The Dual Effect of COVID-19 on Intergroup Conflict in the Korean Peninsula

Nimrod Nir\textsuperscript{1}, Eran Halperin\textsuperscript{1} and Juhwa Park\textsuperscript{2}

Abstract
The coronavirus pandemic has fundamentally shifted the way human beings interact, both as individuals and groups, in the face of such a widespread outbreak. This paper seeks to investigate the effects of COVID-19 on intergroup emotions and attitudes within an intractable intergroup conflict, specifically, through the lens of the Korean conflict. Using a two-wave, cross-sectional design, this study was able to track the profound psychological changes in intergroup emotions and attitudes both prior to the pandemic and during its onslaught. Results of these two wave representative samples show that South Korean citizens demonstrated higher levels of fear of their neighbors in North Korea after the outbreak of COVID-19 than before. In turn, this led to increased societal support of hostile government policies towards North Koreans. Conversely, the same participants exhibited higher levels of empathy towards North Koreans during the pandemic, which led to a higher willingness to collaborate with their outgroup. This dual effect on intergroup emotions within intractable conflicts brings forth new avenues from which societies may be able to restrain the destructive influence of the COVID-19 threat on intergroup relations — as well as harvesting its constructive potential for reconciling warring intergroup relations.

Keywords
COVID-19, conflict, Korea, international cooperation, conflict resolution, Intergroup, Group Based Emotions

\textsuperscript{1}Faculty of Social Science, The Hebrew University of Jerusalem, Jerusalem, Israel
\textsuperscript{2}Korea Institute for National Unification, Seocho-Gu, Seoul, Republic of Korea

Corresponding Author:
Nimrod Nir, Faculty of Social Science, The Hebrew University of Jerusalem, Mt. Scoop, Jerusalem, 91905, Israel.
Email: NimrodN@thebrief.co.il
The Dual Effect of COVID-19 on Intergroup Conflict in the Korean Peninsula

The COVID-19 pandemic poses a serious threat to the health and wellbeing of humanity, with the full extent of its ripple effects still unknown. Beyond its influence on various aspects of our lives such as in health and economy, the pandemic may also see dramatic effects on relations between groups within an intractable conflict. Such conflicts usually involve members of warring groups who have already—without the added impetus of coronavirus—experienced a variety of both psychical and psychological threats that stem from the very nature of violent, chronic disputes (Coleman 2003). In order to cope with such threats, group members adopt socio-psychological beliefs, emotions and attitudes aimed at preserving their wellbeing and positive self-image (Bar-Tal and Halperin 2011). While these constructs may be effective in helping individuals cope with a threatening reality, they also act as powerful barriers that stand in the way of intergroup reconciliation (Halperin 2015).

Exploring the influence of external threats on intergroup relations is a major crusade for social scientists, given that tragic outcomes of intractable intergroup conflicts are not confined to warring groups alone, but may spread to threaten and undermine international stability. In light of this, this study seeks to reveal the implications of COVID-19 on intergroup emotions and, in turn, on citizens’ attitudes relating to intergroup escalation and reconciliation, using the divided Korean peninsula as a litmus test.

The main question driving the current work is whether external threat such as the COVID-19 outbreak, may lead to both constructive (i.e. intergroup cooperation) and destructive (i.e. intergroup hostility) intergroup outcomes, and whether those seemingly contradicting effects are mediated by social identification and intergroup emotions — in the context of the Korean peninsula.

Intergroup Conflicts in the Face of COVID19

Threatening events can substantially influence attitudes and behaviors (Heine et al. 2006; Xu and McGregor 2018), as they generate ‘compensatory responses’ (Brandt and Crawford 2020; Jonas et al. 2014) such as cognitions, emotions and behavioral shifts in both personal and social contexts. These responses provide individuals with some relief from anxiety and uncertainty (Mirisola et al. 2014), but at the same time may also undermine more tolerant attitudes towards outgroups (Van Bavel et al. 2020). On the other hand, external threats may not always lead to pejorative behaviors towards outgroups. When faced with collective danger and threat (e.g. shared enemy), people sometimes demonstrate a tendency to seek affiliation and proximity, express mutual aid, and act collaboratively, suggesting that one possible collective response to the pandemic may also be alliance when under threat (Adam-Troian and bagci 2020; Bodenhausen et al. 2000).

Thus, social psychological theories regarding people’s reactions to threats, such as COVID-19, can be generally divided into two classifications (Cruwys et al. 2020); with
one approach emphasizing the increase in intergroup hostility as a response to such threats (Van Bavel et al. 2020), while the other highlighting the role of unity and cooperation, leading to more inclusive and collaborative intergroup behaviors (Bodenhausen 2000). Although these approaches appear to imply contradictory responses towards outgroups in the face of external threats, they also converge on the adaptive functions of socio-psychological responses to pandemics; with one serving the avoidance of the spread of disease, and the other encouraging group level aid and cooperation against a common threat (Smith and Gibson 2020). Indeed, recent findings from Turkey have revealed that the COVID-19 threat has increased both negative (through perceptions of immigrant threat) and more positive attitudes (through a sense of common identity) towards Syrian immigrants (Adam-Troian and Bagci 2020).

However, to the best of our knowledge, the role of group based emotions in mediating the effects of COVID-19 on intergroup conflict outcomes has yet to be explored. As group based emotions play a major role in determining escalation and reconciliation of intergroup conflicts (Halperin 2015; Halperin and Nir 2019), and are highly receptive to threatening events; a better understanding of the ways in which group based emotions might affect socio-psychological responses to the COVID-19 threat, may be of high importance for both theoretical and applied venues.

In what follows, we will first discuss the role of intergroup emotions in intractable conflicts, before addressing our main focus in the current work; illuminating two potential influence paths of COVID-19 on intergroup escalation and reconciliation. This will be examined through the prism of the Korean conflict and explored through both social and emotional mechanisms.

**Group Based Emotions in Intergroup Conflict**

An external threat, such as the COVID-19 pandemic, may amplify all psychological factors (e.g. collective memory, societal beliefs, cognitive biases) that usually preserve and perpetuate intractable conflicts (Bar-Tal and Halperin 2011). However, as the effects of group based emotions in conflict on aggressive and conciliatory intergroup policies is more proximate than the one of other psychological phenomena (Halperin 2015), and, as new threats carry some intense emotional reactions, the current work will focus on the emotional barriers in intergroup conflict and their potentially mediating effect on intergroup hostility or collaboration, all under the threat of the COVID-19 pandemic.

It is known that emotions are not felt only on the individual level. Vast empirical research stemming from intergroup emotions theory has established that people feel emotions on behalf of their group (Mackie, Devos and Smith 2000; Mackie and Smith 2002). Smith, Seger and Mackie (2007) suggests that when group memberships are salient, people can feel emotions on account of their group’s position, even if they have had little or no personal experience of the actual intergroup situations themselves. According to this approach, group-based emotions are sentiments that are dependent upon an individual’s membership in a particular social group and occur in response to
events that have perceived relevance for the group as a whole (Mackie et al. 2000; Smith et al. 2007).

Often, these aggregated experiences of short term negative emotional reactions turn into emotional sentiment, which refers to enduring negative feelings toward the outgroup or the conflict itself, that are not contingent upon specific action or behavior of that group (Halperin and Gross 2011). The transformation of momentary individual-level and intergroup emotions into long-term sentiments is one reason that intractable conflict reconciliation is so difficult to address; as these intergroup emotional sentiments serve as a powerful force that motivates and sustains conflicts between societies and countries (e.g. see Halperin 2014; Maoz and McCauley 2008). These emotional barriers lead to the formation of intergroup negative attitudes (Hewstone, Rubin and Willis 2002; Stephan and Stephan 1985), motivate support for destructive intergroup policies, and bias group membership (Cole, Balcetis and Dunning 2013).

