A fundamental asymmetry in judgments of soldiers at war.

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Abstract

How should we judge a soldier who is fighting for an unjust cause? Is such a soldier the moral equal of a soldier fighting for an opposing, just cause? According to traditional just war theory (Walzer, 2006), soldiers on either side of a war are moral equals, regardless of the justness of the cause for which they fight (the “principle of combatant equality”). According to revisionist just war theory, however, the justness of the soldiers’ cause should inform moral judgments of their actions; on this view, our judgments of soldiers on either side of a just versus unjust war should therefore be asymmetric (McMahan, 2009). Despite intense philosophical debate regarding these two theories, little work has examined whether lay moral judgments accord with the principle of combatant equality. Assessing lay moral judgments is important because people’s attitude towards soldiers may have a variety of consequences, ranging from their support for war, to their acceptance, rejection, or valorization of individual combatants. Across nine studies, we find consistent evidence that ordinary individuals’ judgments of soldiers’ actions are influenced by the justness of the soldiers’ causes, contrary to the principle of combatant equality. Two factors partially explain this effect: First, people implicitly presume that soldiers identify with the cause for which they fight, which influences moral judgments of their actions; second, people implicitly align themselves with the just side of a war, treating combatants on the just side as part of their ingroup, thus rendering more favorable moral judgments of them. Several other possible explanations were not supported.

A fundamental asymmetry in judgments of soldiers at war.

In 2009, Barack Obama, President of the United States and the Commander-in-Chief of the world's most powerful military force, was awarded the Nobel Peace Prize. Many commentators felt that this award was premature; and controversy was further heightened when Obama devoted his Nobel Lecture (acceptance speech) to the subject of war (Fouché & Sturcke, 2009; Franke-Ruta, 2009, 2013; Zeleny, 2009). Invoking the notion of "just war," he argued that at times it may not be merely necessary, but also morally justified, for a country to go to war (Obama, 2009). He then drew an important distinction: "Even as we make difficult decisions about going to war, we must also think clearly about how we fight it... we have a moral and strategic interest in binding ourselves to certain rules of conduct." These remarks drew upon the philosophical and ethical doctrine known as *just war theory* (Walzer, 2006), the goal of which is to establish criteria for judging the morality of war (Walzer, 2006). The roots of just war theory stretch back to St Augustine and Aquinas, but its contemporary version is usually attributed to Michael Walzer, who re-invigorated it in the context of the Vietnam War with his book *Just and Unjust Wars* (Walzer, 2006; Orend, 2013). In addition to providing the philosophical grounding for many international laws of armed conflict (Orend, 2013), just war theory is the most prominent doctrine referenced when discussing the morality of war (Fiala, 2008; Orend, 2013): For example, the question of whether the wars led by the United States in Afghanistan and Iraq following the 9/11 terrorist attacks were just or unjust was debated in terms of just war theory (Bugnion, 2002; Carter, 2003; Coady, 2011; Douzinas, 2009; Mackey, 2009).

A cornerstone of just war theory is the distinction Obama invoked between the justification for a country's going to war in the first place (known as *jus ad bellum*), and the rules of conduct that guide how the war is actually carried out (known as *jus in bello*). The idea that these aspects of war should be evaluated separately is referred to as *the independence thesis* (Walzer, 2006). The independence thesis, in turn, implies the related principle of *combatant equality*, which is the focus of this paper. According to this principle, soldiers fight permissibly as long as they abide by the prescribed rules of conduct in war,

regardless of the cause for which they fight (Lazar, 2017).¹ Consequently, as long as soldiers on either side of a war follow the prescribed rules of conduct their actions are morally equivalent, and should be judged symmetrically.² This means that, regardless of whether you believe the United States was justified in going to war in the 1991 Gulf War, for instance, you should judge U.S. soldiers fighting in that war only according to whether they abide by the rules of conduct prescribed by just war theory. Similarly, you should also judge Iraqi soldiers fighting in the same war, against the U.S., only according to whether they abide by these same rules. The principle of combatant equality is *prescriptive*; it is an attempt to delineate how people *should* think about war. However, in the present paper, we address a *descriptive* question: To what extent (and under which conditions) do lay people's moral judgments about the conduct of war align with the principle of combatant equality? Despite the centrality of this principle in philosophy and international law, to date no empirical research has comprehensively assessed its correspondence with ordinary people's moral judgments about war.

One key motivation for the principle of combatant equality is that soldiers on either side of a war operate under a "shared servitude" (Walzer, 2006). In essence, soldiers on either side of a war are heavily and equally constrained – they serve as instruments of the state, they do not choose the wars they fight, or the missions they engage in, and they must obey their superiors' orders in battle. This view strips soldiers of responsibility concerning the cause for which they fight, and holds them responsible only for their conduct in fighting. As such, it implies that moral judgments of soldiers on either side of a war should be symmetrical; hence giving rise to the principle of combatant equality. Two soldiers, engaging in identical

¹ In this paper, we use the terms "combatant" and "soldier" interchangeably, notwithstanding the fact that "combatant" is a more general term which covers soldiers as well as sailors, airmen or irregular fighters (Rodin & Shue, 2008, p. 2). In all our studies, the moral agent is a soldier fighting in a regular army, but we expect that the results would generalize to combatants from the air force and navy as well. We mostly write about soldiers in the plural, and use the pronouns "they" and "them." But, when describing an individual soldier (e.g., to participants in our studies) we refer to "he" and "him," because most soldiers are male (Office of the Deputy Assistant Secretary of Defense, 2013).

² The philosophical principles of *jus in bello* are generally considered to be discrimination (between combatant and non-combatant), proportionality, necessity (Lazar, 2017), responsibility (Moseley, n.d.), and a restriction on means that are *mala in se* – bad in and of themselves (Moseley, n.d.; Orend, 2005). Meanwhile, in international law, these principles have been given a more concrete articulation in the form of customary international humanitarian law (Henckaerts & Doswald-Beck, 2005). To avoid unnecessary jargon, we refer to *jus in bello* as "rules of conduct."

actions, but who are on opposite sides of a war, ought to be judged equivalently in moral terms, regardless of the justness of their respective causes (Walzer, 2006).

However, this argument has not gone unchallenged. Advocates of what is referred to as *revisionist* just war theory (to contrast with Walzer's *traditional* just war theory; Benbaji, Falk, & Feldman, 2015; McMahan, 2009; Leveringhaus, 2012) claim that neither the independence thesis nor the principle of combatant equality is justified. According to these theorists, traditional arguments for the principle of combatant equality unrealistically limit the moral capacities of soldiers. For instance, one of the principal advocates of revisionist just war theory, Jeff McMahan (2004), argues that: "Walzer exaggerates the significance of the coercive pressures and the constraints on knowledge that often apply to those whose government orders them to fight" (p. 700, see also Nozick, 1974). Not only are soldiers in fact quite capable of judging the morality of the causes for which they fight, they are often not so severely constrained that they cannot make a moral choice to abstain from fighting, should they deem their own side's cause unjust. McMahan also argues that, even if it were the case that a soldier's decision to fight for an unjust cause was caused by a lack of relevant knowledge, or by overwhelming coercive pressures, this would at best show that the soldier's wrongful behavior was *excused* (McMahan, 2004, 2009). It would not show that their behavior was morally permissible, nor would it show that their behavior was on par, morally speaking, with the behavior of a combatant on the just side of the war. Therefore, McMahan (2004) rejects the principle of combatant equality (for further arguments against the traditionalist position, see McMahan, 2009).

The question we ask in this paper is whether – with respect to the principle of combatant equality – ordinary individuals' moral judgments about the actions taken by soldiers in war align more closely with traditional just war theory, or with its revisionist counterpart. That is, do ordinary people judge soldiers' conduct in war independently of the side for which they fight, in line with the principle of combatant equality, or are their judgments instead influenced by information about the justness of the soldiers' respective sides? This question has not yet been directly addressed in the moral psychological literature. Answering it would yield several benefits.

First, it would shed light on the descriptive adequacy of two major philosophical theories of war and its conduct. Although these two theories were not intended as descriptive accounts of people's judgments, they are intended partly to guide public sentiments about war (Walzer & Margalit, 2009, McMahan 2010). Indeed, McMahan (2009) believes that widespread acceptance of the principle of combatant equality is a propellant towards war, writing that, "the widespread acceptance of this idea [that a soldier does not do wrong merely by fighting in an unjust war, owing to the principle of combatant equality] also makes it easier for independently-minded people ... to fight in war without qualms about whether the war might be unjust" (p. 3). Whether McMahan is correct about this, is unknown. It is also unknown whether he is correct to assume such widespread acceptance in the first place. As a starting point, it seems worth finding out.

Second, addressing this question opens further subsidiary questions of theoretical interest, regarding the factors guiding people's judgments of soldiers: What is the explanation for why people make symmetric or asymmetric judgments about soldiers' conduct in war? Just war theorists evoke various factors to justify their normative stances. Our aim, however, was to investigate, descriptively, which psychological factors actually guide people's moral judgments, regardless of their relation to any particular philosophical stance. Factors such as the correspondence bias or ingroup bias may be relevant, particularly given their demonstrated importance in other contexts (see e.g., Gilbert & Malone, 1995; Hewstone, Rubin, & Willis, 2002; Malle, 2006). However, determining whether they can explain moral judgments in war is not a straightforward task. Our studies make progress in answering this mechanistic question.

Third, our research complements research on "everyday" human morality (e.g., Hofman, Wisneski, Brandt, & Skitka, 2014) by studying some of the more extreme situations humans find themselves in (Hedges, 2002, James, 1910/1968; Shue, 2008, Watkins & Brandt, 2019). War has been a stark reality for a vast number of people for all of human history (Wimmer, 2014; Pinker, 2011), and seems saturated with moral considerations (Lazar, 2017). Yet, we know very little about people's moral judgments about the conduct of war. Studying moral judgments in this context – with its immediate

relevance to human affairs – also extends moral judgment research beyond the artificial vignettes that have been a feature of much recent investigation (e.g., trolley problems, Bloom, 2011; Bauman, McGraw, Bartels, & Warren, 2014). Finally, this research may have important implications for understanding how ordinary civilians react to soldiers, before, during, and after wartime. Research in military and clinical psychology has begun to focus on the moral dimensions of soldiers' experiences, including judgments made of them by friends, family, and other civilians (Brock & Lettini, 2012; Frame, 2015; Sherman, 2015). Our research may contribute to this effort by shedding further light on the social worlds that soldiers inhabit.

To preview our results, across nine studies (including three supplemental studies), we find consistent evidence that ordinary individuals do not judge soldiers on either side of a war as moral equals. Instead, their judgments of soldiers' conduct are heavily influenced by the justness of the side those soldiers are fighting for – soldiers fighting on the just side of a war are seen as engaging in more defensible conduct than soldiers taking identical actions on the unjust side. As such, our participants' judgments do not abide by the principle of combatant equality. However, as straightforward as this pattern of results is, it does not yield to an immediate explanation. Across the ensuing studies, we investigate several varied explanations of this asymmetry, which we review in due course.

Relation to Relevant Past Research

Our research provides the first complete test of the descriptive adequacy of the principle of combatant equality. To date, there has been very little psychological research investigating this principle, and what research does exist is incomplete. One relevant finding comes from a pioneering study with Israeli participants, which investigated moral judgments about the conduct of war (Benbaji et al., 2015). Participants were told about a war with a just and an unjust side, and were asked to imagine themselves as a military commander serving in the army of either the just or the unjust country. They then judged the moral permissibility of ordering an attack on a strategically significant hill (inhabited by the enemy), in order to gain a military advantage for their own side. Around half the participants (55.7%) on the just side thought that such an attack would be morally permissible, whereas only 40.8% of the participants on the

unjust side thought that it would be permissible, thus seemingly showing that participants' judgments were not symmetric, and were instead influenced by the justness of the soldiers' respective causes.³ In light of these results, Benbaji et al. (2015) argued that their participants were more like "intuitive revisionists" than "intuitive traditionalists."

Benbaji et al.'s (2015) study highlights an important exception to the principle of combatant equality. However, two factors limit its ability to yield fully generalizable conclusions about the adequacy of the principle of combatant equality. First, judgments were rendered about a *military commander's* strategic decision to order an attack, not about the actions of the soldiers carrying out that attack. It is important to test perceptions of common soldiers for several reasons. Soldiers are more numerous and more representative of the armed services than are military commanders. They are also more constrained than are commanders, and therefore more emblematic of Walzer's notion of "shared servitude." Accordingly, if the principle of combatant equality should apply to anyone, it should apply to common soldiers. Yet, without further investigation, it is impossible to know whether the asymmetry in participants' judgments of military commanders' decisions, observed in Benbaji et al.'s study, would also be seen in their judgments of soldiers acting in accordance with those decisions. Second, Benbaji et al.'s results are complicated by the fact that participants were asked to align themselves with one side or the other – that is they were asked to put themselves in the role of one or other of the military commanders, rather than in the role of a third party. This feature of their design may have influenced participants' judgments. A more neutral assessment of the principle of combatant equality in lay judgments would position participants as third-party judges of a war without aligning them with either side. Accordingly, in the present studies, participants were placed in the role of third-party observers of war (except when we tested the specific effects of alignment, see Study 6 and Supplemental Study 3), and were asked to

³ The difference between the judgments on the just and the unjust side was attenuated by the fact that many participants failed a manipulation check, and reported that "their side" was the "just side" even when they had been assigned to the unjust side. When only participants who passed the manipulation check were included, the statistics were: 60.0% just side, 38.4% unjust side.

evaluate the actions of soldiers and not military commanders – specifically, the moral defensibility of those soldiers’ actions.

Overview of Studies

In all studies, our primary outcome measure is participants’ judgments of the moral defensibility of identical actions taken by soldiers on either side of a war.⁴ We manipulated the justness of the cause soldiers were fighting for in order to assess whether participants’ judgments of their conduct were symmetric (in line with the principle of combatant equality) or asymmetric (contravening this principle).

We paid particular attention to sampling the possible stimulus space broadly, in order to provide the most generalizable evidence. We used four types of war scenario: One country invading another to plunder resources (Studies 1, 4); one country intervening militarily in another to prevent a humanitarian atrocity (Studies 2 and 3); one country intervening to prevent a hostile take-over of a smaller country by a larger, aggressor country (Study 5); and, finally, two countries warring following a longstanding border dispute (Study 6). While just war theorists and international legal scholars debate the precise conditions under which resorting to war can be considered just (or legal) versus unjust (or illegal), the key consideration for our purpose was that participants perceive one side of the conflict to be just, and the other unjust (see Table 1). While we chiefly focused on the straightforward act of killing an enemy combatant, in Study 3 we explored a wide array of different actions, which varied significantly in their underlying moral properties. We also explored different types of judgment, by comparing concrete with abstract judgments (Study 2), and joint with separate evaluations (Studies 1 and 2).

⁴ We chose to investigate whether soldiers’ actions were “defensible” as our principal dependent variable, rather than possible alternatives, for several reasons. One possible alternative would be to ask whether the soldiers’ actions were “excused.” But, claiming that person’s action is defensible is a stronger claim than that those actions are merely excused. A claim of defensibility means not only that the person is free of blame for the act, but also that the act was warranted; the latter is not true for merely excused actions (see Greenawalt, 1984, 1986). For this reason, we preferred to use “defensible” over “excused.” We also preferred the term “defensible” to its close synonym “justified,” because claiming that an act is “defensible” seemed to us less suggestive that one must be able to produce the relevant defense (i.e., if you claim that an act is “justified,” it may seem more incumbent upon you to be able to produce the relevant justification). And we also thought that “defensible” was more natural than “permissible,” which seems less commonly used in daily life.

Finally, as noted above, we explored several possible reasons for the consistent asymmetry we observed in our participants' judgments, by manipulating factors that might explain it. These factors include situational constraint (Study 3), causal contributions to war outcomes (Study 4), identification with the war effort (Study 4), global character evaluations (measured in Studies 1-4, and manipulated in Study 5), and alignment with one side or the other to measure ingroup biases (Study 6). As will be seen, no one factor appears to explain this asymmetry, although it can be attenuated by two of the factors we considered.

Sample sizes. Participants were recruited for all studies using Amazon Mechanical Turk (AMT), and we used the AMT settings to limit participation to U.S. residents. In all studies, we decided on the number of participants based on a “rule of thumb” of no less than 75 participants per cell that was distinguished by the key hypothesis (except where noted otherwise), as we did not initially have a basis on which to perform a power analysis. In later studies, we recruited larger samples, primarily because the study designs became more complicated. This also meant that we filtered out more people who failed attention checks, and we report these exclusions for each respective study. We also include more information about these excluded participants in the Supplemental Materials. In all studies, we decided on the sample size before collecting data, and did not analyse the results until after data collection was completed. In all studies we report all exclusions. Full data files for all studies are available at osf.io/xwgr3, and we also provide all materials at osf.io/zwcmv. [Note to reviewers: please use this anonymous link https://osf.io/4z9ge/?view_only=469f528b7a474b02ae9545aeb35cc705 to access any OSF files from the manuscript. The non-anonymous links will be made public after the paper is accepted.] The research ethics committee at the University of Pennsylvania determined that the studies met the eligibility criteria for exempt status.

Study 1

Study 1 first investigated whether people judge the actions of soldiers on the just and the unjust sides of a war as morally equivalent, in line with the principle of combatant equality. Participants were presented with information about a hypothetical war in which one country invaded another country in

order to take control of its natural resources. They then indicated the degree to which it is morally defensible for a soldier on one side of the war to kill a soldier on the other side (among other measures). Depending on condition, participants judged either a soldier on the just (defending) or unjust (invading) side. We also included a third, joint evaluation condition, in which participants explicitly compared the moral defensibility of killing carried out by just and unjust soldiers. This joint evaluation condition allowed us to test whether participants explicitly endorse a difference in the judgment of just and unjust soldiers' conduct (see e.g., Bartels, 2008; Bazerman & Messick, 1998; Paharia, Kassam, Greene, & Bazerman, 2009).

Method

Participants. Two-hundred-and-twenty-three participants (139 male, 84 female, $M_{\text{age}} = 31.17$, $SD_{\text{age}} = 8.93$) were recruited through Amazon Mechanical Turk (AMT), and compensated for their participation. Four participants indicated that they had not completed the task properly and were excluded from analysis, leaving a total sample size of 219.

Design, materials and procedure. Participants were allocated to either the *joint* evaluation condition, or one of the two *separate* evaluation conditions: *defending* or *invading*. In all conditions, participants were first given the following information:

Imagine that there are two countries, currently at war with each other. The reason why the countries are at war is that one country illegitimately invaded and occupied parts of the other country's territory in order to take control over newly discovered gas deposits.

All potential political and diplomatic solutions have been exhausted to no avail. Thus, the country being invaded eventually resorted to military action as a means of self-defense against this unprovoked aggression. This self-defensive military action has the full support of major international bodies and other countries in the region. The two countries are therefore now at war.

The soldiers fighting in both countries' armies are volunteers; their military recruitment systems work much the same as in the US. During the war, in one battle, soldiers from each country fight and kill each other.

This background information was based on scenarios developed by Benbaji et al. (2015) and Watkins and Laham (2018b). To heighten the chance that participants would read the scenario properly, a timer ensured that participants spent at least 10 seconds on this page. The country that invaded the other country was referred to as “the invading country” throughout, and the country that was invaded was referred to as “the defending country.”

After reading the introductory material, participants next made two moral judgments about the soldiers’ conduct. They were asked (bolding and italics in the original) to: “please think about **the soldiers themselves** – who are on the ground, fighting the war, and *killing soldiers from the other country*,” and responded to the following questions in a fixed order (manipulation in brackets): “To what extent is it **morally defensible** for a soldier from the [defending/invading] country to kill a soldier from the [invading/defending] country?” (7-point response scale, anchored at 1 = *Not at all morally defensible* and 7 = *Completely morally defensible*) and “To what extent is it **morally good** or **morally bad** for a soldier from the [defending/invading] country to kill a soldier from the [invading/defending] country?” (7-point bipolar scale anchored at 1 = *Very morally bad*, 4 = *Neutral*, 7 = *Very morally good*). In the joint evaluation condition, participants responded to the moral defensibility question for soldiers on both sides, in a counterbalanced order; and to the moral goodness question for soldiers on both sides, in a counterbalanced order. The two moral defensibility questions were always asked before the two moral goodness questions.

Participants then responded to a categorical question that forced a more definitive judgment about moral defensibility. In the separate conditions, this question was “If you *had* to make a judgment one way or the other, do you think the actions of the soldiers from the [defending/invading] country are **morally defensible**?” Response options were “Yes: the [defending/invading] soldiers’ actions are morally defensible” and “No: the [defending/invading] soldiers’ actions are *not* morally defensible”. In the joint evaluation condition, the question was “If you *had* to make a judgment one way or the other, do you think the actions of the soldiers from one country are **more defensible** than the actions of the soldiers from the other country?” Response options were “No: the soldiers’ actions are *equally* morally defensible”, “Yes:

the **invading soldiers'** actions are morally *more* defensible", or "Yes: the **defending soldiers'** actions are morally *more* defensible." In each condition, the response options were presented in a random order for each participant. Afterwards, participants were optionally invited to respond to the question: "Why did you give this answer?" Almost all participants gave a response to this question, but these responses did not elucidate our main research question; they are therefore not analyzed further in this paper.

In Studies 1-4, participants next evaluated the moral character of the soldiers on either side of the war. More information about the character traits and the results from these judgments is provided in Study 5.

The final set of questions concerned participants' judgments about the decision to enter the war, which functioned as a check on the justness manipulation. Participants were instructed to "please think about each country's **decision to go to war**; i.e. the decision made by government officials and policymakers to go to war," and then responded to the question: "To what extent was the decision of the [*defending/invading*] country **morally defensible**?" (7-point response scale, anchored at 1 = *not at all morally defensible* and 7 = *completely morally defensible*). Participants were also asked a categorical version of this question, to parallel the categorical judgment of the soldiers' conduct. However, responses to this question did not elucidate our main research question beyond responses to the continuous questions, and their analysis is therefore moved to Supplemental Materials.

Finally, participants provided demographic information (including age, gender, political orientation, and religiosity),⁵ were asked to indicate honestly whether they had completed the study properly (yes/no), and were debriefed and thanked. No other measures were collected. All these measures were very similar for all studies. Therefore, for the subsequent studies, we only report details of any changes we made to the materials. Full materials and data for all studies are provided on the project's OSF page (osf.io/zwcmv).

⁵ Further description and analysis of demographic variables is provided in the Supplemental Materials.

Results

In the separate evaluation condition, participants judged that the leaders of the defending country had made a more morally defensible decision to go to war ($M = 5.37$, $SD = 1.58$) than had those from the invading country, $M = 2.24$, $SD = 1.54$; $t(145) = 12.16$, $p < .001$, $d = 2.01$. This same difference was also seen in the joint evaluation condition, defending: $M = 5.82$, $SD = 1.39$; invading: $M = 2.32$, $SD = 1.63$; $F(1,71) = 151.26$, $p < .001$, $\eta_p^2 = .68$. Thus, our manipulation of justness was successful; participants clearly judged there to be a just and an unjust side of the war. This manipulation was successful in all studies, accordingly, for Studies 1-5 they are summarized in Table 1 (Study 6 is more complex, and manipulation checks for that study are reported in its Results section).

Table 1

Judgments of the Moral Defensibility of Each Country's Decision to Go to War (Manipulation Checks), Studies 1-5.

Study	Type of War	Mean judgment (SD)		Test statistic	p	d
		Just	Unjust			
1	War of Aggression	5.37 (1.58)	2.24 (1.54)	$t(145) = 12.16$	<.001	2.01
2	Military Humanitarian Intervention	5.79 (1.51)	2.97 (1.86)	$t(134) = 9.76$	<.001	1.66
3	Military Humanitarian Intervention + Aggression	6.07 (1.21)	2.61 (1.70)	$F(1, 367) = 718.60$	<.001	2.34
4	War of Aggression	6.33 (1.11)	1.86 (1.32)	$F(1, 291) = 1331.54$	<.001	3.67
5	Intervention against War of Aggression	6.16 (1.33)	1.96 (1.38)	$F(1, 500) = 1859.39$	<.001	3.10

Note. When the war scenario discussed a war of aggression and defense (Studies 1, 4, and 5), the countries involved were referred to as the “defending” and “invading” countries. When the war scenario involved a military humanitarian intervention, the labels were instead “intervening” and “resisting”. Responses were made on a 7-point response scale, from 1 = *not at all morally defensible* to 7 = *completely morally defensible*. For Studies 1 and 2, only the results in the separate conditions are reported here, but the results were the same in the joint condition (see Supplemental Materials). The design of Study 6 was more complex, and results of the manipulation check for this study are reported in Table 5.

Contrary to the principle of combatant equality, participants considered it more defensible for soldiers on the defending side to kill soldiers on the invading side (see Figure 1). This effect was significant in both the separate and joint evaluation conditions (separate evaluation: $M_{defending} = 5.05$, $SD_{defending} = 1.77$ vs. $M_{invading} = 3.65$, $SD_{invading} = 2.00$, $t(145) = 4.51$, $p < .001$, $d = 0.74$; joint evaluation: $M_{defending} = 5.43$, $SD_{defending} = 1.39$ vs. $M_{invading} = 3.19$, $SD_{invading} = 1.76$, $t(71) = 8.00$, $p < .001$, $d = 0.94$). The fact that this result was observed in the joint evaluation condition indicates that participants normatively endorsed a different evaluation of soldiers on either side of the conflict. In fact, the difference between judgments of defending and invading soldiers was larger in the joint evaluation than in the separate evaluation condition (joint: $M_{difference} = 2.24$; separate: $M_{difference} = 1.40$, $t(216) = 2.50$, $p = .013$).⁶

Figure 1: Moral defensibility judgments of the soldiers on the just (defending) and unjust (invading) side of the conflict as a function of evaluation condition (joint vs. separate), Study 1. Error bars represent 95% confidence intervals of the mean.

⁶ We calculated the t-statistic for the difference of the differences across joint and separate evaluation conditions using the formula reported by Hsee (1996), footnote 2: “ $t = ((M_{JA} - M_{JB}) - (M_{SA} - M_{SB})) / [(S_J^2/N_J + S_{SA}^2/N_{SA} + S_{SB}^2/N_{SB})]^{1/2}$ ”, where M_{JA} , M_{JB} , M_{SA} and M_{SB} are means for A and for B in joint evaluation and means for A and for B in separate evaluation, respectively; S_J^2 , S_{SA}^2 and S_{SB}^2 are variances; N_J , N_{SA} and N_{SB} are numbers of participants in the joint-, and the two separate-evaluation conditions, respectively.” We thank Christopher Hsee and Garry Robins for their assistance in interpreting this formula for use in the present study.

The results for the moral goodness judgments followed the same pattern as for moral defensibility judgments, and are therefore moved to Supplemental Materials. Likewise, results for the categorical questions are moved to Supplemental Materials, as these did not elucidate our research question further in this study.

Discussion

Overall, the pattern of moral judgments in this study demonstrates that participants judge the actions of soldiers on different sides of a war asymmetrically, in violation of the principle of combatant equality. This difference was clear in both joint and separate evaluation conditions. We also observed strong correlations between judgments of the moral defensibility of soldiers' actions and judgments of the moral defensibility of the decision to enter the war (all r s > .5, see Supplemental Materials), which suggests that people's judgments of individual soldiers' actions are closely related to their view of the war as a whole.

