

## RESEARCH ARTICLE

# Camouflaged liability: How the distinction between civilians and soldiers influences moral judgement of permissible harm in war

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## Abstract

Previous research has shown that people judge sacrificing a few people to save a larger number to be morally permissible when the intervention targets the threat but not when it targets the victims. We investigated whether this distinction according to the locus of intervention influences people's evaluations of wartime scenarios and whether such evaluations vary according to different types of victims (e.g., civilians vs. soldiers). We observed a significant effect of locus of intervention in situations in which a smaller number of civilians were sacrificed to save a larger number of civilians (Study 1;  $N = 142$ ). However, the effect of locus of intervention was less pronounced in scenarios in which soldiers were sacrificed to save civilians (Studies 2 and 3;  $N = 173$  and  $N = 841$ ). A fourth experiment ( $N = 477$ ) explored why participants treated soldiers and civilians differently. Participants believed that it is more permissible to sacrifice soldiers because they consent to being harmed.

## KEYWORDS

locus of intervention, moral psychology, permissible harm, moral status of victims, war

## 1 | INTRODUCTION

People are influenced by the causal relations between actions and outcomes when judging the moral permissibility of harming others for a greater good (Chemla et al., 2015; Cushman & Young, 2011; Iliev et al., 2012; Royzman & Baron, 2002; Sloman et al., 2009; Waldmann et al., 2012). A recent theory highlighting the role of causal relations states that people focus primarily on the locus on which the agent intervenes to establish the permissibility of the action (Waldmann et al., 2017; Waldmann & Dieterich, 2007; Waldmann & Wiegmann, 2010). Several experiments have shown that people consider it permissible to re-direct threats to a smaller number of victims who would die as a side effect. By contrast, targeting a victim, for example, by re-directing it to

save a larger number of victims, is generally deemed less permissible. An example is Waldmann and Dieterich's (2007) experiment in which they showed that throwing a bomb on victims (i.e., re-directing a threat) was viewed as less immoral than throwing a person on a bomb (i.e., re-directing a victim) (see also Iliev et al., 2012). The focus of the present research is to explore the boundary conditions of this effect in war scenarios and study whether the moral distinction between civilians and soldiers moderates this effect.

The moral distinction between civilians and soldiers, that is, the *principle of discrimination*, is a fundamental ethical criterion included in the just war theory, international humanitarian law and the Genocide Convention (Bellamy, 2006, 2012a). It establishes the prohibition to carry out military actions that directly or indirectly harm civilians.

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This obligation excludes soldiers who are liable to military attack and can, therefore, be endangered to safeguard the lives of civilians as part of the armed forces (Coates, 2016b; Fabre, 2009; Walzer, 2015). One implication of this differential moral treatment in war is that the factors constraining the permissibility of justifying the sacrifice of people might be more relevant when civilians rather than soldiers are the victims. This article presents three studies on the effect of the locus of intervention and the influence of the moral status of victims on judgements about the moral permissibility of harm in war. A fourth study investigated how subjects view the difference between soldiers and civilians. This study served as a manipulation check for the three previous studies.

## 1.1 | Theories of permissible harm

In normative ethics, the question of whether the preservation of the life of an individual or a group of people justifies harming innocent people has been addressed by various competing accounts. For example, a utilitarian principle requires it to select the action that will produce the best consequences, impartially considered (Cohen & Ahn, 2016; Engelmann & Waldmann, 2022; Sinnott-Armstrong, 2021). Therefore, it may be considered morally appropriate to sacrifice a small group of innocents to save a larger number of people (Kahane et al., 2018; Rachels & Rachels, 2012). By contrast, a non-consequentialist or deontological approach does not only take the consequences of an action into account but also the type of action and the causal relation between action and outcome (Kamm, 2007). A certain action might produce the best consequences but can, nevertheless, be morally forbidden, for example, when a moral rule is violated. This class of ethical accounts can be elaborated in different ways: one possibility is to generally prohibit intentionally harming innocent people regardless of the good consequences the action might entail (Larry & Moore, 2021; Rachels & Rachels, 2012). Another solution, which is more lenient than the first one, allows harm done for the greater good under certain strict conditions. An example of this second type of solution is provided by the *doctrine of double effect* (DDE). Like other non-consequentialist principles, it prohibits causing harm intentionally to others as a direct effect or a means to achieve a greater good. Nevertheless, the DDE justifies the same harm when it is an unintended side effect of an action with good outcomes and when the good outcomes outweigh the bad ones (i.e., fewer people are harmed than are saved) (FitzPatrick, 2012; Marquis, 1991; McIntyre, 2001). Thus, the DDE examines the features of the act itself as well as the causal status and type of consequences.

In line with the DDE, several studies in moral psychology suggest that people neither focus exclusively on the act itself nor on its consequences to judge the moral permissibility of harming others (Crockett, 2013; Cushman & Young, 2011; Feltz & May, 2017; Hauser et al., 2007; Mikhail, 2007, 2011). For example, people react differently to different scenarios of the trolley problem, a hypothetical case in which people were asked to judge the morality of a bystander's potential action which harms people in order to save others. Most people consider it permissible to save five workers by re-directing a trolley onto another

track where it would kill one worker (switch scenario), whereas they consider it impermissible to push a heavy man off a bridge onto the tracks to stop the trolley and thereby saving five workers (footbridge scenario). Responses to both scenarios differ despite having identical consequences, which is inconsistent with a utilitarian view (see Waldmann et al., 2012, 2017, for overviews). The findings are rather consistent with the DDE: Whereas the victim in the switch dilemma is harmed as a side effect which according to the DDE is permissible, the person on the bridge is used as a means, which is impermissible.

The DDE can also be applied to situations other than the typical scenarios of the trolley problem. A case in point is situations in war involving harm to innocents due to military operations (Di Nucci, 2013, 2014; Kamm, 2011, 2012; Scanlon, 2008; Walzer, 2015). It has been argued, for example, that the DDE explains why it is illegitimate to bomb civilians as a means to undermine enemy morale but that the bombing of an arms factory is legitimate when it causes the death of civilians as a side effect. In a recent study, Watkins and Laham (2019) used trolley problem scenarios to explore whether people's judgements are consistent with the DDE in circumstances of peace and war. In the peacetime scenarios, the dilemmas involved harming a civilian to save other civilians. In the wartime scenarios, the trade-off was between soldiers. As a second factor, it was manipulated whether the victims came from the same group (ingroup) or different groups (outgroup). The study showed that, although people tended to judge sacrificing in war as more acceptable than sacrificing in peace, the difference between switching and footbridge scenarios was still present in both contexts. However, the effect was slightly smaller for the war conditions. One general shortcoming of this set of studies is that they did not really present realistic war scenarios. As in previous research, trolley dilemmas were presented without vividly situating them in war or peace scenarios. These contexts were just mentioned in the instructions.

Despite the successful predictions of the DDE in suitable scenarios, some philosophers and psychologists have criticized the DDE as being too restrictive (Kamm, 2007; Waldmann et al., 2017; Waldmann & Wiegmann, 2010). In very few real-world situations, people are used as involuntary means in the strict sense. If a person is pushed from a bridge to stop a train, their body is used as a means (e.g., Wiegmann & Waldmann, 2014). However, when a car with a passenger is pushed to stop a train, the car along with the passenger is clearly the locus of intervention, but it is the car that stops the train, not the body of the passenger. Since in such a situation, the harm to the passenger of the car is a causal side effect, the DDE would predict that it is permissible to harm the passenger by pushing the car in harm's way. Empirically this has not been found, however. Pushing a car along with its passenger in harm's way, was in experiments considered to be less permissible, then killing a bystander by re-directing a car to save others (Waldmann & Dieterich, 2007; Waldmann & Wiegmann, 2010; Waldmann et al., 2017).

As a theoretical alternative to the DDE, Waldmann and colleagues proposed the *locus of intervention theory* which differentiates between targeting primarily a potential victim versus targeting a threat. This account covers the cases addressed by the DDE but also other cases,

such as the distinction between re-directing a threatening car (threat intervention) versus pushing a car with its passenger in harm's way (victim intervention).

