

Published online: April 22, 2023

## **GENDER DIFFERENCES IN SUPPORT FOR COLLECTIVE PUNISHMENT: THE MODERATING ROLE OF MALLEABILITY MINDSET**

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### **ABSTRACT**

This research investigates whether the effect of an observer's gender in support for collective punishment—that is, the punishment of all the group members as a response to a misdeed perpetrated by only one or a few group members—is moderated by the belief that groups are capable of change (i.e., a malleability mindset). We hypothesize that men would support collective punishment more than women when a fixed mindset is salient but not when a malleable mindset is salient. The results of two studies using different samples and scenarios in which we either assessed (Study 1) or experimentally manipulated (Study 2) the mindset support this hypothesis.

### **INTRODUCTION**

Collective punishment refers to the negative treatment applied by an authority or a social group to an entire group for the wrongful behavior of one or more of the group's members (Falomir-Pichastor, Staerklé, Depuiset, & Butera, 2007). Collective punishment can take different forms, but they all refer to the punishment of the entire group, which includes innocent members as well as the actual offender. However, imposing collective sanctions on an entire group can be perceived as challenging one of the most important moral and justice principles: Only offenders should be punished (e.g., Corlett, 1992). It follows that overall, people believe that innocent group members should not endure collective sanctions.

Despite this general understanding, some people do support collective punishment, which can be motivated by different reasons. For instance, people can support collective punishment in order to punish the offender, compensate the victim, deter future offenses, or reaffirm the violated norm (Berent, Pereira & Falomir-Pichastor, 2017). However, past research that investigates the conditions under which people support collective punishment is scarce, and further research is needed in order to increase our understanding of this phenomenon.

For this reason, it is relevant to investigate whether people, both crime victims and observers, support collective sanctions that target all group members as a response to a misdeed perpetrated by only one or a few group members and what factors can influence this support. In this research, we aim to contribute to this effort by

examining the potential intertwined influence of two factors that have not yet been investigated: the observer's gender and the belief that groups can change (i.e., the malleability mindset).

### ***Gender Differences in Punitiveness***

To our knowledge, no previous research has investigated gender differences in relation to support for collective punishment. However, past research has examined gender differences in two relevant domains: punitive attitudes and the use of force. On the one hand, punitive decisions may be marred by the observer's gender (Livingston, Rerick, & Miller, 2019), but empirical evidence regarding gender differences and punitiveness is mixed. While some studies showed that men tend to be more punitive than women (e.g., Batchelder, Koski, & Byxbe, 2004; West, Yelderman, & Miller, 2018; Applegate, Cullen, & Fisher, 2002), other studies did not find any gender difference (Jaffee & Hyde 2000; Seyedsayamdost, 2015; Applegate, Cullen, Turner, & Sundt, 1996) or even found just the opposite (Tsoudis, 2000). Additionally, gender differences in punitiveness appear to depend on the type of offense committed (Devine & Caughlin, 2014). On the other hand, men are more likely than women to support the use of force to solve international conflicts (Norrandner, 2008), the use of torture (Lieberman, 2013; Lizotte, 2017), and the use of international violence (Caprioli, 2000). Compared to women, men are also more likely to support military interventions (Huddy, Feldman, Taber, & Lahav, 2005; Eichenberg, 2003; Shapiro & Mahajan, 1986).

Consequently, despite mixed results, past research suggests that compared to women, men accept more the related suffering of innocent people as a means to fulfill justice (namely, retributive and utilitarian views, see Gilligan, 1982; Lambert et al., 2009). As a result, it seems reasonable to expect that men would be more likely than women to support collective punishment because collective punishment constitutes a means to achieve justice. Past research has shown that retributive motives increased support for collective punishment when the whole offender group was perceived as responsible for the offense (e.g., Lickel, Schmader, & Hamilton, 2003; Pereira et al., 2015). In the present research, we contend that gender differences in support of collective punishment should specifically appear when all members of the offender group are perceived as unchangeable, that is, having fixed traits. In contrast, gender differences in support of collective punishment should reduce or disappear when members of the offender group are perceived as malleable. In the present research, we investigate whether the belief that group members are fixed versus flexible moderates the effect of gender on support for collective punishment.