A recent study, conducted in the context of the Korean conflict, revealed that the effect of South Koreans’ group based hatred on support of military action against North Korea as well as on support for conciliatory policies, went above and beyond various variables, such as ideology and group identification, (Halperin and Nir 2019). Emotions can be explained as mental states of readiness (Scarantino and de Sousa 2018), incorporating motivation and directed action towards a certain target (Bagozzi et al. 1999). As such, their role as mediating factors between social reactions to COVID-19 and intergroup escalation and cooperation may be especially important.

Amongst these group based emotions, group based fear and intergroup empathy are the natural candidates for mediating the potential dual effect of the pandemic threat on intergroup conflict. While fear is a product of threat and induces intergroup hostility (Oh et al. 2016), empathy requires a certain degree of perspective taking and sense of intergroup commonality, and induces intergroup cooperation and conciliatory attitudes (Batson and Ahmad 2009). We shall discuss the roles of each intergroup emotion, before presenting the theorems and findings underlying the potential routes of an encompassing social reaction to COVID-19.

The Destructive Path: COVID-19 Increases Intergroup Hostility

Various theories and findings predict that when facing an external threat such as the COVID-19 pandemic, individuals’ identification with their ingroup will increase, as well as their hostility towards the outgroup (Cruwys et al. 2020). From an evolutionary psychology perspective (Sorokowski et al. 2020), outgroup distancing may be especially adaptive for avoiding infections, since outgroup members are more likely to carry pathogens to which members of the ingroup have not yet developed immunity (Murray et al. 2013). Hence, in response to a pandemic threat, people who share social identities will perceive each other as more similar and as less likely to infect them, compared to outgroups members, triggering greater ingroup favoritism and outgroup bias (Cruwys et al. 2020).
According to Terror management theory (Greenberg, Pyszczynski and Solomon 1986), humans are overwhelmed by their own mortality; the thought that one’s life is subject to an end that may be sudden, unpredictable and unavoidable. Individuals affected by death anxiety cannot function normally, as their defenses are impaired and they are vulnerable to many dangers (Becker 1973). According to TMT, cultures and groups can provide an escape from death anxiety, as they integrate individuals into something larger than themselves—a culture group that existed before they were born and will continue to exist long after they die. Numerous studies adopting a TMT approach found that when made to think about their own mortality, people tend to render especially harsh judgments of those who violate ingroup cultural standards, and favor those who uphold their standards (Landau et al. 2004; Solomon, Greenberg and Pyszczynski 2000). Thus, group members under threat—especially in the face of a realistic health and economic risk—will increase identification with their ingroup as a means to decrease existential anxiety, all the while further distancing themselves from their outgroups.

From an emotional perspective, both the COVID-19 threat and the increased intergroup biasness it promotes, may have substantial influence on group based fear. Fear refers to a subjective emotional state that arises in situations perceived as threatening or dangerous and accompanied by a physiological response (Halperin 2008). Often, fear is accompanied by a perception of weakness and relative fatigue as well as a low potential for cooperation with the threatening event (Roseman 1984). Fear can be perceived as a social phenomenon, experienced by the individual within the cultural-social context; as it may be aroused by a threat to one’s personal or social status, as well as one’s identity and beliefs (Shaver et al. 1987). However, the most significant fear factor is the threat to one’s physical existence (Jarymowicz and Bar-Tal 2006), such as in the case of COVID-19.

At the group level, when people experience high levels of fear—which is part and parcel of an intergroup conflict—they may respond with aggressive behavior, even if that behavior is perceived as counter-productive (Maoz and McCauley 2008). Studies show that fear strengthens relations within the ingroup (Wohl, Branscombe and Reysen 2010), and that extreme fear can lead to cognitive “stagnation” (Kruglanski 2004), preventing mental flexibility and activating automated systems of defense and cognitive rigidity (Cohen et al. 2014); a process that allows for selective retrieval of fear-related knowledge and prevention of openness to new ideas (Clore, Schwarz and Conway 1994). Studies conducted on the intractable Israeli-Palestinian conflict found that group based fear was associated with decreased openness to new information (rather, reinforced conflict-supporting beliefs), increased perceptions of outgroup members as dangerous and increased support of intergroup aggression (Cohen et al. 2014).

The threat posed by COVID-19 may increase group based fear in the following ways. The fear of COVID-19 may be generalized as fear of the outgroup, while the threat of the pandemic may enhance the sense of ingroup vulnerability - increasing the intensity of the perceived threat by the outgroup. Further, in the context of the Korean
conflict, where the North Korean regime reveals no solid data regarding the magnitude and severity of the COVID-19 outbreak, all the while sharing a border with the South, the fear of the COVID-19 may be directly intertwined with the fear of the outgroup (i.e. fearing that the North’s poor dealing with the pandemic will cause a widespread outbreak in the South). Group based fear, in turn, may lead to higher levels of hostility towards the outgroup.

**The Constructive Path: COVID-19 Induces Common Ingroup Identity**

Although various models of reaction to threats predict higher levels of ingroup social cohesion and identification, they rarely specify which ingroup is targeted by these mechanisms. For instance, responding to threat via increased identification as residents of a certain city or country, could extend to inhabitants with an immigrant background (Adam-Troian and bagci 2020). This aforementioned point alludes to the necessity of incorporating other group-level aspects of pandemics that may predict changes in intergroup attitudes. Accordingly, beyond some immediate effects of COVID-19 on deescalating intergroup conflict due to reprioritization, restrictions and reallocation of resources, COVID-19 may have a meaningful, sustainable and positive impact on groups engaged in conflict. When facing a collective threat, people may perceive themselves as more interdependent on others sharing that same threat, and therefore seek their affiliation and proximity, and exhibit mutual assistance – suggesting that one possible socio-psychological response to pandemics may be increased cooperation under threat (Alonso-Ferres et al. 2020; Mawson 2005; Van Bavel et al. 2020).

The very foundation of intergroup relations is the identification of individuals as group members; but the borders of these social groups may be malleable under certain circumstances (Haslam et al. 1997). Social Identity Theorists (Tajfel 1978, 1981) have deeply investigated the way psychological identification with various groups shape perceptions of group boundaries that determine intergroup biases and attitudes. One of the major findings, is that when individuals identify as part of a common in-group via a higher level of self-categorization (Turner et al. 1987), previous ingroup-outgroup boundaries change, resulting in the reduction of negative intergroup attitudes (Brewer 2010). Accordingly, the Common Ingroup Identity Model (Gaertner et al. 1993) suggests that when individuals from different groups perceive themselves as sharing the same goals and destiny, and when their sense of cross groups interdependency increases, they identify themselves as part of a common –superordinate group. Consequently, according to the common ingroup identity model, perceiving one’s ingroup and outgroup as being in the ‘same boat’ during an external threat, is likely to increase perceived similarities between the two groups and improve intergroup attitudes and behaviors. Common ingroup identification, in turn, can potentially lead to decreased perception of outgroup threat (Riek et al. 2006), less outgroup devaluation and ingroup favoritism, as well as enhancing intergroup cooperation (Levine et al. 2005). This hypothesis is supported by decades of empirical research using
observational, experimental and longitudinal designs (Gaertner et al. 2016). Vezzali and his colleagues (2015) have found that the threat of an earthquake increased Italian children’s perception of belonging to a common ingroup that included both native Italian and immigrant children, thereby resulting in more positive attitudes and intergroup helping behavior.