Unlike the DDE that simply distinguishes between the causal status of victims (means vs. side effects), the locus of intervention theory also offers a cognitive mechanism underlying the moral distinctions. Different targets of interventions lead to differences in attentional focus, which myopically downplay some outcomes and highlight others (see Waldmann et al., 2017; Waldmann & Wiegmann, 2010). The general hypothesis here is that people tend to focus their attention on the target of their interventions and consider what happens to this target as a consequence of the interaction in contrast to the hypothetical absence of the interaction. Thus, when evaluating the case of a threat intervention, as in the case of the switch scenario, people consider the two possible causal paths of the threat (e.g., the trolley continuing on its original path or being diverted): one leading to harming five people, the other leading to harming one person. By contrast, in the footbridge scenario, the target of intervention is the victim placed on the bridge, who would die when the action is executed but would otherwise live. The intervention on the victim draws the focus on the victim's fate, which makes the harm this victim suffers a more salient factor than in the switch scenario in which the harm for one victim is contrasted with the saving of five. The differences in attentional focus explain the different moral evaluations. Whereas the footbridge/switch contrast can also be explained by the DDE, Waldmann and colleagues have also demonstrated similar effects in cases in which the targets of interventions differ but in none of the conditions the victim's body has been used as a means (Waldmann & Dieterich, 2007; Waldmann & Wiegmann, 2010; Waldmann et al., 2017). For example, in Waldmann and Dieterich's study (2007), participants were presented with a case in which a torpedo was about to kill six soldiers on a boat. In the victim intervention condition, three soldiers in a boat are ordered to move in front of the torpedo to save the other six. Here the boat not the passengers stops the torpedo. In the threat intervention condition, the torpedo is redirected by remote control to a submarine with three soldiers. People's responses favoured the threat intervention condition over the victim intervention condition (see also Iliev et al., 2012). In these cases, the locus of intervention theory but not the DDE explains the differences between moral assessments.

## 1.2 | The moral status of the victims and permissible harm in war

The few previous studies on war scenarios typically presented trade-offs between civilians or soldiers but did not study mixed scenarios in which both soldiers and civilians are involved. It is one novel goal of our study to test such scenarios. War presupposes a coordinated and selective use of violence for the interests and rights of groups and their members. Like any human activity, such violence is regulated by moral considerations and principles, preventing an excessive use whose cost exceeds the good it might serve. Such principles have been integrated into ethical and legal frameworks, such as *just war theory*, interna-

tional humanitarian law and the Genocide Convention (Bellamy, 2006, 2012a; Coates, 2016; Orend, 2013; Walzer, 2015). All these frameworks present as one of their main principles the obligation of armed forces to discriminate between those who are legitimate targets of military attack and those who are not (Bellamy, 2006, 2012b; Benvenisti, 2006; Coates, 2016; Fabre, 2009, 2014; Walzer, 2015). Accordingly, civilians should be excluded from hostilities and protected from harm since they do not actively contribute to the battle and do not pose a threat. On the contrary, armed forces members may be considered legitimate military targets or be put at risk to protect others.

The asymmetry that war poses in the moral treatment of soldiers arises from a traditional representation of their social role. Once ordinary citizens join an armed force, they acquire the right to use violence, take an active part in the battlefield and threaten their enemies. In turn, they waive their right to protection or immunity from military attack (Bellamy, 2012a; Orend, 2013; Walzer, 2015). Moreover, as soldiers become part of a chain of command within an organization with a defined political purpose, they tend to be perceived as instruments serving the interests of their group.

Some previous studies have focused on whether the legitimacy of the war that soldiers wage influences how people judge the permissibility of killing in war (Benbaji et al., 2015; Watkins & Laham, 2020). The results of these experiments have shown that people consider it illegitimate to attack civilians in any circumstance. At the same time, the permissibility of killing soldiers depends on the cause of the war it serves. We have already discussed an initial study by Watkins and Laham (2019) focusing on differences in responses to the switch and footbridge scenarios in war versus peace. A shortcoming of this study is that it presents abstract trolley scenarios which are not clearly situated in a war or peace context. Moreover, the question of how soldiers and civilians are perceived in war is not addressed because the trade-offs either involved soldiers in war or civilians in peace contexts but not a mixture.

## 1.3 | Overview of studies

Our studies have several goals. We have developed novel sacrificial dilemmas that are clearly situated in war and do not use victims as means in the sense of the DDE to test whether the locus of intervention is a relevant moral factor in war. Moreover, we studied trade-off situations within war scenarios that involve civilian and military victims, which allows us to assess the role of the type of victims in concert with the role of the locus of intervention. Finally, we examined beliefs related to the moral status of victims that may give rise to different moral evaluations. In the first three experiments, participants evaluated hypothetical war dilemmas. We compared situations in which the locus of intervention differed (i.e., targeting the threat vs. targeting the potential victims); in neither scenario, victims were used as involuntary means. Study 1 tested the role of the locus of intervention in a war dilemma in which a threat to civilians could be prevented by sacrificing a smaller group of people. In the second study, we manipulated the status of the victims whose lives could be sacrificed. We compared a trade-off involving civilians only with a trade-off in which civilians can

be rescued by sacrificing soldiers. We hypothesized that the locus of intervention is less relevant when the victims sacrificed are soldiers than civilians because it is part of the role of soldiers to protect their country, possibly by jeopardizing their own lives. The third study is similar to the second one, differing only in introducing a new category of victims in addition to civilians and regular soldiers. Here we presented new scenarios in which farmer soldiers, rather than regular soldiers, who have entered the armed forces to remain on their properties and protect them are the potential victims to be sacrificed. By including a group of people who lie, in some sense, between farmers and soldiers, the goal of the study was to pinpoint which characteristics of civilians or soldiers make them liable to being sacrificed in a dilemma situation.

In the last study, Study 4, we wanted to gain insight into the reasons and beliefs that led participants to favour the sacrifice of some kinds of victims over others, as observed in Studies 2 and 3. Unlike in the other three studies, in Study 4, we did not ask participants whether a certain action should be performed, but we posed five questions asking about the moral permissibility of killing or harming certain types of victims in war, about whether these victims had a duty to sacrifice themselves, about whether they consented to such harm and about whether the armed forces had a duty to sacrifice them given their moral status.

## 2 | STUDY 1

In our first study, we tested whether the locus of intervention influences people's moral judgement about the permissibility of harming others in wartime circumstances. We hypothesized that people would rate the moral permissibility of a threat intervention more favourably than of a victim intervention in a situation involving a trade-off between civilians from the same country. In the victim intervention condition, a bus transporting 50 people is driven to a missile launcher by remote control, which is about to be launched and would kill a hundred people. Driving the bus into the launcher would stop it but would also kill its 50 passengers. In the threat intervention condition, the self-driving bus is empty. After the empty bus hits the missile launcher, it causes an explosion that stops the missile from being launched but kills 50 people in the vicinity. Note that the two scenarios differ from trolley dilemmas in that they clearly represent dilemmas in war. Moreover, the two contrasted conditions use the same action, re-directing a bus. Thus, unlike in the classic contrasts between switch and footbridge, differences cannot be explained by different actions, personal force or other confounds (see Waldmann et al., 2017, for a list of confounds in trolley dilemmas). Finally, in the victim intervention condition, the passengers who would lose their lives are not used as means to stop the missile. Thus, the expected effect cannot be explained by the DDE, but it would support the locus of intervention theory.

### 2.1 | Method

**Participants.** One hundred forty-three people were randomly assigned to the two conditions and compensated with money for their partici-

pation in the experiment via Prolific (£0.20, i.e., £6 per hour). The final data analysis included the responses of 131 participants who answered the attention check questions correctly (73 females, 57 males, 1 who did not indicate gender; age  $M = 31.8$ ,  $SD = 9.59$ , range = 18–75 years). The participants were native English speakers who did not participate in our previous experiments. In an a priori power analysis with G\*Power for a two-independent sample *t*-test (one-tailed) (Faul et al., 2007), we determined that with a sample size of at least 134 participants and an alpha level of .05, we would have 95% power to detect a medium effect ( $r = .30$ ).