### ***The Malleability Mindset***

As opposed to a fixed mindset, a malleable mindset refers to the belief that characteristics such as intelligence, personality, and moral character, can change over time (Dweck, 2008; Rattan & Georgeac, 2017; Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011). Thus, a malleability mindset can be understood as a continuum opposing these two mindsets (Gervey, Chiu, Hong, & Dweck, 1999). Past research has shown that a malleable mindset is related to different outcomes in different fields, such as academia, social relationships, or physical health (Lüftenegger & Chen, 2017), and is also domain-specific (Dweck, Chiu, & Hong,

1995; Levy, Stroessner, & Dweck, 1998; Hughes, 2015).

In the present research we focused on the malleability mindset of groups, and the possibility that a group's basic moral values and beliefs can significantly change (Halperin et al., 2012), because this mindset appears to be particularly relevant regarding collective punishment. Perceived group malleability has consequences on intergroup relations (Rattan & Georgeac, 2017). Compared to individuals with a more fixed mindset, those with a malleable mindset tend to show less aggressive desires (Yeager, Miu, Powers, & Dweck, 2013) and less punitiveness (Tam, Shu, Ng, & Tong, 2013; Erdley & Dweck, 1993; Gervy et al., 1999; Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011). However, research examining gender differences in the malleability mindset has shown either mixed results (Todor, 2014; Ahmavaara & Houston, 2007; Dweck, Chiu, & Hong, 1995) or no gender differences at all (Chan, Sun, & Chan, 2021). Accordingly, the present research specifically contends that the malleability mindset moderates the effect of gender differences on individuals' support for collective punishment.

### ***The Present Research***

Research on factors explaining individuals' support for collective punishment is scarce, and to our knowledge, no previous research has yet examined the potential moderating role of a malleability mindset of group on gender differences. Therefore, the present research sought to fill this gap by examining whether people's perception of a malleability mindset of groups moderated gender differences in support of collective punishment. More specifically, we assumed that gender differences in support of collective punishment would appear when people believe that groups constitute an entity that cannot change (a fixed mindset). Therefore, men would support collective punishment to a greater extent in comparison to women in order to restore justice. However, gender differences in support of collective punishment should reduce or disappear when people believe that groups can change (a malleable mindset) since men would consider to a lesser extent that collective punishment constitutes an appropriate means to achieve justice.

We conducted two studies to test this main hypothesis. We operationalized the malleability mindset of groups either as an individual difference (Study 1) or as a situationally manipulated factor (Study 2). In both studies, participants were asked to read an ostensibly real offense in which collective punishment appears as the only solution to achieve justice. The main dependent variable in both studies was the participants' support for collective punishment. According to the reviewed literature, we expected an interaction effect between malleability mindset and participant's gender: Men would support collective punishment more than women when a fixed mindset is salient, but not when a malleable mindset is salient.

### **STUDY 1**

In the first study, we tested our main hypothesis on a situation in which participants were relatively involved in an intractable (or protracted) conflict (see Bar-Tal, 2001). The study focused on the Israel-Palestinian conflict and an event that occurred in the aftermath of a clash between the two national entities.

## METHOD

### *Participants and Procedure*

As recommended by Simmons, Nelson, and Simonshohn (2013), we recruited approximately 50 participants per experimental condition. Given that this study included one continuous factor (mindset) and one dichotomic factor (gender), we used a 2 x 2 experimental design as a proxy. Therefore, 200 Jewish Israelis were recruited by Midgam Project Web Panel, an Israeli sampling service, to participate in the study. Participants received a small monetary compensation for their participation. We excluded 6 participants who did not meet the inclusion criteria (i.e., suspicious participation) and 11 who did not provide their gender. The final sample included 183 participants (91 male, 49.7%) with ages ranging from 18 to 74 ( $M = 43.19$ ,  $SD = 16.10$ ). A sensitivity power analysis conducted on G\*Power for an ANOVA with four groups, assuming an  $\alpha$  of 0.05 (two-tailed) and a power of 0.80, revealed that our final sample was powered enough to detect between a small and medium effect size ( $f = 0.20$ ). We first assessed participants' malleability mindset. They were then asked to read a vignette describing intergroup aggression within the Israel-Palestine conflict. Finally, participants were to indicate the extent to which they support a reaction based on collective punishment. At the end of the study, participants provided limited demographic information and were fully debriefed.

### *The Malleability Mindset of Groups*

We assessed the malleability mindset of groups through a 4-item scale developed by Halperin, Russell, Trzesniewski, Gross, and Dweck (2011). The scale includes items such as "As much as I hate to admit it, you can't teach an old dog new tricks" or "groups can't really change their basic characteristics" (1 = strongly disagree and 6 = strongly agree). We reversed the scale and computed one average score so that higher scores reflect a higher malleable mindset of groups ( $M = 3.42$ ,  $SD = 1.08$ ; alpha = .76).

