>6.39</b>	11.25	<b>1.63</b>	3.46	<b>7.39</b>	12.00	<b>19.82</b>	8.47	<b>21.13</b>	9.18	<b>4.94</b>	6.57	<b>6.57</b>	7.92

### **Appendix 3**

In an attempt to further understand our findings that while PTS is highest in the minority, ongoing conflict group, and that whether an individual was exposed to political violence or not was not related to PTS, we ran a post hoc analysis. We examined whether, when it comes to an ongoing conflict, the relationship between minorities' exposure and psychological distress would be found in regard to the *extent* of exposure (i.e., as opposed to what we examined earlier which just distinguished between those ever been exposed to political violence and those who have not). Thus, we conducted a regression analysis in which psychological distress at T2 was the dependent variable and extent of exposure at T1 was the independent variable. Extent of exposure was assessed by summing the three exposure items (i.e. (1) the death of a family member or friend; (2) witnessing an attack or being present at a site where there were injuries or fatalities; and/or (3) injury to oneself, a family member, or a friend). For each item the respondent indicated if it had not occurred = '0' or occurred = '1' at any time in their past. Summing these responses created a variable ranging from 0 (none of the events occurred) to 3 (has experienced all the above events). We used the same control variables presented above and added for two very context specific variables, namely whether the individual lives in Gaza as opposed to Jerusalem or the West Bank

(1=yes, 0=no) and whether the individual resides in a refugee camp (1=yes, 0=no). Of the sample, 37% reported living in Gaza and 16% reported residing in a refugee camp.

Our regression analysis revealed that indeed, after controlling for all the other variables, extent of exposure was significantly related to PTS ( $b=0.036$ ,  $p<0.05$ ). This finding shows that for Palestinians, the extent of exposure is related to psychological distress even though, in our previous analysis, exposure (examined as a zero/one variable) was not related to such distress. Furthermore, although psychological distress levels are generally high for this group, for those who experience high exposure, psychological distress is even greater. Thus, these findings indicate among minority group members in an ongoing conflict, the *extent* of exposure, and *not* a dichotomous distinction of whether one has been exposed or not, was significantly related to PTS.