**Design, materials and procedure.** We employed a one-factor between-subjects design (locus of intervention: victim intervention vs. threat intervention). The experiment was conducted in English using the web-based software Unipark. Participants were recruited on Prolific and received a link leading to the online survey. The first page of the survey described the general instructions about the experiment and explained how to respond to a Likert scale in each condition. Each participant was randomly assigned to one of two conditions: victim intervention or threat intervention. Initially, participants of both conditions received the same instruction presenting the general scenario:

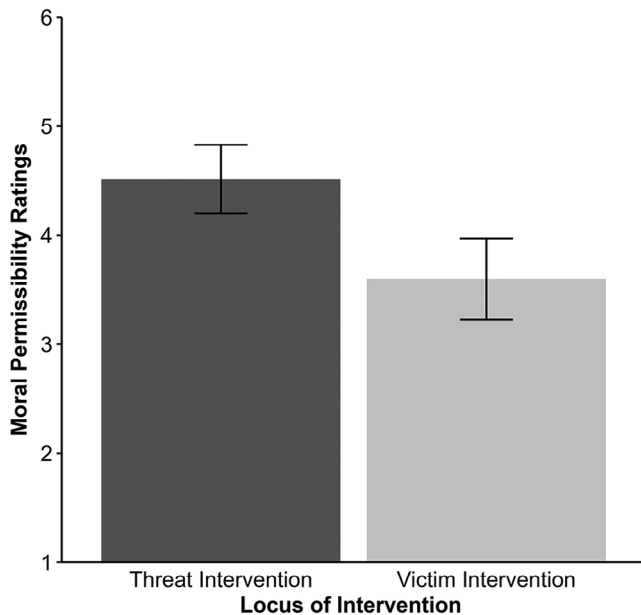
Imagine that two countries, called the Blue Nation and the Yellow Nation, have started a war with each other. The Yellow Nation has secretly placed a missile launcher truck on the territory of Blue Nation and is about to launch a missile over a nearby village, which would kill one hundred people who live there. The armed forces of The Blue Nation discovered the threat only five minutes ago and are looking for a way to stop the imminent attack. There is only one possibility to stop the launching and save the lives of the hundred people:

After this initial passage, the participants were presented with one of two possible courses of action as well as the expected consequences. Each scenario included images depicting the initial situation and the consequences of what would happen in the presence and absence of the action. In the victim intervention condition, the participants read the following description:

Close to the threat is a self-driving bus transporting fifty passengers. A general of the Blue Nation could remotely control the bus and navigate it into the missiles-launcher truck, thereby causing an explosion and eliminating the threat. However, due to the explosion, the fifty civilians inside the bus would die.

In contrast, participants in the threat intervention condition read the following description:

Close to the threat is a self-driving bus with no passengers aboard. A general of The Blue Nation could remotely control the bus and navigate it into the missiles-launcher truck, thereby causing an explosion



**FIGURE 1** Mean ratings of moral permissibility in the victim and threat intervention conditions of Study 1. Error bars represent a 95% confidence interval. The Likert scale ranged from 1 ('certainly not') to 6 ('certainly yes').

and eliminating the threat. However, due to the explosion, fifty civilians in the vicinity of the truck would die.

Once participants read the vignettes, they were asked to morally evaluate the potential action. The question was worded: 'Should the general navigate the bus into the missile-launcher truck?' Participants gave their answer by marking one point on a 6-point Likert item, which ranged from 1 ('certainly not') to 6 ('certainly yes').

## 2.2 | Results and discussion

As illustrated in Figure 1, participants assigned to the threat intervention condition rated moral permissibility higher ( $M = 4.5$ ,  $SD = 1.28$ ) than participants assigned to the victim intervention condition ( $M = 3.6$ ,  $SD = 1.50$ ). This difference was significant,  $t(129) = -3.76$ ,  $p < .001$ ,  $d = 0.66$ , thus confirming our prediction.

The results of Study 1 are consistent with previous research manipulating the locus of intervention in war dilemmas (Iliev et al., 2012; Waldmann & Dieterich, 2007). They confirm that the locus of intervention is a potent moral factor even in the exceptional circumstances of war when the lives of civilians are in danger. Given that in the victim intervention condition people were not used as means, the DDE is not applicable. Strictly speaking, the DDE would predict no effect since the death of the victims is a side effect of the action in both conditions. In both conditions, the missile launcher is stopped by a self-driving bus and the passengers in the victim intervention condition do not play a causal role.

As in the previous experiments investigating the effect of locus of intervention in the context of war (Iliev et al., 2012, Exp 3; Waldmann & Dieterich, 2007, Exp 1), we presented scenarios in which the sacrificed victims had the same characteristics as the saved ones. The difference is that our study describes a situation in which civilians, rather than soldiers, are sacrificed to save other civilians. The finding that participants took into account how civilians are harmed is consistent with normative views on how civilians should be treated in war (Bellamy, 2012b; Coates, 2016b; Walzer, 2015).

## 3 | STUDY 2

In the previous experiment, we observed that the locus of intervention in a dilemma situation in war affects moral judgements when a trade-off occurs between civilians. We now seek to investigate whether we find a similar pattern with civilians when the victims that are sacrificed for a larger number of civilians are soldiers. As mentioned in the introduction, most theories of the ethics of war consider soldiers as liable to military attacks to safeguard the lives of their fellow citizens (Bellamy, 2006; Benvenisti, 2006; Orend, 2013; Walzer, 2015). This may entail those causal distinctions regarding harm inflicted on soldiers are less relevant as a normative criterion when evaluating the moral permissibility of harming soldiers for the benefit of civilians than they are for civilians. If so, we would expect that the influence of the locus of intervention should decrease in scenarios in which the victims sacrificed to save civilians are soldiers rather than civilians.

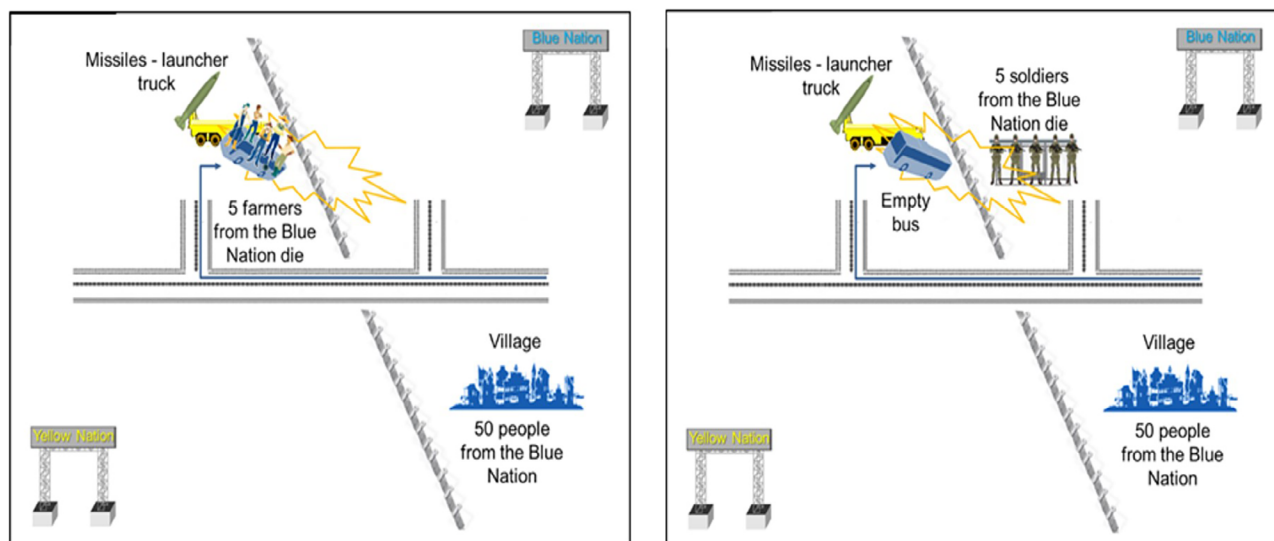
To test this assumption, we designed a new experiment using the scenarios from Study 1 but varying the type of victim to be sacrificed. We hypothesized a significant interaction between the locus of intervention and the type of victim. In other words, we expected that we would observe a significant difference in the moral permissibility ratings of the threat intervention and the victim intervention conditions when the trade-off involves civilians (as in Study 1), but a significant attenuation of this effect when soldiers are traded off against civilians.