### *Support for Collective Punishment [1]*

We initially asked participants to read a vignette based on the account of a real event within the context of the Israeli-Palestinian conflict. The event occurred in November 2018 and involved casualties on both sides. Due to the temporal proximity to the event, the description was merely a reminder (Appendix A). Afterward, we asked participants to indicate their agreement or disagreement with a possible collective punishment of the entire Palestinian group that was allegedly being considered by Israel. This reaction encompassed several punitive measures such as "the monetary aid transfer to Gaza will be frozen." Participants had to indicate whether this reaction was *legitimate*, *necessary*, and *just*. We also asked participants to rate to what extent they would feel proud and ashamed (reversed item) if the proposed reaction was applied. Each item was presented separately. All scales for the 5 items ranged from 1 (strongly disagree) to 6 (strongly agree). A confirmatory factor analysis extracted one single factor, and we, therefore, computed an average score ( $M = 3.83$ ,  $SD = 1.42$ ; alpha = .89). This score was negatively correlated with the malleability mindset of groups,  $r = -.25$ ,  $p = .001$ .

## RESULTS

To test our hypothesis, we used Hayes's (version 4.0) PROCESS bootstrapping command (model 1: 5,000 iterations). We regressed collective punishment on participant's gender (-1 male vs +1 female), the malleability mindset of groups (standardized scores), and their interaction. The analysis revealed a significant main effect of the malleable mindset ( $B = -.34$ ,  $SE = .10$ ,  $t(179) = -3.39$ ,  $p < .001$ , 95%  $CI [-.55, -.14]$ ), but the main effect of gender was not significant ( $B = -.06$ ,  $SE = .10$ ,  $t(179) = -.59$ ,  $p = .55$ ). The analysis also revealed as significant the predicted gender  $\times$  malleability interaction ( $B = .27$ ,  $SE = .10$ ,  $t(179) = 2.65$ ,  $p < .01$ , 95%  $CI [.07, .47]$ ) (see Figure 1). Men supported collective punishment more than women when the mindset was relatively fixed (-1SD;  $B = -.35$ ,  $SE = .14$ ,  $t(179) = -2.38$ ,  $p < .05$ , 95%  $CI [-.65, -.06]$ ), but not when the mindset was relatively malleable (+1SD;  $B = .27$ ,  $SE = .16$ ,  $t(179) = 1.64$ ,  $p = .10$ , 95%  $CI [-.05, .60]$ ).

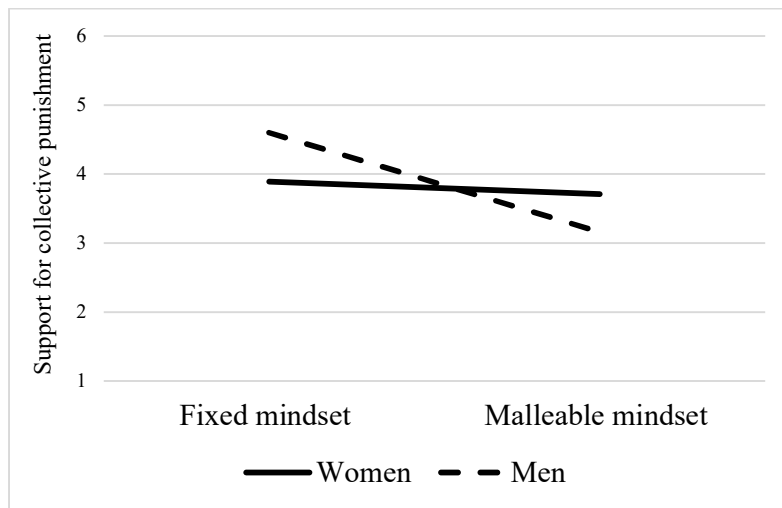


Figure 1. Support for collective punishment as a function of malleability mindset (-/+1SD) and participant gender (Study 1).

## DISCUSSION

These results confirmed the main hypothesis regarding the moderating role of malleability mindset of groups: Gender differences were observed in a relatively fixed mindset but not in a relatively malleable mindset. Given that the current study was fully correlational, which prevents causality inferences from occurring, we conducted a second study to provide consistent evidence in support of the main hypothesis while experimentally manipulating the malleability mindset of groups.