Other examples include international cooperation between countries donating each other surpluses, medical care and equipment. In fact, the UN Department of Economic and Social Affairs recently published that it considers COVID-19 to be a transformative event that can reduce social inequalities through expanding systems for the universal provision of quality public services, and encouraged the sharing of knowledge and scientific findings across the world; in essence, calling for international and national unification while fighting the pandemic. Lately, other theoretical work has also drawn attention to the importance of investigating COVID-19 from a social identity approach, focusing on a shared group membership emerging from pandemics (Cruwys, Stevens and Greenaway 2020; Drury, Reicher and Stott 2020; Templeton et al. 2020). Due to its global nature as an infectious disease, COVID-19 is a prototypical example of an external threat that is likely to trigger identification with an inclusive common ingroup.

Returning to the emotional perspective, the COVID-19 threat and its social reaction of re-categorization may activate positive emotions towards former outgroup members. Intractable intergroup conflicts generate group based empathy towards other ingroup members (Halperin 2015), based on perceived commonalities, similarities and a shared fate and goals (Stürmer et al. 2006). The threat of COVID-19 and its inclusive social reaction by which members of opposing groups share a common fate and mutual goals, facing the same threat together, may induce stronger empathy to former outgroup members, now “in it together” with the ingroup - and in turn lead to increased willingness to cooperate with, and give assistance to, the outgroup (Batson and Ahmad 2009; De Vos et al. 2013).

According to Davis (1994), empathy is an array of emotional and cognitive structures that link one person’s responses to another’s experiences. These responses include an emotional experience, positive or negative, similar to that experienced by others, as well as cognitive (perceiving the other’s point of view) and behavioral responses (Decety 2015). Empathy involves sharing and understanding the emotional states of the other, and is associated with pro-social collaboration in the context of interpersonal relations and within a group (Batson et al. 1997), as reflecting a shared fate or “feeling with” a group or another person (Singer & Lamm 2009). As such, empathy plays a significant role in intergroup relations living under ongoing conflict, as it is linked to the willingness to alleviate the suffering of outgroup members (Pagano and Huo 2007) and may lead to support of conciliatory policies towards outgroups within an intractable conflict (Halperin 2015). A study conducted by Maoz and MacCauley (2008), revealed that Jewish Israelis’ empathy for Palestinians was associated with their willingness to compromise. Todd, Bodehausen and Galinsky (2012) revealed that empathy towards the outgroup is positively associated with reducing prejudice and racism, while increasing support of intergroup reconciliation.
However, inducing empathy towards outgroup members, especially in the context of intergroup conflict, is a challenging task. As empathy requires a certain degree of taking one’s own perspective and engaging with one’s inner state—a task easier to undertake alongside those who are similar to us—it is not surprising that people often feel less empathy towards strangers who belong to a different group (e.g., racial, political, or social group), as compared to strangers who are identified as ingroup members (Batson and Ahmad 2009; Davis 1994; Hornstein 1991). This phenomenon was previously described as “the intergroup empathy bias” (Bruneau, Cikara and Saxe 2012).

But not all out-groups elicit the intergroup empathy bias to the same extent, and the bias is demonstrably subject to context effects (e.g., Gutsell and Inzlicht 2010, 2013). One of the major findings eliciting such contextual effects on intergroup empathy, and is especially relevant to our present context, was demonstrated. The findings revealed that the formation of a common ingroup leads to increased empathy towards former outgroup members. Additional findings reaffirm that when a more inclusive social categorization is made salient; empathetic behavior is extended to those who were previously identified as out-group members (Levine et al. 2005). As COVID-19 is a borderless, global pandemic where different groups members’ share a common threat, all the while promoting a more inclusive common ingroup identification; its existence may increase empathy towards former outgroup members, now experiencing a similar reality.

In the case of the Korean conflict, where both sides already share several similarities and common characteristics (ethnicity, language, history, geographical borders), common threat is more likely to induce South Koreans to feel more empathetic towards North Koreans; and in turn, encourage greater support for intergroup cooperation. We shall address these unique characteristics of the Korean conflict, before presenting our current work.

The Korean Conflict

The Korean peninsula provides a unique socio-psychological context in which the two proposed outcomes of COVID-19 may be examined. South Koreans maintain an ambivalent attitude toward North Korea with both favorable and hostile feelings saliently mingled together. The root of the South Korean people’s ambivalence lies in their common ethnic identity (i.e., Koreans) and national identity (i.e., South Korean). Before the division of the two Koreas in 1945, South and North Korea had been a nation state for a thousand years, in which “the great majority of people [were] aware of the fact that they had a shared culture” (UNESCO 2019).

In modern reality, however, the two Koreas have been divided for over 70 years with two completely different political regimes in place. After the Korean war, which ended in 1953, North Korea has never ceased to be a tangible threat to the South. Therefore, it appears to be rather natural that people living in South and North Korea have distinct national identities. However, findings on national identity as a differentiated factor from
the ethnic identity began to appear in South Korea only recently (Jung, Hogg and Choi 2016; Park and Kim 2019).

These characteristics of the Korean conflict are especially relevant to our suggested influence paths; While the destructive effects of an external threat (i.e. COVID-19) on intergroup relations were widely established in various contexts (e.g. Cruwys et al. 2020; Lantos and Molenberghs 2021) – the activation of the constructive path may demand some basic shared characteristics and similarities between warring group members’ – which may increase the likelihood of a superordinate, common, group categorization (Batson and Ahmad 2009).

As South Koreans identify both as ethnic Koreans and as national South Koreans, the Korean conflict may be a prominent case study of the dual effects of COVID-19, through parallel group identifications and group based emotions on conflict related attitude. Moreover, eliciting ways to strengthen the common ethnic Korean identification is a key mission in achieving reconciliation in the Korean peninsula.

The Current Study

Various theoretical frameworks and recent findings have revealed the potential dual effect of the COVID-19 threat on intergroup relations. However, most of these findings fail to address the context of intractable intergroup conflicts, rather focusing on more moderate, albeit tense, intergroup relations between majority-minority groups. Moreover, although the role of group based emotions is widely established as central to the processes of intergroup escalation and reconciliation—and as these emotional mechanisms are highly correlated to both external threat and to ingroup boundaries—they still have yet to be explored as possible mediators of the COVID-19 influence on intergroup escalation and cooperation.

Given the above, we hypothesized that the COVID-19 pandemic will increase South Korean participants’ national identification (compared to a similar sample taken a year prior to the outbreak), therefore enhancing group based fear, and, consequently, leading to greater hostility towards the North Korean outgroup. Simultaneously, we hypothesized that South Korean participants will exhibit higher ethnic identification as Koreans (compared to a pre COVID-19 outbreak sample), leading to increased outgroup empathy, which, in turn, will enhance their willingness to collaborate (i.e. to give assistance and to cooperate) with their North Korean outgroup.