## 3.1 | Method

**Participants.** A power analysis with G\*Power for a mixed-model analysis of variance (ANOVA) revealed that with a sample size of at least 132 participants (66 average per group) and an alpha level of .05, we have 90% power to detect a small interaction effect (partial eta-squared,  $\eta_p^2 = .02$ ) (Faul et al., 2007). Inclusion criteria were to pass the attention control filter and to not have participated in our previous study. The final sample for this study consisted of 172 participants (67 females, 102 males, 3 who did not indicate gender; age,  $M = 33.9$ ,  $SD = 11.9$ , range = 18–72 years), who were English native speakers and compensated with money for their participation through Prolific (£0.20, i.e., £6 per hour).

**Design, materials and procedure.** The experimental design was a mixed  $2 \times 2$  design: 2 (locus of intervention: victim intervention vs. threat intervention; between-subjects)  $\times$  2 (type of victims: farmers





**FIGURE 2** Examples of the illustration accompanying scenario descriptions in Study 2. The illustration on the left represents an intervention on the victim in a situation in which civilians are sacrificed. The illustration on the right represents an intervention on the threat in a situation in which soldiers are sacrificed.

vs. soldiers, within-subject; counterbalanced order). Apart from minor changes, we used the same scenarios as in Study 1. Two new scenarios involved the sacrifice of soldiers. Moreover, in the conditions in which civilians were potentially sacrificed, the victims were described as being farmers. To emphasize the type of victim, we added context information that highlights their profession. For example, in the case of the farmers it was mentioned that they were going to the local marketplace to attend a course on cultivation techniques. By contrast, for the soldiers it was pointed out that they were on the way to the central military base to attend a course on military technology. In contrast to Study 1, the scenarios in this experiment described sacrificing five victims to save 50 people in the village. The victim intervention condition described a bus transporting five soldiers or farmers, which were driven to the missile launcher truck. In the threat intervention condition, the bus was empty. It was directed at the missile launcher truck, causing an explosion that killed five soldiers or farmers in a bus station in the vicinity. Illustrations accompanied the scenario descriptions to facilitate understanding (Figure 2).

As in the previous experiment, participants received a link leading to the online survey using the web-based software Unipark. The locus of intervention was a between-subjects factor, and the type of victim (soldier vs. farmer) was a within-subject factor. The order in which soldiers or farmers were presented as victims was counterbalanced across participants. The two scenarios with farmers and soldiers as victims were presented consecutively within the assigned locus of intervention condition. We used the same test question (Likert scale) as in Study 1.

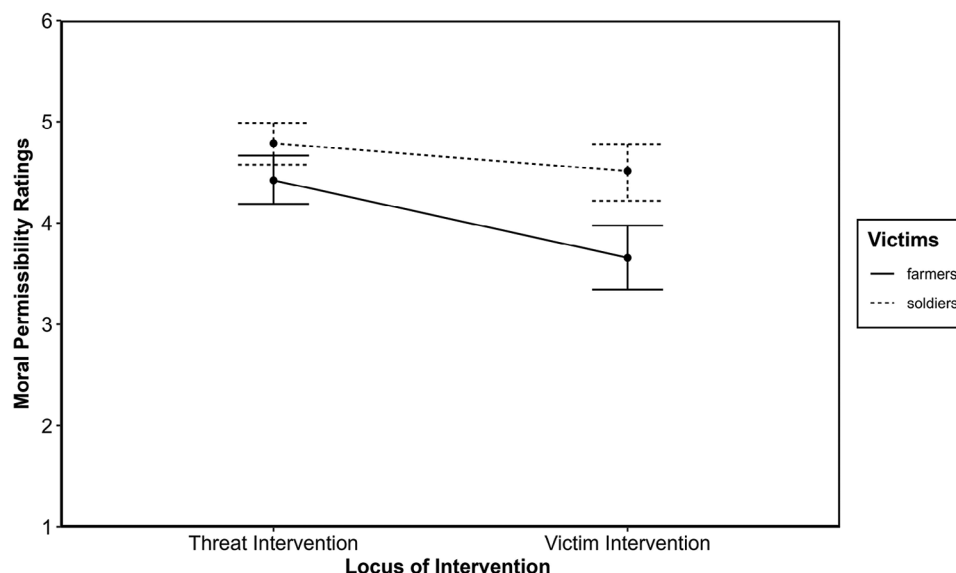
### 3.2 | Results and discussion

The analysis of mean ratings from each scenario showed that subjects considered the sacrifice of five farmers to save 50 people as more

morally permissible in the threat intervention condition ( $M = 4.42$ ,  $SD = 1.19$ ) than in the victim intervention condition ( $M = 3.65$ ,  $SD = 1.52$ ). This effect closely replicates the findings in Study 1 with civilians as victims. By contrast, this effect was not significant when soldiers were the victims ( $M = 4.78$ ,  $SD = 1.02$ , threat intervention;  $M = 4.51$ ,  $SD = 1.33$ , victim intervention).

An ANOVA analysis confirmed this descriptive pattern. The analysis yielded a significant main effect for the locus of intervention,  $F(1, 170) = 8.39$ ,  $p = .0043$ ,  $\eta_p^2 = .047$  and for the victim factor,  $F(1, 170) = 64.99$ ,  $p > .001$ ,  $\eta_p^2 = .277$ . But most importantly, the analysis showed a significant interaction between the locus of intervention and the status of victims,  $F(1, 170) = 10.35$ ,  $p = .0015$ ,  $\eta_p^2 = .057$  (see Figure 3). After conducting a post hoc analysis using a Bonferroni-Holm correction, we found that mean ratings of moral permissibility for victim and threat intervention differed significantly when victims were farmers ( $p < .001$ ,  $d = 0.56$ ) but not when they were soldiers ( $p = .31$ ,  $d = 0.23$ ), thus showing that the effect of the locus of intervention was present only for the case of civilians. Furthermore, we observed that the difference between mean ratings of moral permissibility for farmers and soldiers was significant in the victim intervention condition ( $p < .001$ ,  $d = -0.6$ ) but not in the threat intervention condition ( $p = .16$ ,  $d = 0.33$ ). The locus of intervention theory predicts this pattern because in the victim intervention conditions the attentional focus is on the victims rather than the threat, so that an influence of the type of victim should be most salient in this condition.

The observed interaction demonstrates that the locus of intervention influences moral intuitions more strongly when the victims are civilians than when they are soldiers in a situation in which the people to be saved are civilians. Thus, the response pattern confirms the principle of discrimination that has been postulated in philosophical analyses of war (Bellamy, 2006; Orend, 2013; Walzer, 2015). However, the principle of discrimination seems particularly salient when soldiers are sacrificed to save civilians. Previous research indicates that the



**FIGURE 3** Mean ratings of moral permissibility in the victim and threat intervention conditions of Study 2 for two kinds of victims in war. Error bars represent a 95% confidence interval. The Likert scale ranged from 1 ('certainly not') to 6 ('certainly yes').

locus of intervention is still a decisive factor for dilemmas involving a trade-off between soldiers (Iliev et al., 2012; Waldmann & Dieterich, 2007). It seems that soldiers are viewed as having the duty to sacrifice themselves for the country they are defending but to some extent retain their moral rights regulated by causal principles when trade-offs involve different groups of soldiers.

## 4 | STUDY 3

The key question that motivated Study 2 was whether the moral effect of the locus of intervention interacts with the type of victim, as implied by the principle of discrimination (Bellamy, 2006; Orend, 2013; Walzer, 2015). We found a difference between farmers and soldiers, but it is still an open question about the morally relevant features that distinguish these two groups. In the normative discussion of the ethics of war, a traditional view assumes that it is enough for people to enroll in a military organization and become soldiers to waive their right not to be attacked (Bellamy, 2006; Orend, 2013; Walzer, 2015). Such a view seems to determine the permissibility of killing in a war based on the simple distinction between civilians and soldiers. However, not every citizen of a country involved in a war may neatly fit into this distinction (e.g., civilians who contribute to the war, guerrillas, partisans or members of the reserve). Some critics of the traditional view argue instead that the degree of contribution to combat and participation in an unjust war should determine the permissibility of being harmed (Fabre, 2009, 2014; McMahan, 2009). Following this debate, Study 3 addressed the following question: Where exactly is the dividing line between soldiers and civilians? Is it necessary to enroll in the army, carry arms and wear a uniform to relinquish one's rights to be protected from being actively sacrificed to save others? Do armed civilians and guerrillas also fall in the category of soldiers or are they more similar to civilians?