## STUDY 2

In this study we introduced the following three methodological changes from Study 1: We used a different scenario, we recruited participants who were not personally involved (i.e., a third-person perspective), and we experimentally manipulated the malleability mindset of groups.

## METHOD

### *Participants and Procedure*

Unless otherwise indicated, the procedure and materials were the same as in Study 1. We initially recruited 180 American adults via Mechanical Turk. However, the final sample included only 162 participants (87 male, 53.7%) with ages ranging from 20 to 71 ( $M = 38.06$ ,  $SD = 12.67$ ; one participant did not indicate their age). Even though the final sample size was smaller than expected, a sensitivity analysis in G\*Power indicated that the final sample size provides an 80% probability of detecting effects with a size of  $f = 0.22$  or greater. Thus, the final sample was large enough to detect medium-sized effects.

### *Manipulation of the Malleability Mindset of Groups*

To experimentally manipulate the malleability mindset of groups, we asked participants to complete a reading Comprehension Task (see Halperin et al., 2011). Participants had to read and think about a text based on a scientific article. The text either supported or opposed the possibility of groups changing over time, depending on the experimental condition. As a manipulation check, we assessed beliefs regarding whether groups have a malleable versus fixed nature with the same scale used in Study 1. We computed an average score in such a way that higher scores reflect a higher malleable mindset of groups ( $M = 3.64$ ,  $SD = 1.40$ ;  $\alpha = .92$ ).

### *Support for Collective Punishment*

In this study, the vignette referred to a conflict between Armenia and Azerbaijan, two neighboring countries that share a tense relationship due to contention over disputed territory, Nagorno-Karabakh. The enduring conflict dates back to 1988 and involves full-scale wars, mass displacement, and constant tension. The scenario was based on one of many incidents that occurred between these countries in 2017, which involved Armenian-backed separatists shelling Azerbaijani territory, resulting in the death of three Azeri citizens (Appendix B). Afterward, we asked participants to read the collective punishment that was allegedly applied by Azerbaijan against Armenia: "Azerbaijan imposed various sanctions on Armenia—economically, socially, and politically. Among the rest, Azerbaijan suspended the transference of financial aid offered to the Armenian people." Participants had to indicate whether this collective punishment was *legitimate*, *necessary*, *just*, *understandable*, and *appropriate*. Scales ranged from 1 (strongly disagree) to 6 (strongly agree). All the items loaded appropriately on one single factor, and we computed an average score ( $M = 4.13$ ,  $SD = 1.24$ ;  $\alpha = .94$ ). This score negatively correlated with the malleability mindset,  $r(162) = -.37$ ,  $p < .001$ .

## RESULTS

### *Manipulation check.*

We used 2 (gender: -1 male vs +1 female)  $\times$  2 (malleability mindset: -1 fixed vs +1 malleable) ANOVA. The analysis of the beliefs concerning groups only showed a

main effect of mindset condition,  $F(1,158) = 28.01, p < .001, \eta_p^2 = .15$ . As expected, participants believed more in a malleable mindset of groups in the malleable condition ( $M = 4.18, SD = 1.39$ ) in comparison to the fixed condition ( $M = 3.09, SD = 1.18$ ). The main effect of gender and the gender  $\times$  mindset interaction were not significant,  $F(1,158) = .99, p = .32$  and  $F(1,158) = 1.08, p = .29$ , respectively.

### ***Support for collective punishment.***

To test our hypothesis, we used (Hayes's 4.0) PROCESS bootstrapping command (model 1: 5,000 iterations.) We regressed collective punishment on participants' gender (-1 male vs +1 female), the malleability mindset of groups (-1 fixed vs +1 malleable), and their interaction. The analysis revealed a significant main effect of gender ( $B = -.25, SE = .09, t(158) = -2.61, p < .01, 95\% CI [-.43, -.06]$ ), but the main effect of the malleable mindset was not significant ( $B = -.11, SE = .09, t(158) = -1.16, p = .24$ ). The analysis also revealed as significant the predicted gender  $\times$  malleability mindset of groups interaction ( $B = .19, SE = .09, t(158) = 2.07, p < .05, 95\% CI [.009, .388]$ ). As shown in Figure 2, men supported collective punishment more than women for the fixed mindset condition ( $B = -.45, SE = .13, t(158) = -3.32, p < .01, 95\% CI [-.72, -.18]$ ), but not for the malleable mindset ( $B = -.05, SE = .13, t(158) = -.42, p = .67, 95\% CI [-.32, .20]$ ).

