

**When is intergroup harm-doing acceptable? Investigating
the psychological antecedents to the endorsement of
destructive intergroup behaviour**

by
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Abstract

Destructive intergroup behaviour (DIB) represents collective action taken with the proximal intent of harming an outgroup or its members. It was hypothesized that endorsement of DIB is most likely when the ingroup's standards are believed to reflect those of the superordinate category, and when the target group is believed to have violated an *absolute standard* (an essential requirement). Two studies conducted in distinct social contexts provided support for this theorizing. In Study 1, African-Americans were more likely to endorse DIB when they believed the targeted police officer had violated an absolute standard. In Study 2, strong beliefs that prodemocracy standards *ought to be* the shared standards of all Hongkongers predicted support for DIB taken by the Anti-Extradition Law Amendment Bill Movement, but only when it was believed that Hong Kong officials had violated an absolute standard. These findings suggest that when an outgroup is believed to have violated an absolute standard, support for DIB becomes more likely, particularly when supporters believe their ingroup's standards ought to be reflected by the broader society.

Keywords: Destructive intergroup behaviour; Ingroup projection; Absolute standards; Collective action

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Introduction

People may endorse destructive and violent acts committed by a group they belong to across a wide range of social contexts. Destructive forms of collective action can be used by powerful actors such as state authorities to maintain the status quo. For instance, the oppressive effects of state-sanctioned violence against African Americans have been well-documented (Gaynor, 2018; Willingham, 2018; Young, 2011). However, in other instances, destructive forms of collective action are used by disadvantaged groups to challenge the status quo. Beginning in May 2020, Black Lives Matter (BLM) protests organized across the United States in response to the murder of George Floyd by Minneapolis law enforcement officers. These protests – and the BLM movement more broadly – demanded reform to policing and judicial systems complicit in the disproportionate abuse and oppression of African American communities. During the initial wave of protests, public and private property was destroyed, cities’ economies were stalled, and violent conflicts between protestors, counter-protestors, and law enforcement occurred. Yet, months after the protests began, the vast majority of African Americans – roughly 87% – continued to support the Black Lives Matter movement (Thomas & Horowitz, 2020).

Another protracted social movement is currently occurring on the other side of the Pacific. As part of the Hong Kong pro-democracy movement – which surged again in 2019 in opposition to the Fugitive Offenders amendment bill – protesters continue to act against the anti-democratic influence of Mainland China. In 2019, these pro-democracy protests led to the destruction of property, a clogged Hong Kong economy, and several violent encounters. Despite this, roughly 59% of Hong Kong residents polled in December 2019 reported support for the protest movement (Pomfret & Jim, 2019). In a separate poll, nearly a fifth of Hong Kong voters indicated support for the violent actions taken by the protestors (Lok-kei, 2019).

Group members often accept and even celebrate destructive action and harm-doing against an outgroup. But what are the psychological processes by which group members come to endorse destructive and violent intergroup behaviour – to view these

acts as necessary, acceptable, and justified? I will argue that many forms of intergroup harmdoing can be understood as *destructive intergroup behaviour* (DIB), which has been defined as collective action taken with the proximal intent of harming an outgroup or its members (Waldzus et al., 2012). The theoretical focus here is on the psychological processes through which group members come to endorse DIB – to see it as necessary and justified – independent of their own intentions to commit an act of DIB.

Because DIB has not been previously described in the literature, I first delineate the theoretical rationale for this novel concept and describe why understanding DIB *endorsement* is of crucial importance. Following this, a theoretical model is outlined that describes group identification, ingroup projection and absolute standards as key psychological processes that lead group members to support harm-doing against another group. Two studies tested the predictions of this model in two distinct intergroup contexts. Results offered support for a number of hypotheses generated by the model and provided several insights for its improvement and expansion.