Method

Participants. The study was based on a two wave cross sectional survey, conducted as part of an extensive unique project led by the Korea Institute for National Unification, as a part of a meta-dimensional analyses underlying the psychology of the Korean conflict (amongst South Koreans). The large samples of participants, as well as the systematic methodological design, enabled us to track psychological changes from before and during the COVID-19 outbreak. The first sample was collected via face-to-
face interviews in March 2019, collecting data from 1300 South Korean participants; 648 women and 652 men (\textit{MAGE} = 46, \textit{SDAGE} = 13.7), with an average monthly income of $479 USD. The second sample was collected during April 2020 (after the COVID-19 outbreak in South Korea) through an online survey, and consisted of 1600 South Korean participants; 804 women and 796 men (\textit{MAGE} = 46.5, \textit{SDAGE} = 13.7), with an average monthly income of $473 USD. There were no significant differences in gender, ideology, education or religion between the samples, enabling us to conduct a direct comparison between these samples.

**Measurements.** Among a variety of other measurements collected in this project, participants were asked to fill in demographic scales, a four item ethnic group scale (“How similar do you feel to other ethnic Koreans as a whole in terms of general attitudes and opinions?”, “How much do you feel that you identify with the Korean ethnic group?”，“How glad do you feel about the fact that you are to be ethnic Korean?”, “How much do you feel that you are attached to the Korean ethnic group?”) that measured the degree of the participants’ ethnic identification as Koreans ranging from 1 to 9; (For the pre COVID-19 sample: [S1] METID = 5.56, SDETID = 1.68, \(\alpha = 0.89\). For the during COVID-19 sample [S2]: METID = 5.92, SDETID = 1.33, \(\alpha = 0.89\).) and a four item national group scale (“How similar do you feel to other South Koreans as a whole in terms of general attitudes and opinions?”, “How much do you feel that you identify with the south Korean?”, “How glad do you feel about the fact that you are to be South Korean?”, “How much do you feel that you are attached to the South Korean?”) ranging from 1 to 9 in assessing their identification as South Koreans (S1: MSKID = 6.04, SDSKID = 1.7, \(\alpha = 0.91\). S2: MSKID = 6.45, SDSKID = 1.4, \(\alpha = 0.91\).) Participants were then asked to assess their levels of various group based emotions towards the North Koreans, each item ranging from 1 (Not at all) to 6 (Extremely), including fear from the outgroup (S1: MFEAR = 3.52, SDFEAR = 1.14. S2: MFEAR = 3.86, SDFEAR = 1.3) and empathy towards the outgroup (S1: MEMPATHY = 3.14, SDEMPATHY = 1.22. S2: MEMPATHY = 3.38, SDEMPATHY = 1.49).

Finally, participants were asked to fill in several scales measuring their policy preferences towards the North Korean outgroup, including one item measuring hostility; (South Korea should be hostile towards North Korea. S1: MHOSTILE = 5.48, SDHOSTILE = 2.5. S2: MHOSTILE = 5.68, SDHOSTILE = 2.41), as well as a two item scale (South Korea should cooperate with North Korea, South Korea should assist North Korea) assessing the willingness of South Koreans to collaborate with the North (S1: MCOLLAB = 5.17, SDCOLLAB = 2.5, \(\alpha = 0.77\). S2: MCOLLAB = 5.59, SDCOLLAB = 2.15, \(\alpha = 0.79\)).

**Results**

Prior to examining the differences between the two samples, we conducted a correlation analysis between the relevant variables of each data set. As presented in Table 1, in both samples, ethnic identification had positive and significant correlations with the South Korean identification, empathy towards the outgroup, and willingness to collaborate
**Table 1.** The Means, SDs and the Zero-Order Correlations Between the Measured Variables of Both Samples: The Left Side of the Table Presenting Correlations of Sample Collected Prior to the COVID-19 Outbreak, Whereas the Right Side of the Table Presents these Correlations in the Sample Collected During the COVID-19 Outbreak.

|                          | Before the COVID-19 outbreak (n = 1600) | During the COVID-19 outbreak (n = 1600) |
|--------------------------|----------------------------------------|----------------------------------------|
|                          | Mean | SD   | 1   | 2 | 3 | 4 | 5 | 6 | Mean | SD   | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Korean ethnic identification | 5.56 | 1.48 | (0.89) | | | | | | 5.92 | 1.33 | (0.89) |
| 2. South Korean identification | 6.04 | 1.56 | (0.91) | 0.73** | | | | | 6.46 | 1.43 | 0.75** | (0.89) |
| 3. Fear of North Koreans | 3.52 | 1.14 | 0.09** | 0.12** | - | | | | 3.86 | 1.15 | 0.11** | 0.11** | - |
| 4. Empathy for North Koreans | 3.14 | 1.22 | 0.19** | 0.04 | 0.00 | - | | | 3.38 | 1.22 | 0.14** | 0.02 | 0.04 | - |
| 5. Hostility towards North Korea | 5.48 | 2.5 | -0.01 | 0.05* | 0.38** | -0.2** | - | | 5.68 | 2.41 | 0.04 | 0.05* | 0.2** | -0.14** | - |
| 6. Collaboration with North Koreans | 5.17 | 2.26 | 0.25** | 0.15** | -0.11** | 0.40** | -0.41** | - | 5.59 | 2.15 | 0.31** | 0.18** | -0.04 | 0.34** | -0.26** | - |

* *p < 0.01 **p < 0.001*
with the outgroup; as well as a weak positive correlation with fear of the outgroup. No significant correlations were found between ethnic identification and hostility towards the outgroup. Empathy had positive and significant correlations with ethnic identification, and collaboration with the outgroup; as well as a negative correlation to hostility towards the outgroup. No significant correlation was found between outgroup empathy and outgroup fear, nor between outgroup empathy and national identification (as South Koreans). South Korean identification had positive correlations with ethnic identification, outgroup fear and hostility towards the outgroup; as well as towards collaboration with the outgroup. Finally, outgroup fear had significant and positive correlations with hostility towards the outgroup; but while the first sample demonstrated that fear had significant negative correlations with collaboration with the outgroup, the correlation was non-significant (yet still negative) in the second sample collected during the outbreak of COVID-19.

As a preliminary assessment of our hypotheses, we compared the means of our relevant variables according to the time collection (before/after the COVID-19 outbreak), and conducted an independent sample T-test to assess the significance of the differences across the two samples, with time collection (before/during the COVID-19 outbreak) as our independent variable, and ethnic identification, South Korean identification, outgroup fear and empathy, hostility towards outgroup and collaboration with the outgroup, as our outcome variables. As seen in Table 2, and in line with our hypotheses; the results indicated that the 1600 participants sampled during the COVID-19 outbreak exhibited stronger identification with their ethnic Koreans as compared to the 1300 South Korean participants sampled prior to the outbreak \((t(2898) = -6.77, p < 0.01)\). These participants (S2) exhibited stronger identification with their national South Korean identity \((t(2898) = -7.3, p < 0.01)\), as well as higher levels of outgroup fear \((t(2898) = -7.7, p < 0.01)\), outgroup empathy \((t(2898) = -5.1, p < 0.01)\), increased hostility towards outgroup \((t(2898) = -2.2, p < 0.05)\), and greater willingness to collaborate with the outgroup \((t(2898) = -5.1, p < 0.01)\).³

It is important to note, that while empathy, fear, hostility and cooperation significantly increased between the 2019 and 2020 sample – there were no significant differences across samples in various other group based emotions (e.g. intergroup

---

**Table 2.** Variables Means and Mean Differences Between the Two Waves of Data Collection Before/After COVID-19 Outbreak.

| Variable                        | Before COVID-19 | During COVID-19 | Mean difference |
|---------------------------------|-----------------|-----------------|-----------------|
| 1. Korean ethnic identification | 5.56            | 5.92            | 0.36**          |
| 2. South Korean identification  | 6.04            | 6.45            | 0.41**          |
| 3. Fear from North Koreans     | 3.52            | 3.86            | 0.33**          |
| 4. Empathy towards North Koreans| 3.14            | 3.38            | 0.23**          |
| 5. Hostility towards North Korea| 5.48            | 5.68            | 0.2*            |
| 6. Collaboration with North Koreans| 5.17            | 5.59            | 0.42**          |

*\(p < 0.01\) **\(p < 0.001\).
hatred), nor in participants’ support of additional intergroup policies and attitudes (e.g. caution, blame). This provides strong indications that the changes over time stem from actual changes in people’s emotions and attitudes due to the Covid-19 eruption, rather than from between surveys differences in sampling and measurements.