Study 3 replicated Study 2 but extended the type of victims that are being potentially sacrificed. We again used the four scenarios from Study 2 (i.e., threat and victim intervention involving farmers and soldiers). To investigate whether people take into account other morally relevant features of victims in determining whether it is permissible to harm them, we added two new scenarios with a new type of victim. These victims were described as farmers who wanted to stay on their farms and protect themselves from the enemy (i.e., farmer-soldiers). However, their government only gave them permission to stay if they accepted to enlist in the armed forces and sign a declaration that they were aware of the risk of staying in a war zone. Thus, farmer-soldiers differed from regular soldiers in taking a more restricted role in the war and enlisting in the army only to protect themselves and their families. This way, they had some features of soldiers in that they were armed and formally enlisted, but they also had features of civilians in that their main goal was to protect themselves and their families on the farm without being obligated to engage in other war activities.

As in the previous experiments, we hypothesized that differences in evaluations of the permissibility of intervening on the victim versus on the threat would be more significant in scenarios involving farmers (i.e., regular civilians) than soldiers. We again expected to observe the smallest locus of intervention effect in scenarios involving regular soldiers. For the intermediate category of farmer-soldiers, we predicted a position in the middle between civilians and regular soldiers.

### 4.1 | Method

**Participants.** For this study, we conducted an a priori power analysis with G\*Power for a two-way ANOVA (Faul et al., 2007), determining that with a sample size of at least 800 participants (133 average per group condition) and an alpha level of .05, we would have over

90% power for detecting a small interaction effect (partial eta-squared,  $\eta_p^2 = .02$ ) We continued the recruitment process until we surpassed this number, excluding subjects that passed the attention control filter and had not participated in any of our previous experiments. We analysed a final sample of 842 people (507 women, 330 men, 3, other gender, 2 who did not report their gender; age  $M = 35.01$ ,  $SD = 12.5$ , range = 18–74). All participants were native English speakers who were registered and compensated with money for their participation through Prolific (£0.20, i.e., £6 per hour).

**Design, materials and procedure.** We used a two-factorial between-subjects design with a 2 (locus of intervention: victim vs. threat intervention, between-subjects)  $\times$  3 (victims: farmers vs. farmer-soldiers vs. soldiers, between-subjects). We presented again the four scenarios of Study 2 involving either a trade-off between soldiers to save civilians or civilians to save civilians, either in a threat or victim intervention scenario. We added two more conditions (threat and victim intervention) in which we changed the type of victims that are possibly sacrificed. We described these victims as farmer-soldiers. The goal of the description was to highlight the intermediate status of farmer soldiers between soldiers and farmers (i.e., civilians). To make the different characteristics of farmer-soldiers salient, we added the following description:

To prevent the endangerment of civilian lives, the government of the Blue Nation has ordered the immediate evacuation of the population within a 10-km-range around the border. Despite the government's order, a group of farmers from the Blue Nation refuses to leave the area to be able to care for their farms. The government has allowed them to work on their farms as long as they join the army to fight with the army if necessary. To be a member of the army, they must sign a consent form in which they accept the following points:

- a. The farmers declare that they are aware that war activities are taking place in the area in which they live, which may lead to situations in which they might be killed. The farmers accept this risk to their lives.
- b. The farmers declare that they have been given M-16 combat rifles and military training for their use. The delivery and training will take place right after signing the consent form.
- c. The farmers declare that they formally join the army of the Blue Nation. They are allowed to work on their farms but must fight with the army if necessary.

As in Studies 1 and 2, the experiment was conducted in English using the web-based software Unipark. In the same way, as in Study 2, each scenario was accompanied by illustrations depicting the situations. The procedure was similar to the ones in previous experiments (see repository for detailed instructions): each participant received a link that led to the online survey and the first page with general instructions.

Subsequently, participants were randomly assigned to one of six conditions varying the locus of intervention and the status of the victims. Finally, we asked participants to evaluate the moral permissibility of the action through the following question: 'Should the general perform the suggested action?' To express their judgement, participants could mark one point on a 6-point Likert scale ranging from 1 ('certainly not') to 6 ('certainly yes').

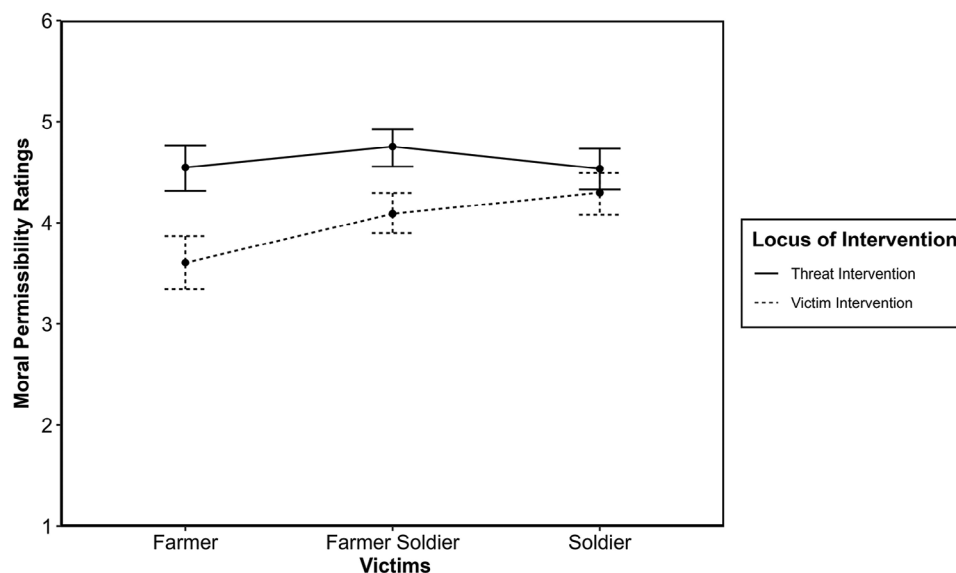
## 4.2 | Results and discussion

As can be seen in Figure 4, we replicated the findings of Studies 1 and 2. Moreover, we found the predicted decrease in the locus of intervention across victim conditions. We observed a higher tendency to regard the sacrifice of farmers in the threat intervention condition ( $M = 4.55$ ,  $SD = 1.33$ ) than in the victim intervention condition ( $M = 3.60$ ,  $SD = 1.54$ ). The effect of locus of intervention was also visible in the scenarios involving farmer soldiers, with higher ratings for the threat intervention condition ( $M = 4.75$ ,  $SD = 1.14$ ) than for the victim intervention condition ( $M = 4.09$ ,  $SD = 1.35$ ). However, the difference was smaller than in the farmer condition but still bigger than in the soldier condition. In the soldier condition, the difference between the evaluations of the threat intervention condition ( $M = 4.53$ ,  $SD = 1.23$ ) and the victim intervention condition ( $M = 4.30$ ,  $SD = 1.24$ ) had the smallest effect size.

These descriptive patterns were confirmed in statistical analyses. A two-way ANOVA test revealed a main effect of locus of intervention,  $F(1, 836) = 45.69$ ,  $p < .001$ ,  $\eta_p^2 = .052$  and of the status of the victims,  $F(2, 836) = 6.32$ ,  $p = .0018$ ,  $\eta_p^2 = .015$ . Most importantly, we again observed a significant interaction between these two factors,  $F(2, 836) = 4.95$ ,  $p = .0073$ ,  $\eta_p^2 = .012$ , which confirmed that the effect of locus of the intervention varied with the status of the victims (see Figure 4). A post hoc analysis using the adjusted Bonferroni–Holm method revealed that the difference in mean ratings of moral permissibility between victim and threat intervention was significant when the victims were farmers ( $p < .0001$ ,  $d = 0.65$ ) and farmer-soldiers ( $p < .0001$ ,  $d = 0.53$ ) but not when they were soldiers ( $p = .69$ ,  $d = 0.19$ ). The post hoc analysis also showed significant differences in mean rating of moral permissibility in the victim intervention condition between farmer and farmer-soldiers ( $p < .05$ ,  $d = -0.33$ ) and between farmers and soldiers ( $p < .001$ ,  $d = -0.49$ ), but no significant difference between farmer-soldiers and soldiers ( $p = .69$ ,  $d = -0.16$ ). We did not observe a significant difference in the mean rating of moral permissibility in the threat intervention condition among the three kinds of victims (farmer vs. farmer soldiers,  $p = .69$ ,  $d = -0.17$ ; farmer vs. soldiers,  $p = .69$ ,  $d = 0.18$ ; farmer soldiers vs. soldiers,  $p = .93$ ,  $d = -0.16$ ).