Study 2

Despite the clarity of its results, Study 1 has an important limitation. We only used a single war scenario, in which an aggressor state invaded a defending state in order to gain control over its natural resources. This means that we cannot be certain whether it was the *unjust intention* behind the invasion, or simply the *intervention in* sovereign territory itself, which gave rise to the asymmetry in participants' judgments. Accordingly, in order to disentangle the influence of these two possible sources of the effect, in Study 2 we described a war in which one country invaded another as part of a just humanitarian military intervention. By using a humanitarian military intervention, we also bring the scenario more in line with contemporary Western wars, which typically involve going to war (with purportedly just intentions) on foreign soil (Wimmer, 2014).

In Study 2, we also elicited abstract judgments about the principle of combatant equality from some participants. Rather than providing participants with a concrete description of an act taken by a particular soldier, we instead described the principle of combatant equality in the abstract, and asked

participants whether they agreed with it. This allowed an additional test of participants' normative endorsement of this principle.

Method

Participants. Three hundred participants (157 male, 138 female, 2 other, 3 missing, $M_{\text{age}} = 34.68$, $SD_{\text{age}} = 16.12$) were recruited through AMT and compensated for their participation. As in Study 1, three participants who indicated that they had not completed the study properly were excluded from analysis. This left a total sample of 297. In the previous study, the effect of side in the separate evaluation conditions was medium-large (Cohen's $d = 0.74$). In the present study, we thus had 99% power to detect this effect in the separate evaluation conditions (independent samples t -test; Faul, et al., 2007).

Design, materials, and procedure. Participants were randomly assigned to one of four conditions, which consisted of three "concrete" conditions (which matched those in Study 1: A joint evaluation condition, and two separate evaluation conditions), and a new, fourth condition in which they only rendered abstract judgments. The materials and procedure for Study 2 were largely similar to those in Study 1, except for the fact that a different war scenario was described.

In the concrete conditions, the background information depicted a humanitarian military intervention. One country (the unjust side) had systematically oppressed an ethnic minority, and all attempts at diplomacy had failed. Eventually, a neighboring country (the just side) intervened with military force, in order to prevent genocide of the ethnic minority (see osf.io/zwcmv for full materials). The outcome measures were the same as in Study 1, with the following minor changes. The "just" country was now labelled the "intervening" country throughout, and the unjust country the "resisting" country. Judgments of moral character traits and judgments of actions were counterbalanced – half the participants evaluated the soldiers' character prior to making moral judgments about their actions, while the reverse was true for the other participants. (Discussion of the character evaluations is reserved until Study 5.)

In the abstract condition, participants were presented with a short passage outlining in plain language the traditional just war theory position on the independence thesis and the moral equivalence of

combatants. The text outlined how traditional just war theorists believe one *should* make moral judgments about the conduct of war, highlighting that judgments about decisions to go to war should be kept separate from judgments about soldiers' conduct, and explaining how this implies that one should make symmetrical judgments of soldiers on either side of a war. Participants were told the following: "Please note that not everyone agrees with this idea about war! You may disagree or agree for whatever reason – in what follows, we are only interested in your opinion about this idea." Then, their own position was elicited by asking "Do you agree with the idea described on the previous pages?" Response options were "I agree" or "I disagree," and each response option was accompanied by a short re-statement of what agreement or disagreement meant in terms of the independence thesis and the principle of combatant equality. Participants were also given the opportunity to respond to an open-ended question, "If you have anything to add, please write it below." The full text is provided in the Supplemental Materials.

Next, participants were presented with four statements describing the traditional just war position, and asked the extent to which they agreed or disagreed (1 = *strongly disagree*, 7 = *strongly agree*). These statements were: "Decisions to go to war can be considered 'just' or 'unjust'," "Moral judgments about decisions to go to war should be kept separate from moral judgments about the soldiers' actions," "When judging soldiers, it doesn't matter which side of the war they are on," "Soldiers on both sides of a war are moral equals." Agreement with the latter three statements indicates agreement with traditional just war theory, and these items formed a reliable scale ($\alpha = .871$). The first statement was not included in the scale because it reflects a position common to both revisionist and traditionalist just war theorists.

Results

Overall, the results mirrored those of Study 1. In both joint and separate evaluation conditions, participants judged the actions of soldiers on the intervening side as more morally defensible and more morally good than those of the soldiers on the resisting side (see Table 2 for continuous judgments). The categorical judgments yielded a similar pattern. In separate evaluation, participants judged the intervening soldier's actions to be morally defensible considerably more often (87.5%) than the resisting soldier's actions (50%), $\chi^2(N = 136) = 23.52, p < .001$. In joint evaluation, 54.5% of participants judged

the intervening soldiers' actions as more morally defensible, 11.7% judged the resisting soldiers' actions as more morally defensible, and 33.8% judged the soldiers' actions as equally morally defensible. This distribution of responses was significantly non-uniform, $\chi^2(N=77) = 21.22, p < .001$, and significantly different from what would be expected if the true median response were "equally morally defensible" (one-sample sign test, $p < .001$).

In the abstract condition, 59.5% of participants agreed with the high-level description of just war theory, and the principle of combatant equality. This proportion was marginally greater than a chance level of 50% agreement, $\chi^2(N = 84) = 3.048, p = .081$. The responses to the individual statements describing traditional just war theory were more definitive. Mean responses to the composite measure of agreement with traditional just war theory were significantly above the midpoint of the scale (4), $t(83) = 2.780, p = .007$, mean difference = 0.41, 95% CIs [0.14, 0.82] (see Supplemental Materials for further details).

Table 2
Moral Defensibility and Moral Goodness Judgments of the Actions of Soldiers on the Resisting and Intervening Sides of the Conflict, Organised by Evaluation Condition (Joint vs. Separate), Study 2.

	Mean moral judgments (<i>SD</i>)				
	Intervening (just)	Resisting (unjust)			
<i>Separate conditions</i>					
(<i>n</i> _{just} = 72, <i>n</i> _{unjust} = 64)			<i>t</i> (134)	<i>p</i>	<i>d</i>
Moral defensibility	5.36 (1.66)	3.97 (1.89)	4.59	<.001	0.78
Moral goodness	4.49 (1.55)	3.67 (1.76)	2.88	.005	0.49
<i>Joint condition (N = 77)</i>					
			<i>t</i> (76)	<i>p</i>	<i>d</i> ^a
Moral defensibility	5.13 (1.77)	3.96 (2.04)	4.36	<.001	.50
Moral goodness	4.18 (1.63)	2.95 (1.47)	4.86	<.001	.55

Note. See Supplemental Material for these results with age, gender, and political orientation included as covariates.

a Cohen's *d* corrected for within-subject comparison (Morris & DeShon, 2002)

These results reveal that participants' judgments differed in the concrete and abstract conditions. Whereas 59.9% of participants agreed with an abstract statement of just war theory, including the principle of combatant equality, only 38.8% of participants in the joint evaluation condition made concrete categorical judgments that accorded with this principle. This difference in proportions was reliable, $\chi^2(N=161) = 5.22, p = .022$.

Discussion

In Study 2, we conceptually replicated the findings of Study 1, by showing that asymmetric moral judgments about soldiers extend to a completely different war situation – in this case, a humanitarian military intervention. We also found that these concrete judgments are not matched by individuals' abstract judgments. When given a description of just war theory, including the principle of combatant equality, without any reference to a concrete situation, almost 60% of participants agreed with it. This discrepancy is intriguing, and may shed light on the apparent popularity of just war theory – it is appealing in the abstract, but less so in concrete circumstances. Since our focus is primarily on people's concrete judgments, in what follows, we set this discrepancy aside and focus on various possible explanations of people's concrete judgments.

Study 3

In both Studies 1 and 2 we observed a pronounced asymmetry between judgments of soldiers on either side of a war. In Study 3, we began to examine why this asymmetry emerges. Specifically, we investigated whether participants' neglect of *situational constraint* might underpin it.

A prototypical justification for the principle of combatant equality is that soldiers on either side of the war are equally compelled by situational constraints to attack their enemy; they each operate under a "shared servitude" (Walzer, 2006). Accordingly, one possible reason why people's descriptive judgments may deviate from this principle is that they either ignore or discount the situational pressures operating on soldiers, and presume instead that soldiers independently choose to bring about outcomes that further their own side's cause. This neglect of situational constraint would, in turn, cause people to focus solely on the outcomes that soldiers bring about when evaluating their actions. The soldier on the unjust side

would be seen as contributing to a bad outcome (i.e., the unjust country making progress in the war), whereas the soldier on the just side would be seen as contributing to a good outcome (i.e., the just country making progress). And if people see the soldiers as having independently chosen to bring about these outcomes, then they should judge the soldier on the just side more favorably (see McMahan, 2004, 2009, for more on this argument).

This explanation has two parts, that draw on two well-known phenomena – the tendency to judge decision makers on the basis of the outcomes they bring about, even when those outcomes are arguably irrelevant to evaluating decision quality (Baron & Hershey, 1988; see also Cushman, 2008, in the moral domain), and the tendency for people to discount situational factors when explaining others' behavior, often referred to as the “fundamental attribution error” or “correspondence bias” (Gilbert & Malone, 1995; Jones & Harris, 1967; Ross, Amabile, & Steinmetz, 1977). In essence, this explanation posits that people focus myopically on outcomes, and either ignore, neglect, or reject the fact that soldiers on both sides of a war are bound by a raft of situational constraints operating on their behavior, or as Walzer (2006) puts it, a “shared servitude.” We explored this idea by manipulating situational constraint, in Study 3, and separately, by manipulating soldiers' causal contributions to specific outcomes, in Study 4.

In Study 3, we tested the situational constraint explanation by experimentally manipulating whether the soldiers' acts were ordered by a superior (and thus were situationally constrained), or whether they instead reflected an independent choice on the part of the soldier (and thus were unconstrained). We also independently manipulated the justness of the soldiers' cause (just vs. unjust). If the difference between just and unjust soldiers is significantly weakened when their choices are clearly situationally constrained, then this would demonstrate the relevance of perceived constraint (or the lack thereof) to the original asymmetry. But, if the previously observed asymmetry emerges just as clearly even when participants are explicitly told that soldiers were situationally constrained, this would suggest that constraint is not critical to the explanation of the asymmetry.

This test of mediating processes relies, as do others in this paper, on a combination of “blockage” and “enhancement” designs as described by Pirlott and MacKinnon (2016). Our goal was to test whether

the asymmetric effect of side (X) on moral judgments (Y) is explained by a particular mediating mechanism (M); in this study, the perception that the soldiers' actions reflected their independent choices. To do this, we held M (independent choice of action) constant across different levels of X (justness of side). In one pair of conditions, soldiers were described as having been entirely constrained (the "blockage" conditions), whereas in the other pair, they were described as having acted freely (the "enhancement" conditions). When both soldiers are described as having been situationally constrained, the ordinary variation in perceptions of choice (M) should be reduced or eliminated, i.e., "blocked" by the experimental manipulation. Consequently, the overall effect of X (side) on Y (moral judgments) should be reduced within these "constrained" conditions.

In contrast, when each soldier is described as having acted independently, the effect of the side manipulation should be "enhanced": The perception that they each independently chose the outcomes they caused (good vs. bad) should be bolstered, and so we should expect that the effect of the independent variable (side) should be stronger when examining the "free choice" conditions. Thus, if an interaction between side and constraint were to emerge on moral defensibility judgments, this would provide evidence supporting the notion that perceived choice is functioning as a mediator (Pirlott & MacKinnon, 2016).⁷ If on the other hand, the effect of side on defensibility judgments is unchanged across the

⁷ The reason we describe this design (and others in this paper) as combining "blockage" and "enhancement" manipulations is as follows. According to Pirlott and MacKinnon's (2016) nomenclature, a "blockage" design consists of a comparison between conditions in which a candidate mediating variable is blocked by an experimental manipulation and a control condition in which the mediator is allowed to vary freely as function of the manipulation. Similarly, an "enhancement" design consists of a comparison between conditions in which the candidate mediating variable is fixed in a way that is likely to enhance the effect of the manipulated independent variable, and a control condition in which it varies freely. The designs we used in the present study, as well as in those that follow do not include such true control conditions. Instead, they include the "blockage" conditions and the "enhancement" conditions, but not the control conditions. For instance, in Study 3 (the present study), the soldiers' independent volition is blocked in the condition in which he is ordered to act (see below), which should reduce the effect of side (relative to hypothetical true control conditions); but it is enhanced in the condition in which he acts freely, which should enhance the effect of side relative to (hypothetical) true control conditions. Strictly speaking, therefore, these designs are a hybrid, comprised of both blockage and enhancement elements. Notably, these sorts of design maximize the variation of the purported mediator, thereby maximizing the chances of finding evidence supporting mediation. This in turn means that our failure to find effects of several of these various mediators has particularly strong evidentiary value.

manipulation of constraint / choice, then this would provide *prima facie* (though not definitive) evidence that this variable is not the mediator. This experimental strategy is also known as “testing-a-process-hypothesis-by-an-interaction” (Jacoby & Sassenberg, 2011).

In Study 3, we also examined a much wider variety of different actions taken in war. The first two studies elicited judgments about the generic action of one soldier killing an enemy soldier. However, killing the enemy is not the only sort of action undertaken by soldiers in war. Soldiers’ actions vary widely in their moral properties. They range from grave moral offenses, such as defiling corpses or killing innocent non-combatants, to acts of tremendous heroism and sacrifice, such as helping enemy civilians, sacrificing one’s own life for one’s comrades, or reporting potential war crimes. In Study 3, we examined how broadly the asymmetry observed in the previous studies extends across a wide range of actions. One possibility of particular interest is that some actions may be so morally abhorrent (or alternatively, so morally laudable) that they are seen as indefensible (or defensible) no matter which side the soldier is on.

Method

Participants. Four-hundred-and-twenty-two participants (243 male, 179 female, $M_{\text{age}} = 35.41$, $SD_{\text{age}} = 11.72$) were recruited through AMT and compensated for their participation. Seven participants indicated that they had not completed the study properly, and were removed from the analyses. We also filtered out 47 participants who responded incorrectly to at least one of the attention check items, leaving a final N of 368. Participants were randomly assigned to receive only a subset of the full set of scenarios, and so the total sample size ensured that each scenario was responded to by a reasonable number of participants (N for each scenario ranged from 114 to 132).

Design, materials and procedure. Participants first read a scenario describing a war in which there was one clearly just and one clearly unjust country. The scenario involved the humanitarian military intervention from Study 2, in which the intervening country acted justly to prevent a genocide in the resisting country. In this study, the resisting country also responded to the intervention by making incursions into the intervening country’s territory. Participants first made moral judgments about each side’s decision to enter the war (a manipulation check on justness, see Table 1), in a random order.

Next, participants evaluated the actions of soldiers. They were randomly assigned to evaluate soldiers from either the just (intervening) or unjust (resisting) side. Participants evaluated eight actions performed by a soldier from the side to which they were assigned. Introductory instructions informed them to treat each scenario as a new case, so that they did not presume that it was the same soldier acting in each case. Each participant was presented randomly with eight out of a total set of 24 scenarios. We selected a range of different actions, ranging widely in their morality, from gravely immoral (even evil) to supererogatory and heroic. The scenarios were derived from previous research (e.g., successful torture; Pratto & Glasford, 2008), the Geneva Conventions on conflict in war (e.g., regarding protections for the wounded, executions; Additional Protocol I, Article 10, 1977; Additional Protocol II, Article 6, 1977), and recent occurrences in contemporary wars (e.g., whistleblowing, Langewiesche, 2015; defiling corpses, Bowley & Rosenberg, 2012; drone warfare, Shane, 2012). A brief description of all 24 scenarios is provided in Supplemental Materials, and full materials can be seen at osf.io/zwcmv.

Situational constraint was manipulated as follows. For half the participants, each soldier was described as acting on his own independent volition: “The soldier decides that he will [action]. He follows through on his decision, and [action]”; whereas for the other half of participants, each soldier was described as being ordered to act: “The soldier is ordered by his superior officer to [action]. He obeys the order, and [action].” For each scenario, participants made a moral judgment about the defensibility and moral goodness (vs. badness) of the soldier’s action (the same continuous items as in Study 1), and evaluated the soldier’s character (to be discussed further in Study 5). After responding to eight scenarios, participants completed two attention checks (they were asked to indicate on which side of the war the soldier was fighting, and whether he was ordered to act or acted on his own decision). They then provided demographic information, indicated whether they had completed the study properly, and were debriefed and thanked.

Results

As in the previous studies, the main outcome variable was moral defensibility judgments of the soldiers' actions. Figure 2 presents the mean moral defensibility judgment for each scenario, broken down by condition.

Because each participant in this study responded to several scenarios, the data is doubly nested: Within scenarios, and within participants. That is, there are some non-independent aspects of the design, in that responses “within” each participant are likely to be more similar to each other, and responses “within” each scenario are likely to be more similar to each other. To take this dependence into account, we analysed the data using generalized linear mixed-effects models in R (Bates, Maechler, Bolker, & Walker, 2015), modelling scenario and participant as random effects. The data and syntax files for these analyses are available on the Open Science Framework (long form data set and code book: osf.io/2vz7c; R syntax file for analyses: osf.io/czyu2).

First, we fitted a null model, in which moral defensibility was predicted only by participant and scenario random effects. Then, we added side as a fixed effect to this model. This model was a significantly better fit to the data than the null model, $\chi^2(1) = 47.73, p < .001$, indicating a main effect of side: As in previous studies, we observe an asymmetry in judgments such that the actions of soldiers on the just side are more morally defensible than those of soldiers on the unjust side. Next, we performed the same comparison with situational constraint as a fixed effect. This model was not a significantly better fit to the data than the null model, $\chi^2(1) = 1.40, p = .237$. We thus have no evidence that the soldier's being ordered to act influenced overall judgments of his actions. However, the crucial test for this study is whether order interacts with side. To test this, we compared a model which included side, order, and their interaction (as well as participant and scenario as random effects), to a model which included only the

main effects (as well as the random effects). The model which included the interaction was not a significantly better fit to the data, $\chi^2(1) = 0.63, p = .427$.⁸

Figure 2: Moral defensibility judgments for each scenario, as a function of condition, in Study 3. Scenarios are ordered by average moral defensibility, from least morally defensible (left) to most morally defensible (right). Error bars are omitted in the interest of clarity, however see Supplemental Materials, Figure S2 and S3, for more details.

⁸ In the Supplemental Materials we also report analyses using by-scenario data (in which responses are averaged across multiple participants for each scenario) and by-participant data (in which each scenario is analysed separately). Overall, these analyses are consistent with the ones reported here.

In addition to the overall effect of side, as can be seen in Figure 2 (and the Supplemental Materials) there was an effect of side for the majority of the scenarios, with the exceptions clustering at the most and least morally defensible poles. This appears consistent with the possibility that some actions may be so morally abhorrent that they are seen as indefensible for all soldiers (and conversely for the laudable actions). We tested this idea formally in two steps. First, we fitted a model in which the effect of side was set to vary by scenario. This model was a better fit than the corresponding model with the effect of side fixed across scenarios, $\chi^2(5) = 67.31, p < .001$, indicating that the size of the asymmetry depends on the scenario. Second, in a by-scenario analysis, we used judgments of the moral extremity of each action (the absolute value of participants' average judgments of moral goodness vs. badness for that action) as a predictor of the effect of side on moral defensibility, in a linear regression. This analysis revealed that the size of the side effect was indeed predicted by moral extremity, $\beta = -.715, t(22) = -4.796, p < .001$. Thus, as we had suspected, as an action becomes extreme (either in the good or bad direction), the asymmetry between either side decreased.

Discussion

Study 3 conceptually replicated the results of the previous studies, across a range of different actions: Soldiers fighting for just causes were seen as acting more defensibly than soldiers fighting for unjust causes, even when carrying out identical actions. This result once again demonstrates that participants do not follow the principle of combatant equality. In this study, we also discovered an important boundary condition on this asymmetry: Some actions were perceived to be so morally abhorrent, or, conversely, so morally laudable, that judgments of soldiers engaging in these actions were not influenced by the justness of the side for which he was fighting.⁹

⁹ We are not aware of just war theorizing that pertains specifically to the more abhorrent, or more laudable, acts we used in Study 3; revisionist versus traditionalist arguments are generally about legal actions such as killing enemy soldiers. Neither revisionist nor traditionalist just war theorists claim that symmetric or asymmetric judgments should be made for *all* actions; for instance, both are likely to agree that some acts are so morally abhorrent that they are impermissible and worthy of condemnation for all combatants or whoever engages in them. The point of this study

However, we did not find that a manipulation of situational constraints interacted with the justness of the soldiers' cause. We had hypothesized that the effect of side might be reduced in the high constraint case (because the soldiers' "shared servitude" becomes more obvious). However, we did not find evidence for such moderation, nor was there an overall effect of the constraint manipulation on moral defensibility judgments. It thus seems unlikely that a failure to recognize soldiers' shared servitude is contributing to the asymmetry in moral defensibility judgments.

Supplemental Study 1. In a separate study, we further assessed the effect of situational constraint using a correlational design: We measured the extent to which participants generally perceive soldiers to be situationally constrained in their actions, and examined whether this individual difference variable moderated the discrepancy in judgments between soldiers on just and unjust sides of a war. If variation in the recognition of situational constraints underpins the asymmetry, then the asymmetry should be larger when situational constraint is judged to be low (i.e., neglected), and smaller when situational constraint is judged to be high. This study was pre-registered using AsPredicted.org (Simonsohn, Simmons, & Nelson, 2017); the pre-registration document, and full materials and results are provided in the Supplemental Materials, as well as details of two minor divergences from the pre-registered analysis plan.

Participants ($n = 433$) first completed a 4-item scale assessing perceived constraint (e.g., "To what extent are soldiers driven by situational pressure when they fight during a war?", $\alpha = .626$). Responses were made on a 7-point scale, with higher numbers indicating greater constraint. Participants then read a war scenario with a clear just and unjust side, and made a moral defensibility judgment of the actions of a soldier from either the just or the unjust side when he killed an opposing soldier (1 = *not at all morally defensible*, 7 = *completely morally defensible*).

Contrary to our expectations, perceived constraint was generally high; it therefore does not appear that participants generally neglect situational constraint when considering soldiers fighting in war, Mean

was to ascertain – descriptively – some of the empirical boundaries of the principle of combatant equality, rather than provide clear support for either revisionist or traditionalist positions.

constraint = 5.36, $SD = 0.86$, Mean difference from midpoint (4) = 1.36, 95% CIs [1.28, 1.44], $t(431) = 33.03$, $p < .001$. We used Hayes (2012) PROCESS Macro for SPSS to test whether the mean-centered composite constraint measure moderated the effect of side on moral defensibility judgments. The interaction term was not significant (effect estimate = .223, $F(1, 428) = 1.51$, $p = .219$), indicating that the effect of side on moral defensibility judgment did not depend on the degree of perceived constraint. The direct effect of side on moral defensibility remained significant in this analysis (effect estimate = 1.479, $p < .001$), and the direct effect of constraint was not significant (effect estimate = 0.150, $p = .244$). Given these results, and that the constraint manipulation in Study 3 was not especially compelling, we turn to other possible explanations in the studies that follow.

Study 4

Our manipulation in the previous study was based on the hypothesis that people would only hold soldiers responsible for contributing to bad (and, conversely, good) outcomes if the soldiers were making an independent choice to act, rather than being ordered to act (i.e., being situationally constrained). By increasing situational constraints, our goal was to weaken the causal contribution made by the target soldier (since much of the causal contribution should get reassigned to the commanding officer), and thus reduce the asymmetry between the just and unjust soldiers. As we saw, this manipulation did not have the anticipated effect. In Study 4, we explored causality directly, by manipulating each soldier's proximate causal contribution to a relevant war outcome, while also separately manipulating the extent to which the target soldier identified with (endorsed or rejected) his country's war effort.

Under normal circumstances, an individual soldier's actions are often the sole and sufficient cause of enemy deaths, for example, a single soldier's bullet(s) causes the death of an enemy soldier. However, this is not always the case – sometimes multiple soldiers' actions jointly contribute to the death of a single enemy, with each soldier's action being a necessary factor in causing death. In other cases, a particular killing may be “overdetermined,” such that it is brought about by multiple causes, any of which alone would be sufficient to cause death. And in still other cases, a possible cause of death may be

causally preceded by another cause, rendering the original cause actually inert, yet counterfactually sufficient, to cause death. In this latter case, an individual soldier's causal contribution to the resultant death seems diminished in comparison with the sole cause, or multiple necessary cause cases.

In Study 4, we made use of the possibility of causal precedence, by specifying that a target soldier's action, though it would alone have been sufficient to kill the enemy, was immediately preceded by another sufficient cause of death (see Alicke, Rose, & Bloom, 2011). As a consequence, the target soldier's actual causal contribution to the outcome is necessarily diminished. If causal contribution to war outcomes is a key factor underlying the asymmetry previously observed, then the asymmetry should be attenuated in these causal precedence cases as compared with more standard cases of killing.

We also investigated another possible cause of the asymmetry, namely soldiers' presumed identification with, or endorsement of, the cause for which they are fighting. Actors' identification with their bad actions is known to affect moral judgments – for instance, actors who identify with their bad actions are judged more morally responsible for them, even when their actions are entirely situationally constrained (e.g., when they are compelled or coerced, Woolfolk, Doris, & Darley, 2006). In the present context, even if people recognize that soldiers' actions are fully situationally constrained, their implicit presumptions about soldiers' attitudes might be partially responsible for the observed asymmetry. Soldiers who fight for a just cause may be presumed to identify with that cause, thereby possessing commendable attitudes, whereas soldiers who fight for an unjust cause may be presumed to identify with it, thereby possessing much less commendable attitudes.¹⁰ These presumed attitudes, in turn, might

¹⁰ We tested this presumption in a short pilot study. Three hundred participants were presented with a description of the same war as in Study 3, and were then asked to evaluate the extent to which either a soldier on the just side, or on the unjust side, identified with his own country's cause for war (3 items, e.g. "To what extent do you think the soldier endorses each country's war effort?", 1 = *Fully endorses the invading country's war effort*, 4 = *Endorses neither country's war effort more than the other*, 7 = *Fully endorses the defending country's war effort*, $\alpha = .944$). Participants responded on 7-point response scales. As expected, soldiers on the unjust side were perceived to identify with their own side ($M = 3.08$, $SD = 1.49$; Mean difference from midpoint = -0.921 , 95% CIs $[-1.179, -0.664]$; $t(130) = -7.078$, $p < .001$), as were soldiers on the just side, $M = 6.09$, $SD = 0.99$; Mean difference from midpoint = 2.088 , 95% CIs $[1.920, 2.256]$; $t(136) = 24.570$, $p < .001$. Full materials and results of this study are provided at osf.io/zwcmv, and in the Supplemental Materials.

influence judgments of the defensibility of the soldiers' actual conduct. If presumed identification of this sort partially underlies the asymmetry, then a manipulation that reverses these presumptions, and which states explicitly that soldiers reject the cause for which they are fighting, should reduce the observed asymmetry.

Method

Participants. Three-hundred-and-sixty participants (188 male, 171 female, 1 other, $M_{\text{age}} = 35.71$, $SD_{\text{age}} = 11.09$) were recruited through AMT and compensated for their participation. Participants who indicated that they had not completed the study properly ($n = 2$) or who failed any of the attention checks described below were filtered out ($n = 66$), leaving a total N of 292. The initial sample size was selected so as to have at least 50 participants per cell for the two separate two-way interactions we were most concerned with. However, with the exclusions we did not quite meet this target: A sample size of 279 yields 72 per cell for the side by causal contribution interaction, and 48 per cell for the side by identification interaction (see below).