## **DISCUSSION**

The results of this second study were similar to those observed in Study 1 and provided consistent support for our main hypothesis while using a quasi-experimental design. More specifically, the effect of gender was observed in the fixed mindset condition, where men supported collective punishment to a greater extent than women. However, this effect was not significant in the malleable mindset condition, where men's support for collective punishment was reduced to the same level as women's support.

## **GENERAL DISCUSSION**

In the present research, we sought to test whether a malleable mindset (the belief about the possibility that groups can change) moderates gender differences in support for collective punishment, defined as the punishment of innocent group members as a reaction to an offense committed by only a few group members. We assessed (Study 1) or manipulated (Study 2) the malleability mindset (fixed versus malleable). In addition, we set out to increase the ecological validity of our research by using two different scenarios and samples—Israeli and American participants—in the function of being directly involved (first-person perspective, Study 1) or not (third-person perspective, Study 2) in the scenario.

Overall, the results of both studies provide strong evidence in support of our main hypothesis. Gender differences in support for collective punishment were moderated by the malleability mindset, operationalized either as an individual difference or experimentally manipulated. More specifically, gender differences in support for collective punishment were observed when participants believe that groups cannot change (a rather fixed mindset), but not when they believe that groups can change (a rather malleable mindset).

The present results are relevant for research on the malleability mindset and punitive attitudes. Interestingly, whilst in Study 1 a malleable mindset reduced the support for collective punishment, in Study 2 we did not observe such an effect. This finding is somehow inconsistent with past research in which a malleable mindset reduces punitiveness (Tam, Shu, Ng, & Tong, 2013; Erdley & Dweck, 1993; Gervy et al., 1999; Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011). One possible explanation relates to the specific scenario used in each study. Another explanation refers to the fact that in Study 2, we recruited participants from the general population, which may be less susceptible to the manipulation of a malleability mindset (see Li & Bates, 2019; Mueller & Dweck, 1998). Finally, it is also possible that this inconsistency stems from a conceptual difference between individual and collective punishment. Indeed, previous research focused on individual punishment (e.g., Tam et al., 2013; Erdley & Dweck, 1993) whereas the current research was the first, to the best of our knowledge, to focus on collective punishment. Therefore, further research is needed in order to investigate this issue.

This research also contributes to the literature on gender differences in punitiveness. Overall, in Study 1, men supported collective punishment to the same extent as women, however, in Study 2 men's support was greater than that of the women. Whilst these inconsistent findings could result from the different scenarios and samples used in each study, it is worth noting that they are also consistent with past research showing that the effect of gender on punitiveness is mixed (Batchelder, et al., 2004; Tsoudis, 2000; Applegate, et al., 1996). However, the present research extends these previous findings by showing the moderating role of the malleability mindset. Accordingly, when punishment refers to violent retaliation targeting the entire offender group (including innocent group members), men tend to be more punitive than women specifically when a fixed mindset is activated.

Alongside the importance of these findings, it is necessary to highlight some methodological limitations. First, although the present research used two different scenarios, both described an interethnic and armed conflict in which a powerful group reacts to specific offenses perpetrated by a few members of a powerless group by inflicting collective punishment on the entire outgroup. Therefore, future research should investigate whether the main hypothesis is also confirmed if offenses of a different nature are employed.

Second, in the present research, we relied on research showing that retribution constitutes the primary motive for justice (Darley & Pittman, 2003), and men overall hold more retributive views than women (Lambert, Clarke, Tucker-Gail, & Hogan, 2009). Accordingly, we reasoned that retribution motives could specifically drive the effect of a malleability mindset on men's support for collective punishment. Women's support for collective punishment, however, could be strengthened particularly when other motives for justice (e.g., deterrence) are highlighted. In the present research, we did not assess justice motives and therefore cannot determine with certainty whether retribution constitutes the specific mechanism behind the investigated processes.

Despite this limitation, it is worth noting that justice motives are strongly related, and it is difficult to investigate the unique contribution of one single motive (see Confino et al., 2022). Moreover, the way that motives for justice are related to the investigated



processes may appear complex, and different motives could also explain the predicted and observed pattern of findings. For instance, one could reason that men's greater support for collective punishment in the fixed mindset disappeared in the malleable mindset specifically because innocent group members were perceived as different from offenders and capable of change—they did not need to be deterred to prevent future offenses. Accordingly, deterrence motives could specifically drive the effect of a fixed mindset and men's support for collective punishment, whereas other motives could motivate women's support. Further research is needed to examine whether different motives for justice account for the investigated gender differences in support for collective punishment.