A trend analysis revealed that ratings of moral permissibility for the victim intervention scenarios increased across all three victim categories following a significant linear trend,  $t = 4.15$ ,  $p < .0001$ , but this was not the case for moral permissibility scores in the threat intervention condition ( $t = -0.09$ ,  $p = .931$ ). Thus, the decrease in the locus of intervention effect was largely driven by a decrease in permissibility to intervene in victims to save civilians.





**FIGURE 4** Mean ratings of moral permissibility in the victim and threat intervention conditions of Study 3 across three kinds of victims in war. Error bars represent a 95% confidence interval. The Likert scale ranged from 1 ('certainly not') to 6 ('certainly yes').

The results of the present experiment replicate the effect of the locus of intervention observed in Studies 1 and 2 for scenarios in which the potential victims were either regular civilians or regular soldiers. Moreover, we also replicated the interaction between the two manipulated factors, confirming that the information about the status of the victims in war moderates the assumed relevance of causal relations linking acts and outcomes for permissibility judgements. Furthermore, Study 3 demonstrates that the effect of causal relations is not dichotomic but is moderated by subtle features of the potential victims. We observed the biggest differences between civilians and soldiers but managed to create a new category (farmer soldiers) that yielded an intermediate effect. Subjects seemed to view farmer-soldiers as people who retain some of the rights of civilians but also voluntarily give up others.

An interesting finding, replicating Study 2, is that the moral status of victims is only relevant in the victim intervention condition but not in the threat intervention condition. The locus of intervention theory predicts this pattern because the two conditions differ in terms of their attentional focus on the victim.

## 5 | STUDY 4

In Studies 2 and 3, we observed that people tend to evaluate interventions targeting victims as more permissible when these were soldiers as opposed to civilians. Study 3 further showed that people differentiate between regular and non-regular soldiers (i.e., farmer-soldiers). We have observed a trend expressing that victim interventions to save a larger number of civilians are less and less aversive, the more similar the sacrificed victims are to soldiers.

According to studies on the ethics of war, the view that it is permissible to risk the lives of soldiers for the benefit of others is due to

their role as soldiers in the service of the government (Bellamy, 2006; Walzer, 2015). Whether they enlist voluntarily or are conscripted, once a soldier becomes part of a military force, they give up their right to not being attacked. In our studies, we have used the philosophical analysis of the differences between soldiers and civilians to interpret the results. The current study more directly assesses whether laypeople agree with the views of philosophers.

Study 4, therefore, investigated how people associate the moral status of different types of agents in war (e.g., soldiers, reservist soldiers, civilians) with a duty to consent to being harmed when civilians will be saved by their sacrifice. Based on the results of Studies 2 and 3, we expected to observe that people would show higher levels of agreement with the moral permissibility of sacrificing soldiers in war than civilians as well as greater agreement with the idea that soldiers have a duty to consent to being sacrificed when necessary. Given the moral permissibility ratings for the intermediate category of victims in Study 3 (i.e., soldier-farmers), we also hypothesized that levels of agreement on the moral permissibility of sacrificing some people to save others and the opinions about duties and consent to be sacrificed would vary with respect to the three victim groups (i.e., civilians vs. reservists vs. soldiers). We expected an analogous linear trend as in Study 3 with soldiers having a stronger obligation to accept harm than reservists and civilians.

### 5.1 | Method

**Participants.** For this study, we conducted a power analysis G\*Power for with for a one-way ANOVA (Faul et al., 2007), determining that with a sample size of at least 450 participants (150 average per group condition) and an alpha level of .05, we would have over 90% power for detecting a small main effect (partial eta-squared,  $\eta_p^2 = .03$ ). We

recruited 500 people who had not participated in any of our previous experiments. After excluding subjects who did not pass the attention-checked filter, our final sample was 477 people (193 women, 281 men, 1 other gender and 2 who did not report their gender; age  $M = 39.86$ ,  $SD = 13.37$ , range = 18–83). All participants were native English speakers who were registered and compensated with money for their participation through Prolific (£0.26, i.e., £8 per hour).

**Design, materials and procedure.** We employed a between-subjects design: 3 (victims: civilians vs. reservist soldiers vs. soldiers). The survey was conducted in English via the web-based software Unipark. It consisted of five questions about the moral permissibility of killing or harming certain types of victims in war and the extent to which these victims had a duty or consent to such harm. Participants were assigned to one of three possible conditions, each referring to a different type of victim: civilians, reservist soldiers and soldiers.

Participants in all groups initially received the following information:

In our project, we are interested in how people assess what is morally permissible and what is morally impermissible in war. In particular, we are interested in your intuition about when it is permissible to harm some kinds of people and whether they should accept being harmed when it is unavoidable. We will present you with descriptions of a group of people and then ask you a series of questions about them.

The participants then received a description of the group of people presented in their condition. In the first condition, the victims were described as civilians, defined as 'people who do not belong to the armed forces, do not have weapons and do not actively participate in the war being fought'. The second condition presented the victims as reservist soldiers or 'people who have joined the armed forces and are provided with combat rifles and military training but do not participate actively in military actions. Unlike regular soldiers, reservists go about their daily lives like any other civilian but are prepared to defend their country when necessary'. In contrast, in the third condition, the victims were soldiers, described as 'people who have joined the armed forces, are provided with combat rifles and military training and participate actively as regular combatants in military actions'.

Once the participants had read the corresponding description, they were asked to indicate to what extent they agreed or disagreed with five statements using a 6-point Likert scale ranging from 1 ('Strongly disagree') to 6 ('Strongly agree'). The five statements were as follows:

1. It is morally permitted to kill [type of victim] in war regardless of the reason for the attack.
2. It is morally permitted to kill [type of victim] in war when their sacrifice can save the lives of a large number of civilians.
3. [type of victim] has in war a duty to risk their lives to save other civilians from their nation.

4. Once a war begins, [type of victim] implicitly consents to be sacrificed to save the lives of a large number of civilians.
5. Armed forces have a duty to save a large number of civilians in their country by putting at risk the lives of a smaller number of [type of victim]

## 5.2 | Results and discussion

In general, participants disagreed more that killing is permissible in a war when there is no reason to do so (Question 1) ( $M = 2.15$ ,  $SD = 1.43$ ) than when a large number of civilians can be saved (Question 2) ( $M = 3.38$ ,  $SD = 1.64$ ). Mean agreement ratings for the five statements of the survey varied across the three different kinds of victims (see Table 1): Participants evaluated the moral permissibility of sacrificing people differently, favouring the sacrifice of soldiers ( $M = 4.30$ ,  $SD = 1.46$ ) over reservists ( $M = 3.46$ ,  $SD = 1.65$ ) and expressing the most disapproval of sacrificing civilians ( $M = 2.40$ ,  $SD = 1.22$ ) (Question 3). We observed similar differences in statements about the duty to risk their lives and the consent to being sacrificed (Question 4). As for the statement about the duty of armed forces to save the majority by sacrificing the few, the differences in mean agreement ratings for the three kinds of victims were smaller (Question 5).