Defining destructive intergroup behaviour

Destructive intergroup behaviour (DIB) is collective action taken with the proximal intent of harming an outgroup or its members. As a form of collective action, DIB is action taken by a group member who is acting as a representative of their ingroup and has the primary intent of promoting group interests (Wright et al., 1990). Thus, DIB can be distinguished from acts of harm-doing that are committed by a person who is thinking of themselves and/or their victim as individuals, as well as acts of harm-doing that are committed for purely personal gain; these represent individual actions. What makes DIB *intergroup* in nature is the actor's self-categorization as a group member, the representation of the targets as outgroup members, and the perception that the harmdoing aligns with and promotes ingroup interests.

Moreover, DIB is taken with the *proximal* intent of harming an outgroup or its members. DIB can be motivated solely by a desire to see another group suffer. However, these cases seem rare. Instead, DIB is primarily used as a means to another broader end;

as a strategy for achieving some more distal group goal. For instance, we have seen a number of cases in which Black Lives Matter protestors have torn down statues in public spaces that personified historical figures including Confederate generals, former Presidents (including Abraham Lincoln), and Christopher Columbus. While the proximal intent of these actions is most certainly destructive (i.e., to destroy symbols viewed as important to certain outgroups), one can convincingly argue that the ultimate goal of these actions is to challenge the systemic institutions of racism that persist in the United States. A similar case can be made for the Hong Kong pro-democracy protests: the destructive actions that occurred in the summer of 2019 served to grab international media attention and amplify the movement's prodemocratic message.

The scope of these distal goals can be quite large. Sabotaging a pipeline may be used to delay or prevent the construction of environmentally-threatening infrastructure. Separating children from their families may be used to send a message to others about the severe risks of illegal immigration. Even DIB that appears to be committed solely to punish an offending outgroup often serves a distal goal of rebalancing the scales of justice or reifying a societally-shared norm of conduct (Wenzel & Thielmann, 2006). Similarly, the range of specific behaviours that would be considered DIB is comparably large, yet what these behaviours have in common is their focus on causing harm to an outgroup. Thus, while physical violence is certainly a form of DIB, DIB encompasses other (perhaps less obvious) forms of intergroup harm-doing, including provoking fear, tarnishing the outgroup's image, destroying outgroup symbols, or causing the outgroup significant financial harm.

At this point, some readers may be wondering whether a difference exists between DIB and the more traditional concept of nonnormative collective action, originally defined by Martin (1986) as collective action that is outside the existing social rules and structure. More recently, Wright (2009) distinguished between normative and nonnormative collective actions by focusing on their (mis)alignment with the norms of the superordinate category. According to this conceptualization, normative collective action is collective action that conforms with values and rules of the larger social category, whereas nonnormative collective action is collective action that does not. These

concepts distinguish collective actions as normative or nonnormative by using comparisons to existing societal norms. In contrast, the criteria for distinguishing between DIB and non-DIB relies solely on an individual's *intention*. An action is considered DIB when it is undertaken with the explicit purpose of causing harm to an outgroup, regardless of whether or not these actions are consistent with the norms of the larger superordinate category (or even the norms of their own ingroup). Thus, DIB provides a cross-cutting distinction from the normative/nonnormative concepts: some acts of DIB may be considered normative (such as killing the enemy during wartime), while other nonnormative collective actions would not be considered DIB (such as chaining oneself to a tree to prevent its destruction).

The importance of understanding DIB endorsement

Research over the last two decades has identified many psychosocial antecedents that predict individual acts of intergroup violence (e.g., Della Porta, 2006; Hogg et al., 2013; Kruglanski et al., 2014; McCauley & Moskaleiko, 2008; McGregor & Jordan, 2007; Taylor & Horgan, 2006). However, less attention has been paid to the processes by which group members come to endorse acts of intergroup violence independent of their own intentions to commit such acts. Yet, it can be argued that understanding the processes that lead to DIB endorsement is of crucial importance for two reasons. First, group members' endorsement of DIB is likely to strongly influence its likelihood of occurrence (Crandall et al., 2002; De La Roche, 2001; Hayes & McAllister, 2005; Jetten et al., 1996; Ritchey & Ruback, 2018; Waldmann, 2005). Second, the motives for endorsing DIB may be different than the motives for engaging in DIB, as research has demonstrated that group members who engage in DIB are particularly motivated by gaining group acceptance (Goldman & Hogg, 2013) or by a 'quest for personal significance' (Kruglanski et al., 2014). In short, it is the collective endorsement of DIB by other ingroup members that empowers a smaller subset of group members to engage in DIB. Therefore, it is important to develop an understanding of how and when group members will endorse DIB in order to expand the collective action literature as well as its application to real world intergroup conflicts.