**Mediation Analyses**

To further examine our hypothesized paths of influence, we have conducted a mediation analyses using bootstrapping Process for SPSS (Model 6), which enabled us to examine the mechanisms for each path of the COVID-19 influence on intergroup attitudes, via identifications and group based emotions.

**Group Based Fear Mediates the Relations Between COVID-19 and Intergroup Hostility**

First we examined a serial multiple mediation model using Hayes (2013) bootstrapping Process for SPSS (Model 6), with collection time (before/after COVID-19) serving as the independent variable, South Korean identification as the first mediator, outgroup fear as a second mediator, and hostility towards the outgroup as our outcome variable. The regression results indicate that the outbreak of COVID-19 was associated with stronger South Korean identification (a1: b = 0.4, SE = 0.05, t = 7.32, p < 0.01), higher levels of outgroup fear (a2: b = 0.3, SE = 0.04, t = 6.9, p < 0.01) and stronger support for hostility towards the outgroup (c: b = 0.2, SE = 0.09, t = 2.2, p < 0.05), as compared to the data collected prior to the pandemic. Stronger South Korean identification was associated with higher levels of outgroup fear (b = 0.09, SE = 0.01, t = 6.17, p < 0.01) and stronger hostility towards the outgroup (b1: b = 0.08, SE = 0.30, t = 2.9, p > 0.05). Fear of the outgroup was linked to stronger support for hostility towards outgroup (b = 0.6, SE = 0.04, t = 15.7, p < 0.01). As we initially hypothesized, the direct effect of the time factor (before/during COVID-19) was non-significant once the mediators (outgroup fear) were entered to the model (ĉ: b = −0.008, SE = 0.08, t = −1, p = 0.92) as well as the effect of South Korean identification on hostility towards outgroup, (b1: b = 0.03, SE = 0.03, t = 0.93, p = 0.34). Thus revealing a full serial mediation effect linking COVID-19 outbreak to hostility towards the North Korean, through fear of the outgroup; both directly (x->m2->y: b = 0.18, SE = 0.03, 95%, CI [0.12, 0.24]), and via increased South Korean identification (x->m1->m2->y: b = 0.02, SE = 0.01, 95%, CI [0.01, 0.03]).

**Group Based Empathy Mediates the Effect of the COVID-19 on Intergroup Collaboration**

To test our second hypothesized path, we conducted a second serial multiple mediation analysis, again using Hayes (2013) bootstrapping Process for SPSS (Model 6), with collection time (before/during COVID-19) serving as the independent variable, ethnic
Korean identification as a first mediator, outgroup empathy as a second mediator, and willingness to collaborate with the outgroup as our outcome variable (Figure 1).

The regression revealed that the outbreak of COVID-19 is associated with stronger ethnic Korean identification (a1: $b = 0.36$, $SE = 0.05$, $t = 6.7$, $p < 0.01$), higher levels of outgroup empathy (a2: $b = 0.19$, $SE = 0.05$, $t = 4.1$, $p < 0.01$) and stronger support for collaboration with the outgroup (c: $b = 0.42$, $SE = 0.08$, $t = 5.15$, $p < 0.01$), as compared to the data collected prior to the pandemic. Stronger ethnic Korean identification is linked to higher levels of outgroup empathy ($b = 0.14$, $SE = 0.01$, $t = 8.77$, $p < 0.01$), and willingness to collaborate with the outgroup ($b_1: b = 0.36$, $SE = 0.03$, $t = 13.3$, $p < 0.01$). As presented in Figure 2, the direct effect of the time collection on our outcome variable was substantially reduced (yet remained significant) once our hypothesized mediators were included in the analyses ($c': b = 0.15$, $SE = 0.05$, $t = 2.09$, $p < 0.05$, 95%, CI [0.10, 0.31]), exposing a partial mediation effect of the COVID-19 on intergroup collaboration, via both ethnic identification ($b_1: b = 0.13$, $SE = 0.01$, 95%, CI [0.04, 0.07]) and outgroup empathy ($b_2: b = 0.14$, $SE = 0.01$, 95%, CI [0.02, 0.07]).

**Discussion**

This paper aimed to reveal the underlying emotional mechanisms of this dual influence as a further step towards maximizing the potential of the COVID-19 in terms of improving relations of groups in conflict, as well as inhibiting its destructive effect on such conflicts. Through a two-wave cross sectional design, conducted before and during the pandemic outbreak (but still during the pandemic itself), we have compared the social identifications, group based emotions, and intergroup attitudes of South Korean participants. This allowed us to inspect the effects of the COVID-19 outbreak on these multi-dimensional intergroup attitudes, and to explore the underlying mechanisms connecting the outbreak to increased intergroup hostility, as well as the

---

**Figure 1.** Mediation model linking COVID-19 to hostility towards outgroup, via south Korean identification and fear from the outgroup. *$p < 0.05$. **$p < 0.01$.**
increased willingness to collaborate (i.e. assist to, and cooperate with) with the North Korean outgroup. Aggregating social identity theories of reactions to threat (Bodenhausen et al. 2000; Cruwys et al. 2020; Greenberg, Pyszczynski and Solomon 1986; Tajfel 1978, 1981), with findings addressing socio-psychological barriers standing in the way of intergroup reconciliation (Bar-Tal and Halperin 2011), we have postulated that the COVID-19 had a dual effect on intergroup attitudes via social identification and group based emotions.

Following the outbreak of COVID-19, South Korean participants exhibited stronger identification as South Koreans; corresponding with social identity theories suggesting that when facing a threat, group members consolidate, strengthening ingroup cohesion as a response to that threat. Extending previous research on socio-psychological barriers in intergroup conflicts, South Korean identification was linked to fear from the outgroup, which, in turn, correlated with more support of aggressive, hostile policies towards the North Koreans. Paradoxically, and aligned with the common ingroup theory and findings, these same South Korean participants identified stronger with their ethnic group (Koreans), which correlated with higher levels of empathy to the outgroup, which, in turn, was linked to stronger support of collaboration with the North Koreans.

Although these findings appear contradictory, both of these paths serve different functions in aiding human beings to cope when facing a threat such as the COVID-19 pandemic; while the first addresses fears of spreading infection and an enhanced sense of vulnerability, the other strives for greater inclusiveness in cooperation against the threat. The current findings demonstrates that these processes may occur even in the context of violent, chronic, intractable conflicts between groups; thus, revealing that the COVID-19 pandemic may have dramatic bearings on the probability of war and peace between groups in conflict. Moreover, we have revealed the central mediating role of group based emotions on the association between the COVID-19 threat and intergroup
conflict escalation (intergroup hostility), as well as reconciliation (intergroup collaboration).