As illustrated in Figure 5, the moral status of the victims (i.e., the difference between civilians vs. reservists vs. soldiers) significantly influenced agreement ratings to each of the five questions included in the survey. A one-way ANOVA test revealed a main effect for Question 1 ('killing regardless of the reason'),  $F(2, 474) = 67.61$ ,  $p < .0001$ ,  $\eta_p^2 = .222$ . A post hoc analysis using an adjusted Bonferroni–Holm correction showed a significant difference when contrasting the mean ratings for civilian and reservist soldiers,  $p < .0001$ ,  $d = -1.19$  and for civilians and soldiers,  $p < .0001$ ,  $d = -1.35$ , but not when contrasting the mean ratings for reservist soldiers and reservist soldiers,  $p = .60$ ,  $d = -0.06$ .

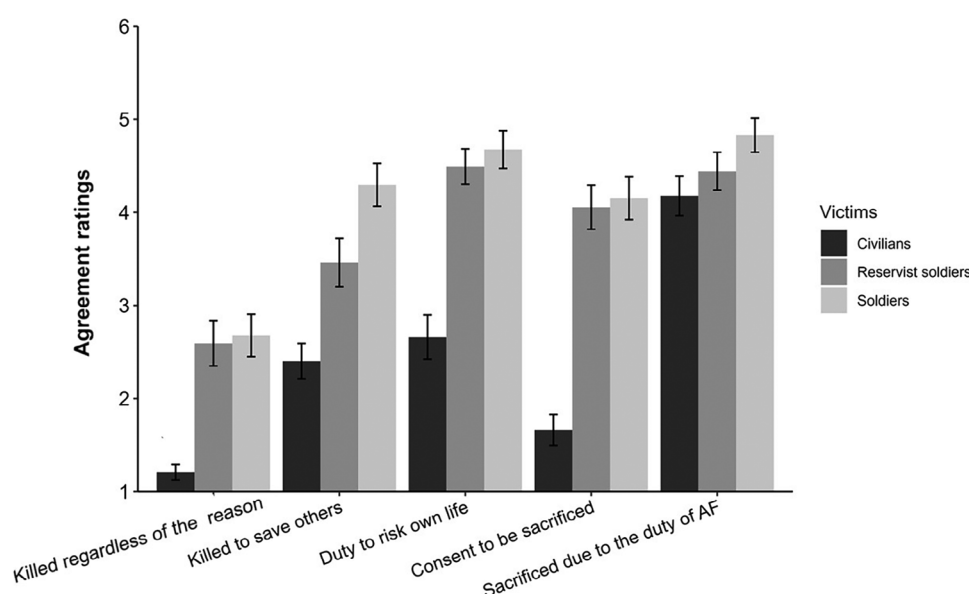
As for Question 2 ('Killed to save others'), the moral status of the victims also led to a significant effect,  $F(2, 474) = 67.30$ ,  $p < .0001$ ,  $\eta_p^2 = .221$ . Here the post hoc analysis using a Bonferroni–Holm correction revealed significant differences between all three possible contrasts (civilians vs. reservist soldiers,  $p < .0001$ ,  $d = -0.73$ ; civilians vs. soldiers,  $p < .0001$ ,  $d = -1.41$ ; reservist soldiers vs. soldiers,  $p < .0001$ ,  $d = -0.53$ ). Consistent with the results of Study 3, the mean scores of agreements on the moral permissibility of sacrificing victims to save a majority followed a linear trend,  $t = 10.34$ ,  $p < .0001$ .

Question 3 ('Duty to risk own life') also led to a significant effect,  $F(2, 474) = 109.16$ ,  $p < .0001$ ,  $\eta_p^2 = .315$  as well as Question 4 ('Consent to be sacrificed'),  $F(2, 474) = 169.38$ ,  $p < .0001$ ,  $\eta_p^2 = .417$ . A post hoc analysis for both questions using a Bonferroni–Holm correction indicated significant differences between the mean ratings for civilians and reservist soldiers (duty to risk own life,  $p < .0001$ ,  $d = -1.34$ ; consent to be sacrificed,  $p < .0001$ ,  $d = -1.82$ ) and for civilians and reservist soldiers (duty to risk own life,  $p < .0001$ ,  $d = -1.43$ ; consent to be sacrificed,  $p < .0001$ ,  $d = -1.94$ ), but no significant differences

**TABLE 1** Mean agreement ratings, standard deviations and 95% confidence intervals for the five statements of Study 4 across three kinds of victims in war.

Question	Civilians (n = 159)			Reservist soldiers (n = 160)			Soldiers (n = 158)		
	M	SD	95% CI [LL, UL]	M	SD	95% CI [LL, UL]	M	SD	95% CI [LL, UL]
1. Killed regardless of the reason	1.21	0.52	[1.13, 1.29]	2.59	1.56	[2.35, 2.84]	2.68	1.45	[2.45, 2.90]
2. Killed for saving others	2.40	1.22	[2.21, 2.59]	3.46	1.65	[3.20, 3.72]	4.30	1.46	[4.07, 4.53]
3. Duty to risk own life	2.66	1.52	[2.42, 2.90]	4.49	1.21	[4.30, 4.68]	4.68	1.29	[4.47, 4.88]
4. Consent to be sacrificed	1.66	1.07	[1.49, 1.82]	4.06	1.52	[3.81, 4.29]	4.15	1.46	[3.92, 4.38]
5. Killed because of Armed Forces duty	4.19	1.35	[3.96, 4.38]	4.44	1.30	[4.24, 4.64]	4.83	1.16	[4.64, 5.01]

Note: The Likert scale ranged from 1 ('Strongly disagree') to 6 ('Strongly agree'). Abbreviations: CI, confidence interval (LL = lower limit, UL = upper limit); M, mean; SD, standard deviation.

**FIGURE 5** Mean agreement ratings for the five statements of Study 4 across three kinds of victims in war. Error bars represent a 95% confidence interval. The Likert scale ranged from 1 ('strongly disagree') to 6 ('strongly agree').

between reservist soldiers and regular soldiers (duty to risk own life,  $p = .20$ ,  $d = -0.15$ ; consent to be sacrificed,  $p = .50$ ,  $d = -0.06$ ). We also found a strongly positive correlation between the ratings of these two statements ( $r(475) = .72$ ,  $p < .001$ ). Likewise, responses to these two statements were strongly related to responses to the moral permissibility of killing to save others (duty of victims to risk their own lives,  $r(475) = .56$ ,  $p < .001$ ; the consent given to be sacrificed,  $r(475) = .63$ ,  $p < .001$ ).

Finally regarding Question 5 ('sacrificed because of the duty of AF'), a one-way ANOVA test revealed a significant effect on the moral status of the victims,  $F(2, 474) = 10.52$ ,  $p < .0001$ ,  $\eta_p^2 = .043$ . After conducting a post hoc analysis using a Bonferroni–Holm correction, we observed that, in contrast to the responses to the previous statements, there was no significant effect between civilians and reservist soldiers ( $p = .06$ ,

$d = -0.2$ ), only between reservist soldiers and regular soldiers ( $p < .05$ ,  $d = -0.31$ ) and between civilians and soldiers,  $p < .0001$ ,  $d = -0.52$ .

The results of the present study are consistent with the effects observed in Studies 2 and 3 on the influence of the moral status of the victims on the judgement of the moral permissibility of killing in war. The characteristics of the victims were relevant when evaluating killing regardless of the purpose and killing to save civilians, even though people generally evaluated killing negatively when saving other people is not the immediate goal. The evaluations in both instances again suggest that people's intuitions align with the principle of civilian immunity and the widespread view that it is permissible to sacrifice soldiers for military purposes or the common good (Bellamy, 2006; Walzer, 2015).

A novel element of the study is that we affirmed our finding in Study 3 that the moral status of victims is not a dichotomous feature

distinguishing between soldiers and civilians, but rather a continuous property associated with the degree of voluntary involvement in war activities. As in Study 4, we found that reservist soldiers ended up in the middle in terms of their moral status. Once ordinary people become soldiers, whether regular ones or reservists, they obtain the right to kill and assume a duty to accept harm when the circumstances require it. Reservist soldiers play a less active role, which affords them some rights to be protected but not to the same extent as civilians.