Design, materials and procedure. The full design of the study was a two (side: just vs. unjust) by two (causal contribution: full contribution vs. no contribution) by three (identification: endorses vs. suspends vs. rejects), with all variables manipulated between participants. Participants first read a scenario describing a war in which there was one clearly just and one clearly unjust country (the same war as in Study 1; a war in which one country invaded another to take control over its gas deposits). The countries were referred to as the "invading country" and the "defending country" throughout. As a manipulation check, participants first judged the moral defensibility of each country's decision to go to war, in a random order (see Table 1).

Participants were then provided with a description of a soldier fighting for one side of this war. In all cases, the soldier was described as a sniper who had been recruited for a special mission for his country, having been drafted into his country's army at the start of the war. The soldier's mission was to shoot and kill a high-ranking and experienced military general (a "high value target") from the enemy side. In all cases, the soldier successfully shot the general. However, he wasn't always the one

responsible for actually killing him – we manipulated the soldier’s causal contribution to this outcome by making use of a “causal precedence” technique (Alicke et al., 2011).

Half the participants were randomly assigned to the *full contribution* condition, in which they read that the enemy general died directly as a result of the target soldier’s bullet. There was also a back-up sniper who concurrently fired at the general, but this second sniper’s bullet hit the general a split second after the target soldier’s bullet. Thus, because the target soldier’s shot had immediately killed the general, only he had directly contributed to the strategic advantage gained by his country. The remaining participants were assigned to the *no contribution* condition. All details were identical except that the target soldier’s bullet struck the general a split-second *after* the back-up sniper’s bullet. Because the back-up sniper’s shot had immediately killed the general, only he had directly contributed to the strategic advantage gained, whereas the target soldier had not.

Independent of this manipulation of causal contribution, we also manipulated the soldiers’ identification with their country’s war effort. This manipulation occurred prior to the description of the killing. In all cases, the soldier was described as having carefully thought through the information available about the war, in order to weigh the costs and benefits of the war effort. The soldier was then described as having subsequently endorsed, rejected, or suspended judgment about his country’s war effort, e.g. “he believes that the decision-makers in his country made the right [wrong] decision to enter the war.” In all cases, the soldier was described as having a strong sense of duty to his country, and as feeling obligated to take part in his assigned mission in order to carry out his job – notwithstanding the variation in levels of his identification. Full materials can be found at osf.io/zwcmv.

Following these descriptions, participants made judgments about the moral defensibility and moral goodness of the soldier’s shooting of the general (continuous measures as in previous studies), and they evaluated the soldier’s moral character (to be discussed further in Study 5). They then completed attention checks for each of the manipulated variables (side, identification, contribution), provided demographic information, indicated whether they had completed the study properly, and were debriefed and thanked.

Results

Replicating the previous results, and as shown in Figure 3, participants judged the actions of the soldier on the just side as more morally defensible ($M = 5.42$, $SD = 1.40$) than the actions of the soldier on the unjust side, $M = 3.16$, $SD = 1.85$, $F(1, 280) = 138.70$, $p < .001$, $\eta_p^2 = .33$. There were no main effects of identification or causal contribution on moral defensibility judgments (identification: $F(2, 280) = 0.748$, $p = .474$, $\eta_p^2 = .01$; causal contribution: $F(1, 280) = 2.211$, $p = .138$, $\eta_p^2 = .01$). However, as predicted, there was a significant identification by side interaction, $F(2, 280) = 5.827$, $p = .003$, $\eta_p^2 = .04$. As shown in Figure 3, in each of the identification conditions, there was a significant effect of side, but the magnitude of this effect decreased as the soldiers' identification with his country's cause decreased (endorses: $F(1, 107) = 108.29$, $p < .001$, $\eta_p^2 = .50$; suspends: $F(1, 74) = 32.99$, $p < .001$, $\eta_p^2 = .31$; rejects: $F(1, 99) = 23.04$, $p < .001$, $\eta_p^2 = .19$). There was no interaction between side and causal contribution, $F(1, 280) = 0.516$, $p = .473$, $\eta_p^2 < .01$, nor any three-way interaction, $F(2, 280) = 0.134$, $p = .874$, $\eta_p^2 < .01$. Both when the soldier contributed (just: $M = 5.64$, $SD = 1.37$; unjust: $M = 3.21$, $SD = 1.74$; $t(144) = 9.421$, $p < .001$, $d = 1.55$), and when he did not (just: $M = 5.22$, $SD = 1.40$; unjust: $M = 3.09$, $SD = 1.97$; $t(144) = 7.614$, $p < .001$, $d = 1.24$), the effect of side was strong. Responses to the moral goodness item followed the same pattern, and are described in the Supplemental Materials.

Figure 3: The effect of side (just vs. unjust) on moral defensibility judgments, across the three identification conditions, Study 4. Error bars represent 95% confidence intervals of the mean.

Discussion

Overall, then, we found no effect of the soldiers' causal contribution to their country's war effort, and no interaction of this factor with side. The asymmetry in judgments of soldiers on the just and unjust sides was just as strong, regardless of the causal contribution their actions made to killing their enemy.

However, the results of Study 4 suggest that part of the asymmetry in moral judgments of soldiers on just and unjust sides of a war can be explained by participants presuming that soldiers endorse their own country's cause for war. When this presumption is reinforced, the asymmetry was at its largest. When it was held in abeyance (with the soldier explicitly withholding identification), the asymmetry was of middling size. But, when this presumption was explicitly overturned, with both soldiers rejecting their country's cause for war, the asymmetry was significantly attenuated. However, this does not appear to be

the full explanation for the asymmetry: The effect of side on moral defensibility was significant even when both soldiers rejected their country's cause for war.

Supplemental Study 2. In a follow-up study ($N = 545$) we aimed to amplify this effect of identification, by having the soldier publicly express his attitude (endorsement or opposition) towards the war in which he was fighting. He was described as either participating in a protest, or a celebratory event, in response to his country's involvement in the war. Participants were assigned to one of four conditions in a 2 (side: just vs. unjust) by 2 (identification: endorse vs. reject) fully between-subjects design. They first read about a war in which a small country was invaded by a neighboring country seeking to expand its territory and gain control over more natural resources. When diplomatic solutions failed, a third non-neighboring country decided to intervene militarily to defend the small country. They were then randomly assigned to judge a target soldier either from the third intervening country (the just country), or from the aggressor invading country (the unjust country), who killed an enemy soldier ($1 = \textit{not at all morally defensible}$, $7 = \textit{completely morally defensible}$). Independent of the side manipulation, the target soldier was described as either endorsing his country's cause for war (he publicly celebrated it), or rejecting it (he publicly protested it).

In line with the results of Study 4, we predicted that this manipulation of identification would interact with the justness of side manipulation, such that the effect of side would be attenuated when the soldier opposed the war in which he was fighting. Because of the public nature of the endorsement in this study, we surmised that this interaction would be stronger than in Study 4, and that the asymmetry would be more noticeably reduced, and possibly even eliminated, in the condition in which the soldier opposed his own side's cause for war. We again found that participants judged the soldier on the just side to have acted more defensibly, $M = 5.55$, $SD = 1.43$, than the soldier on the unjust side, $M = 3.55$, $SD = 1.88$, $F(1, 541) = 202.052$, $p < .001$, $\eta_p^2 = .27$. The key interaction between identification and side was also significant, $F(1, 541) = 13.809$, $p < .001$, $\eta_p^2 = .03$. The difference in judgments between the soldiers on the just and unjust sides was reliable both when the soldier endorsed his side's cause, $t(270) = 13.287$, $p < .001$, $d = 1.62$, and when he rejected it, $t(271) = 7.114$, $p < .001$, $d = 0.86$, but it was significantly

attenuated in the reject condition. This result is once again consistent with identification partially explaining the asymmetry. However, the overall size of the interaction, $\eta_p^2 = .03$, was no greater than it had been in Study 4, $\eta_p^2 = .04$, suggesting that making identification (or its opposite) public had no bearing on the results. Full details of this study are provided in the Supplemental Materials.

Summary. Study 4 and Supplemental Study 2 show that when soldiers on the just and unjust sides of a war both reject their country's cause for war (that is, they *do not* identify with it, and are fighting merely out of a sense of duty), the perceived difference between the moral defensibility of their actions is significantly attenuated as compared with a condition in which they both endorse their country's cause for war. This attenuation arises principally because the soldiers on the unjust side who reject their side's cause are viewed as acting more morally defensibly than their comrades who endorse it. These results thus elucidate one cause of the asymmetry, namely that soldiers are presumed by default to identify with their own side (see Footnote 9), and their actions are then judged as a function of those presumed attitudes. This is not a complete explanation, because the asymmetry was only attenuated and not eliminated with this default attitudinal presumption was overturned. In the next study, we take a broader look at the assumptions people make about soldiers, not just about their attitudes towards the war, but about their moral character more generally.

Study 5

In the present study, we extended the investigations of the asymmetry between soldiers on just and unjust sides of war to a new outcome measure: Character evaluations of the soldier. Our aim was to answer two questions: Are soldiers on the unjust side of a war generally seen as having worse moral character than soldiers on the just side? And if so, could this factor be part of the explanation for the asymmetry? That is, if soldiers on the just side of the war are implicitly presumed to have better global moral character than are soldiers on the unjust side (separate from any specific attitudes they might have towards the war itself), then this might in turn influence judgments of those soldiers' actions during war.

This explanation may not be rational, since it is not entirely clear why soldiers fighting for one side or the other should be seen as having different moral characters, nor if they do, why this should

influence judgments of their specific actions during war. Nevertheless, there is evidence that global character information can influence moral judgments of actions, even when that character information has no relevance to the actions in question (Nadler & McDonnell, 2012). And global character information is known to be highly relevant to person perception and moral judgment more generally (Goodwin, Piazza, & Rozin, 2014; Uhlmann, Pizarro, & Diermeier, 2015; Wojciszke, Bazinska, & Jaworski, 1998). Thus, it seemed possible that character inferences could comprise part of the explanation of the observed asymmetry.

We investigated this possibility with both mediation evidence and an experimental manipulation. In all previous studies (except Supplemental Study 1), we asked participants to make judgments about the soldiers' character, in addition to their acts. We first summarize the results from these prior studies, and examine what evidence they provide for character evaluations explaining the asymmetry (Study 5a). Then, in Study 5b, we manipulate the global moral character of the target soldiers, in order to investigate this factor experimentally.

Study 5a: Summary of Prior Studies

The character judgments we elicited in previous studies were divided into two sorts, reflecting a previous distinction made in the literature between *core goodness* traits (e.g., kindness, honesty, compassion, trustworthiness) and *value commitment* traits (e.g., dedicated, committed, courageous; see Piazza, Goodwin, Rozin, & Royzman, 2014).¹¹ We expected that if any differences between soldiers on the just and unjust sides were to be found, they would be revealed on judgments of core goodness traits rather than value commitment traits – there is no reason to expect soldiers fighting for the unjust side to be less courageous or dedicated, but there is perhaps reason to see them as less good overall (though see Watkins & Laham, 2018b).

¹¹ The exact traits rated by participants varied across the previous studies: In Studies 1 and 2, participants rated the target soldiers on 10 traits. Based on exploratory factor analyses (EFAs), for Studies 3, 4, and Supplemental Study 2, we then reduced the set of traits down to two for goodness (*principled, kind*) and two for strength of character (*capable, dedicated*), in line with theory (Piazza et al., 2014). Full details of these rating scales and EFAs are provided in Supplemental Materials.

In all studies, the two sets of traits were positively correlated (r s between aggregated ratings of the traits ranged from .299 to .850; descriptive statistics are provided in the Supplemental Materials). We therefore investigated the effect of side on goodness traits after shared variance with dedication traits had been partialled out (and vice versa). The results of these analyses are summarized in Figure 4. As can be seen, the unique effect of side on goodness traits was sizable; the meta-analytic effect size was 0.383, 95% CIs [0.279, 0.487].¹² However, the unique effect on dedication traits was not significant overall, effect size estimate = -0.022, 95% CIs [-0.070, 0.026] (Neyeloff, Fuchs, & Moreira, 2012). Overall, these analyses indicate that the previously observed asymmetry does extend to character evaluations, but primarily to evaluations of a soldier's core goodness, and not those of his dedication or competence.

We next conducted mediation analyses to determine whether these character evaluations were able to explain the observed asymmetry in moral defensibility judgments. In each of Studies 1-4 and Supplemental Study 2, we observed an indirect effect of side on moral defensibility judgments, *through* evaluations of goodness traits (see Supplemental Materials). The corresponding indirect effect through dedication traits was consistently much smaller, and was significant in only one study out of the five (Study 3). These results align with the possibility that the asymmetry occurs because the soldier on the just side is imbued with the moral goodness of his own side (and vice versa for soldiers on the unjust side). However, having only measured evaluations of character, we cannot make any causal claims about this mediating process. In the next study, we therefore manipulated the soldiers' character directly, to investigate whether his having a good or bad character can attenuate the asymmetry.

¹² This estimate is from a random effects analysis, as the fixed effects analysis indicated substantial heterogeneity in effect sizes, $Q = 26.225$, $p < .001$, $I^2 = 80.93$ (effect estimate from fixed effect model: 0.353, 95% CIs [0.306, 0.400]). More details about these analyses are presented in the Supplemental Materials.

Figure 4: Forest plots displaying the effect of side (Fisher's z) on goodness, partialing out dedication (left hand side), and on dedication, partialing out goodness (right hand side). Error bars indicate standard errors. For Studies 1 and 2, we include the effects only in the separate evaluation conditions. For Study 3, we include the effects only for the scenario in which the target soldier killed an enemy soldier. We also report the results of Study 5b in these graphs, so that they provide a full overview of the effects.

Study 5b: Experimental Manipulation of Global Character

To go beyond the merely correlational analyses in the prior studies, Study 5b manipulated background information about the target soldiers' moral character. Participants were randomly assigned to one of three conditions: Two experimental conditions in which they were informed either that the soldier had a good moral character (i.e., kind, honest, principled), or that he had a bad moral character (i.e., cruel, dishonest, unprincipled), or a third, control condition in which no character information was provided. If the asymmetry in moral defensibility judgments results from participants inferring something

about soldiers' global moral character from the side for which they are fighting, then providing strong, prior information about a target soldier's moral character should constrain (or even overturn) these inferences and attenuate the asymmetry.

Method

Participants. Six-hundred-and-three participants were recruited through AMT and compensated for their participation (305 men, 295 women, 3 other; $M_{\text{age}} = 35.51$ years, $SD_{\text{age}} = 10.65$). One-hundred-and-one participants answered at least one attention check incorrectly, leaving a total sample of 502.

Materials and procedure. In contrast to the previous studies, participants were first introduced to an individual soldier, before being given information about the war in which he was fighting. In the two experimental conditions, the soldier was described as having a morally good or a morally bad character, to target the core goodness traits we assessed in the previous studies. For example, the "good character" paragraph emphasized his kindness, integrity, and honesty, whereas the "bad character" paragraph emphasized his dishonesty, cruelty, and unscrupulousness (see osf.io/zwcmv for full materials). Following this description, participants responded to a manipulation check about the soldier's moral character on a 7-point response scale (1 = *very morally bad*, 4 = *neutral*, 7 = *very morally good*). In the control condition, participants were not given any information about the soldier's moral character, but were simply asked to make their best guess about it.

Next, participants were asked to imagine that the target soldier's country was involved in a war similar to that described in Studies 1 and 4, and were randomly assigned to read that the target soldier was from the defending country or the invading country. They also read that "the soldier is aware of his country's reasons for going to war, but he is currently undecided about whether he would reject or endorse the overall war effort." Then, participants read that the target soldier had shot and killed an enemy soldier.

The outcome measures were moral defensibility judgments regarding the soldier's action (1 = *not at all morally defensible*, 7 = *completely morally defensible*), and moral character ratings of him (*kind*, *principled*, *dedicated*, *competent*, also on 7-point scales ranging from *not at all* [trait] to *extremely* [trait]);

these moral character ratings were additional to those asked initially as a manipulation check. Finally, participants made defensibility judgments regarding each country's decision to enter the war (see Table 1 for results), completed two attention checks (indicating on which side of the war the soldier was fighting, and how he felt about his country's cause for war), provided demographic information, and were debriefed and thanked.

Results

The manipulation of moral character was successful, $F(2, 498) = 1657.47, p < .001, \eta_p^2 = .87$: In the neutral condition, participants gave initial character ratings that were slightly higher than the midpoint (4) of the scale, $M = 4.90, SD = 1.08$; mean difference = 0.90, 95% CIs [0.74, 1.07]; $t(166) = 10.85, p < .001$. The soldier with bad character was rated as significantly worse than the scale midpoint ($M = 1.43, SD = 0.84$; mean difference = -2.57, 95% CIs [-2.69, -2.44]; $t(172) = -40.33, p < .001$), whereas the soldier with good character was rated as significantly better, $M = 6.66, SD = 0.53$; mean difference = 2.66, 95% CIs [2.58, 2.74]; $t(160) = 64.169, p < .001$.

Descriptive statistics for moral defensibility judgments are presented in Table 3. Consistent with the previous studies, the actions of the soldier on the just side were rated as more morally defensible than those of the soldier on the unjust side, $F(1, 495) = 136.84, p < .001, \eta_p^2 = .22$. There was also a main effect of character, such that the actions of the soldier with good character were rated as more defensible than those of the soldier with bad character, $F(2, 495) = 5.68, p = .004, \eta_p^2 = .02$. However, there was no significant interaction between side and moral character, $F(2, 495) = 0.061, p = .941, \eta_p^2 < .01$. The effect of side was significant for all character conditions (see Table 3), and was not attenuated in either case when the soldier's overall character was described first.

As our manipulation of character did not interact with side to influence the asymmetry in moral judgments as hypothesized, further analyses of the character evaluations and of the relationship between character evaluations and moral judgments are presented in the Supplemental Materials.

Table 3

Descriptive Statistics for Moral Defensibility Judgments of Just and Unjust Soldiers, Across Three Different Character Conditions, Study 5b.

	Mean moral judgments (<i>SD</i>)		<i>t</i>	<i>p</i>	<i>d</i>
	Defending	Invading			
<i>Character conditions</i>					
Good (<i>n</i> = 162)	5.88 (1.36)	4.30 (1.60)	6.525	<.001	1.04
Neutral (<i>n</i> = 167)	5.49 (1.39)	3.79 (1.73)	7.029	<.001	1.10
Bad (<i>n</i> = 172)	5.37 (1.49)	3.72 (1.82)	6.771	<.001	1.04

Note. These effects all held when age, gender, and political orientation were included as covariates.

Discussion

A manipulation of background character information did not attenuate the asymmetry observed in prior studies. Although participants did take this character information into account – judging the good soldier's actions (and his character) as more defensible (and better) than the bad soldier's (see Supplemental Materials) – the character manipulation did not significantly moderate the effect of side, which was significant in all conditions. It appears, then, that although character evaluations and moral defensibility judgments are related (as additional mediation analyses also supported, see Supplemental Materials), the critical asymmetry does not *depend on* perceptions of the overall moral character of the target soldiers.

Study 6

The final possible explanation we explored is that participants' harsher judgments of soldiers on the unjust side of a war may reflect an ingroup bias. People erect group boundaries on the basis of even quite minimal information, and demonstrate preferences reflecting these boundaries (Tajfel, 1970). And a strong allegiance to one's own ingroup predicts greater endorsement of hostile action, including war, directed towards outgroup members (Cohen, Montoya, & Insko, 2006). In the context of our studies, it may be that when reading a description of a war, participants implicitly align themselves with the just side, subsequently treating soldiers on the just side as members of their own ingroup, and soldiers on the unjust side as members of an outgroup. Their moral judgments about these soldiers might then reflect these implicit alignments, such that they preferentially judge the actions of soldiers on their own (just)

side (see also DeScioli & Kurzban, 2013). On this account, moral considerations regarding the justness of each side are relevant because they serve as a signal of one's own group membership, but the proximate driver of the asymmetry is ingroup favoritism.¹³

To investigate this possibility, we manipulated which side of the war participants were aligned with, by telling them explicitly that they were citizens of one of the warring countries, or instead, that they were citizens of a neutral third country. If the asymmetry depends on ingroup favoritism, then we would expect that it should be similar in size when participants are aligned with the just side, or an external country – in such cases, participants' default alignment with the just side is either reinforced or left intact. However, when participants' default alignment is overturned, and they are asked to imagine themselves as citizens of the unjust side, their default alignment with the just side is now in conflict with what they have been explicitly told. In this case, the purported proximate cause of the asymmetry has been disrupted, participants' judgements can no longer be dictated by an allegiance to the just side, and so the asymmetry should be reduced or eliminated.

For this study, we described a new sort of war that originated from a long-lasting and hostile border dispute between two countries. There were five between-subjects conditions in the study, which resulted from manipulating both whether the war had a clearly just and unjust side (which we refer to as a “morally asymmetric war” for the purposes of this study) or not, as well as the participants' alignment with the countries in the war. These conditions are summarized in Table 4.

In the asymmetric war conditions, war broke out after one of the countries violated an existing ceasefire by bombing a hospital in its rival's territory. The country that violated the ceasefire was the

¹³ In a related vein, participants may be implicitly or explicitly “pattern matching” the hypothetical scenario to real wars that they know about, and aligning themselves with the country that best resembles the U.S. or its allies. The present study cannot disentangle these two possibilities. However, we have conducted a follow-up study to investigate this specific issue, and the results do not seem to support such pattern matching. When presented with a war scenario that (we thought) closely resembled a conflict the United States had been engaged in, a majority of subjects identified it as resembling a real-world conflict (165 out of a total *N* of 273). However, whether or not they did so did not influence their moral judgments of the defensibility of the soldiers' actions – the documented asymmetry was just as large for participants who recognized the war as resembling a real conflict as for those who did not (Watkins, Vosburg, & Goodwin, 2019). We thank an anonymous reviewer for highlighting this possibility.

unjust country (“Borilia”) and the country that had been attacked was the just country (“Dumolia”).

Participants were instructed that they were members of either the just (Condition 1: aligned just) or the unjust (Condition 2: aligned unjust) country, or alternatively, a third, neutral country (Condition 3: aligned external) that was removed from the war. In the two remaining conditions, the reason for the violation of the ceasefire was not specified, and so the war did not have a clearly just or unjust side (it was “morally symmetric”). In these conditions, participants were either aligned with one of the warring countries (Condition 4: aligned only), or with a third, neutral country (Condition 5: baseline). Participants in all five conditions judged a soldier from both sides of the war, making side a within-subjects factor in the present study (given that Studies 1 and 2 had shown that the effect of side is equally robust within-subjects as it is between-subjects).

Table 4

Overview of the Design of Study 6.

<i>Condition</i>	Participant alignment	Ceasefire violator (i.e., unjust side)
1 Aligned just	Dumolia	Borilia
2 Aligned unjust	Borilia	Borilia
3 Aligned external	External	Borilia
4 Aligned only	Borilia	Unspecified
5 Baseline	External	Unspecified

Manipulating alignment in this design allows us to make the following critical tests. Comparing Conditions 1 (aligned just) and Condition 2 (aligned unjust) allows us to test the central question regarding the effect of alignment. If the difference between evaluations of the just and unjust soldiers is attenuated in Condition 2 relative to Condition 1, this would suggest that (implicit) alignment with the just side may be part of the explanation for the asymmetry. Similar comparisons can be made between Conditions 2 and 3 (aligned external), and between Conditions 1 and 3 – if the effect of side is smaller in Condition 2 than 3, this would similarly suggest that implicit alignment with the just side may be part of the explanation of the asymmetry, as would also be suggested if the effect of side is smaller in Condition

3 than in Condition 1. Finally, comparing Condition 1 (aligned just) with Condition 4 (aligned only), allows us to test what additional effect justice considerations have over and above the effect of alignment.

Method

Participants. Six-hundred-and-three participants were recruited through AMT and were compensated for their participation (279 women, 317 men, 7 other; $M_{\text{age}} = 36.66$, $SD_{\text{age}} = 12.24$). Ninety-three people answered at least one of the attention check questions incorrectly, leaving a total sample of 510 (see further details in Supplemental Materials).

Design, materials and procedure. In this study, participants first read a war scenario, modelled on current geo-political events but using the fictional countries “Borilia” and “Dumolia.” The scenario described a longstanding border dispute, which was currently in a state of ceasefire, owing to extensive negotiation by the international community. This description was designed to make the countries equivalent in moral terms before war subsequently broke out (neither side being just or unjust in this initial state). After reading the initial description of the countries, participants were asked to imagine themselves as a citizen either of Borilia, of Dumolia, or of a third country. In all cases, participants were told that although they remained a civilian throughout the war and were not directly involved, they followed the conflict in the news and were therefore aware of developments in the hostilities. At this point, participants were asked for an initial indication of their own alignment (referred to as pre-war alignment): “Which of the two warring countries do you most identify with (i.e., feel a sense of connection or kinship with)?” (7-point scale: 1 = *Fully identify with Borilia*, 4 = *Do not identify with either country*, 7 = *Fully identify with Dumolia*.) (Whether Borilia or Dumolia was presented on the left or the right side of the scale was randomly varied for each participant.)

Next, participants were told about a breach of the ceasefire, which led to renewed conflict. The breach was described either in neutral terms, without identifying a perpetrator (“the ceasefire is breached”), or as resulting from Borilia’s unjust actions: “Borilia violates the ceasefire by bombing a hospital in Dumolia.” Participants in the three aligned conditions were then asked to indicate how they felt about the actions of their own country (*anxious, proud, sad, angry, scared, happy, disgusted*,

ashamed, grateful, 1= not at all, 7 = a great deal), which served as an additional check on our alignment manipulation. The next question was the *post*-manipulation measure of alignment (post-war alignment). This was identical to the pre-war question except with the phrase “In light of the information you just read” appended at the start.

Participants then made moral defensibility judgments about each country’s decision to enter the war (presented in a random order), followed by the primary outcome measure: Moral defensibility judgments of a soldier’s act of shooting and killing an enemy soldier. These judgments were made about a soldier from Borilia, and a soldier from Dumolia, in a random order.

Finally, participants completed two attention checks (they were asked to indicate which country they were from, and which country violated the ceasefire), provided demographic information, and were debriefed and thanked.

Results

As expected, in the baseline condition (Condition 5) there was no effect of side on judgments of decisions to enter the war, whereas in the three “morally asymmetric” conditions (1-3) and the one “aligned only” condition (4) there was an effect of side. These results are summarized in Table 5.

Table 5

Descriptive Statistics for Moral Judgments About the Countries’ Decision to Enter the War Across the Different Conditions, Study 6.