The above findings are further corroborated by a nationwide survey undertaken in South Korea in March 2020. Pertaining to our study, the results from Daegu city and the Gyeongbuk Province, where residents are known for exhibiting some of the more negative attitudes towards North Koreans, are particularly illuminating. At the time of the survey, those areas were hit hard by the virus. Surprisingly, yet aligned with the findings of this study, the survey revealed increasingly positive attitudes from the South towards their Northern brethren. Following the outbreak of the virus, residents even expressed support for government aid to be delivered from Seoul to Pyongyang. The researchers concluded that the harsh experience of COVID-19 in these areas may have encouraged South Koreans living in Daegu and the Gyeongbuk Province to feel sympathy towards the suffering of North Koreans (National Unification Advisory Council 2020).

From an applied perspective, by emphasizing the commonality of the COVID-19 threat (and others) on warring groups, social scientists, political and social leaders and organizations may promote cooperation between nations and groups in conflict. The commonality of the threat, leads to heightened accessibility of a superordinate social identity which includes both warring parties – sharing “the same boat” in the face of the storm. In contrast, emphasizing the boundaries of the national group in dealing with the pandemic may lead to escalation of these conflicts.

A recent example of the latter is a statement made in July 2020 by North Korea’s leader, Kim Jung Un, claiming that the first COVID-19 patient was detected in the DPRK after infiltrating the country from South Korea. As previous findings established the effectiveness of various interventions aimed at reducing group based fear (Halperin, Sharvit and Gross 2011), as well as increasing group based empathy; incorporating such interventions within the context of the COVID-19 threat, may serve as practical means of activating the constructive influence path, as well as inhibiting the destructive path.

As intriguing as these findings may be, the current work has several limitations that demand further examination beyond the scope of this essay. For example, although the two Koreas are still technically at war and experience various threats from their respective bordering outgroup, there has been no physical violence on a massive scale since the Armistice in 1953, maintaining a de facto “negative peace” (Jang 2010). In addition, and unlike similar cases of intergroup conflict, South Korean ideology hinges largely on their attitude toward North Korea, rather than the other way around (Han 2016). But perhaps the most unique characteristic differentiating the Korean case from most intractable intergroup conflicts is the fact that the warring parties share a common ethnicity, language and remote history. Although recent studies (Adam-Troian and Bagci 2020) have demonstrated that the COVID-19 outbreak may lead to positive attitudes towards outgroup members (in non-intractable conflicts) – even when these groups share little in common – it is important to replicate the current findings in the contexts of prolonged intractable conflicts. Thus, in order to validate and generalize the
current findings, it is important to explore the avenues through which re-categorization of a common ingroup may occur amongst other warring groups; groups who do not share the aforementioned similarities, and whom are engaged in active violent disputes.

Another limitation of the current work regards the underlying mechanisms via which COVID-19 may increase willingness for intergroup collaboration. While group based fear was a full mediator in the relations between the COVID-19 threat and hostility to outgroup; the effect of COVID-19 outbreak (before/during COVID-19) on collaboration with the outgroup remained significantly above and beyond ethnic identification, as well as group based empathy; alluding to the possibility that they may be further mechanisms involved in this conciliatory path. Examining the dual path by which this global pandemic may activate social, emotional and behavioral responses in the context of other intractable intergroup conflict, as well as including other possible moderators and mediators of socio-psychological responses to the COVID-19 threat, may help to further utilize the COVID-19 threat as a powerful reconciliation tool between groups engaged in intractable conflicts.

Finally, given that power relations between groups engaged in intractable conflict were widely established as a substantial socio-psychological dimension of intractable conflict - as the high power and the low power groups differ in their needs, motivations and emotions (Schnabel & Nadler 2008; Saguy et al. 2012) - the current findings may be a-symmetrically confined to the high power (i.e. South Koreans), but not to the low power (North Koreans) group. Although our findings corroborate previous psychological theorems and findings which are indicative to the universality of the potential dual effect found in the current work – the assumption that the COVID-19 has similar effects on both the high power and the low power groups – calls for further validation. This is especially true because since conducting academic studies amongst North Korean participants is currently unattainable.

In conclusion, while the COVID-19 pandemic has dramatic and catastrophic effects on human beings and groups, it may also serve as an extremely powerful social “reshuffling” tool, helping group members in conflict rise above the reality of “us and them”, towards a united “we”; paving the way for reconciliation.

**Author's Note**

Access to data files and replication materials will be made available at http://eranhalperin.com/data/Dual.Covid.Korea.2020

**Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.
Funding
The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Korea Institute for National Unification.

ORCID iD
Nimrod Nir https://orcid.org/0000-0002-7313-6836

Notes
1. It is important to note, however, that since emotions stimulate action directed at a certain target which may affirm or help cope with the emotion; fear may actually lead to support of conciliatory policies in the context of intractable conflict, especially when these policies are instrumental in alleviating the intensity of the threat and regaining a sense of security. Group based fear differs from group based hatred in this regard; as the goal of the latter is destroying the warring party (Halperin 2015).
2. The Armed Conflict Location and Event Data (ACLED) shows a notable drop in violent incidents, with the count starting around early March. https://acleddata.com/acleddatanew/wp-content/uploads/dlm_uploads/2020/03/ACLED_AnnualReport2019_WebVersion.pdf
3. These differences were significant above and beyond demographic variances.
4. Total indirect effect: $b = 0.211$, 95%, CI = [0.15, 0.28]
5. Total indirect effect: $b = 0.27$, SE = 0.03, 95%, CI = [0.19, 0.34]
6. See:https://www.nytimes.com/2020/07/25/world/asia/north-korea-coronavirus-kim-jong-un.html

References
Adam-Troian, Jais, and Sabahat bagci. 2020 “The pathogen paradox: Evidence that perceived COVID-19 threat is associated with both pro-and anti-immigrant attitudes.”
Alonso-Ferres, María, Ginés Navarro-Carrillo, Marta Garrido-Macías, Eva Moreno-Bella, and Inmaculada Valor-Segura. 2020. “Connecting perceived economic threat and prosocial tendencies: The explanatory role of empathic concern.” Plos One 15, no. 5: e0232608.
Bagozzi, R. P., M. Gopinath, and P. U. Nyer. 1999. “The role of emotions in marketing.” Journal of the Academy of Marketing Science 27, no. 2: 184-206.
Bar-Tal, Daniel, and Eran Halperin. “Socio-psychological barriers to conflict resolution.” (2011).
Batson, C. Daniel, and Nadia Y. Ahmad. 2009. “Using empathy to improve intergroup attitudes and relations.” Social Issues and Policy Review 3, no. 1: 141-177.
Batson, C. Daniel, Marina P. Polycarpou, Eddie Harmon-Jones, Heidi J. Imhoff, Erin C. Mitchener, Lori L. Bednar, Tricia R. Klein, and Lori Hightberger. 1997. “Empathy and attitudes: Can feeling for a member of a stigmatized group improve feelings toward the group?” Journal of Personality and Social Psychology 72, no. 1: 105-118.
Becker, Ernest. 1973. The Denial of Death. The Free Press. ISBN 0-02-902380-7.
Bodenhausen, Galen V., Thomas Mussweiler, Shira Gabriel, and Kristen N. Moreno. 2000. “Affective influences on stereotyping and intergroup relations affective influences on stereotyping and intergroup relations.” In Handbook of affect and social cognition, 321-343.