## 6 | GENERAL DISCUSSION

In the initial three of our studies, we investigated whether we can establish a locus of intervention effect in war and whether the size of the effect varies across different potential types of victims. Previous studies have shown that people find it less permissible to trade off the lives of a larger number against a smaller number of victims when the intervention that accomplishes the trade-off directly targets the smaller number of victims (i.e., victim intervention) than when the intervention redirects the threat (i.e., threat intervention). In the initial three studies, the victim interventions targeted a bus with five passengers who, in the absence of an intervention, would be safe. In all three experiments, we showed that subjects tend to find threat interventions more permissible than victim interventions.

The theory predicting this effect assumes that subjects focus on the initial morally relevant target of intervention in the causal chain initiated by the action and consider what happens to this target in the presence versus absence of the intervention (Waldmann et al., 2017; Waldmann & Wiegmann, 2010).

It is interesting to use this scenario to contrast the locus of intervention theory with the DDE, which has often been invoked in the literature on sacrificial dilemmas. The key assumption of the DDE is that using people as means makes an act aversive. This is the case in the famous footbridge dilemma in which a man's body is used to stop a train. However, in our scenarios, the deaths of the five victims are a side effect in both conditions. In both scenarios, the five people die as a side effect of the explosion of the missile launcher. They either die because they are passengers of a bus or because they happen to stand near the collision between the empty bus and the missile launcher. The key difference, however, is how their deaths are related to the interventions. In the victim intervention condition, they are passengers of the bus that is being actively moved. Thus, they are tightly connected with the target of intervention, which influences both the fate of the bus and of its passengers (see also Kamm, 2007, for a similar analysis). This connection turns them into targets of intervention whose fates are considered when reflecting on the moral appropriateness of the action. In the threat intervention scenario, the deaths of the five bystanders are caused by the explosion of the missile launcher, which represents an imminent threat to the 50 people. Again, the deaths of the fewer victims are a side effect but they are only indirectly caused by the empty bus. In the causal sequence, the deaths of the fewer victims are the last event in the causal chain starting with the collision of the empty bus, whereas, in the victim intervention condition, the colli-

sion already involves the victims and is therefore more directly tied to the intervention.

Our study shows that the DDE is a too narrow account and only covers a very restricted number of scenarios. The DDE explains the aversion to using involuntary humans as means, but our research shows that this aversion generalizes to a wider range of cases that are beyond the scope of the DDE. One key advantage of our study is that the contrasted conditions are extremely similar, especially when compared to the typical contrasts between switch and footbridge dilemmas (Feltz & May, 2017; Hauser et al., 2007; Mikhail, 2007; see the discussion in Waldmann et al., 2017).

The second important novel finding of our study is that the locus of intervention effect interacts with the type of victims. One interesting finding further supporting the locus of intervention theory is that in Studies 2 and 3, we observed that the moral status of victims only affected permissibility intuitions in the victim intervention conditions but not in the threat intervention conditions. Since in the victim intervention conditions the attentional focus is on the victims rather than the threat, such an effect is particularly expected in this condition. The DDE does not make an analogous prediction. The effect size of the interaction between the locus of intervention and the status of victims in both experiments is small which is partly due to the fact that the locus of intervention theory predicts that the interaction is mainly driven by a trend in the victim intervention condition.

As in previous studies (Waldmann et al., 2017; Waldmann & Dieterich, 2007; Waldmann & Wiegmann, 2010), a clear effect of the locus of intervention was observed when the trade-off involved civilians. Our study adds to the literature in that it shows that civilians in war are viewed similarly to civilians in non-war situations. Initiating an intervention that directly harms people who did not consent is in war aversive even when the action saves others. Study 4 confirms this hypothesis by demonstrating that people differentiate between the moral duties and rights of civilians, soldiers and reservists.

The aversion against sacrificing civilians fits with philosophical and legal debates on the rules of war which claim that we have a particular concern with protecting the life and integrity of non-combatants (Bellamy, 2012a; Walzer, 2015). Thus, we found consistency between people's intuitions and a prominent normative analysis of civilians' protection in war.

However, whereas civilians can expect to be protected from harm unless there are special circumstances, soldiers are viewed as having given up these rights, which is again in line with the distinctions posited by the traditional approach of just war theory (Bellamy, 2006; Orend, 2013; Walzer, 2015). Within this approach, it suffices to become a soldier to be liable to military attack and it is okay for soldiers to be put at risk for the sake of saving others. Our four studies show that laypeople share this view.

In Study 3, we started to explore what it is that differentiates between civilians and soldiers. In many wars, there is often no clear distinction between civilians and soldiers. Civilians may in part also be involved in battles as guerillas or in self-defence. When exactly do they relinquish the right to be saved from harmful interventions? As a first step in answering this question, we introduced a new group of

victims, farmer-soldiers. This group was described as having a limited role in battle, distinguishing them from both civilians and regular soldiers. They signed up as soldiers and were armed, but their range of action was restricted and their main motivation was to save their farm and their family. Despite this group of victims having the formal status of a soldier, we observed that participants considered them different from both soldiers and civilians. Farmer soldiers are viewed as having a moral status in between civilians and soldiers. They have some rights not to be harmed, but due to their voluntary involvement in military actions they seem to have given up some of these rights in the eyes of our subjects.

To better understand which characteristics of victims moderate the moral permissibility of being sacrificed, we conducted a fourth study in which we asked people to indicate the extent to which they agreed or disagreed with two statements about the moral permissibility of killing in war and three statements about victims' duties, rights and the consent given to being sacrificed. In this study, we confirmed the finding of Study 3 that the role of victim status is not categorical, but varies continuously. Not only do people distinguish between civilians and soldiers, but they also distinguish between reservists and the two other groups. These findings mirror the differences between the permissibility ratings in Study 3.

## 6.1 | Perspectives for future research

Various further questions need to be studied in future research. We have manipulated three different categories of victims varying in terms of their status in war. One limitation was that in all studies the lives of civilians were traded off against either civilians, soldiers or a mixture of the two (farmer-soldiers). It would be interesting to widen the comparison and also study how soldiers are traded off against each other (see Watkins & Laham, 2019, for such a contrast using different tasks).

Moreover, war offers many examples in which civilians and combatants play different roles with varying degrees of contribution to the war. For example, based on normative considerations, Fabre (2009) holds that it is morally permissible to harm civilians working in an arms factory or participating in a battle. Nevertheless, it is not permissible to attack soldiers working as medical or logistical personnel. Therefore, a question of interest for empirical research is how this variability in the role of victims, discussed in philosophy, might interact with factors that have been identified as relevant for moral judgement.

A further interesting question might address the question of whether the type of war interacts with the evaluations of trade-offs. McMahan (2009), for example, argues that soldiers should be immune to attack when they fight for a just cause or in self-defence but may lose their rights when they fight for an unjust cause or behave in an unnecessary immoral way. These factors may also influence how their moral status is viewed. Some authors concerned with the legitimacy of the killing of combatants in war find the conception of the combatant as an instrument for the benefit of others particularly problematic. Some philosophers argue that this conception leads to the dehumanization of

the combatants (Benvenisti, 2006; Fabre, 2014; McMahan, 2009). Previous studies in moral psychology have shown that group bias is linked to the dehumanization and emotional inhumanization of victims (Bloom et al., 2020; Castano & Giner-Sorolla, 2006; Leidner et al., 2010; Moncrieff & Lienard, 2018). In a recent study, Watkins and Laham (2020) have also shown that stereotypes and a sense of dehumanization may mediate moral evaluations about harm to soldiers. Future research needs to examine whether a shared conception of instrumentalization or dehumanization of soldiers may account for variations in the effect of the locus of intervention and other causal factors.

Overall, the results of our four studies set a benchmark for future research on the moral considerations regarding the harm caused to different groups during war interventions. Our research not only yields important implications for academic discussions on the ethics of war but also provides valuable insights into public perceptions.

## CONFLICT OF INTEREST STATEMENT

We have no conflicts of interest to disclose.

## DATA TRANSPARENCY STATEMENT

The manuscript submitted is original, and the results are presented honestly without fabrication, falsification or inappropriate data manipulation. The authorship accurately reflects individual's contributions to the work and its reporting. The materials, data and codes for the statistical analyses can be found at <https://osf.io/3kydc/>

## ETHICS STATEMENT

We confirm that the research was conducted in accordance with the principles embodied in the Declaration of Helsinki and in accordance with the ethical standards of the institutional and national research committees.

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