Condition	Mean judgment (<i>SD</i>)		<i>t</i>	<i>p</i>	<i>d</i> ^a
	Borilia	Dumolia			
1 Aligned just (<i>n</i> = 99)	1.84 (1.56)	5.69 (1.64)	-13.708	<.001	1.38
2 Aligned unjust (<i>n</i> = 101)	1.91 (1.31)	5.50 (1.67)	-14.924	<.001	1.49
3 Aligned external (<i>n</i> = 106)	1.79 (1.23)	5.65 (1.70)	-17.037	<.001	1.67
4 Aligned only (<i>n</i> = 97)	3.23 (1.52)	2.97 (1.42)	2.737	.007	0.28
5 Baseline (<i>n</i> = 107)	3.18 (1.75)	3.14 (1.74)	1.070	.287	0.11

Note. Higher numbers indicate greater moral defensibility (scale 1-7). In all asymmetric war conditions (i.e., 1-3) Borilia was the unjust violator of the ceasefire, and Dumolia was the just defending country, see Table 4. In Condition 4, participants were aligned with Borilia.

^aCohen’s *d* corrected for the correlation between the judgments (Morris & DeShon, 2002).

The manipulation of participants' alignment was also successful, as indicated by responses to the pre-war alignment measure. (All responses to this measure were recoded such that Borilia = lower numbers, see Table 6 for descriptive statistics.) When participants were told they were from Dumolia (Aligned just), they identified more with Dumolia (Mean difference from midpoint (4) = 1.99, 95% CIs [1.76, 2.22]; $t(98) = 17.53, p < .001$), whereas when they were told they were from Borilia, they identified more with Borilia (Aligned unjust: Mean difference = -1.89, 95% CIs [-2.13, -1.65], $t(100) = -15.85, p < .001$; Aligned only: Mean difference = -2.04, 95% CIs [-2.25, -1.84]; $t(96) = -19.71, p < .001$). In both conditions in which participants were aligned with an external country, responses were no different from the midpoint; Aligned external: Mean difference = -0.01, 95% CIs [-0.05, 0.03], $t(105) = -0.45, p = .657$; Baseline: Mean difference = -0.02, 95% CIs [-0.08, 0.04]; $t(106) = -0.63, p = .530$.

Table 6

Descriptive Statistics for Alignment Across the Different Conditions and Comparisons Between Pre-War and Post-War Alignment, Study 6.

		Mean alignment ratings (<i>SD</i>)				
<i>Condition</i>		Pre-war	Post-war	<i>t</i>	<i>p</i>	<i>d</i> ^a
1	Aligned just (<i>n</i> = 99)	5.99 (1.13)	6.14 (1.29)	1.347	.181	0.14
2	Aligned unjust (<i>n</i> = 101)	2.11 (1.20)	3.76 (1.34)	13.806	<.001	1.38
3	Aligned external (<i>n</i> = 106)	3.99 (0.22)	5.40 (1.30)	11.006	<.001	1.32
4	Aligned only (<i>n</i> = 97)	1.96 (1.02)	2.43 (1.24)	4.929	<.001	0.50
5	Baseline (<i>n</i> = 107)	3.98 (0.31)	3.99 (0.17)	0.300	.765	0.03

Note. Responses were made on a 1-7 scale. Lower numbers indicate stronger identification with Borilia (the unjust country).

^aCohen's *d* corrected for the correlation between the judgments (Morris & DeShon, 2002).

The post-war alignment scores revealed a slightly different picture. As Table 6 shows, once the nature of the war had been revealed, participants who were aligned with the just side (Condition 1) did not show any shift in their alignment judgments. However, for participants who were aligned with the unjust side (Condition 2), learning about their country's unjust actions shifted their judgments such that they were only marginally different from the scale midpoint; Mean difference = -0.24, 95% CIs [-0.50, 0.03]; $t(100) = -1.78, p = .078$. Meanwhile, alignment judgments shifted in the direction of the just

side for participants who were aligned with an external country (Condition 3); this is consistent with the possibility that in our previous studies, participants were implicitly aligning themselves with the just side. Alignment judgments did not shift at all when participants were aligned with an external country and the war did not involve a just and unjust side (Condition 5; see Table 6 for test statistics). Curiously, when the war was morally symmetric and participants were aligned with one side (Condition 4), the resumption of hostilities shifted participants' identification towards the middle of the scale (away from their own country's end of the scale).

Table 7

Profiles of Feelings Across the Different Aligned Conditions (1-3), Study 6.

<i>Feeling</i>	Mean (SD)			<i>F</i> (2, 294)	<i>p</i>	η_p^2
	Aligned only (Condition 4)	Aligned unjust (Condition 2)	Aligned just (Condition 1)			
Anger	4.20 (1.89) _a	5.71 (1.56) _b	2.97 (1.97) _c	57.569	<.001	.28
Shame	3.57 (1.76) _a	5.83 (1.54) _b	2.17 (1.58) _c	129.397	<.001	.47
Disgust	3.85 (1.92) _a	5.69 (1.68) _b	2.69 (1.85) _c	69.647	<.001	.32
Fear	5.33 (1.72) _a	5.17 (1.78) _a	4.24 (2.10) _b	9.664	<.001	.06
Anxiety	5.63 (1.52) _a	5.32 (1.70) _a	4.44 (2.11) _b	11.542	<.001	.07
Pride	2.44 (1.63) _a	1.38 (0.89) _b	3.43 (1.82) _c	47.347	<.001	.24
Happiness	1.50 (1.02) _a	1.28 (0.74) _a	2.26 (1.63) _b	18.855	<.001	.11
Sadness	5.12 (1.64) _a	5.78 (1.42) _b	3.80 (2.17) _c	32.485	<.001	.18
Gratitude	1.94 (1.41) _a	1.35 (0.83) _b	2.99 (1.76) _c	36.062	<.001	.20

Note. Participants responded on a 1-7 point scale. Different subscripts in each row indicate significant differences, $p < .05$, Bonferroni corrected for multiple comparisons.

These results show that the alignment manipulation successfully influenced *pre-war* alignment judgments. The *post-war* alignment judgments were more equivocal: When war resumed, participants who had previously identified with the unjust side no longer did so (Condition 2). However, notwithstanding these later identification judgments, there is still good evidence that participants *felt implicated* in the side specified by the manipulation. As Table 7 shows, participants who were aligned with the unjust country (Condition 2) reported considerably greater negative moral emotions (anger, disgust, shame) about their own country than did participants aligned with the just country (Condition 1), or with one of the countries in the morally symmetric war (Condition 4).

They also reported significantly lower pride and gratitude, and higher sadness. These emotion reports indicate that, while participants on the unjust side may not have identified strongly with their country's war effort, they still felt themselves part of that country, and experienced emotional reactions that were consistent with that sense of belonging.

Descriptive statistics for the moral defensibility judgments are presented in Figure 5. In the aligned just condition (Condition 1), there was an effect of side, as expected, such that participants regarded the just soldier's actions as more defensible ($M = 5.18$, $SD = 1.53$) than the unjust soldier's actions, $M = 4.00$, $SD = 1.81$; Mean difference = 1.18, 95% CIs [0.77, 1.60]; $t(98) = 5.662$, $p < .001$. There was a similar effect of side in the aligned external condition (Condition 3; just: $M = 5.12$, $SD = 1.69$; unjust: $M = 4.37$, $SD = 1.75$; Mean difference = 0.76, 95% CIs [0.48, 1.03]; $t(105) = 5.397$,

Figure 5: Moral defensibility judgments of the actions of Borilian (dark bars) and Dumolian (light bars) soldiers, organized by condition, Study 6. Error bars represent 95% confidence intervals of the mean. In the three asymmetric war conditions (1-3), Borilia was always the country which violated the ceasefire; i.e., Borilia was the unjust country. In the three conditions in which participants were aligned with one country or the other (1, 2, 4), the dotted bars indicate the country with which they were aligned. The effect of side was significant in all conditions except baseline; Dumolia: $M = 4.66$, $SD = 1.86$; Borilia: $M = 4.60$, $SD = 1.89$; Mean difference = 0.07, 95% CIs [-0.07, 0.20]; $t(106) = 0.961$, $p = .339$.

$p < .001$), which shows – consistent with our prior studies – an effect of moral considerations (i.e., the justness of each side's cause) in the absence of explicit alignment with one of the warring parties. The effect of side was also significant in the aligned unjust condition (Condition 2; just: $M = 5.22$, $SD = 1.50$; unjust: $M = 4.98$, $SD = 1.55$; Mean difference = 0.24, 95% CIs [0.03, 0.45]; $t(100) = 2.254$, $p = .026$). Critically, however, it was significantly attenuated in this condition relative to the effects in both Condition 1 (interaction: $F(1, 198) = 16.495$, $p < .001$, $\eta_p^2 = .08$) and Condition 3 (interaction: $F(1, 205) = 8.593$, $p = .004$, $\eta_p^2 = .04$). Similarly, the effect of side was marginally attenuated in Condition 3 relative to Condition 1 (interaction: $F(1, 203) = 2.960$, $p = .087$, $\eta_p^2 = .01$). These interactions all indicate that implicit alignment with the just side may underpin the observed asymmetry to some degree – when participants were explicitly aligned with the unjust side, thereby reversing their default alignment, the asymmetry weakened, albeit not entirely.

We also compared the effects in Conditions 1 (aligned just) and 4 (aligned only), which allows an additional examination of the role of moral (i.e., justice) considerations, independent of the effect of alignment: Condition 1 features both alignment and moral considerations (one side was just, the other not), whereas Condition 4 features only alignment. The effect of side was larger in Condition 1 relative to Condition 4 (interaction: $F(1, 194) = 20.447$, $p < .001$, $\eta_p^2 = .10$),¹⁴ thus offering a further demonstration that alignment cannot fully explain the asymmetry – moral considerations play a role in addition to alignment. This result complements the basic effect of side in Condition 3 (aligned external), when participants were aligned with a neutral third party. (See Supplemental Materials for additional comparisons among conditions.)

¹⁴ In order to calculate this interaction, we needed to directly compare the two ingroup conditions against one another. This required switching the alignment coding in Condition 4 since participants were aligned with Dumolia (rather than Borilia) in this condition. The simple effect of side was significant in Condition 4; outgroup: $M = 4.45$, $SD = 1.73$; ingroup: $M = 4.64$, $SD = 1.66$; Mean difference = -0.19, 95% CIs [-0.31, -0.06]; $t(96) = 2.880$, $p = .005$.

Discussion

By independently manipulating both moral considerations (just vs. unjust sides) and participants' alignment with either side, Study 6 examined whether participants' implicit alignment contributes to the asymmetry that we have observed throughout the preceding studies. Consistent with prior studies, when the war involved only moral considerations (Condition 3; aligned external), participants judged the actions of the soldier on the just side to be more morally defensible. As compared with previous studies, in this condition, participants were explicitly aligned with a neutral third party, thereby blocking implicit alignment with the just side as a possible contributing factor to the asymmetry. Participants similarly judged the soldier on the just side more favorably when they were explicitly aligned with that side (Condition 1). By contrast, when participants were explicitly aligned with the unjust side (Condition 2), the asymmetry was significantly attenuated (relative to both Conditions 1 and 3). This attenuation suggests that implicit alignment with the just side is responsible for part of the standard effect. However, even in the aligned unjust condition, participants judged the actions of the soldiers on the just side (their outgroup members) to be more morally defensible than those of soldiers on the unjust side (their ingroup members), showing that alignment alone does not fully explain the asymmetry.

Supplemental Study 3. In sum, we have found evidence for two factors that seem independently to contribute to the asymmetry – the presumption that soldiers endorse their own side's cause for war, and the implicit tendency for participants to align themselves with the just side and judge its soldiers as part of their ingroup. When each of these factors is experimentally overturned, the asymmetry is significantly attenuated. In a final study, we asked whether the asymmetry could be completely eliminated with concurrent, independent manipulations of both of these factors.

We independently manipulated participants' alignment, and soldiers' identification with their own side's cause for war (between-subjects), alongside a within-subjects manipulation of side. The results of this study ($N = 415$) showed that the asymmetry persisted even when both of these attenuating factors were combined. When participants were aligned with the unjust side of a war (as in the present study), *and* the soldiers on both sides of the war rejected their countries' war efforts, the asymmetry was

significantly smaller (defending: $M = 4.74$, $SD = 1.68$; invading: $M = 4.27$, $SD = 1.80$; $t(86) = -4.979$, $p < .001$, $d = 0.36$)¹⁵ than in a control condition in which participants were aligned with a neutral third party, and no information was provided about the soldiers' level of endorsement (defending: $M = 5.41$, $SD = 1.64$; invading: $M = 4.34$, $SD = 2.03$; $t(63) = -4.977$, $p < .001$, $d = 0.64$); interaction between side and condition (the two conditions just described), $F(1, 139) = 5.461$, $p = .021$, $\eta_p^2 = .04$. However, even in this study the asymmetry persisted in all conditions, suggesting that part of the effect remains unaccounted for. (Full details of this study are provided in the Supplemental Materials and at osf.io/zwcmv.)

General Discussion

The language of just war theory is routinely employed by politicians (Carter, 2003; Obama, 2009), journalists (Mackey, 2009), and veterans (Brock & Lettini, 2012) in discussing the morality of war. This theory makes an important distinction between judgments about *going to war* (resort to war), and about the *conduct of war*; a distinction referred to as the independence thesis. As a corollary, it maintains that soldiers on either side of a war, even a morally asymmetric war, are moral equals (the principle of combatant equality), and should be judged only by their conduct in war; not by the cause for which they fight. Significant philosophical debate surrounds this element of just war theory (e.g., McMahan, 2004, 2009; Walzer, 2006). Our goal was to approach the question descriptively, by investigating whether ordinary individuals make judgments that are consistent with the principle of combatant equality, a question which has received little empirical scrutiny. Our studies clearly show that American MTurk workers do *not* generally make moral judgments that align with the principle of combatant equality. Rather, their judgments of the defensibility of an individual soldier's actions are heavily influenced by the *justness* of the cause for which the soldier is fighting. Soldiers on the just and the unjust side of a hypothetical war are therefore judged asymmetrically.

This asymmetry in judgments was remarkably robust. It occurred whether soldiers were acting under orders or on their own initiative (Study 3); whether their actions causally contributed to their side's

¹⁵ Cohen's d corrected for correlation between judgments, as all participants judged both soldiers (Morris & DeShon, 2002).

war effort or not (Study 4); whether soldiers identified with their country's cause for war or not (Studies 4 and Supplemental Study 2); whether the soldier had generally good or bad character (Study 5); and whether the participants were part of the same national group as the soldier or not (Study 6 and Supplemental Study 3). It also occurred reliably in both joint and separate evaluation conditions (Studies 1 and 2), suggesting that participants normatively endorsed asymmetric judgments.

The robustness of the effect across these various manipulations provides information about its underlying cause. The effect was only marginally, and inconsistently, attenuated when soldiers acted on orders as opposed to their own initiative (Study 3, see also Supplemental Materials). This suggests that the effect is not primarily explained by the presumption that soldiers' actions reflect their own independent volition, and a corresponding neglect of the factors that situationally constrain soldiers in war – even when these constraining factors are made entirely obvious, the effect persisted. The fact that the effect was not attenuated even when soldiers' actions did not causally contribute to war outcomes (Study 4) suggests that the effect is not explained by the differential outcomes of soldiers' actions. And the fact that the effect was not attenuated when the soldiers' overall character was stipulated (Study 5) suggests that the effect is not explained by inferences of general character from the target soldier's side. However, the fact that the effect was significantly attenuated when soldiers were described as not identifying with their side's cause for war (Studies 4 and Supplemental Study 2, see also Supplemental Materials), and when participants were explicitly aligned with the unjust side (Study 6 and Supplemental Study 3), suggests that these two factors comprise a meaningful part of its explanation. In other words, people tend to presume that soldiers endorse their own side's cause for war, and this then influences their moral judgments of soldiers' actions. Similarly, people tend implicitly to align themselves with the just side of a war, and this sense of sharing (moral) group membership with soldiers on the just side also influences their judgments of individual soldiers in the war. These two factors may not explain the entire asymmetry, but together, they can explain a substantial part of it.

There were two other notable boundary conditions on the asymmetry. First, when soldiers performed extremely good actions (e.g., helping enemy civilians, sacrificing their own life to save their

comrades) or extremely bad actions (e.g., killing enemy civilians, defiling enemy corpses), the asymmetry was no longer observed, though it did emerge reliably for actions that were short of these extremities (Study 3). This may be partially reassuring for those who have been concerned that a rejection of the independence thesis would lead to soldiers on the just side having *carte blanche* – that is, moral liberty to take any actions whatsoever, on the grounds that their ends justify their means (Benbaji, et al., 2015; McMahan, 2009). Ordinary people, at least, do not see it that way.

The second boundary condition is that when the arguments of traditional just war theory – specifically, the independence thesis and the principle of combatant equality – were presented in the abstract, 60% of participants agreed with them (Study 2). This proportion was considerably larger than that observed when people made concrete judgments of soldiers on either side of an unjust war in the joint evaluation condition of the same study (34%). In other words, people endorsed the principle of combatant equality abstractly, but did not make judgments that aligned with it. This discrepancy was surprising, but it has a potential post hoc explanation. Research suggests that abstraction (or higher levels of construal) makes moral judgments more principled and value-based (Eyal, Liberman, & Trope, 2008; Eyal, Sagristano, Trope et al. 2009), which may be why the principle of combatant equality was more convincing when considered in the abstract. However, because our principal focus was on concrete judgments, we did not pursue this interesting discrepancy further.

While our main interest was in judgments of the moral defensibility of soldiers' actions, the asymmetry also reliably emerged in evaluations of the soldiers' *character* – both their core moral goodness (e.g., integrity and kindness), and their strength of character (e.g., dedication and competence; see Piazza et al., 2014, for the distinction between *core goodness* traits and *value commitment* traits). However, there was a greater asymmetry in evaluations of the soldiers' core goodness traits as compared with their strength of character traits. In fact, when shared variance with core goodness was partialled out, the effect of side on strength of character judgments was negligible (and not significant). Strength of character traits were also less closely tied to judgments of the soldiers' actions than were moral goodness traits. This dissociation might result from there being a closer conceptual link between core moral

goodness traits and the features that make a war just or unjust, leading to these traits being more susceptible to the asymmetry.

Overall, the nine studies reported here provide a comprehensive investigation of a central tenet of just war theory, the principle of combatant equality. These studies show that this principle is not widely followed by lay individuals, and they identify two independent contributing reasons for this. Since this principle forms the cornerstone of traditional just war theory, the present studies have important implications for the theory, as well as for moral and social psychology.

Implications for Just War Theory

The present findings have important implications for just war theorists insofar as they want their theories to connect with human moral psychology. Indeed, one of the goals of both traditional and revisionist just war theory is actively to shape public opinion about war. For example, Walzer (2006) believes that traditional just war theory “worked ... in helping Americans understand what was wrong in Vietnam,” (p. i). In counterpoint, Leveringhaus (2012) believes that revisionist just war theory, “can be used to instill a sense of individual responsibility and conscience in citizens and members of the armed forces” (p.17), while McMahan (2012) writes that, “What revisionists hope is that their work can be a source of guidance in establishing new international institutions that will eventually make it possible to reform the law of armed conflict” (para. 32). The present results establish that revisionist just war theory corresponds more closely to the current state of lay opinion within the United States (at least among the MTurk subset of the population) concerning the principle of combatant equality than does traditional just war theory.¹⁶ Interestingly, this does not seem to result from ordinary people’s appreciation and endorsement of the philosophical bedrock on which revisionist theorizing is based. Indeed, neither of the two psychological factors that seem to give rise to the asymmetry – people’s belief that soldiers identify with their own side’s cause, and people’s implicit alignment with the just side – are emphasized within

¹⁶ Our studies do not show that ordinary individuals can be categorized as “revisionists” as opposed to “traditionalists” in general terms, since the debate between these theories extends beyond the principle of combatant equality. Instead, they are relevant specifically to the principle of combatant equality.

revisionist just war theory itself. However, the fact that people's judgments end up aligning with revisionist theory, regardless, is instructive. It shows that traditional just war theorists face an uphill battle in convincing lay individuals to judge soldiers on either side of an unjust war as moral equals (though we acknowledge that this idea is seen as more acceptable in the abstract, see Study 2).

Implications for Moral and Social Psychology

Earlier research in social psychology has provided a nuanced and complex picture of the factors that increase or decrease support for war, when one's own group is involved as a perpetrator or a victim (Bar Tal, 2007; Hewstone, 2000; Hornsey & Hogg, 2000; Noor, Shnabel, Halabi, & Nadler, 2012). A core idea of this research is that the knowledge that one's own country is engaged in unjust actions in war (e.g., killing civilians) can generate an experience of "intragroup" cognitive dissonance (e.g., why is my country, which is good, engaging in harmful violence?) which needs to be resolved somehow (see Aquino, Reed, Thau, & Freeman, 2006; Glasford, Dovidio, Pratto, 2009, Study 1; Fiske & Rai, 2014; Leidner & Castano, 2012). Individuals who tend to glorify their own country react to the intragroup dissonance evoked by their own country's unjust wars by de-emphasizing the need for justice to be delivered to the perpetrators, a response that is mediated by dehumanizing and diminishing the suffering of outgroup victims (Leidner, Castano, Zaiser, & Giner-Sorolla, 2010). Our work branches out from these investigations by directly manipulating the overall justness or unjustness of the parties to war, thereby showing the profound effect this has on moral judgments of soldiers' actions. Although our studies are not the first to investigate these factors (see Benbaji et al., 2015), they are the first to demonstrate comprehensively the effects of justness in shaping moral judgments of the conduct of war by third-party judges, and the first to provide an explanation for this effect. Further, while earlier work primarily focuses on judgments of support for or (opposition to) one's own country going to war (i.e., judgments of resort to war, see Watkins, 2016, for a review), we examined judgments of a wide range of actions undertaken during war, conducted by soldiers on both sides of the conflict.

Though we have not pursued the downstream consequences of these judgments, several can be hypothesized. Overall moral judgments of the justness of one's own country's war efforts likely influence

political attitudes and behavior regarding that war, which may be expressed in rallies, demonstrations, or in the voting booth. Our results go further than that, however, because they also show how judgments of individual soldiers, and not the war itself, are influenced by the justness of the cause for which soldiers fight (see also Watkins & Laham, 2018b). It is conceivable that such judgments could have a substantial effect on the way soldiers returning home from war are received – whether they are accepted and valorized, or alternatively, rejected and denigrated. Such judgments may also affect people's support for policies that aid soldiers' transition back into civilian life, which in turn may have an effect on the overall adjustment and well-being of soldiers themselves. A soldier who returns from a war that is widely perceived to be unjust may, in the worst cases, be criticized, shunned, or otherwise rejected by his or her local community. Such findings, compounded with the sense of betrayal that soldiers may also feel towards the governments that sent them to fight an unjust war in the first place (see e.g., Glenton, 2016), may make the transition back to ordinary civilian life ever more difficult, thereby exacerbating their susceptibility to mental health problems (Brock & Lettini, 2012; Sherman, 2015). Future research might investigate how social variables pertaining to returning soldiers' public image intersect with their post-war mental health.

Limitations and Future Directions

A strength of the present studies is their inclusion of a range of different kinds of modern war, and similarly, their inclusion of a wide variety of possible actions taken by soldiers. Notwithstanding this, our studies are limited in their focus on hypothetical and *conventional* wars: Military contests between nation states fought with conventional national armies. Our studies exclude consideration of civil wars, cold wars, and other forms of unconventional, asymmetric war. The war on terror, for example, does not fit neatly into the framework provided by just war theory because of its diffuse geography, because of the difficulty of identifying which actions comprise this war, and because of the difficulty of precisely identifying its combatants (e.g., Clark & Raustilia, 2007, argue that terrorists are not combatants, but

instead, criminals).¹⁷ An important avenue for extending the present findings, then, would be to other kinds of war, as well as to scenarios involving real countries and conflicts they have engaged in.

A further issue worth considering concerns soldiers' knowledge about their country's justness or unjustness in going to war. Perhaps one reason the asymmetry emerged in our studies is because our vignettes all implied (by default) that the soldiers did have such knowledge. But what might have happened if we had instead instructed participants that the soldiers on the ground had no knowledge of the justness of their own side's cause? Is it possible that the asymmetry in our studies could have been eliminated with such an instruction?¹⁸

This is indeed possible, although our studies suggest that it is unlikely. In Study 4 and Supplemental Study 2, we found that when a soldier believed his country's cause was unjust, and *rejected* it, judgments were more symmetrical (judgments of the soldier on the unjust side were more lenient). Yet the asymmetry still persisted to a significant degree under these conditions – soldiers on the just side who rejected their own side's cause for war were still judged significantly more favorably than soldiers on the unjust side who rejected their side's cause. While knowing and rejecting one's own side's cause for war is not the same as not knowing it in the first place, rejection does seem to be a more extreme mental state manipulation than mere ignorance because it indicates considerably greater psychological “distance” from one's own side than does ignorance. This in turn would seem to imply that the asymmetry is also likely to persist if we had employed the “milder” mental state manipulation of instructing subjects that the soldiers were merely ignorant of their own side's cause. Of course, we cannot be sure about this, and have no data about this that speaks to this hypothesis directly¹⁹; it is certainly interesting enough to warrant further research.

¹⁷ However, Walzer (2006) writes that although “asymmetric warfare has its own set of moral difficulties and immoral cruelties that require specific, detailed consideration” (p.191), the same moral rules – that is, the principles concerning decisions to go to war and how a war is fought, outlined by just war theory – can be applied to both armies and insurgents or terrorists, and he demonstrates this in Walzer (2008).

¹⁸ We thank an anonymous reviewer for raising this possibility.

¹⁹ One possible reason why this ignorance hypothesis might be true is as follows. People might see ignorance as more exonerating than rejection if they infer that a soldier on the unjust side would not have continued to fight in the war

Our studies isolate a challenge to Walzer's independence thesis flowing from the cause for war, to judgments of actions: They show how judgments of soldiers' actions are dependent on judgments of the overall cause they serve. However, a distinct challenge to the independence thesis may arise in the opposite direction, if for instance, judgments of the cause for which soldiers fight are influenced by judgments of specific actions those soldiers carry out.²⁰ This is particularly relevant in cases where soldiers perform especially heinous or meritorious actions, similar to the ones we investigated in Study 3. That study was not capable of addressing this possibility, because judgments of the resort to war were solicited before participants were exposed to information about the specific actions that the soldiers had carried out. However, future research could usefully explore whether the independence thesis might be violated in this "reverse" direction as well.

It would also be useful to explore whether the present findings extend beyond the context of war entirely. Construed in the abstract, the dynamic of war – two (or more) parties locked in an ongoing competitive exchange – is replicated across a variety of other societal contexts, including legal disputes, marketplace competitions, and even sporting competitions. The same question that we ask here could similarly be asked in other contexts, for example, are the low-level employees of an organization that is generally seen as nefarious also judged harshly for the ordinary pursuit of their work activities? On the one hand, based on the present findings we may predict that they would be (particularly given that the

had he possessed knowledge of his own side's unjustness. In our studies, of course, the soldier who rejected his own side's cause did continue to fight notwithstanding his belief (knowledge) of its unjustness. This therefore might be one reason why information about ignorance could be more powerfully attenuating than information about rejection or disavowal. This would indeed be interesting, if it occurred, but to our minds it introduces a wholly new set of considerations beyond those studied in the present project. First, it introduces hypothetical, counterfactual reasoning about what would have happened had the soldiers' state of knowledge been different. Second, it would likely lead to qualitatively different inferences on the two sides, i.e., people might infer that the soldier on the unjust side would have withdrawn with better knowledge, but would be unlikely to infer the same consequence for the soldier on the just side (inferring instead that he would have continued to fight). Third, it also means that the "soldiers" in question would be mentally reclassified as a potential "conscientious objectors." Since our project was focused on soldiers who do indeed fight and kill, and who do so without mistake, we judged this potential follow-up as beyond the ambit of the present investigation.