Brandt, Mark J., and Jarret T. Crawford. 2020. “Worldview conflict and prejudice.” Advances in Experimental Social Psychology 61: 1-66.

Brewer, Marilynn B. 2010. Intergroup relations. Oxford University Press.

Bruneau, Emile G., Mina Cikara, and Rebecca Saxe. 2012. “Going beyond the headlines: Narratives mitigate intergroup empathy bias.” CogSci.

Clore, Gerald L., Norbert Schwarz, and Michael Conway. 1994. Affective causes and consequences of social information processing.

Cohen, S., Eran Halperin, Roni Porat, and Daniel Bar-Tal. 2014. “The differential effects of hope and fear on information processing in intractable conflict.” Journal of Social and Political Psychology 2, no. 1: 11-30.

Cohen, Racheli, Ruthie Pliskin, and Eran Halperin. 2019. “How I learned to stop fearing: Ideological differences in choice of reappraisal content.” European Journal of Social Psychology 49, no. 3: 482-502.

Cole, Shana, Emily Balcetis, and David Dunning. 2013. “Affective signals of threat increase perceived proximity.” Psychological Science 24, no. 1: 34-40.

Coleman, Peter T. 2003. “Characteristics of protracted, intractable conflict: Toward the development of a metaframework-I.” Peace and Conflict: Journal of Peace Psychology 9, no. 1: 1-37.

Cruwys, Tegan, Mark Stevens, and Katharine H. Greenaway. 2020. “A social identity perspective on COVID-19: Health risk is affected by shared group membership.” British Journal of Social Psychology.

Cruwys, Tegan, Mark Stevens, Michael J. Platow, John Drury, Elyse Williams, J Ashleigh, Kelly, and Margarita Weekes. 2020. “Risk-taking that signals trust increases social identification.” Social Psychology.

Davis, Mark H., and Stephen J. Kraus. 1994. “Carol Luce & Stephen J. Kraus. "The heritability of characteristics associated with dispositional empathy.” Journal of Personality 62, no. 3: 369-391.

De Vos, Bart, Martijn van Zomeren, Ernestine H Gordijn, and Tom Postmes. 2013. “The communication of “pure” group-based anger reduces tendencies toward intergroup conflict because it increases out-group empathy.” Personality and Social Psychology Bulletin 39, no. 8: 1043-1052.

Decety, Jean. 2015. “The neural pathways, development and functions of empathy.” Current Opinion In Behavioral Sciences 3: 1-6.

Drury, John, Clifford Stott, Roger Ball, Stephen Reicher, Fergus Neville, Linda Bell, Mikey Biddlestone, Sanjeedah Choudhury, Max Lovell, and Caoimhe Ryan. 2020. “A social identity model of riot diffusion: From injustice to empowerment in the 2011 London riots.” European Journal of Social Psychology 50, no. 3: 646-661.

Gaertner, Samuel L., John F. Dovidio, Phyllis A. Anastasio, Betty A. Bachman, and Mary C. Rust. 1993. “The common ingroup identity model: Recategorization and the reduction of intergroup bias.” European Review of Social Psychology 4, no. 1: 1-26.
Gaertner, Samuel L., John F. Dovidio, Rita Guerra, Eric Hehman, and Tamar Saguy. 2016. *A common ingroup identity: Categorization, identity, and intergroup relations.*

Greenberg, Jeff, Pyszczynski Tom, and Sheldon Solomon. 1986. “The causes and consequences of a need for self-esteem: A terror management theory.” In *Public self and private self*, 189-212. New York, NY: Springer.

Gutsell, Jennifer N., and Michael Inzlicht. 2010. “Empathy constrained: Prejudice predicts reduced mental simulation of actions during observation of outgroups.” *Journal of Experimental Social Psychology* 46, no. 5: 841-845.

Gutsell, Jennifer N., and Michael Inzlicht. 2013. “Using EEG mu-suppression to explore group biases in motor resonance.” *Neuroscience of Prejudice and Intergroup Relations*: 279-297.

Halperin, E., and N Nir. 2019. “Intergroup Hate in Conflict: The case of the Korean Conflict.” In *2019 Annual Reports of Attitude of Koreans toward Peace and Reconciliation*, edited by J. Park, M. Lee, H. Choi, Y. Kwon, S. Sloman, and E. Halperin, eds Seoul: Korea Institute for National Unification.

Halperin, Eran, Alexandra G. Russell, Carol S. Dweck, and James J. Gross. 2011. “Anger, hatred, and the quest for peace: Anger can be constructive in the absence of hatred.” *Journal of Conflict Resolution* 55, no. 2: 274-291.

Halperin, Eran, and James J. Gross. 2011. “Emotion regulation in violent conflict: Reappraisal, hope, and support for humanitarian aid to the opponent in wartime.” *Cognition & Emotion* 25, no. 7: 1228-1236.

Halperin, Eran. 2014. “Emotion, emotion regulation & conflict resolution.” *Emotion Review* 6, no. 1: 68-76.

Halperin, Eran. 2008. “Group-based hatred in intractable conflict in Israel.” *Journal of Conflict Resolution* 52, no. 5: 713-736.

Halperin, Eran. 2015. *Emotions in conflict: Inhibitors and facilitators of peace making.* Routledge.

Han, JeongHun. 2016. “Korean Voters’ Ideological Propensities : A Case Study of the Effect of Ideology on Voters’ Perception of Unification in Korea.” *Korean Political Science Review* 50, no. 4: 105-126.

Haslam, S. Alexander, John C. Turner, Penelope J. Oakes, McGarty Craig, and J Katherine Reynolds. 1997. “The group as a basis for emergent stereotype consensus.” *European Review of Social Psychology* 8, no. 1: 203-239.

Heine, Steven J., Travis Proulx, and Kathleen D. Vohs. 2006. “The meaning maintenance model: On the coherence of social motivations.” *Personality and Social Psychology Review* 10, no. 2: 88-110.

Hewstone, Miles, Mark Rubin, and Hazel Willis. 2002. “Intergroup bias.” *Annual Review of Psychology* 53, no. 1: 575-604.

Hornstein, Harvey A. 1991. “Empathic distress and altruism: Still inseparable.” *Psychological Inquiry* 2, no. 2: 133-135.

Jang, Yong Suk. 2010. “How to Approach the Peace Regime and Agreement on the Korean Peninsula.” *The Korean Journal of Unification Affairs* 22, no. 1: 123-152.

Jarymowicz, Maria, and Daniel Bar-Tal. 2006. “The dominance of fear over hope in the life of individuals and collectives.” *European Journal of Social Psychology* 36, no. 3: 367-392.
Jonas, Eva, Ian McGregor, Johannes Klackl, Dmitrij Agroskin, Immo Fritsche, Colin Holbrook, Kyle Nash, Travis Proulx, and Markus Quirin. 2014. “Threat and defense: From anxiety to approach.” *Advances in Experimental Social Psychology* 49: 219-286.

Jung, J., M. A. Hogg, and H. S. Choi. 2016. “Reaching across the DMZ: Identity uncertainty and reunification on the Korean peninsula.” *Political Psychology* 37, no. 3: 341-350.

Kruglanski, Arie W. 2004. “The quest for the gist: On challenges of going abstract in social and personality psychology.” *Personality and Social Psychology Review* 8, no. 2: 156-163.