## CONCLUSION

This research contributes to the social justice literature in two ways. First, it adds to our understanding of the factors motivating people's support for punishment and in particular collective punishment. Second, it shows for the first time that men's support for collective punishment is driven by their belief about whether innocent group members can change (a fixed mindset). Therefore, the main conclusion extracted from this research is likely that gender differences in punitiveness are related to one's malleability mindset.

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#### **ENDNOTE**

[1] In order to better understand the investigated processes, in both studies we included 3 items that assessed retribution motives and 3 items that assessed deterrence concerns. Additionally, one item assessed power balance, and another assessed willingness to make the offender group suffer. However, in both studies, preliminary analyses showed strong correlations between deterrence and retribution (Study 1:  $r = .59$ ; Study 2:  $r = .74$ ), which prevented us from examining whether the investigated processes related to specific (deterrence vs. retribution) justice concerns. More information about the results regarding these scales can be obtained from the first author.

## **Appendix A: Material used in Study 1**

### *Context description*

#### **In this part of the study, we ask a few questions about recent events in the Gaza strip and in Gaza-vicinity communities.**

Since Operation Protective Edge in 2014, a relative silence was kept between Israel and the Gaza strip, which is under Hamas control. The few security incidents that took place between the two parties during that period were held in check and ended quickly without slipping into an extensive and intensive confrontation.

On November 11, 2018, a special unit of the IDF, which conducted a covert operation in Khan Yunis (Gaza), was exposed during a clash with Hamas militants. One Israeli officer and 7 Hamas militants were killed. Israeli fighter aircraft attacked that region to assist ground forces on their way back to Israeli territory. Following the incident, 17 rockets were fired toward Israeli communities in the Gaza vicinity.

On the next day in the afternoon, an anti-tank missile was launched toward an Israeli bus, severely injuring an IDF soldier. Shortly after the missile, the terror organizations in Gaza began heavily shooting rockets toward Israeli communities. At the same time, the Israeli air force attacked over 70 terrorist targets, leading to 3 dead Palestinians.

At the end of 3 days, approximately 460 rockets were shot toward Israeli communities. Records stated that one Israeli citizen was killed and over 100 were wounded. During that time span in the Gaza strip, 160 targets were attacked, causing the death of 14 citizens and terror activists. On both sides, large damage was caused to households and infrastructures.

### *Collective Punishment*

After a ceasefire was achieved, the citizens in Gaza's vicinity got back to their daily routine. However, in the Israeli military and political system, numerous voices were heard calling for a significantly larger response: "We shouldn't treat them with kid gloves when it comes to military response," said a high-ranking official in the security system. "There is a need for a harsher response than what has been taken so far. We need to inflict a blow on the entire strip, even if roads, power stations, and schools will be ruined. It can't be that life in Gaza will continue as usual after Israelis suffered from missiles and sat in shelters. It's not time to use a scalpel, it's time to operate massive pressure on all the residents of Gaza."

As part of the proposed response, the monetary aid transfer to Gaza will be frozen and a significant cut will be applied to the provision of electricity to the strip. Other officials in the security system expressed concern that those measures will cause a general paralysis of the strip and deadly damage to the entire citizenry of Gaza.

## **Appendix B: Material used in Study 2**

### *Context description*

Azerbaijan and Armenia are two neighboring countries that have been in an ongoing territorial dispute over the border region of Nagorno-Karabakh. There are no diplomatic relations between the two countries and all negotiation attempts have reached a deadlock.

Nagorno-Karabakh, the focus of contention, declared independence from Azerbaijan in the war of 1988–1994 and has been under the control of Armenian-backed separatists since then.

In July 2017, Armenia-backed separatists fired shells toward Azerbaijan territory. As a result, three Azeri citizens were killed. The strike was committed by a small group of unaffiliated separatists that acted independently, according to BBC reports.

### *Collective Punishment*

In response, the Azerbaijan government condemned the offense, pointing the finger at Armenia.

Therefore, Azerbaijan imposed various sanctions on Armenia— economically, socially, and politically and suspended the transference of financial aid offered to the Armenian people. In addition, the participation of Armenians in international enterprises and conferences was blocked. These sanctions had substantial consequences for the entire Armenian population. For instance, they brought about an increase in unemployment rates and damage to the provision of essential services.

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