²⁰ We thank an anonymous reviewer for raising this possibility, and for suggesting ways to test it.

employees are likely to be seen as endorsing the aims of the civilian organization they have joined). On the other hand, social context matters for moral judgment (Carnes, Lickel, & Janoff-Bulman, 2015; Simpson, Laham, & Fiske, 2016), and there may be unique aspects of military contexts that produce the judgments we have observed here (see e.g. Fiske & Rai, 2014; Watkins, 2019; Watkins & Laham, 2018a). The answer to this question awaits empirical scrutiny.

Our studies are also limited by their exclusive focus on Mechanical Turk workers within the United States. Though this population is a reliable resource for behavioral studies, and is at least as representative of the U.S. population as are traditional undergraduate subject pools (Buhrmester, Kwang, & Gosling, 2009; Paolacci, Chandler, & Ipeirotis, 2010), this limitation means that our findings cannot yet be generalized more broadly.²¹

Conclusion

The terrible reality of war is a crucible. Soldiers often describe their experiences in war as the most intense of their life, filled with a passion and engagement that is not replicable in peace time (Hedges, 2002; Junger, 2016). Perhaps one reason for this is that the life and death nature of war saturates it with moral elements, yielding a chronically elevated sense of meaning and purpose (Rovenpor, O'Brien, Roblain, Guissmé, Chekroun, & Leidner, 2019). Yet, this moral dimension of war is clearly not confined to the psychology of combatants alone, as war is also viewed in starkly moral terms by complete outsiders. In the present work, we have tackled but one of the moral elements of war – how the justness of a war influences ordinary people's judgments of its combatants – and have demonstrated and (partially) explained a robust asymmetry in such judgments. We hope that this work serves as an invitation for moral psychologists to explore this rich territory further.

²¹ Another socio-cultural factor that might matter is military experience. In a short MTurk study, we found that out of 134 participants, 5 reported that they personally have military experience (3.7%, 95% CIs [2.88, 4.52]), whereas 113 reported that they did not. The remaining 16 participants did not respond, or gave an uninterpretable answer. Our largest study includes 720 participants, so if this same proportion holds, this study would have approximately 27 veterans, which is too small a number to conduct any additional analyses. Full details of this study are provided in the Supplemental Materials.

Context of Research

The ideas for the present project emerged from the first author's visit to the second author's lab, supported by an Endeavour Fellowship. They extended upon the ideas contained in the first author's Ph.D. thesis. We are currently following up the findings of the present paper by investigating the principle of combatant equality as it is applied in moral judgments of soldiers fighting in real wars (e.g., the Vietnam War, World War II).

Pre-print

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Supplemental Materials

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Study 1

The Study 1 Supplemental Materials contain information about additional questions we asked participants, and the results for those questions, as well as a note on demographic variables.

1. Additional methods: categorical judgments about decision to enter the war
2. Additional results: categorical judgments (resort and conduct), moral goodness judgments
3. Correlation between resort and conduct judgments
4. A note on demographic variables (footnote 5)

1. Categorical judgments about decision to enter the war

After being asked to make a continuous moral judgment about the country's *decision to enter the war*, participants were also asked a categorical question about the same issue. In the separate conditions, this question was "If you *had* to make a judgment one way or the other, do you think the [defending/invading] country's decision to go to war was **morally defensible**?" Response options were "Yes: the [defending/invading] country's decision to go to war was morally defensible" and "No: the [defending/invading] country's decision was *not* morally defensible". In the joint evaluation condition, the question was "If you *had* to make a judgment one way or the other, do you think one country's decision to go to war was **morally more defensible** than the other country's decision to go to war?" Response options were "No: the decision to go to war was *equally* morally defensible for both countries", "Yes: the **invading country's** decision to go to war was morally *more* defensible", or "Yes: the **defending country's** decision to go to war was morally *more* defensible." In each condition, the response options were presented in a random order for each participant.

2. Additional results

Joint condition, decision to enter the war: In the joint evaluation condition, participants judged that the leaders of the defending country had made a more morally defensible decision to go to war ($M = 5.82$, $SD = 1.39$) than had those from the invading country, $M = 2.32$, $SD = 1.63$; $F(1,71) = 151.26$, $p < .001$, $\eta_p^2 = .68$. This same difference in the separate evaluation conditions is reported in the main manuscript.

Decision to enter the war: When making a categorical judgment, 77.6% of participants in the defending condition judged that the decision to go to war was morally defensible, compared with only 15.5% in the invading condition, $\chi^2(N = 147) = 61.34$, $p < .001$. In the joint evaluation condition, 80.6% responded that the defending country's decision was more morally defensible, and 19.4% said the decision was *equally* morally defensible for both countries; *no* participants said that the invading country's decision was more morally defensible. This distribution of responses was significantly non-uniform, $\chi^2(N = 72) = 26.89$, $p < .001$, and differed significantly from what would be expected if the true median response was

“equally morally defensible” (one-sample sign test, $p < .001$). These findings are consistent with the results of the continuous judgments reported in the main manuscript.

Moral defensibility of soldiers’ action (categorical): Across the separate evaluation conditions, participants judged the defending soldier’s actions to be morally defensible considerably more often (88.2%) than the invading soldier’s actions (32.4%), $\chi^2(N = 147) = 51.59$, $p < .001$. In the joint evaluation condition, some participants (25.0%) judged the actions of the soldiers on either side as equally morally defensible, but virtually everyone else (72.2%) judged the actions of the soldiers on the defending side as more morally defensible. This distribution of responses was significantly non-uniform ($\chi^2(N = 72) = 54.33$, $p < .001$), and significantly different from what would be expected if the true median response were “equally morally defensible” (one-sample sign test, $p < .001$). These results are also consistent with the results of the continuous judgments, reported in the main manuscript.

Moral goodness judgments (1 = *very morally bad*, 4 = *neutral*, 7 = *very morally good*): In the separate evaluation condition, participants appeared to consider it relatively neutral (in terms of moral goodness or badness) for soldiers on the defending side to kill soldiers on the invading side ($M = 4.26$, $SD = 1.58$, Mean difference from midpoint (4) = 0.26, 95% CIs [-0.10, 0.62], $t(75) = 1.454$, $p = .150$), whereas they considered it morally bad for soldiers on the invading side to kill soldiers on the defending side ($M = 2.94$, $SD = 1.55$), and these judgments were significantly different from each other, $t(145) = 5.113$, $p < .001$, $d = 0.84$. These results also held in the joint evaluation condition, defending: $M = 4.44$, $SD = 1.52$; invading: $M = 2.67$, $SD = 1.49$, $F(1,71) = 57.202$, $p < .001$, $\eta_p^2 = .45$. For this outcome measure, the difference between judgments of defending and invading soldiers was no greater in the joint than the separate evaluation condition, $t(216) = 1.55$, $p = .123$.

3. Correlation between judgments of decision to enter the war, and moral judgments of soldiers

The strong correlations between judgments of the decision to go to war, and moral judgments of the soldiers' conduct (Table S1) further suggests that participants are not making the distinction prescribed by traditional just war theory.

Table S1

Correlation between judgments of decision to enter the war (resort to war) and judgments about the soldiers' conduct in the war, organised by side of conflict and condition (joint vs. separate), Study 1.

		Correlation with resort to war judgment	
		Defensibility judgment	Goodness/badness judgment
Defending	Joint	.697***	.386**
	Separate	.521***	.479***
Invading	Joint	.599***	.422***
	Separate	.512***	.493***

Note. *** $p < .001$, ** $p < .01$

4. A note on demographic variables (See Footnote 5, Study 1)

Gender (male) and political orientation (conservative) are perhaps the most robust predictors of support for war at a general level; for example, endorsement of hawkish military policies, or support for nationalistic and militaristic values (Bizumic et al, 2013; Eichenberg, 2003; McCleary & Williams, 2009). And indeed, in Study 1, there was a main effect of political orientation in the separate conditions, $F(1,125) = 7.509$, $p = .007$, $\eta_p^2 = .06$, as more conservative participants judged the decision to go to war as more morally defensible overall. (Looking at each condition separately, the correlation between political orientation resort to war was significant in the invading condition, $r(59) = .398$, $p = .001$, but not the defending condition, $r(67) = .105$, $p = .389$.) There were no effects of gender ($p = .809$), nor age ($p = .556$). In the joint evaluation condition, on the other hand, these effects were not significant: politics: $p = .116$; gender: $p = .957$; age: $p = .808$. (Looking at each side separately, the only change from non-significance was a positive correlation between political orientation and judgments of the invading side's resort to war, $r(61) = .273$, $p = .030$, consistent with the results in the separate conditions.)

However, the decision to go to war, or support for war more generally, are not the key outcome variables of interest for the present studies. Rather, we are focusing on moral judgments of conduct *in* war, and in particular on the asymmetry in judgments of soldiers on either side of the war. On the one hand, one might expect that the same variables which predict decisions about going to war (e.g. gender, politics, as above) would also predict judgments of conduct *in* war. On the other hand, a close relationship between resort to war and conduct of war is not a given (as outlined earlier, traditional just war theorists insist on their logical separation), and some previous research has found that individual differences do not reliably predict moral judgment in war (Watkins, 2016). Furthermore, consistent demographic differences in moral judgment seem to be elusive (Hauser, Cushman, Young, Jin, & Mikhail, 2007). Nonetheless, as an example, we ran the analyses from Study 1 again, taking age, gender, and political orientation into consideration.

In the separate conditions, political orientation had a marginal main effect on the outcome variable moral defensibility, $F(1,122) = 3.757$, $p = .055$, $\eta_p^2 = .03$, with political conservatives finding the actions of the soldiers more morally defensible. However, political orientation did not interact with side ($p = .708$), indicating that it did not influence the asymmetry in judgments. Neither age ($p = .583$) nor gender ($p = .361$) significantly predicted moral defensibility judgments. Further, in this analysis, the effect of side was still significant, $F(1,122) = 4.511$, $p = .036$, $\eta_p^2 = .04$.

To investigate whether demographic variables influenced the asymmetry in the joint evaluation condition, we created an "asymmetry score" (i.e. a difference score) for each participant, by subtracting the moral defensibility judgments of the unjust soldier from judgments of the just soldier. This difference score was not significantly correlated with gender, $r(70) = -.145$, $p = .225$; age, $r(70) = .178$, $p = .135$; or political orientation, $r(61) = .084$, $p = .513$.

Overall, then, it seems as if individual differences among our participants did not play a significant role in explaining the asymmetry in moral judgments for soldiers on the just and the unjust side. For the sake of restricting the length of this paper we have therefore opted to highlight the effects of individual differences in the main text only if entering demographic variables into our analyses substantially alters the conclusions. Interested researchers are directed to the data sets provided online (osf.io/xwgr3), and the analyses of the excluded participants, provided on p. 45 of these supplemental materials.

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Study 2

The Study 2 Supplemental Materials contain the full text of the information about (traditional) just war theory participants received in the “abstract” condition and response options, results with demographic variables included, and responses to each of the statements describing the principle of combatant equality.

1. Full text from abstract condition

IDEAS ABOUT WAR

Wars have been a part of human history since the beginning.

Because of this, many people have spent a lot of time thinking about war, and developing ideas about it. One important idea is that moral judgments about the *decision to go to war* should be kept separate from moral judgments about the *soldiers fighting in the war*.

In other words, even if you agree or disagree with the decision to go to war, this **should not** affect your judgments about the actions of soldiers who end up fighting *in* the war.

We are interested in what you think about this idea, whether you agree or disagree with it.

There are many reasons why a country’s leaders might decide to go to war, and these reasons can be considered **just** or **unjust**. For example, if one country illegitimately invades part of another country’s territory in order to take control over their natural resources, such an aggressive military act would generally be considered unjust. But, the country defending itself against such an invasion would have a just reason to go to war.

On the other hand, sometimes a country has a just reason to invade another country – for example to prevent genocide or other human rights abuses perpetrated by the government of that country. In that case, the intervening country’s military actions may be considered just, whereas the military actions of the defending country (in defending itself) may be considered unjust.

You might agree or disagree about the justness of decisions to go to war for self-defence or humanitarian reasons. However, according to the idea mentioned on the previous page, what you think about the **decision to go to war** – a decision made by government officials and policy makers – should be kept separate from what you think about the **actions of the soldiers fighting on either side of the war**.

In fact, according to this idea, the soldiers on either side should be considered **moral equals**. This means that if a soldier on the just side and a soldier on the unjust side are engaging in the same actions, you

should judge them in the same way.

In other words, *regardless of which country they are from*, if they are performing the same actions as soldiers on the other side, those actions are **equally wrong or right**, equally defensible, equally permissible, equally justified, and so on.

It doesn't matter whether a soldier is on the aggressing side or the defending side; if they are doing the same thing, they should be judged in the same way. Even if the *decision* to go to war was just or unjust, the moral status of a *soldier's actions* from one country is equivalent to the moral status of those same actions performed by a soldier from the opposing country.

Please note that not everyone agrees with this idea about war! **You may disagree or agree for whatever reason** - in what follows, we are only interested in your opinion about this idea.

Do you agree with the idea described on the previous pages?

You can only pick one answer or the other, however if you would like to add anything to your response please use the box below.

I agree: Judgments about the moral conduct of soldiers' actions **should not** be based on the justness of their country's decision to enter into the war. Regardless of the defensibility of each country's decision to go to war, if soldiers on each side are engaged in the same actions, they are doing something **equally morally defensible** (or indefensible) by fighting in the war.

I disagree: Judgments about the moral conduct of soldiers' actions **should** be based on the justness of their country's decision to enter into the war. A great deal **depends on the defensibility of each country's decision** to go to war, so even if the soldiers on each side are engaged in the same actions, they are not necessarily doing something equally morally defensible by fighting in the war.

2. Results with demographic variables included as covariates

Moral defensibility judgment: For the separate conditions, to test the effects of demographic variables we analyzed the difference in moral defensibility judgments across the just and unjust side in a one-way ANOVA with age, gender, and political orientation included as covariates. Gender had a marginal main effect on the outcome variable moral defensibility, $F(1,118) = 3.227, p = .075, \eta_p^2 = .03$, with men finding the actions of the soldiers more morally defensible than women. Neither age ($p = .606$) nor political orientation ($p = .149$) significantly predicted moral defensibility judgments. Further, in this analysis, the effect of side was still significant, $F(1,118) = 76.449, p < .001, \eta_p^2 = .10$. In the joint evaluation condition, the effect of side (calculated as a difference score) was uncorrelated with gender, $r(72) = -.15, p = .700$, and political orientation, $r(72) = -.098, p = .406$, but positively correlated with age, $r(75) = .277, p = .015$. Older participants, relative to younger participants, judged the actions of the intervening soldiers to be more morally defensible, resulting in a greater asymmetry for older participants.

Moral goodness judgment: The analyses of the moral goodness judgment yielded a similar pattern. In the separate conditions, gender had a significant main effect, $F(1,118) = 4.512, p = .036, \eta_p^2 = .04$, with men finding the actions of the soldiers more morally good than women. Neither age ($p = .339$) nor political orientation ($p = .551$) significantly predicted moral goodness judgments, and the effect of side remained significant, $F(1,118) = 8.633, p = .004, \eta_p^2 = .07$. In the joint evaluation condition, the effect of side (calculated as a difference score) was uncorrelated with gender, $r(74) = -.04, p = .760$, and political orientation, $r(72) = .005, p = .965$, but positively correlated with age, $r(75) = .402, p < .001$. Older participants, relative to younger participants, judged the actions of the intervening soldiers to be more morally good, and the actions of the resisting soldiers to be less morally good, resulting in a greater asymmetry for older participants.

3. Responses to abstract statement, Study 2

Table S2

Comparing Mean Levels of Agreement with Elements of Traditional Just War Theory to the Midpoint of the Scale (4), Abstract Condition, Study 2.

<i>Statement</i>		<i>M (SD)</i>	<i>t(83)</i>	<i>p</i>	<i>Mean Difference (95% CI)</i>
1.	Decisions to go to war can be considered just or unjust. ^a	5.93 (1.03)	17.208	< .001	1.93 (1.71, 2.15)
2.	Moral judgments about decisions to go to war should be kept separate from moral judgments about the soldiers' actions.	4.82 (1.74)	4.335	<.001	0.82 (0.44, 1.20)
3.	When judging soldiers, it doesn't matter which side of the war they are on.	4.40 (1.81)	2.048	.044	0.41 (0.01, 0.80)
4.	Soldiers on both sides of a war are moral equals.	4.20 (1.73)	1.070	.288	0.20 (-0.17, 0.58)
	Composite measure of agreement with traditional just war theory (statements 2-4)	4.48 (1.57)	2.780	.007	0.48 (0.14, 0.82)

Note. Ratings were made on a 1-7 response scale, with higher numbers indicating greater agreement.

^aThis statement reflects a stance that both traditional and revisionist just war theory have in common.

Study 3

Table S3

Labels and Short Descriptions of Each Scenario in Study 4, Ordered by the Mean Defensibility Rating for Each Scenario (from Least Morally Defensible to Most Morally Defensible).

Label	Brief Description	Mean defensibility (SD)
Defile	During a reconnaissance patrol, the target soldier and his unit find three enemy corpses. The target soldier places them in sexually indecent positions.	1.46 (1.00)
Killing Civilian (Revenge)	During an offensive, the target soldier shoots a civilian from the opposing side, because the target soldier feels that killing the civilian would provide a measure of retribution for his own side's losses.	1.56 (1.06)
Failure to Whistleblow	The target soldier witnesses his sergeant execute four civilians, in contravention of international laws of armed conflict. The target soldier does not report the incident. Nobody finds out about the incident.	1.83 (1.32)
Wounded	During an attack, a wounded enemy soldier lays down his weapons and indicates that he surrenders. The target soldier shoots the wounded enemy soldier.	2.20 (1.63)
Torturing Civilian (Unsuccessful)	The target soldier tortures a captured enemy civilian. The civilian does not reveal any useful information.	2.33 (1.60)
Killing Government Worker	During an attack on a government building, the target soldier shoots and kills a government worker.	2.38 (1.56)
Torturing Soldier (Unsuccessful)	The target soldier tortures a captured enemy soldier. The soldier does not reveal any useful information.	2.41 (1.59)
Torturing Soldier (Successful)	The target soldier tortures a captured enemy soldier. The soldier reveals information that is of great military value to the target soldier's side.	2.41 (1.49)
Siege (Successful)	The target soldier is involved in cutting off food supplies to a town in which civilians and some enemy soldiers are hiding. The enemy soldiers eventually surrender.	2.57 (1.77)
Torturing Civilian (Successful)	The target soldier tortures a captured enemy civilian. The civilian reveals information that is of great military value to the target soldier's side.	2.78 (1.88)
Siege (Unsuccessful)	The target soldier is involved in cutting off food supplies to a town in which civilians and some enemy soldiers are hiding. The enemy soldiers do <i>not</i> surrender, and the siege ends.	2.91 (1.60)
Killing Civilian (Strategic)	During an offensive, the target soldier shoots a civilian from the opposing side, because the civilian might be running to alert more enemy soldiers to the fight.	2.98 (1.64)
Execution	The target soldier executes a captured military general from the enemy country.	3.03 (1.85)

Drone	The target soldier is a drone pilot, who blows up a building knowing there may be enemy civilians inside. A young male civilian is killed.	3.08 (1.74)
Risking Lives	The target soldier blows up a building, knowing there may be enemy civilians inside. A young male civilian is killed.	3.13 (1.85)
School	The target soldier leads a mission to occupy a school to use as a strategic command centre. Many of the students are traumatized, and the community is unable to continue to provide education for them.	3.24 (1.79)
Pilot	The target soldier is a pilot, who blows up a building knowing there may be enemy civilians inside. A young male civilian is killed.	3.55 (1.82)
Killing Politician	During an attack on a government building, the target soldier shoots and kills an important enemy politician.	3.79 (1.95)
Killing Soldier	The target soldier shoots and kills an enemy soldier.	4.72 (1.84)
Destroy	During an attack on a government building, the target soldier destroys a building and two government vehicles (no lives are lost).	4.97 (1.86)
Sacrifice	The target soldier is involved in an attack with a group of soldiers. When his fellow soldiers retreat to safety, the target soldier remains behind to provide cover fire. He is killed, but his unit makes it to safety.	5.78 (1.33)
Whistleblowing	The target soldier witnesses his sergeant execute four civilians, in contravention of international laws of armed conflict. He reports the incident to the relevant authorities, and the people involved are punished.	5.93 (1.92)
Helping (Practical)	During a reconnaissance patrol, the target soldier encounters enemy civilians who have a broken truck. He helps them fix the truck.	6.46 (1.12)
Helping (Safe)	During an attack, the target soldier finds a woman and her two children (from the enemy country) hiding in an abandoned building. He escorts them out of the firefight so they can get to safety.	6.68 (0.90)

In the main manuscript we report results of mixed effects models for Study 3, to account for the nested nature of the data (participants responded to more than 1 scenario). But, we also investigated the effects of side and situational constraint in two additional ways.

First, we conducted a by-scenario ANOVA that treated each of the 24 scenarios as a separate case. This analysis revealed an overall effect of side: The actions of the soldier on the just side were deemed to be more morally defensible ($M = 3.82$, $SD = 1.50$) than the actions of the soldier on the unjust side, $M = 3.06$, $SD = 1.57$; $F(1, 23) = 39.21$, $p < .001$, $\eta_p^2 = .63$. However, there was no overall effect of whether or not the soldier was ordered to act (ordered: $M = 3.48$, $SD = 1.43$; own decision: $M = 3.40$, $SD = 1.60$; $F(1, 23) = 1.09$, $p = .307$, $\eta_p^2 = .05$). The interaction between these two variables was marginally significant, $F(1, 23) = 3.99$, $p = .058$, $\eta_p^2 = .15$. This marginal interaction reflected the fact that the effect of side was larger when the soldier acted on his own volition (just side: $M = 3.84$, $SD = 1.63$; unjust side: $M = 2.96$, $SD = 1.64$; $F(1, 23) = 50.57$, $p < .001$, $\eta_p^2 = .69$), than when he was ordered to act (just side: $M = 3.81$, $SD = 1.40$; unjust side $M = 3.16$, $SD = 1.54$; $F(1, 23) = 20.54$, $p < .001$, $\eta_p^2 = .47$), though it was still significant in both conditions.

For the second set of analyses, we regressed moral defensibility judgments on side, situational constraint, and their interaction, for each scenario separately. An overview of all the scenarios is provided in Figure S1 below (which duplicates Figure 2 from the main manuscript). The effects in each scenario are summarized in Figures S2 (side) and S3 (situational constraint). As these figures show, there was an effect of side for the majority of the scenarios, with the exceptions clustering at the most and least morally defensible poles. By contrast, there was an effect of situational constraint for only three out of the 24 scenarios – in those scenarios, the soldiers' (negative) actions were seen as more morally defensible when carried out under orders. The interaction between side and situational constraint was not significant in any scenario.

Overall, then, there is inconsistent support for the notion that the asymmetry is reduced when soldiers are clearly acting under situational constraints (e.g., obeying orders) and thus are less causally responsible for their actions – this attenuation was marginal in a by-scenario analysis, but not apparent at the level of any individual scenario, nor in the mixed effects analyses.

Figure S1 (Duplicates Figure 2 in the Main Manuscript): Moral defensibility judgment for each scenario, as a function of condition, in Study 3. Scenarios are ordered by average moral defensibility, from least morally defensible (left) to most morally defensible (right). Error bars are omitted in the interest of clarity, however see Figures S2 and S3 for further detail.

Figure S2: The effect of side (0 = unjust, 1 = just) on moral defensibility judgment for each scenario in Study 3. The x-axis represents the unstandardized co-efficient of side (greater numbers = greater moral defensibility on just side), in a linear regression including side, situational constraint, and their interaction as simultaneous predictors of moral judgment. Error bars represent bias corrected and accelerated boot strapped confidence intervals (95%). The grey dotted line represents the arithmetic mean of all the effect sizes (for illustrative purposes only). Scenarios are ordered by average moral defensibility, from least morally defensible (bottom) to most morally defensible (top).

Figure S3: The effect of situational constraint (0 = acting on own initiative, 1 = being ordered to act) on moral defensibility judgment for each scenario in Study 3. The x-axis represents the unstandardized co-efficient of situational constraint (greater numbers = greater moral defensibility if ordered to act), in a linear regression including side, situational constraint, and their interaction as simultaneous predictors of moral judgment. Error bars represent bias corrected and accelerated boot strapped confidence intervals (95%). The grey dotted line represents the arithmetic mean of all the effect sizes (for illustrative purposes only). Scenarios are ordered by average moral defensibility, from least morally defensible (bottom) to most morally defensible (top).

Supplemental Study 1

As mentioned in the main manuscript (Discussion to Study 3), we further assessed the effect of situational constraint in a separate study using a correlational design: We measured the extent to which participants generally perceive soldiers to be situationally constrained in their actions, and examined whether this individual difference variable moderated the discrepancy in judgments between soldiers on just and unjust sides of a war. This study was pre-registered using AsPredicted.org (Simonsohn, Simmons, & Nelson, 2017).

Method

Participants. Five hundred participants were recruited through AMT and compensated for their participation. Data from one participant failed to save, leaving a total of 499 (223 male, 272 female, four other, $M_{age} = 36.87$, $SD_{age} = 11.02$). We pre-registered this sample size, and justified it as follows: “With a sample size of 425, we will be able to detect a small effect, $f = 0.18$ ($\eta_p^2 = .03$), at $\alpha = .05$ with 95% power (Faul et al., 2007). However, we will be excluding participants who fail the attention check, so it is useful to have a buffer.” Sixty-seven people failed the attention check question (20 from the just side, 47 from the unjust side) and were filtered out of the following analyses, as planned; the final sample size was thus 433.

Design, materials, and procedure. Participants first provided demographic information, and then answered four questions assessing how constrained (or free from constraint) soldiers’ actions are in war, each on a 7-point scale (*Free*: “How freely chosen are soldiers’ actions during war?” (reverse scored); *Pressure*: “To what extent are soldiers driven by situational pressure when they fight during a war?”; *Circumstances*: “How constrained by the circumstances are soldiers’ actions during war?”; *Situation*: “To what extent are soldiers’ actions in war a product of the situation they find themselves in?”).

They were then presented with a description of a war involving three countries: A small, weak country that was invaded by a neighboring country, and a third non-neighboring country that intervened with military force to repel the invasion from the small country’s territory. The unjust side was the invading aggressor country, and the just side was the intervening country, with the war taking place in the territory of the small victim country. Soldiers on both sides were described as having been sent to a foreign country to fight, which holds constant a potential source of variability in perceived constraint. Participants first judged the defensibility of each country’s decision to enter the war, which again functioned as a manipulation check on justness.

They were then randomly assigned to judge a soldier either from the intervening country (the just country), or from the aggressor country (the unjust country), who had shot and killed an enemy soldier. (In this study we did not include a joint-evaluation condition.) They again made a single moral defensibility judgment of the soldier’s action on a 7-point response scale (1 = *not at all morally defensible*, 7 = *completely morally defensible*), which was the only outcome measure in the present study. Finally,

participants completed an attention check question: They were asked which country the soldier they judged was from (response options: the invading country, the defending country, the victim country). As mentioned, 67 people failed this attention check. Full materials are available at osf.io/zwcmv.