Landau, Mark J., Sheldon Solomon, Jeff Greenberg, Florette Cohen, Pyszczynski Tom, Jamie Arndt, HDaniel M. Ogilvie Claude Miller, and Alison Cook. 2004. “Deliver us from evil: The effects of mortality salience and reminders of 9/11 on support for President George W. Bush.” *Personality and Social Psychology Bulletin* 30, no. 9: 1136-1150.

Lantos, D., and P. Molenberghs. 2021. “The neuroscience of intergroup threat and violence.” *Neuroscience & Biobehavioral Reviews* 131: 77-87.

Levine, Mark, Amy Prosser, David Evans, and Stephen Reicher. 2005. “Identity and emergency intervention: How social group membership and inclusiveness of group boundaries shape helping behavior.” *Personality and Social Psychology Bulletin* 31, no. 4: 443-453.

Mackie, Diane M., and Eliot R. Smith, eds 2002. *From prejudice to intergroup emotions: Differentiated reactions to social groups*. Psychology Press.

Mackie, Diane M., Thierry Devos, and Eliot R. Smith. 2000. “Intergroup emotions: explaining offensive action tendencies in an intergroup context.” *Journal of Personality and Social Psychology* 79, no. 4: 602-616.

Maoz, Ifat, and Clark McCauley. 2008. “Threat, dehumanization, and support for retaliatory aggressive policies in asymmetric conflict.” *Journal of Conflict Resolution* 52, no. 1: 93-116.

Mawson, Anthony R. 2005. “Understanding mass panic and other collective responses to threat and disaster.” *Psychiatry: Interpersonal and Biological Processes* 68, no. 2: 95-113.

Mirisola, Alberto, Michele Roccato, Silvia Russo, Giulia Spagna, and Alessio Vieno. 2014. “Societal threat to safety, compensatory control, and right-wing authoritarianism.” *Political Psychology* 35, no. 6: 795-812.

Murray, Damian R., Mark Schaller, and Suedfeld Peter. 2013. “Pathogens and politics: Further evidence that parasite prevalence predicts authoritarianism.” *PloS One* 8, no. 5: e62275.

National Unification Advisory Council. 2020. *Survey on Attitude toward Unification and North Korea Second Quarter 2020*. Seoul: National Unification Advisory Council.

Oh, Soo Youn, Jeremy Bailenson, Erika Weisz, and Jamil Zaki. 2016. “Virtually old: Embodied perspective taking and the reduction of ageism under threat.” *Computers in Human Behavior* 60: 398-410.

Pagano, Sabrina J., and Yuen J. Huo. 2007. “The role of moral emotions in predicting support for political actions in post-war Iraq.” *Political Psychology* 28, no. 2: 227-255.

Park, Juhwa., and Kapsik Kim. 2019. “Ethnic Identification Matters.” *Asian Perspective* 43, no. 4: 673-697.

Riek, Blake M., Eric W. Mania, and Samuel L. Gaertner. 2006. “Intergroup threat and outgroup attitudes: A meta-analytic review.” *Personality and Social Psychology Review* 10, no. 4: 336-353.
Nir et al. 1929

Roseman, I. J. 1984. Cognitive determinants of emotion: A structural theory. In Review of personality & social psychology.

Saguy, T., L. R. Tropp, and D. Hawi. 2012. “The role of group power in intergroup contact.” In Advances in intergroup contact, 127-146. Psychology Press.

Scarantino, Andrea, and Ronald De Sousa. "Emotion." (2018).

Shaver, Phillip, Judith Schwartz, Donald Kirson, and Cary O’connor. 1987. “Emotion knowledge: further exploration of a prototype approach.” Journal of Personality and Social Psychology 52, no. 6: 1061.

Singer, Tania, and Claus Lamm. 2009. “The social neuroscience of empathy.” Annals of the New York Academy of Sciences 1156, no. 1: 81-96.

Smith, Eliot R., Charles R. Seger, and Diane M. Mackie. 2007. “Can emotions be truly group level? Evidence regarding four conceptual criteria.” Journal of Personality and Social Psychology 93, no. 3: 431-446.

Smith, Laura GE, and Stephen Gibson. 2020. “Social psychological theory and research on the novel coronavirus disease (COVID-19) pandemic: Introduction to the rapid response special section.” The British Journal of Social Psychology 59, no. 3: 571-583.

Schnabel, N., and A. Nadler. 2008. “A needs-based model of reconciliation: Satisfying the differential needs of victim and perpetrator.” Journal of Personality and Social Psychology 94, no. 1: 116-132.

Solomon, Sheldon, Jeff Greenberg, and Tom Pyszczynski. 2000. “Pride and prejudice: Fear of death and social behavior.” Current Directions in Psychological Science 9, no. 6: 200-204.

Sorokowski, Piotr, Agata Groyecka, Marta Kowal, Agnieszka Sorokowska, Michał Białek, Izabela Lebuda, Małgorzata Dobrowolska, Przemysław Zdybek, and Maciej Karwowski. 2020. “Can information about pandemics increase negative attitudes toward foreign groups? A case of COVID-19 outbreak.” Sustainability 12, no. 12: 4912.

Stephan, Walter G., and Cookie White Stephan. 1985. “Intergroup anxiety.” Journal of Social Issues 41, no. 3: 157-175.

Stürmer, Stefan, Mark Snyder, Alexandra Kropp, and Birte Siem. 2006. “Empathy-motivated helping: The moderating role of group membership.” Personality and Social Psychology Bulletin 32, no. 7: 943-956.

Tajfel, Henri, ed. 1978. Differentiation between social groups: Studies in the social psychology of intergroup relations. Academic Press.

Tajfel, Henri. 1981. Human groups and social categories: Studies in social psychology. Cup Archive.

Templeton, Anne, Selin Tekin Guven, Carina Hoerst, Sara Vestergren, Louise Davidson, Susie Ballentyne, Hannah Madsen, and Sanjeeedah Choudhury. 2020. “Inequalities and identity processes in crises: Recommendations for facilitating safe response to the COVID-19 pandemic.” British Journal of Social Psychology 59: 674-685.

Todd, Andrew R., Galen V. Bodenhausen, and Adam D. Galinsky. 2012. “Perspective taking combats the denial of intergroup discrimination.” Journal of Experimental Social Psychology 48, no. 3: 738-745.
Turner, John C., Michael A. Hogg, Penelope J. Oakes, Stephen D. Reicher, and Margaret S. Wetherell. 1987. *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.

UNESCO. 2019. https://wayback.archive-it.org/10611/20171126022449/http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/nation-state/

Van Bavel, Jay J., Katherine Baicker, Paulo S. Boggio, Valerio Capraro, Aleksandra Cichocka, Mina Cikara, and Molly J. Crockett. 2020. “Using social and behavioural science to support COVID-19 pandemic response.” *Nature Human Behaviour* 4: 1-12.

Vezzali, Loris, Alessia Cadamuro, Annalisa Versari, Dino Giovannini, and Elena Trifiletti. 2015. “Feeling like a group after a natural disaster: Common ingroup identity and relations with outgroup victims among majority and minority young children.” *British Journal of Social Psychology* 54, no. 3: 519-538.

Wohl, Michael JA, Nyla R. Branscombe, and Stephen Reysen. 2010. “Perceiving your group’s future to be in jeopardy: Extinction threat induces collective angst and the desire to strengthen the ingroup.” *Personality and Social Psychology Bulletin* 36, no. 7: 898-910.

Xu, Xiaowen, and Ian McGregor. 2018. “Motivation, threat, and defense: Perspective from experimental social psychology.” *Psychological Inquiry* 29, no. 1: 32-37.