Results

Participants judged the aggressor country as having made a less defensible decision to enter the war ($M = 1.82$, $SD = 1.45$) than the intervening country, $M = 5.88$, $SD = 1.25$; $F(1, 431) = 1593.284$, $p < .001$, $\eta_p^2 = .79$. Also consistent with the previous studies, participants judged the action of the soldier on the just side as more morally defensible ($M = 5.55$, $SD = 1.43$) than the same action by the soldier on the unjust side, $M = 4.04$, $SD = 1.82$; $F(1, 430) = 92.440$, $p < .001$, $\eta_p^2 = .18$.

The main question in the present study was whether the measure of perceived constraint would moderate this asymmetry. The four constraint items did not form as reliable a scale as we had hoped. After reverse-scoring the first item, Cronbach's $\alpha = .626$ (our pre-registered cut-off was .700). We therefore report the results for a composite scale of the four items here, and for each item separately below. Contrary to our expectation, perceived constraint was generally high; it does not appear that participants are generally neglecting situational constraint when considering soldiers fighting in war (Mean constraint = 5.36, $SD = 0.86$, Mean difference from midpoint (4) = 1.36, 95% CIs [1.28, 1.44], $t(431) = 33.03$, $p < .001$). We next used Hayes (2012) PROCESS Macro for SPSS to test whether the mean-centered composite constraint measure moderated the effect of side on moral defensibility judgments.²² The interaction term was not significant (effect estimate = .223, $F(1, 428) = 1.51$, $p = .219$), indicating that the effect of side on moral defensibility judgment did not depend on the degree of perceived constraint. The direct effect of side on moral defensibility remained significant in this analysis (effect estimate = 1.479, $p < .001$), and the direct effect of constraint was not significant (effect estimate = .150, $p = .244$).²³

Divergence from Pre-Registered Plan We diverged from the pre-registered analysis plan in two ways. First, the perceived constraint scale did not have a Cronbach's $\alpha > .700$, which was our cut-off for combining it into a composite scale. We therefore report the results of the composite scale in the main manuscript and above, and the result of the same analysis with each item separately in Table S5, below. We also report descriptive statistics and correlations among the items in Table S4 below. The second change

²² These moderation analyses were not run exactly as planned: We neglected to mention in our pre-registration the possibility that we would first need to mean-center the constraint measure, in order to avoid multicollinearity problems.

²³ In an exploratory linear regression, regressing moral judgment on condition (unjust vs. just) and the mean-centered constraint measure (but not including the interaction term), both condition and constraint had significant direct effects on moral defensibility. The effect of constraint was $B = 0.262$, $SE = .091$, $t(428) = 2.894$, $p = .004$. In other words, although constraint does not moderate the effect of side on moral defensibility, perceptions of greater constraint are associated with judging soldiers' actions as more morally defensible.

from our original plan was that we mean-centred the perceived constraint variables (composite scale and individual items) in order to avoid multicollinearity problems in the moderation analyses. The only significant effect (except for the effect of side) was at Step 2, where the extent to which soldiers were seen as driven by situation pressure positively predicted moral defensibility judgments.

Table S4

Descriptive Statistics for the Four Items Assessing How Free From Situational Constraint a Soldier is Perceived to be in War, Supplemental Study 1

	<i>Item</i>	<i>M(SD)</i>	2	3	4
1	Free	3.16 (1.45)	-.190***	-.334***	-.152**
2	Pressure	5.75 (1.04)		.348***	.444***
3	Circumstances	5.32 (1.25)			.384***
4	Situation	5.54 (1.21)			-
	Composite Constraint	5.36 (0.86)			-

Note. For the “free” item, higher numbers indicate greater freedom. For the other three items, higher numbers indicate greater situational constraint.

*** $p < .001$

Table S5

Results of hierarchical linear regression analyses testing whether perceived constraint (each item separately) moderates the effect of side on moral defensibility judgments. Significant effects are in **bold**. Supplemental Study 1

		95% Confidence Intervals				β	t	p	ΔR^2
		B	Std. Error	Lower Bound	Upper Bound				
Step 1	Side	1.504	0.156	1.197	1.812	.421	9.615	<.001	.18***
Step 2	Side	1.471	0.155	1.166	1.776	.411	9.484	<.001	.03**
	Free	-0.012	0.057	-0.124	0.099	-.010	-0.218	.827	
	Pressure	0.244	0.085	0.077	0.411	.143	2.878	.004	
	Circumstance	-0.005	0.071	-0.145	0.136	-.003	-0.067	.947	
	Situation	0.056	0.074	-0.09	0.202	.038	0.758	.449	
Step 3	Side	1.472	0.155	1.166	1.778	.412	9.467	<.001	<.01
	Free	-0.006	0.085	-0.173	0.160	-.005	-0.074	.941	
	Pressure	0.197	0.125	-0.049	0.443	.115	1.575	.116	
	Circumstance	-0.007	0.105	-0.213	0.198	-.005	-0.071	.943	
	Situation	-0.003	0.106	-0.211	0.204	-.002	-0.031	.975	
	Side x Free	0.120	0.149	-0.173	0.413	.058	0.805	.421	
	Side x Pressure	0.004	0.144	-0.278	0.286	.002	0.030	.976	
	Side x Circumstance	0.081	0.171	-0.255	0.417	.035	0.474	.635	
	Side x Situation	-0.021	0.114	-0.246	0.204	-.013	-0.185	.853	

An anonymous reviewer requested that we explain why we used the PROCESS Macro for the analyses reported in the main manuscript (and above), rather than the linear regression function built in to SPSS. We don't have a good answer; the first author has simply become used to using PROCESS, finds it intuitive and easy, and so when we were writing our pre-registration that was the method that came to mind.

Pre-print

Study from Footnote 10, Study 4

In this study we wanted to test our assumption that soldiers were perceived to identify with their own country's cause for war, if no additional information was provided.

Method

Three-hundred participants were recruited from AMT. One extra person participated, so the full sample was 301 (136 male, 165 female, none other; $M_{age} = 36.05$, $SD = 11.42$).

Participants were first given information about a war with a just and an unjust side (as in Study 3), and were asked to make a moral judgment about both countries' decision to enter the war (in a random order). Then they were asked to think about a soldier on either the just side or the unjust side, and indicate whether he identified with either country, and if so, to what extent (bolding and italics in original: "To what extent do you think the soldier **endorses each country's war effort?**", "What do you think the soldier feels about whether **each country did the right thing in going to war?**", What do you think the soldier thinks about **how justified each country was** in going to war?"). These items were combined into a single measure of identification ($\alpha = .944$), and this was the main outcome measure of the present study: we simply wanted to know whether participants assumed that the soldier identified with his own country (when given no further information).

After the identification items, participants were asked to make a moral defensibility judgment about the soldier when he shoots and kills an enemy soldier. Finally, they responded to an attention check question (which country was the soldier from), provided demographic information, and were debriefed and thanked.

Results

Thirty-three people responded to the attention check incorrectly, and are filtered out of the following analyses. As in previous studies, the manipulation of resort to war was successful: participants judged the defending country's resort to war as much more morally defensible ($M = 5.93$, $SD = 1.37$), than the invading country's, $M = 1.71$, $SD = 1.40$; $F(1, 267) = 934.294$, $p < .001$, $\eta_p^2 = .78$.

The identification measure was scaled so that lower numbers indicated identification with the unjust side. As expected, soldiers on the unjust side were perceived to identify with their own side, $M = 3.08$, $SD = 1.49$; Mean difference from midpoint (4) = -0.921, 95% CIs [-1.179, -0.664]; $t(130) = -7.078$, $p < .001$. Meanwhile, soldiers on the just side were perceived to identify with *their* own side, $M = 6.09$, $SD = 0.99$; Mean difference from midpoint = 2.088, 95% CIs [1.920, 2.256]; $t(136) = 24.570$, $p < .001$.

Perceived identification was the main outcome measure of this pilot study, however we had also included a question about the moral defensibility of the soldiers' actions, and we were therefore also able to get a first look at the relationship between identification and moral defensibility judgments. Consistent with previous studies, participants judged the action of the soldier on the just side, when he shot and killed

an enemy soldier, as more morally defensible ($M = 5.63$, $SD = 1.42$) than the same action by the soldier on the unjust side, $M = 3.86$, $SD = 1.94$; $F(1, 266) = 72.499$, $p < .001$, $\eta_p^2 = .21$.

Predicting moral defensibility from side and identification in a linear regression yielded a main effect of side ($\beta = .308$, $t = 3.660$, $p < .001$) and a main effect of identification ($\beta = .202$, $t = 2.407$, $p = .017$); as identification with the just side increased, so did moral defensibility. We then added the interaction between side and identification at the next step, and found that in this analysis, the interaction was marginally significant ($\beta = .191$, $t = 2.041$, $p = .042$), side remained significant, and identification did not. We therefore analysed the relationship between identification and moral defensibility on either side of the war separately: on the just side greater identification was associated with greater moral defensibility, $r(135) = .308$, $p < .001$, whereas on the unjust side this correlation was not significant, $r(129) = .064$, $p = .468$. These results – showing that identification interacts with side to influence the asymmetry in moral judgment – is consistent with the findings reported in the main manuscript (Studies 4 and 5).

Study 4

Supplemental Materials for Study 4 contain the results of the moral goodness judgments about the soldier.

Table S6

Results of an ANOVA entering side, identification, and contribution (and their interaction) as between-subjects predictors of moral goodness judgments. Significant effects are **bolded**. Study 4

<i>Factor</i>	<i>F</i>	<i>p</i>	η_p^2
Side	172.337	<.001	.38
Identification	0.383	.682	<.01
Contribution	1.960	.163	.01
Side x Identification	5.367	.005	.04
Side x Contribution	0.006	.938	<.01
Identification x Contribution	0.029	.971	<.01
3-way interaction	0.377	.686	<.01

The results for moral goodness followed the same pattern as for moral defensibility. As can be seen in Table S4, there was a significant main effect of side, and a significant side by identification interaction. No further main effects or interactions were significant. Decomposing the interaction between side and identification revealed a main effect of side at all levels of identification (rejects: $F(1, 99) = 28.426, p < .001, \eta_p^2 = .22$; suspends: $F(1, 74) = 55.890, p < .001, \eta_p^2 = .43$; endorses: $F(1, 107) = 114.474, p < .001, \eta_p^2 = .52$); although it was substantially bigger when the soldiers endorsed their side's cause for war. Similarly, there was a significant main effect of identification on the unjust side, $F(2, 128) = 3.928, p = .022, \eta_p^2 = .06$; but not on the just side, $F(2, 152) = 1.596, p = .206, \eta_p^2 = .02$. These results are illustrated in Figure S4.

Figure S4: Illustrating the moral goodness judgments about the soldier's action, across 3 identification conditions and 2 side conditions, Study 4. Error bars represent standard errors of the mean.

Supplemental Study 2

In Supplemental Study 2, we aimed to amplify the effect of identification, by having the soldier publically express his attitude (endorsement or opposition) towards the war in which he was fighting. He was described either as participating in a protest, or a celebratory event, in response to his country's involvement in the war. In line with the results of Study 4, we predicted that the manipulation of identification would interact with the justness of side manipulation, such that the effect of side would be attenuated when the soldier opposed the war in which he was fighting. Because of the public nature of the endorsement in this study, we surmised that this interaction would be stronger than in Study 4, and that the asymmetry would be more noticeably reduced, and possibly even eliminated, in the condition in which the soldier opposed his own side's cause for war.

Method

Participants. Six-hundred-and-one participants were recruited through AMT and were compensated for their participation (257 women, 338 men, 6 other; $M_{\text{age}} = 36.77$, $SD_{\text{age}} = 12.56$). Eleven participants incorrectly answered both attention checks, 25 participants incorrectly answered only the attention check about the soldier's side, and 20 participants incorrectly answered only the attention check about whether the soldier endorsed the war effort. Filtering out these participants left a total sample of 545.

Design, materials and procedure. The study employed a 2 (side: just vs. unjust) by 2 (identification: endorse vs. reject) fully between-subjects design. Participants were provided with a description of a war in which a small country was invaded by a neighboring country seeking to expand its territory and gain control over more natural resources. When diplomatic solutions failed, a third non-neighboring country decided to intervene militarily to defend the small country. After reading this information, participants judged the moral defensibility of the invading and the defending country's decisions to enter the war, in a random order. They were then randomly assigned to judge a target soldier either from the third intervening country (the just country), or from the aggressor invading country (the unjust country). This target soldier was conscripted to the war in all conditions.

Orthogonal to this manipulation of justness, the target soldier's attitude towards the war was also manipulated between-subjects. Participants were randomly assigned to read either about a soldier who endorsed his country's cause for war (and celebrated it), or about one who rejected his country's cause for war (and protested it). This manipulation was intended to strongly connect, or disconnect, the soldier's values and the country's cause for war.

In all conditions, participants judged an identical action, that of killing an enemy soldier. Participants again made moral defensibility judgments of the soldiers' action on a 7-point response scale (1 = *not at all morally defensible*, 7 = *completely morally defensible*), and evaluated his moral character (to

be discussed in Study 5a). Finally, participants completed two attention checks (which asked them to indicate on which side of the war the soldier was fighting, and how he felt about his country's cause for war), provided demographic information, and were debriefed and thanked.

Results

Corroborating the manipulation of justness, participants clearly viewed the aggressor country as having made a less defensible decision to enter the war ($M = 1.72$, $SD = 1.30$), than the intervening country, $M = 5.92$, $SD = 1.24$, $F(1, 544) = 2377.365$, $p < .001$, $\eta_p^2 = .81$.

The main effect of side was observed once again. Participants judged the soldier on the just side to have acted more defensibly ($M = 5.55$, $SD = 1.43$) than the soldier on the unjust side, $M = 3.55$, $SD = 1.88$, $F(1, 541) = 202.052$, $p < .001$, $\eta_p^2 = .27$. There was also an unexpected main effect of identification, $F(1, 541) = 8.681$, $p = .003$, $\eta_p^2 = .02$, such that the action of the soldier who rejected his country's cause for war was judged to be more morally defensible (reject: $M = 4.77$, $SD = 1.86$; endorse: $M = 4.33$, $SD = 2.01$). The key interaction between identification and side was also significant, $F(1, 541) = 13.809$, $p < .001$, $\eta_p^2 = .03$. The difference in judgments between the soldiers on the just and unjust sides was reliable both when the soldier endorsed his side's cause, $t(270) = 13.287$, $p < .001$, $d = 1.62$, and when he rejected it, $t(271) = 7.114$, $p < .001$, $d = 0.86$, but it was significantly attenuated in the reject condition. Similar to the results of Study 4, this attenuation appears to have been driven by a positive shift in judgments of the soldier on the unjust side who rejected his country's cause for war ($M = 4.02$, $SD = 1.90$) compared to the one who endorsed his country's (unjust) cause for war, $M = 3.09$, $SD = 1.75$, $t(270) = 4.23$, $p < .001$, $d = 0.51$. In contrast, there was no downward shift in judgments of the soldier on the just side when he rejected his country's cause for war ($M = 5.50$, $SD = 1.51$) compared to when he endorsed his country's cause for war, $M = 5.60$, $SD = 1.35$, $t(271) = -0.624$, $p = .533$, $d = 0.08$.

Discussion

Studies 4 and Supplemental Study 2 both show that when soldiers on the just and unjust sides of a war both reject their country's cause for war (that is, they *do not* identify with it, and are fighting merely out of a sense of duty), the perceived difference between the moral defensibility of their actions is significantly attenuated as compared with a condition in which they both endorse their country's cause for war. This attenuation arises principally because soldiers on the unjust side who reject their side's cause are viewed as acting more morally defensibly than their comrades who endorse it. Contrary to our prediction, however, the effect of this identification manipulation was not strengthened in this Study by making the soldiers' attitudes more public. Nonetheless, these results elucidate one cause of the asymmetry, namely that soldiers are presumed by default to identify with their own side (see Footnote 10 in the main manuscript, and full information about the study above), and their actions are then judged as a function of those presumed attitudes.

Study 5

Supplemental Materials for Study 5 contains the following:

- results of exploratory factor analyses of the moral character evaluation items in Studies 1 and 2
- descriptive statistics of moral character evaluations in Studies 1-4
- more details about the meta-analysis reported in the main manuscript
- a summary of the relationship between moral judgment and moral character evaluations in Studies 1-4
- a summary of the relationship between moral judgment and moral character evaluations in Study 5, across the three character conditions.

Exploratory factor analyses (EFA) of moral character evaluations in Studies 1 & 2

In studies 1 and 2, participants responded to a larger set of items (see Tables S7 and S8 for items), and we performed an exploratory factor analysis to investigate underlying factors. We follow the guidelines of Sakaluk (2017), and use maximum likelihood extraction, with an oblique rotation (direct oblimin; we did not expect factors to be uncorrelated). To determine the number of factors, we rely on the Eigenvalues > 1 heuristic, and examine the pattern matrix to determine the interpretability of the factors. Below we report the pattern matrix, and the amount of variance accounted for by each factor. As reported in the main manuscript, in subsequent studies the number of items was narrowed down to 4, based on a mix of statistical and theoretical reasoning.

Table S7

Pattern matrix from exploratory factor analysis Study 1, in separate and joint evaluation conditions. Loadings < .300 have been suppressed.

<i>Items</i>	Separate conditions		Joint condition: just side		Joint condition: unjust side	
	Goodness	Dedication	Goodness	Dedication	Goodness	Dedication
Honest	0.945		0.886		0.860	
Kind	0.904		0.828		0.808	
Trustworthy	0.888		0.882		0.852	
Principled	0.730			0.558	0.772	
Loyal		0.884		0.959		0.947
Dedicated		0.789		1.003		0.985
Skillful		0.717	0.535	0.369		0.753
Competent		0.712	0.540	0.419	0.323	0.517
Brave		0.645		0.844		0.727
Fearless		0.550		0.503		0.809
<i>Variance</i>	50.55%	15.65%	12.96%	56.94%	19.66%	50.74%

Note. Maximum likelihood extraction, direct oblimin rotation

Table S8

Pattern matrix from exploratory factor analysis Study 2, in separate and joint evaluation conditions. Loadings < .300 have been suppressed.

<i>Items</i>	Separate conditions		Joint condition: just side		Joint condition: unjust side	
	Goodness	Dedication	Goodness	Dedication	Goodness	Dedication
Kind	0.977		0.382	0.404	0.655	
Trustworthy	0.928		0.968		1.028	
Honest	0.924		0.983		0.927	
Has integrity	0.902		0.947		0.970	
Principled	0.805			0.554	0.821	
Competent	0.578	0.366		0.902	0.643	
Dedicated		0.987	0.865			0.964
Loyal		0.768	0.834			0.850
Fearless		0.612		0.730		0.386
Brave	0.360	0.573		0.821	0.738	
Skillful	0.326	0.551		0.921		0.785
<i>Variance</i>	61.59%	11.47%	60.26%	13.41%	55.72%	12.93%

Note. maximum likelihood extraction, direct oblimin rotation

Descriptive statistics for character evaluations in Studies 1-4

Table S7

Descriptive Statistics For Character Trait Evaluations (Goodness And Dedication), And The Effect Of Side (Just Vs. Unjust) On Both Of These Traits, Across The 5 Previous Studies.

	Mean character evaluation (<i>SD</i>)		Effect of side on each character trait		
	Just	Unjust	<i>F</i>	<i>p</i>	η_p^2
Study 1 (<i>n</i> = 147)					
Goodness	64.19 (19.50)	38.39 (23.90)	51.741	<.001	.26
Dedication	73.34 (17.55)	65.56 (18.17)	6.965	.009	.05
Study 2 (<i>n</i> = 136)					
Goodness	70.31 (19.65)	38.07 (22.79)	78.472	<.001	.37
Dedication	76.75 (18.77)	63.55 (15.78)	19.428	<.001	.13
Study 3 (<i>n</i> = 118)					
Goodness	4.57 (1.15)	3.52 (1.44)	19.112	<.001	.14
Dedication	5.95 (1.03)	5.38 (1.47)	5.822	.017	.05
Study 4 (<i>n</i> = 292)					
Goodness	4.95 (1.20)	3.79 (1.51)	53.028	<.001	.16
Dedication	6.27 (0.99)	6.00 (1.12)	4.572	.033	.02
Supp. Study 2 (<i>n</i> = 545)					
Goodness	5.10 (1.27)	3.73 (1.53)	128.229	<.001	.19
Dedication	6.05 (1.14)	5.42 (1.35)	33.992	<.001	.06

Note. In Studies 1 and 2, judgments were made on a 1-100 scale; in Studies 3, 4, and Supplemental Study 2, judgments were made on a 1-7 scale. For Studies 1 and 2, we report the results from the separate evaluation conditions only. For Study 3, we report the results only of the scenario in which the target soldier killed an enemy soldier (as this scenario was the most similar to the action judged in the other studies). All these effects held when covariates were included, except in Study 1 the effect of side on dedication was only marginally significant, $p = .051$.

How the meta-analytic effects reported in Study 5a, Figure 4, were conducted

In Studies 1 and 2, character was measured on a 1-100 scale, whereas in the remaining studies the scale was 1-7; in every study, I therefore z -scored the variables goodness and dedication, using the following SPSS syntax. This step is not strictly necessary since the effect size used for the meta-analyses is a standardized metric anyway, but I decided to do it this way because then I could work with a standardized metric from the start.

```
DATASET ACTIVATE DataSet1.  
DESCRIPTIVES VARIABLES=Goodness Dedication  
/SAVE  
/STATISTICS=MEAN STDDEV MIN MAX.
```

Descriptive statistics before and after this step are provided in Table M1 below.

Because I was interested in the effect of side on the “unique” aspects of goodness and dedication, I next regressed $goodness_z$ on $dedication_z$ and saved the residuals as a separate variable, and then vice versa. SPSS syntax example provided below.

```
DATASET ACTIVATE DataSet1.  
REGRESSION  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Zgoodness  
/METHOD=ENTER Zdedication  
/SAVE RESID.
```

Next, I analysed the effect of side on $Dedication_{RES}$ and on $Goodness_{RES}$ separately, using simple Student t -tests (SPSS syntax example provided below).

```
T-TEST GROUPS=Condition(0 1)  
/MISSING=ANALYSIS  
/VARIABLES=RES_Goodness RES_Dedic  
/CRITERIA=CI(.95).
```

The results are provided in Table M2 below, including Cohen’s d , corrected for the correlation between means (i.e. within-subject differences; calculated using this webpage: www.cognitiveflexibility.org/effectsize)

Table M1

Descriptive Statistics For Character Trait Evaluations (Goodness And Dedication): Raw Scores and Standardized Scores

	Mean (<i>SD</i>)		Z-scores (<i>SD</i>)	
	Just	Unjust	Just	Unjust
Study 1 (<i>n</i> = 147)				
Goodness	64.19 (19.50)	38.39 (23.90)	0.49 (0.77)	-0.53 (0.95)
Dedication	73.34 (17.55)	65.56 (18.17)	0.21 (0.96)	-0.22 (1.00)
Study 2 (<i>n</i> = 136)				
Goodness	70.31 (19.65)	38.07 (22.79)	0.57 (0.74)	-0.64 (0.86)
Dedication	76.75 (18.77)	63.55 (15.78)	0.33 (1.01)	-0.38 (0.85)
Study 3 (<i>n</i> = 118)				
Goodness	4.57 (1.15)	3.52 (1.44)	0.38 (0.82)	-0.37 (1.03)
Dedication	5.95 (1.03)	5.38 (1.47)	0.22 (0.79)	-0.21 (1.13)
Study 4 (<i>n</i> = 292)				
Goodness	4.95 (1.20)	3.79 (1.51)	0.36 (0.82)	-0.43 (1.03)
Dedication	6.27 (0.99)	6.00 (1.12)	0.11 (0.94)	-0.14 (1.06)
Supp. Study 2 (<i>n</i> = 545)				
Goodness	5.10 (1.27)	3.73 (1.53)	0.44 (0.81)	-0.44 (0.98)
Dedication	6.05 (1.14)	5.42 (1.35)	0.24 (0.88)	-0.24 (1.05)
Study 5b (<i>n</i> = 502)				
Goodness	4.47 (1.78)	3.57 (1.65)	0.26 (1.00)	-0.25 (0.93)
Dedication	5.45 (1.45)	4.90 (1.58)	0.18 (0.94)	-0.18 (1.02)

Note. In Studies 1 and 2, judgments were made on a 1-100 scale; in the remaining studies, judgments were made on a 1-7 scale. For Studies 1 and 2, we report the results from the separate evaluation conditions only. For Study 3, we report the results only of the scenario in which the target soldier killed an enemy soldier (as this scenario was the most similar to the action judged in the other studies).

Table M2

Descriptive Statistics for the Dedication_{RES} and Goodness_{RES} Measures, Across Studies 1-4, Supplemental Study 2, and Study 5b, and Test Statistics for the Difference Across Just and Unjust Sides in Each Study.

	Res. Mean (SD)		Test Statistics			
	Just	Unjust	<i>t</i>	<i>p</i>	<i>d</i>	<i>r</i>
Study 1 (<i>n</i> = 147)						
Goodness	0.38 (0.53)	-0.41 (0.91)	6.474	<.001	1.10	.48
Dedication	-0.07 (0.71)	0.07 (0.94)	-1.016	.311	-0.17	-.08
Study 2 (<i>n</i> = 136)						
Goodness	0.34 (0.39)	-0.39 (0.83)	6.672	<.001	1.20	.51
Dedication	-0.06 (0.64)	0.06 (0.82)	-0.949	.344	-0.16	-.08
Study 3 (<i>n</i> = 118)						
Goodness	0.29 (0.71)	-0.28 (1.01)	3.578	.001	0.66	.31
Dedication	0.07 (0.69)	-0.07 (1.10)	0.816	.416	0.16	.08
Study 4 (<i>n</i> = 292)						
Goodness	0.30 (0.64)	-0.35 (0.92)	7.132	<.001	0.83	.38
Dedication	-0.08 (0.75)	0.09 (0.94)	-1.726	.085	-0.20	-.10
Supp. Study 2 (<i>n</i> = 545)						
Goodness	0.30 (0.63)	-0.30 (0.87)	9.099	<.001	0.80	.37
Dedication	-0.01 (0.69)	0.01 (0.92)	-0.302	.763	-0.03	-.01
Study 5b (<i>n</i> = 502)						
Goodness	0.12 (0.62)	-0.12 (0.68)	4.054	<.001	0.37	.18
Dedication	-0.01 (0.58)	0.01 (0.74)	-0.304	.761	-0.03	-.01

Note. Cohen's *d* was corrected for correlation between means, using this website: www.cognitiveflexibility.org/efficientsize. This effect size was then transformed into *r* using the spreadsheet provided by Goh et al., (2016).

Cohen's *d* was transformed into Pearson's *r* (see Table M2), and then into Fisher's *z*, using the spreadsheet from Goh, Hall, and Rosenthal (2016) available here: <https://osf.io/6tfh5/>. The *z* statistic has the important property of being approximately normally distributed (Fisher, 1925), with a standard error (SE) calculated by $\frac{1}{\sqrt{N-3}}$. I could thus next calculate the SE for each of the studies.

I then entered the effect size (Fisher's *z*) and SE for each study into the meta-analysis spreadsheet provided by Neyeloff, Fuchs, and Moreira (2012, accessible [here](#)), for goodness and dedication separately. The

spreadsheet performs the following calculations: it weights each effect size by the inverse of its variance (which means that more precise estimates from the larger samples are given more weight). It also calculates additional metrics (weights squared, effect size squared) as these are required in order to compute the Q statistic. The Q statistic provides a measure of the heterogeneity among the studies. The I^2 is another measure for quantifying heterogeneity (formulas provided in Neyeloff et al., 2012). Since, as can be seen in Table M3 (fixed effects models), the heterogeneity was substantial (for goodness) in the present meta-analysis, we used a random effects model to estimate the meta-analytic effect. This requires the calculation of a constant, v , which takes into account the heterogeneity and the number of studies (degrees of freedom). The weighted effect size of each study is then adjusted by this constant, and combined to find the overall effect summary and standard error. Excel sheets including all the calculations for the present meta-analyses are provided on the project's page on the OSF. In Table M3 we provide a summary of the models (the random effect model summaries are the ones displayed in Figure 4 of the main manuscript).

Table M3
Summary of Fixed Effect and Random Effect Models, for Goodness and Dedication Separately.

<i>Fixed Effect Models</i>	Estimated effect size (95% CI)		Q	I^2
Goodness	.353	(.306, .400)	26.225, $p < .001$	80.93
Dedication	-.033	(-.081, .014)	3.759, $p = .585$	-33.03
<i>Random Effects Models</i>	Estimated effect size (95% CI)		Q_v	I^2_v
Goodness	.390	(.275, .505)	4.689, $p = .455$	-6.63
Dedication	-.030	(-.066, .007)	4.803, $p = .440$	-4.10

Note: The Q statistic has a χ^2 distribution, which is how the p -values were derived:
<http://www.socscistatistics.com/pvalues/chidistribution.aspx>

References

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- Fisher, R. A. (1925). *Statistical methods for research workers*. Genesis Publishing Pvt Ltd.
- Neyeloff, J. L., Fuchs, S. C., & Moreira, L. B. (2012). Meta-analyses and Forest plots using a microsoft excel spreadsheet: step-by-step guide focusing on descriptive data analysis. *BMC research notes*, 5(1), 52.

Relationship between character evaluations and moral judgments in Studies 1-4, Supp. Study 2 (in preparation for Study 5b)

In all studies up to this point (except Supp. Study 1), we assessed how participants perceived the *moral character* of the soldier, as well as their action(s). We provide a summary of the main results in the main manuscript: just like moral judgments, moral character evaluations (especially goodness of character) was significantly affected by the side for which the soldier was fighting. In order to assess the relationship between moral judgment and moral character evaluations, in all these studies we also ran the mediation model illustrated in Figure S5. Results of these analyses are provided in Table S10. As can be seen, in all studies there was a significant indirect effect of side on moral judgment via goodness evaluation (but the same was only true for dedication evaluations in one study). This finding motivated Study 5b, in which we attempted to manipulate the soldiers' character directly, and thus influence the effect of side on moral judgment.

Figure S5: Schematic illustration of mediation model, in which the effect of side on moral defensibility judgment is mediation by goodness and dedication character traits. Path labels correspond to columns in Table S8 below.

Table S10

Summary of mediation model in all studies, significant indirect effects are bolded. Columns correspond to paths labelled in Figure S5. All analyses performed with PROCESS Macros for SPSS, using Hayes (2012) “model 4” with 10,000 bootstrapped resamplings.

	Path <i>a</i>	Path <i>b</i>	Indirect effects			Direct effect
			Effect estimate	95% CI (Lower)	95% CI (Upper)	Path <i>c</i> ’ (95% CI)
Study 1 (<i>n</i> = 147)						0.193 (-0.129, 0.515)
Goodness	1.023***	0.496***	0.507	0.272	0.766	
Dedication	0.427**	-0.001	-0.001	-0.090	0.089	
Study 2 (<i>n</i> = 136)						0.320 (-0.067, 0.707)
Goodness	1.213***	0.414**	0.502	0.173	0.858	
Dedication	0.710***	-0.121	-0.086	-0.272	0.061	
Study 3 (<i>n</i> = 118)						0.486 (-0.028, 0.999)
Goodness	1.052***	0.688***	0.724	0.365	1.200	
Dedication	0.565*	0.333**	0.188	0.037	0.451	
Study 4 (<i>n</i> = 292)						1.441 (1.113, 1.768)
Goodness	1.158***	0.705***	0.816	0.572	1.082	
Dedication	0.265*	0.041	0.011	-0.023	0.068	
Supp. Study 2 (<i>n</i> = 545)						1.015 (0.768, 1.262)
Goodness	1.362***	0.683***	0.930	0.727	1.158	
Dedication	0.625***	0.091	0.057	-0.010	0.142	

Note: For Studies 1 and 2, we report the results from the separate evaluation conditions only. For Study 3, we report the results only of the scenario in which the target soldier killed an enemy soldier (as this scenario was the most similar to the action judged in the other studies). Bias correlated and accelerated bootstrapped 95% CI’s reported.

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

Main Effects of Manipulations on Character Judgments, Study 5b

As in the previous studies, we asked participants to rate the soldier on four character traits: kind, principled, dedicated, and competent, and combined these ratings into two separate *goodness* and *dedication* composite measures. Descriptive statistics for the composite measures are provided in Table S11. For goodness traits, there was a main effect of side, $F(1, 496) = 68.37, p < .001, \eta_p^2 = .12$, a main effect of character, $F(2, 496) = 201.21, p < .001, \eta_p^2 = .45$, and a marginally significant interaction, $F(2, 496) = 2.96, p = .053, \eta_p^2 = .01$. Although the soldier on the just side was seen as more morally good than the one on the unjust side across all three character conditions (Neutral: $t(165) = 5.959, p < .001, d = 0.93$; Good: $t(160) = 5.784, p < .001, d = 0.91$; Bad: $t(171) = 2.720, p = .007, d = 0.35$), the effect was smaller for the bad character condition.

For dedication traits, there was a main effect of side, $F(1, 496) = 11.96, p = .001, \eta_p^2 = .02$ and a main effect of character, $F(2, 496) = 109.54, p < .001, \eta_p^2 = .31$, but no significant interaction, $F(2, 496) = 0.46, p = .629, \eta_p^2 < .01$. Although our manipulation was designed primarily to target core goodness traits, the main effect of character for dedication traits indicates that the manipulation also had a more global effect (though it was larger for goodness than for dedication traits; see Table S11).

Table S11

Descriptive Statistics for Goodness and Dedication Ratings of Just and Unjust Soldiers, Across Three Different Character Conditions; Study 5b.

<i>Character conditions</i>	<i>Goodness traits</i>		<i>Dedication traits</i>	
	Defending	Invading	Defending	Invading
Good ($n = 162$)	5.85 (1.25)	4.70 (1.29)	6.36 (1.17)	5.83 (1.29)
Neutral ($n = 167$)	4.92 (1.05)	3.80 (1.35)	5.81 (1.08)	5.54 (1.24)
Bad ($n = 172$)	2.81 (1.39)	2.26 (1.29)	4.17 (1.90)	3.63 (1.88)
Total:	4.47 (1.78)	3.57 (1.65)	5.41 (1.67)	4.99 (1.79)

Relationship between character and judgments: Study 5b

As the summary above demonstrates (Table S10), core moral goodness was closely related to moral act judgments in previous studies. This was the link we were hoping to “break” with our manipulation of character in Study 5b. However, the character conditions did not interact with side; the asymmetry across the just and the unjust side did not differ across the character conditions (see main manuscript). While goodness trait evaluations were again strongly related to moral judgments, and there was an indirect effect of side on moral judgment through goodness judgments (see below, Table S12), this relationship did not

appear to differ across the three character conditions (Table S12, and Figure S5 above). In addition, in these mediation analyses, a sizable direct effect of side on moral defensibility judgment remained, indicating that although character evaluations are related to side of the war and to moral judgment, they cannot provide the full causal story.

Table S12

Summary of mediation model in all three character conditions, Study 5b. Columns correspond to paths illustrated in Figure S5. Significant indirect effects are bolded. Note that the direct effect remains significant in all three conditions.

	Path <i>a</i>	Path <i>b</i>	Indirect effect			Direct effect Path <i>c</i> ' (95% CI)
			Effect estimate	95% CI (Lower)	95% CI (Upper)	
Good character (<i>n</i> = 162)						0.810 (0.389, 1.231)
Goodness	1.156***	0.685***	0.792	0.449	1.217	
Dedication	0.503**	-0.030	-0.015	-0.146	0.098	
Neutral character (<i>n</i> = 167)						0.725 (0.337, 1.112)
Goodness	1.118***	0.796***	0.890	0.561	1.259	
Dedication	0.533**	0.175	0.093	-0.001	0.247	
Bad character (<i>n</i> = 172)						1.256 (0.805, 1.707)
Goodness	0.575**	0.353**	0.203	0.060	0.447	
Dedication	0.715**	0.268**	0.192	0.039	0.460	

Note. Bias correlated and accelerated bootstrapped 95% CIs reported, *** *p* < .001, ** *p* < .01, * *p* < .05

Study 6

Prior to Study 6 we ran an additional study testing the same ideas as in Study 6, but which Study 6 then made entirely redundant. Full details about this Additional Study are available on the OSF.

In the Supplemental Materials for Study 6, we provide some additional comparisons between conditions that were not pertinent to the main aim of Study 6, but which were interesting with respect to the possibility that participants' judgments reflect ingroup bias.

The configuration of the conditions are displayed in Table 4 of the main manuscript, and the results across each condition displayed in Figure 5.

In Condition 4 the war was morally symmetric (i.e. participants were not given any information about which side violated the ceasefire), but participants were aligned with one of the countries (Borilia). In this condition, the effect of side was significant (outgroup: $M = 4.45$, $SD = 1.73$; ingroup: $M = 4.64$, $SD = 1.66$; Mean difference = -0.19 , 95% CI: $(-0.31, -0.06)$; $t(96) = 2.880$, $p = .005$), indicating an independent effect of alignment on participants moral judgment. In other words, participants judged an ingroup soldier more leniently than an outgroup soldier, even when the soldiers were engaged in the same action (killing an enemy soldier).

In the completely neutral baseline condition that involved neither justice considerations nor alignment (Condition 5), there was, predictably, no effect of side, (Dumolia: $M = 4.66$, $SD = 1.86$; Borilia: $M = 4.60$, $SD = 1.89$; Mean difference = 0.07 , 95% CI: $(-0.07, 0.20)$; $t(106) = 0.961$, $p = .339$). The effect of side was significantly larger in Condition 4 relative to Condition 5 (interaction: $F(1, 202) = 7.099$, $p = .008$, $\eta_p^2 = .03$), again demonstrating that there was a significant effect of alignment by itself, absent any moral considerations.

We also compared Conditions 1 (aligned just) and 3 (aligned external), in order to test whether alignment adds to the effect of side over and above morality considerations. Indeed, the effect of side was marginally larger in Condition 1 (aligned just) than it was in in Condition 3 (aligned external; interaction: $F(1, 203) = 2.960$, $p = .087$, $\eta_p^2 = .01$), thereby providing weak evidence that alignment contributes to the effect of side over and above moral considerations.

Finally, comparing Conditions 3 (aligned external) and 4 (aligned only) allows a test of the relative effect sizes of justness of side and alignment, since Condition 3 features only a moral asymmetry between the warring parties, whereas Condition 4 features only a difference in alignment with the warring parties. This analysis revealed a larger effect in Condition 3 (interaction: $F(1, 201) = 35.122$, $p < .001$, $\eta_p^2 = .15$), indicating that the effect of justice considerations was larger than the effect of alignment, when these two effects were placed in direct comparison (this is also consistent with the effect of side in the aligned unjust condition, reported in the main manuscript).

We also compared the effects in Conditions 1 (aligned just) and 4 (aligned only), which allows an additional examination of the role of moral (i.e., justice) considerations, independent of the effect of alignment: Condition 1 features both alignment and moral considerations (one side was just, the other not), whereas Condition 4 features only alignment. The effect of side was larger in Condition 1 relative to Condition 4 (interaction: $F(1, 194) = 20.447, p < .001, \eta_p^2 = .10$),²⁴ thus offering a further demonstration that alignment cannot fully explain the asymmetry – moral considerations play a role in addition to alignment. This result complements the basic effect of side in Condition 3 (aligned external). Both results offer a clearer test of the role of moral considerations than those in the prior studies, because they either prevent, or hold constant, possible effects of implicit alignment. Condition 3 prevents the effect of implicit alignment by explicitly aligning participants with a neutral third party. The effect of side in this condition shows that moral considerations are sufficient to drive the asymmetry, even without implicit alignment. In a converging manner, the comparison between Condition 1 and Condition 4 holds constant alignment explicitly. The fact that the effect of side was larger in Condition 1 further suggests that although alignment can account for some of the asymmetry observed in this study and the preceding studies, it cannot be the sole explanation.

²⁴ In order to calculate this interaction, we needed to directly compare the two ingroup conditions against one another. This required switching the alignment coding in Condition 4 since participants were aligned with Dumolia (rather than Borilia) in this condition. The simple effect of side was significant in Condition 4; outgroup: $M = 4.45, SD = 1.73$; ingroup: $M = 4.64, SD = 1.66$; Mean difference = -0.19 , 95% CIs $[-0.31, -0.06]$; $t(96) = 2.880, p = .005$.

Supplemental Study 3

Combining alignment and identification (reported in discussion of Study 6, main manuscript)

In the present study we combined the manipulation of participant alignment, with the soldiers' rejection of the cause of war. We asked whether, when participants are motivated to judge the soldier more leniently because he's an ingroup member, *and* the soldier rejects the war, will the asymmetry be eliminated?

To test this possibility, we designed 5 conditions. In the neutral baseline condition, participants were told about a war with a just and an unjust side, where they were not aligned with either side (i.e. similar to the aligned-external Condition 3 in Study 6). They then judged the moral defensibility of an action of both a soldier from the just side, and from the unjust side, without having any information about the soldiers' endorsement of their countries' war efforts. We expected in this condition to replicate the asymmetry observed in the previous studies. The 4 experimental conditions were created by varying participants' alignment (just side vs. unjust side), *and* whether the soldiers both endorsed, or both rejected, their respective countries' war efforts (see Figure A1). We expected the asymmetry to be smallest, and perhaps eliminated, in the condition where the soldiers both rejected their countries' causes for war, and the participant was aligned with the unjust side. We expected the asymmetry to be largest in the condition where the soldiers both endorsed their countries' causes for war, and the participant was aligned with the just side. In the other two conditions (aligned just/soldiers reject; aligned unjust/soldiers endorse) the participants' alignment and soldiers' identification with the war effort "push in opposite direction" with respect to the asymmetry; we therefore did not have any strong expectation for what we would observe in these conditions.

Method

Participants.

We attempted to recruit 600 people through AMT; however the data from one person failed to save, and we therefore had a final sample of 311 women, 278 men, 6 other, and 4 missing; $M_{age} = 35.29$, $SD_{age} = 11.44$.

Design, Materials, and Procedure.

Participants first read the war scenario involving an aggressor country invading a smaller country, and a defending country then intervening to repel the invasion. After reading the scenario, participants made moral judgments about both the invading country and defending country's decision to go to war, in a random order, as in the previous studies.

They were then told to imagine either that they were a citizen of the invading country, the defending country, or “a completely different country that has no connection to the dispute”. This was the alignment manipulation. In all cases, participants were told that they remained civilians throughout the war, but that they followed the conflict in the news. Immediately following this information, they were asked to report their degree of alignment with either of the warring countries (as in Study 6) as a manipulation check. (In the control condition, this question assessed participants’ default alignment with either country.)

Next, participants were given information about “two different soldiers, one from the defending country and one from the invading country”. The description of the soldiers, and whether they endorsed or rejected their countries’ causes for war, was similar to in Study 6, but participants were told about soldiers on both sides of the war in parallel. For example, participants aligned with the defending country were told that “the soldier from your country, the defending country, strongly believes that it is right for his country to use military force to defend the smaller, occupied country.” This statement was elaborated on, and then the following paragraph stated “At the same time, the soldier from the invading country strongly believes that it is right for *his* country to use military force to invade its neighboring country”. In all conditions, participants read that both men were drafted to fight for their country. Full materials are available online.

Participants were then asked about the soldiers’ level of endorsement of their own countries’ war efforts (as a manipulation check; 1 = *fully endorses the invading country’s war effort*, 4 = *endorses neither country’s war effort more than the other*, 7 = *fully endorses the defending country’s war effort*). In the experimental conditions, this functioned as a manipulation check; in the control condition, this question provided a further test of the baseline assumption made about the soldiers (i.e. a within-subjects replication of the Footnote Study). All participants made this judgment for both the invading and the defending soldier, in a random order.

They were then asked to make a separate moral defensibility judgment of each soldier, when he shoots and kills an enemy soldier. The two scenarios were presented in a random order, and participants were alerted to the fact that they would be making judgments about two very similar scenarios (i.e. “These two scenarios are very similar. However, please read each one carefully, and treat each of them as independent of the other (i.e. treat them as two separate events).”)

Finally, participants responded to two attention check items (they were asked what the background information stated about which country they were aligned with, and whether they read that the two soldiers both rejected or endorsed their respective countries’ war efforts), provided demographic information, were debriefed and thanked.

Results

Attention checks.

A number of people responded incorrectly to the alignment attention check: 16 out of 82 responded incorrectly in the control condition, 53/263 responded incorrectly in the aligned just condition, and 81/250 in the aligned unjust condition. 4 people failed to respond to this item (all in the aligned unjust condition) and were also filtered out.

Additionally, a number of people responded incorrectly to the identification attention check. Twenty-one out of 264 responded incorrectly in the condition in which the soldiers endorsed their countries' causes for war; 39/249 responded incorrectly when the soldiers rejected their countries' causes for war. In the control condition, 50 out of 82 people responded incorrectly, and of those 50, 47 responded that the soldiers *endorsed* their countries' cause for war. Although the correct response in this condition would have been "There was no information about their support", the confusion about whether they had been *informed* or merely *asked* them about the soldiers' support is understandable, and counting this as an "error" sets a high bar for attentiveness. We therefore report the results with these participants included. 4 people failed to respond to this question (3 in the rejects condition, 1 in the endorse condition) and were also filtered out. Some people responded incorrectly to both questions. Thus, we were left with 64 people in the neutral condition, 77 in the aligned unjust/rejects condition, 79 in the aligned unjust/endorses condition, 87 in aligned just/rejects, and 108 in the aligned just/endorses condition (final $N = 415$). The pattern of errors observed here seems to suggest that it is harder for participants to align themselves with the unjust condition, and that there is a strong tendency to assume that soldiers endorse their countries' causes for war (as also demonstrated earlier, see study mentioned in Footnote 10, page 21 of these Supplemental Materials).

Manipulation check.

The manipulation of justness was successful. Participants viewed the decision of the invading country to enter the war as less defensible ($M = 1.83$, $SD = 1.28$) than the decision of the defending country ($M = 5.92$, $SD = 1.12$; Mean difference = 4.09, 95% CIs [4.28, 3.91]; $t(414) = 43.252$, $p < .001$, $d = 2.12^{25}$). There was also a significant effect of the alignment manipulation on the extent to which participants said that they identified with either of the warring countries, $F(2, 412) = 67.246$, $p < .001$, $\eta_p^2 = .25$. (This variable was coded so that higher numbers indicate greater sense of identification with the defending country.) In both the control condition ($M = 5.63$, $SD = 1.18$), and the aligned just condition ($M = 5.93$, $SD = 1.21$), participants identified with the defending country (control: Mean difference from midpoint (4) = 1.63, 95% CIs [1.33, 1.92]; $t(63) = 11.063$, $p < .001$; aligned just: Mean difference = 1.93, 95% CIs [1.76, 2.10]; $t(194) = 22.387$, $p < .001$), and these levels of identification were not significantly different from each other

²⁵ Cohen's d corrected for correlation between the judgments (Wiseheart, 2014)

(Mean difference = -0.31, 95% CIs [-0.79, 0.17]; Bonferroni corrected $p = .365$). In the aligned unjust condition, the level of identification was significantly lower ($M = 4.25$, $SD = 1.64$), and only marginally different from the midpoint (Mean difference = 0.25, 95% CIs [-0.01, 0.51]; $t(155) = 1.908$, $p = .058$). In other words, participants tended to identify with the defending country, even when given explicit instructions that their own alignment was with the invading country. (Compare post-war alignment responses in Study 6.)

The manipulation of the soldiers' identification was also successful. In the control condition, participants responded that the invading soldier identified with his country ($M = 2.42$, $SD = 1.59$), as indicated by perceptions of his identification being significantly different from the midpoint of the scale, Mean difference = -1.58, 95% CIs [-1.98, -1.18]; $t(63) = -7.932$, $p < .001$. Similarly, they responded that the defending soldier identified with his country, $M = 6.22$, $SD = 1.22$; Mean difference = 2.22, 95% CIs [1.92, 2.52]; $t(63) = 14.614$, $p < .001$. In the rejects condition, however, the perceived identification of both soldiers was close to the midpoint (invading: $M = 4.29$, $SD = 1.11$; Mean difference from midpoint (4) = 0.29, 95% CIs [0.12, 0.46]; $t(163) = 3.301$, $p = .001$; defending: $M = 4.21$, $SD = 0.68$; Mean difference = 0.21, 95% CIs [0.11, 0.32]; $t(163) = 4.015$, $p < .001$) and were not significantly different from each other, Mean difference = 0.07, 95% CIs [-0.17, 0.31]; $t(163) = 0.60$, $p = .549$). Finally, in the endorses condition, the asymmetry was exaggerated, and both soldiers were seen as strongly identifying with their own country; invading: $M = 1.40$, $SD = 1.26$; Mean difference from scale midpoint (4) = -2.60, 95% CIs [-2.79, -2.42]; $t(186) = -28.196$, $p < .001$; defending: $M = 6.80$, $SD = 0.73$; Mean difference = 2.80, 95% CIs [2.69, 2.90]; $t(186) = 52.615$, $p < .001$.

Moral defensibility

Figure A1 displays the moral defensibility judgments across the 5 conditions. Contrary to expectation, the asymmetry was significant in all conditions. However, as expected, it was smaller in the aligned-unjust/rejects condition (defending: $M = 4.74$, $SD = 1.68$; invading: $M = 4.27$, $SD = 1.80$; Mean difference = -0.47, 95% CIs [-1.05, -0.45]; $t(86) = -4.979$, $p < .001$) than in the control condition (defending: $M = 5.41$, $SD = 1.64$; invading: $M = 4.34$, $SD = 2.03$; Mean difference = -1.06, 95% CIs [-1.49, -0.64]; $t(63) = -4.977$, $p < .001$) as indicated by a small interaction when the moral judgments in these two conditions were entered into a repeated measures ANOVA: $F(1, 139) = 5.461$, $p = .021$, $\eta_p^2 = .04$. As expected, the asymmetry was also descriptively bigger in the aligned-just/endorses condition (defending: $M = 5.47$, $SD = 1.30$; invading: $M = 4.19$, $SD = 1.88$; Mean difference = -1.28, 95% CIs [-1.67, -0.89]; $t(107) = -6.507$, $p < .001$) than in the control condition, although this interaction was not significant, $F(1, 170) = 0.503$, $p = .479$, $\eta_p^2 < .01$.

The asymmetry did not differ across the control and the aligned-unjust/endorse conditions (defending: $M = 5.29$, $SD = 1.63$; invading: $M = 4.30$, $SD = 2.03$; Mean difference = -0.99 , 95% CIs $[-1.40, -0.58]$; $t(78) = -4.816$, $p < .001$) – that is, the interaction was not significant, $F(1,141) = 0.064$, $p = .801$, $\eta_p^2 < .01$; nor across the control and the aligned-just/rejects condition; defending: $M = 4.75$, $SD = 1.73$; invading: $M = 4.00$, $SD = 1.82$; Mean difference = -0.75 , 95% CIs $[-1.05, -0.45]$; $t(86) = -4.98$, $p < .001$; interaction: $F(1,149) = 1.552$, $p = .215$, $\eta_p^2 = .01$.

Figure A1: Moral defensibility judgments of soldiers on the just and the unjust side, across the five different conditions of Supplemental Study 3. Error bars represent Standard Errors of the Mean.

Discussion

In this additional study we again demonstrated that the soldiers' (perceived) endorsement plays a role in explaining the observed asymmetry in moral judgments: Participants tend to assume that soldiers endorse their country's cause for war, which contributes to an asymmetry in judgments of soldiers on the just versus unjust side of the war. When this assumption is overturned, the asymmetry is reduced. Interestingly, despite finding an effect of participants' alignment in the previous study, in the present study

this factor did not appear to play a substantial role in influencing judgments of soldiers on either side of the war. This could be because in the present study, information about soldiers from both sides was presented in parallel, thus highlighting their similarities (despite their differing ingroup/outgroup identities) at the expense of any ingroup favoritism that might otherwise have influenced participants' judgments of them. We decided not to include this full study in the main manuscript because it did not contribute substantially to the overall results and conclusions of the paper.

Pre-print

Information about Excluded Participants

The later studies were somewhat more complicated than the earlier ones, and we included fairly stringent attention checks. As a result, we excluded a substantial proportion of our participants in some studies. Below we have included demographic information about the excluded participants, as well as additional analyses *including* these participants, where relevant. The details are provided on the next several pages, but as a summary: The only consistent effect across multiple studies was that the excluded participants, if they were different than the included participants, tended to be slightly more conservative. We did generally not observe any differences in gender; and the excluded participants were sometimes older and sometimes younger than the included participants (and not always significantly). In addition, political conservatism tended to be correlated with moral defensibility; this means that our exclusion criteria selects for people who are slightly less likely to judge the soldiers' actions as morally defensible overall. (However, it is hard to disentangle a "true" effect from effect of not paying attention and therefore not being as influenced by manipulation, or responding in the middle of the scale.) There were very few direct effects of accuracy (i.e., exclusion/inclusion) on the main outcome measure, moral defensibility.

There is no doubt a lot to unpack, concerning the effect of demographic variables on perceived moral defensibility in war. However, for the purposes of the present paper, and the main effect we were investigating (i.e., the asymmetry in moral defensibility judgments) we feel confident that a) demographic differences cannot account for the asymmetry; b) differences in accuracy cannot account for the asymmetry (though it might influence how broadly we generalize from these results).

Study 1 and Study 2	p. 46
Supplemental Study 1	p. 47
Study 3	p. 48
Study 4	p. 50
Supplemental Study 2	p. 54
Study 5b	p. 57
Study 6	p. 59

Study 1 and Study 2

Only four and three participants excluded; not enough to conduct any additional analyses.

Pre-print

Supplemental Study 1

Recruited 500 (499): 67 failed an attention check asking them which side (just vs. unjust) their target soldier was on (20 from just side, 47 from unjust side).

In this study, the key test was whether individual differences in the perceived constraint on soldiers would moderate the size of the asymmetry (those who view soldiers as constrained would show smaller asymmetry).

Table S1D

Supplemental Study 1 Demographics of Included and Excluded Participants

	Just Side		Unjust Side	
	Excluded (n = 20)	Included (n = 228)	Excluded (n = 47)	Included (n = 204)
Gender	11 Male	95 Male	22 Male	95 Male (3 Other)
Age <i>M</i> (<i>SD</i>)	34.25 (9.94)	36.84 (11.46)	35.13 (10.15)	37.57 (10.80)
Political Orientation <i>M</i> (<i>SD</i>)	4.74 (1.52)	3.57 (1.83)	4.62 (1.74)	3.69 (1.81)
Apolitical/Libertarian (<i>freq.</i>)	1/0	10/5	5/3	8/7
Constraint <i>M</i> (<i>SD</i>)	4.96 (0.83)	5.41 (0.84)	4.99 (0.87)	5.31 (0.88)
Defensible <i>M</i> (<i>SD</i>)	5.45 (1.28)	5.55 (1.43)	4.98 (1.51)	4.04 (1.82)

Political orientation was reported on a 1 (very liberal) to 7 (very conservative) scale, with responses “Apolitical/not interested” or “Libertarian” being filtered out. The participants who failed the attention check were significantly more conservative, $F(1, 456) = 15.183, p < .001, \eta_p^2 = .03$. They also had significantly lower scores on the “constraint” measure, $F(1, 495) = 9.790, p = .002, \eta_p^2 = .02$.

We did not observe a significant difference between the included and excluded participants on gender, age, or the main outcome measure, moral defensibility. However, among the excluded participants, there was no effect of condition (just vs. unjust) on moral defensibility judgments. This makes sense, seeing as these participants responded incorrectly to a question about the justness or unjustness of the war in which their target was fighting. However, when we analyse the whole sample, the effect of condition on moral defensibility remained significant, $F(1, 497) = 83.085, p < .001, \eta_p^2 = .14$.

The effect of condition is also significant when analysing the whole sample, and including politics, age, and gender as covariates, $F(1, 450) = 83.429, p < .001, \eta_p^2 = .16$. In this ANOCVA, there was also a significant main effect of politics, $F(1, 450) = 14.346, p < .001, \eta_p^2 = .03$, as conservatives judge the act as more morally defensible.

Study 3

In this study we filtered out 7 participants who had responded incorrectly to both attention check items, and 40 who had responded incorrectly to either the “side” attention check ($n = 20$) or the “order” attention check ($n = 20$), leaving a final N of 368. Their distribution across conditions (just vs. unjust; own decision vs. ordered), and their demographics, are presented in Table 3D below.

In a univariate ANOVA on age, there was an effect of accuracy, $F(1, 407) = 4.296, p = .039, \eta_p^2 = .01$, such that the inaccurate people were somewhat younger overall (Inaccurate: $M = 32.21, SD = 11.12$; Accurate: $M = 35.93, SD = 11.79$). There was also a significant interaction between condition and accuracy, $F(1, 407) = 4.160, p = .042, \eta_p^2 = .01$, such that the difference in age between accurate and inaccurate participants was significant on the just side, $F(1, 204) = 8.812, p = .003, \eta_p^2 = .04$, but not on the unjust side, $F(1, 203) = 0.001, p = .982, \eta_p^2 < .01$.

Analysing the whole sample in a univariate ANOVA testing the effect of order, condition, and accuracy on moral defensibility (using only the “kill soldier” scenario), the main effect of condition was significant, $F(1, 127) = 5.261, p = .023, \eta_p^2 = .04$, consistent with the results reported in the main manuscript. None of the other main effects or interactions were significant, all $ps > .092$.

Running a univariate ANCOVA on moral defensibility (again using only the “kill soldier” scenario, and the full sample), with order and condition as predictors, and gender, age, and politics, as covariates, the effect of condition was still significant, $F(1, 116) = 17.471, p < .001, \eta_p^2 = .13$. And, there were significant effects of age, $F(1, 116) = 7.266, p = .008, \eta_p^2 = .06$, and gender, $F(1, 116) = 16.809, p < .001, \eta_p^2 = .13$. Women thought the killing was less defensible, and older people thought the killing was more defensible.

Note that in the mixed effects model reported in the main manuscript, we include a random effect by participant, which takes into account variance associated with age, gender, politics, all in one “package”.

Table 3D
Study 3 Demographics of Included and Excluded Participants

	Just Side				Unjust Side			
	Ordered		Decision		Ordered		Decision	
	Exclude (n = 10)	Included (n = 79)	Excluded (n = 13)	Included (n = 106)	Excluded (n = 14)	Included (n = 102)	Excluded (n = 10)	Included (n = 81)
Gender	8 male	48 male	9 male	62 male	7 male	51 male	7 male	49 male
Age	30.40 (6.85)	36.42 (12.40)	27.00 (6.00)	36.06 (11.37)	37.36 (14.35)	36.46 (12.64)	33.60 (12.37)	34.62 (10.67)
Political Orientation	3.10 (1.66)	3.60 (1.66)	3.77 (1.79)	3.58 (1.71)	3.92 (2.25)	3.36 (1.70)	4.44 (2.07)	3.77 (1.75)
Apolitical/libertarian	0/0	3/3	0/0	14/4	1/0	6/5	1/0	5/1
Defensible	5.75 (0.96)	5.46 (1.79)	4.00 (1.87)	5.41 (1.35)	4.75 (0.96)	3.91 (1.92)	3.75 (1.26)	4.18 (1.81)

Study 4

For Study 4 we recruited 360 participants. Participants who indicated that they had not completed the study properly ($n = 2$) or who failed any of the attention checks were filtered out (only side: $n = 7$; only contribution: $n = 9$; only identification: $n = 39$; identification and side, $n = 5$; identification and consequences: $n = 4$; consequences and side: $n = 0$; all three: $n = 2$), leaving a total N of 292.

The distribution of the participants who failed the attention check across conditions, and their demographic details, are provided in Tables 4D below; split into the 3 different identification conditions (A, B, C).

In this study the excluded participants were non-significantly older than the included participants (excluded: $M = 33.56$, $SD = 9.81$; included: $M = 36.23$, $SD = 11.33$), $t(356) = 1.771$, $p = .077$, mean difference = 2.67, 95% CIs [-0.29, 5.64]. They were also slightly more conservative than the included participants (excluded: $M = 3.98$, $SD = 1.85$; included: $M = 3.45$, $SD = 1.77$), $t(324) = 2.126$, $p = .034$, mean difference = 0.53, 95% CIs [0.04, 1.02]. There was no significant difference in the gender of the excluded and included participants, $\chi^2(1) = 0.88$, $p = .348$, nor did we find a significant effect of accuracy on the main outcome measure, moral defensibility (included: $M = 4.38$, $SD = 1.97$; excluded: $M = 4.09$, $SD = 1.95$), $t(356) = 1.090$, $p = .276$, mean difference = 0.29, 95% CIs [-0.24, 0.82].

In this study, the main findings reported in the main manuscript were a main effect of condition (just vs. unjust), and an interaction between condition and identification. Analysing the full sample, these effects were still significant; see Table 4D-D below. Further, these effects remained significant if accuracy (excluded vs included) was included as a factor in the ANOVA, see Table 4D-E.

Table 4D-A

Study 4, Endorses Condition: Demographics of Included and Excluded Participants

	Just Side				Unjust Side			
	No consequences		Consequences		No consequences		Consequences	
	Exclude (n = 3)	Included (n = 38)	Excluded (n = 1)	Included (n = 24)	Excluded (n = 4)	Included (n = 22)	Excluded (n = 1)	Included (n = 27)
Gender	2 male	18 male	1 male	9 male	3 male	13 male	0 male	12 male
Age	28.67 (1.53)	33.26 (9.79)	32.00 (-)	42.75 (14.43)	32.25 (12.55)	36.05 (9.54)	39.00 (-)	35.48 (13.27)
Political Orientation	1.33 (0.58)	3.44 (2.02)	7.00 (-)	3.63 (1.88)	3.50 (1.29)	2.76 (1.41)	7.00 (-)	3.79 (1.91)
Apolitical/Libertarian	0/0	5/1	0/0	0/0	0/0	0/1	0/0	2/1
Defensible	5.67 (1.15)	5.45 (1.33)	5.00 (-)	5.92 (1.32)	3.50 (1.73)	2.45 (1.79)	1.00 (-)	2.74 (1.72)

Table 4D-B

Study 4, Suspends Condition: Demographics of Included and Excluded Participants

	Just Side				Unjust Side			
	No consequences		Consequences		No consequences		Consequences	
	Exclude (n = 7)	Included (n = 15)	Excluded (n = 7)	Included (n = 28)	Excluded (n = 15)	Included (n = 17)	Excluded (n = 12)	Included (n = 18)
Gender	3 male	6 male	3 male	16 male	10 male	8 male	6 male	9 male
Age	32.57 (6.55)	38.93 (15.86)	31.57 (11.18)	36.00 (9.14)	35.87 (12.78)	36.06 (11.63)	34.75 (9.62)	39.06 (10.60)
Political Orientation	3.43 (1.51)	3.40 (1.45)	3.86 (1.57)	3.96 (1.89)	4.07 (1.91)	3.35 (1.73)	4.18 (2.14)	3.75 (2.08)
Apolitical/Libertarian	0/0	0/0	0/0	2/3	0/0	0/0	1/0	1/1
Defensible	4.57 (2.23)	5.40 (1.12)	4.57 (2.23)	5.54 (1.20)	3.47 (1.81)	3.29 (1.96)	4.42 (2.23)	3.33 (2.09)

Table 4D-C

*Study 4, **Rejects** Condition: Demographics of Included and Excluded Participants*

	Just Side				Unjust Side			
	No consequences		Consequences		No consequences		Consequences	
	Exclude (n = 1)	Included (n = 29)	Excluded (n = 4)	Included (n = 24)	Excluded (n = 4)	Included (n = 25)	Excluded (n = 7)	Included (n = 25)
Gender	0 male	17 male	4 male	12 male	3 male	12 male	3 male	17 male
Age	38.00 (-)	34.41 (10.22)	32.75 (4.57)	38.38 (10.34)	28.25 (1.50)	34.60 (9.60)	34.71 (12.94)	34.00 (11.27)
Political Orientation	7.00 (-)	3.08 (1.35)	4.33 (2.08)	4.21 (1.69)	4.75 (1.50)	2.77 (1.88)	3.71 (1.50)	3.42 (1.53)
Apolitical/Libertarian	0/0	5/1	0/0	0/0	0/0	0/1	0/0	2/1
Defensible	3.00 (-)	4.83 (1.56)	5.25 (0.96)	5.50 (1.62)	4.00 (1.63)	3.52 (2.06)	3.43 (2.07)	3.64 (1.38)

Table 4D-D

Testing the effects of condition, identification, and contribution on moral defensibility judgments in Study 4, using the whole sample. Significant effects, consistent with the main manuscript, are **bolded**.

	<i>F</i>	<i>p</i>	η_p^2
Corrected Model	14.141	<.001	.310
Intercept	2346.643	<.001	.872
Condition	135.983	<.001	.282
Contribution	2.795	.095	.008
Identification	0.702	.496	.004
Condition x Contribution	0.648	.422	.002
Condition x Identification	7.198	.001	.040
Contribution x Identification	0.034	.967	.000
Condition x Contribution x Identification	0.515	.598	.003

Note. $R^2 = .310$ (Adjusted $R^2 = .288$)

Table 4D-E

Testing the effects of condition, identification, contribution, and accuracy on moral defensibility judgments in Study 4. Significant effects, consistent with the main manuscript, are **bolded**.

	<i>F</i>	<i>p</i>	η_p^2
Corrected Model	7.193	<.001	.331
Intercept	688.180	<.001	.673
Condition	33.327	<.001	.091
Contribution	0.098	.755	<.001
Identification	0.495	.610	.003
Accuracy	0.972	.325	.003
Condition x Contribution	1.431	.232	.004
Condition x Identification	3.083	.047	.018
Condition x Accuracy	2.025	.156	.006
Contribution x Identification	0.984	.375	.006
Contribution x Accuracy	0.355	.551	.001
Identification x Accuracy	0.134	.875	.001
Condition x Contribution x Identification	1.485	.228	.009
Condition x Contribution x Accuracy	0.574	.449	.002
Condition x Identification x Accuracy	0.495	.610	.003
Contribution x Identification x Accuracy	1.255	.286	.007
Condition x Contribution x Identification x Accuracy	0.993	.372	.006

Note. $R^2 = .331$ (Adjusted $R^2 = .285$)

Supplemental Study 2

For this study we recruited six hundred and one participants through AMT. Eleven participants incorrectly answered both attention checks, 25 participants incorrectly answered only the attention check about the soldier's side, and 20 participants incorrectly answered only the attention check about whether the soldier endorsed the war effort. The distribution of these participants across the 4 conditions (side: just vs. unjust; identification: endorses vs. rejects), and their demographic characteristics are presented in Table S2D below.

The excluded participants were slightly older than the included participants; included: $M = 37.10$, $SD = 12.70$; excluded: $M = 33.57$, $SD = 10.713$; $t(599) = 2.006$, $p = .045$; mean difference = 3.53, 95% CIs [0.07, 6.98]. The excluded participants were also slightly more conservative than the included participants; included: $M = 3.60$, $SD = 1.88$; excluded: $M = 4.18$, $SD = 2.15$; $t(545) = 2.150$, $p = .032$, mean difference = 0.58, 95% CIs [0.05, 1.11]. We did not observe any differences in gender across the two groups, $\chi^2(1) = 0.262$, $p = .608$.

We did not observe any differences between the two groups in terms of their moral judgment; included: $M = 4.55$, $SD = 1.95$; excluded: $M = 4.95$, $SD = 1.42$; $t(599) = 1.483$, $p = .139$; mean difference = .396, 95% CIs [-0.13, 0.92]. Further, analyzing the full sample in a 2 (side: just vs. unjust) by 2 (endorsement: reject vs. endorse) ANOVA, the pattern of results remained the same as in the main manuscript.

However, including accuracy as a factor in the ANOVA, we observed a significant interaction between accuracy (included vs. excluded), and side, $F(1, 593) = 17.747$, $p < .001$, $\eta_p^2 = .03$, as well as a significant three-way interaction between accuracy, side, and endorsement, $F(1, 593) = 16.467$, $p = .013$, $\eta_p^2 = .01$. We investigated these interactions in two ways. First, we analysed the accurate (included) and inaccurate (excluded) participants separately. The analyses for the included participants are identical to the ones reported in the main manuscript, and are therefore not repeated here. For the excluded participants, sample size was quite small ($n = 56$), and there was no effect of condition ($F(1, 52) = 0.028$, $p = .867$, $\eta_p^2 < .01$), identification ($F(1, 52) = 0.058$, $p = .811$, $\eta_p^2 < .01$), nor an interaction ($F(1, 52) = 2.659$, $p = .109$, $\eta_p^2 = .05$). Second, we analysed the just and the unjust side separately. On the just side, there was a marginal effect of accuracy, $F(1, 294) = 3.753$, $p = .054$, $\eta_p^2 = .013$, such that the included participants judged the action as slightly more morally defensible ($M = 5.55$, $SD = 1.43$) than did

the excluded participants ($M = 4.96$, $SD = 1.34$). No further main effects or interactions were significant, all $ps > .165$. On the unjust side, however, there was a significant main effect of accuracy, $F(1, 299) = 15.721$, $p < .001$, $\eta_p^2 = .05$, such that the included participants judged the action as less morally defensible ($M = 3.55$, $SD = 1.88$) than did the excluded participants ($M = 4.94$, $SD = 1.50$). Note that this pattern of interaction (cf. to the just side) is consistent with the included participants paying more attention and therefore being more influenced by the manipulation of justness. On the unjust side there was also a significant interaction between endorsement and accuracy, $F(1, 299) = 4.620$, $p = .032$, $\eta_p^2 = .02$: When the unjust soldier rejected his country's cause for war, the excluded ($n = 14$; $M = 4.64$, $SD = 1.55$) and included ($M = 4.02$, $SD = 1.90$) participants did not judge him significantly differently, $F(1, 146) = 1.391$, $p = .240$, $\eta_p^2 = .01$. But, when the unjust soldier endorsed his country's cause for war, the excluded participants ($n = 17$) judged his actions as more morally defensible ($M = 5.18$, $SD = 1.47$) than did the included participants, $M = 3.09$, $SD = 1.75$, $F(1, 153) = 22.397$, $p < .001$, $\eta_p^2 = .13$. I would caution against making too much of these results, given the small and uneven cell sizes.

Table S2D

Supplemental Study 2 Demographics of Included and Excluded Participants

	Just Side				Unjust Side			
	Rejects		Endorses		Rejects		Endorses	
	Exclude (n = 12)	Included (n = 139)	Excluded (n = 13)	Included (n = 134)	Excluded (n = 14)	Included (n = 134)	Excluded (n = 17)	Included (n = 138)
Gender	6 male	81 male	8 male	71 male	5 male	76 male	11 male	80 male
Age	33.00 (10.61)	36.26 (12.82)	31.15 (11.47)	37.62 (13.89)	35.64 (11.32)	37.25 (10.89)	34.12 (10.25)	37.30 (13.09)
Political Orientation	4.09 (2.55)	3.81 (1.87)	4.31 (1.80)	3.42 (1.87)	3.71 (2.05)	3.48 (1.96)	4.53 (2.32)	3.69 (1.80)
Apolitical/Libertarian	1/0	8/12	0/0	9/2	0/0	4/10	0/0	5/2
Defensible	4.09 (2.55)	3.81 (1.87)	4.31 (1.80)	3.42 (1.87)	3.71 (2.05)	3.48 (1.96)	4.53 (2.32)	3.69 (1.80)

Study 5b

In this study we recruited six-hundred-and-three participants were recruited through AMT. Forty-four participants incorrectly responded to the side manipulation check (19 on the unjust side, 25 on the just side), and 80 participants incorrectly responded to the endorsement question (17 responded that the soldier rejected his country's cause for war, and 63 responded that he endorsed it; the correct answer was that he was undecided). Twenty-three participants answered both questions incorrectly; accordingly, 101 participants in total were excluded, leaving a total sample of 502. The distribution of the excluded participants across the conditions (side: just vs. unjust; character: bad vs. neutral vs. good), as well as their demographics, are provided in Table 5D below.

The excluded participants were slightly more conservative than the included participants; included: $M = 3.58$, $SD = 1.76$; excluded: $M = 4.10$, $SD = 2.01$; $t(548) = 2.598$, $p = .010$, mean difference = 0.53, 95% CIs [0.13, 0.93]. We did not observe any differences in gender across the two groups, $\chi^2(1) = 1.122$, $p = .289$; nor age, included: $M = 35.71$, $SD = 10.62$; excluded: $M = 34.50$, $SD = 10.79$; $t(601) = -1.046$, $p = .296$; mean difference = -1.21, 95% CIs [-3.49, 1.07].

We did not observe any differences between the two groups in terms of their moral judgment; included: $M = 4.74$, $SD = 1.79$; excluded: $M = 4.68$, $SD = 1.64$; $t(600) = -0.319$, $p = .750$; mean difference = -0.061, 95% CIs [-0.44, 0.32]. Further, analyzing the full sample in a 2 (side: just vs. unjust) by 3 (character: bad vs. neutral vs. good) ANOVA, the pattern of results remained the same as in the main manuscript.

However, including accuracy as a factor in the ANOVA, we observed a significant interaction between accuracy and condition, $F(1,590) = 7.782$, $p = .005$, $\eta_p^2 = .01$. In the unjust condition, there was a main effect of character, $F(2,295) = 4.064$, $p = .018$, $\eta_p^2 = .03$, but no further main effects or interactions were significant (all $ps > .188$). In the just condition, however, there was a main effect of accuracy, $F(1, 295) = 7.923$, $p = .005$, $\eta_p^2 = .03$, such that the excluded participants judged the action as slightly less morally defensible ($M = 5.00$, $SD = 1.43$) than did the included participants, $M = 5.57$, $SD = 1.43$. In this condition, no further main effects or interactions were significant (all $ps > .143$).

Table 5D
Study 5b Demographics of Included and Excluded Participants.

	Unjust Side						Just Side					
	Bad		Neutral		Good		Bad		Neutral		Good	
	Exc. (13)	Inc. (86)	Exc. (17)	Inc. (84)	Exc. (18)	Inc. (84)	Exc. (15)	Inc. (87)	Exc. (16)	Inc. (83)	Exc. (22)	Inc. (78)
Gender	7 male	33 male	8 male	53 male	8 male	45 male	6 male	44 male	6 male	45 male	11 male	39 male
Age	33.85 (10.78)	37.01 (10.97)	35.35 (10.61)	35.10 (9.64)	34.67 (9.2)	36.23 (11.01)	35.40 (14.64)	36.32 (11.80)	36.81 (13.45)	34.58 (10.59)	31.77 (6.35)	34.90 (9.46)
Political Orientation	3.67 (2.06)	3.60 (1.78)	4.53 (1.85)	3.59 (1.74)	4.61 (2.00)	2.99 (1.67)	3.36 (1.86)	3.57 (1.67)	4.13 (2.20)	3.89 (1.83)	4.09 (2.09)	3.91 (1.80)
Apolitical/Libertarian	1/0	4/4	0/2	3/2	0/0	2/3	1/0	3/3	1/0	6/4	0/0	6/8
Defensible	4.00 (2.20)	3.72 (1.82)	3.88 (1.62)	3.79 (1.73)	5.00 (1.53)	4.30 (1.60)	4.67 (1.76)	5.37 (1.49)	5.06 (1.34)	5.49 (1.39)	5.18 (1.26)	5.88 (1.36)

Study 6

Six-hundred-and-three participants were recruited through AMT and were compensated for their participation. Ninety-three people answered at least one of the attention check questions incorrectly, leaving a total sample of 510. The distribution of the included and excluded participants across conditions, and their demographic details, are provided in Table 6D below.

The excluded participants were slightly younger overall ($M = 32.00$, $SD = 9.635$) than the included participants ($M = 37.51$, $SD = 12.48$); $t(601) = 4.044$, $p < .001$; mean difference = 5.51, 95% CIs [2.84, 8.19]. They were also slightly more conservative overall ($M = 4.20$, $SD = 2.14$) than the included participants ($M = 3.63$, $SD = 1.85$); $t(546) = 2.491$, $p = .013$; mean difference = 0.57, 95% CIs [0.12, 1.02]. There was no significant difference in the distribution of men and women across included and excluded groups, $\chi^2(1) = 0.221$, $p = .638$.

Collapsing across all 5 conditions, the defensibility ratings are hard to interpret. However, there was no significant overall differences in defensibility ratings of Borilian soldiers across the excluded and included participants (excluded: $M = 4.38$, $SD = 1.79$; included $M = 4.52$, $SD = 1.76$; $t(601) = 0.71$, $p = .478$). However, excluded participants judged the actions of the Dumolian soldiers as slightly less defensible ($M = 4.33$, $SD = 1.81$) than did the included participants, $M = 4.93$, $SD = 1.69$, $t(601) = 3.091$, $p = .002$. On both sides of the conflict (Dumolian vs. Borilian), the mean defensibility judgments made by the excluded participants were closer to the midpoint of the scale overall, which may indicate that they were not paying attention to the materials.

Repeating the analyses of the effect of side within each condition, with the entire sample (no exclusions), the pattern of results is identical to that reported in the main manuscript. In the aligned just condition, participants regarded the just soldier's actions as more defensible ($M = 5.03$, $SD = 1.64$) than the unjust soldier's actions, $M = 4.08$, $SD = 1.86$; Mean difference = 0.95, 95% CIs [0.59, 1.31]; $t(117) = 5.157$, $p < .001$. There was a similar effect of side in the aligned external condition (just: $M = 5.07$, $SD = 1.69$; unjust: $M = 4.41$, $SD = 1.72$; Mean difference = 0.65, 95% CIs [0.39, 0.92]; $t(122) = 4.867$, $p < .001$), and in the aligned unjust condition just: $M = 5.11$, $SD = 1.57$; unjust: $M = 4.89$, $SD = 1.60$; Mean difference = 0.22, 95% CIs [0.04, 0.40]; $t(119) = 2.380$, $p = .019$. In the baseline condition, the effect of side was not significant, Dumolia: $M = 4.57$, $SD = 1.87$; Borilia: $M = 4.48$, $SD = 1.88$; Mean difference = 0.09, 95% CIs [-0.05, 0.23]; $t(122) = 1.309$, $p = .193$. Finally, in the aligned only condition, there was also an effect of side (Borilia: $M = 4.61$, $SD = 1.68$; Dumolia: $M = 4.42$, $SD = 1.73$; Mean difference = 0.19, 95% CIs [0.05, 0.34], $t(118) = 2.689$, $p = .008$) such that people judged the action of their ingroup (Borilian) soldier as more morally defensible.

Table 6D
Study 6 Demographics of Included and Excluded Participants.

	Baseline		Aligned Only		Morality Only		Aligned Unjust		Aligned Just	
	Excluded (16)	Included (107)	Excluded (22)	Included (97)	Excluded (17)	Included (106)	Excluded (19)	Included (101)	Excluded (19)	Included (99)
Gender	7 male	58 male	9 male	54 male	12 male	56 male	11 male	50 male	12 male	48 male
Age	36.00 (11.92)	38.57 (13.75)	29.41 (6.74)	36.43 (12.29)	33.71 (11.76)	37.76 (11.63)	32.89 (7.65)	38.03 (12.90)	29.21 (9.35)	37.71 (11.85)
Political Orientation	4.43 (2.47)	3.65 (1.77)	4.20 (1.88)	3.56 (1.79)	5.00 (2.24)	3.62 (1.82)	4.28 (2.14)	3.77 (1.91)	3.25 (1.95)	3.55 (2.00)
Apolitical/Libertarian	2/0	7/3	1/1	1/5	1/2	7/2	1/0	1/6	3/0	3/8
Defensible (Borilia)	3.69 (1.62)	4.60 (1.89)	4.50 (1.79)	4.64 (1.66)	4.71 (1.57)	4.37 (1.75)	4.42 (1.80)	4.98 (1.55)	4.47 (2.12)	4.00 (1.81)
Defensible (Dumolia)	3.94 (1.88)	4.66 (1.86)	4.27 (1.83)	4.45 (1.72)	4.71 (1.72)	5.12 (1.69)	4.53 (1.81)	5.22 (1.50)	4.21 (1.93)	5.18 (1.53)

Veterans on MTurk

After running our studies, we also attempted to find estimates of the proportion of MTurk workers who have military experience. In the many studies assessing the characteristics of MTurk workers (e.g., Buhrmeister, Kwang, & Gosling, 2011; Paolacci, Chandler, & Ipeirotis, 2010), the question of military experience has not been asked. One researcher investigated the feasibility of recruiting veterans using online methods (Lynn, 2014), and concluded that it was possible; however, as this study was particularly targeted at veterans it does not provide a base-line estimate of people with military experience in an MTurk study. As a rough way to provide such an estimate, we ran a brief study on MTurk asking about military experience, and military experience in the family. We found that out of the 134 participants in this study, 5 reported that they personally have military experience (3.7%, 95% CIs [2.88, 4.52]), whereas 113 reported that they did not. The remaining 16 participants did not respond, or gave an uninterpretable answer. The 3.7% estimate is somewhat lower than the current estimate population wide, which was at 7% in 2016, and with less than 1% on active duty (Bialik, 2017). This could be because veterans are less likely to be using MTurk, or because they did not wish to report their veteran status. Our largest studies include 720 participants, so if this same proportion holds, this study would have approximately 27 veterans, which is too small a number to conduct any additional analyses. Further, 69 people (out of the 134) reported family involvement, with the most common responses being father or grandfather (or both). See full materials here <https://osf.io/54exk/> and full data set here <https://osf.io/jkubr/>.

Additional References

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