Ingroup identification and DIB endorsement

A key insight of Social Identity Theory (Tajfel & Turner, 1979) is that an individual's self-concept is informed by their collective (or social) identities: those identities that stem from the groups they belong to. Turner et al.'s (1987) Self-Categorization Theory, developed in part to elaborate this idea, proposed that when collective identities are salient, individuals categorize themselves at a level of abstraction that includes other group members. As a result of this categorization, individuals engage in self-stereotyping, wherein their beliefs, values, goals, and behaviours are aligned with those that define the salient ingroup. Another important insight of Social Identity Theory is that because collective identities inform individuals' self-concepts, group members are motivated to see their ingroup in a positive light, or to achieve 'positive distinctiveness'. Thus, mistreatment of the ingroup is experienced as a threat to self-esteem, especially for highly identified group members.

For these reasons, researchers have noted that the degree to which an individual identifies with an ingroup should predict both perceptions of group-based injustices (Smith et al., 1994) as well as the extent to which threats against the ingroup's status and values are personally experienced (Stephen et al., 2002). In support of these claims, research has shown that compared to those lower in ingroup identification, high identifiers are more likely to recognize prejudice and discrimination directed towards their ingroup (Major et al., 2003; Operario & Fiske, 2001; Sellers & Shelton, 2003), and to personally suffer from their ingroup's mistreatment (Eliezer et al., 2010; McCoy and Major, 2003). Given these findings, it seems likely that identification with the ingroup should increase broadband support for actions intended to alleviate the ingroup's suffering.

Moreover, individual group members might endorse DIB because it promotes group goals, protects the group from an outgroup, or rights a wrong against the ingroup. As individuals identify more strongly with their group, they increasingly experience the group's interests as their own, and by extension, will be more motivated to endorse collective actions that are perceived to serve group interests. More generally,

identification with the ingroup is essential for collective action (Simon & Klandermans, 2001), and research has revealed that identification with the ingroup can act as both a direct (Thomas et al., 2009) and indirect (van Zomeren et al., 2008) predictor of collective action intentions. Although the focus of the current work is on the endorsement of DIB – not actual intentions to engage in DIB – it can be reasoned that ingroup identification also acts as an important psychological antecedent to DIB endorsement.

Finally, there is also some direct evidence that higher levels of ingroup identification can lead group members to support harm-doing against an outgroup specifically. For instance, Adelman et al. (2012; reported in Hogg & Adelman, 2013) showed that in the context of the Israeli-Palestinian conflict, higher identification with Israelis and Palestinians predicted stronger support for military action and suicide bombings against the outgroup, respectively. Similarly, Sidanius et al. (2004) reported that the strength of religious identification among Muslims in Lebanon was positively related to support for political groups linked to Islamic terrorism and was also indirectly related to support for the 9/11 attacks.

In summary, ingroup identification seems necessary for DIB endorsement. Highly identified group members are more sensitive to the ingroup's mistreatment, react more negatively when their group is wronged by another, and thus should be more supportive of outgroup harm-doing. However, other authors (see Huynh et al., 2014) have argued that when considering group members' responses to group-based threats and injustices, it is important to consider the role played by multiple social identities simultaneously. To that end, we now turn to another important collective identity – the superordinate group – and the role it might play in the psychology of DIB endorsement.

Identification with the superordinate category and DIB endorsement

A superordinate category encompasses both the ingroup and other relevant outgroups (Tajfel & Turner, 1979) and defines the norms, values and standards for all subgroups contained within (Turner et al., 1987). Much like identification with one's ingroup, identification with the superordinate category should exert its own unique

influence on ingroup member's willingness to endorse DIB. However, unlike ingroup identification, which should have a rather simple positive relationship to DIB endorsement, the role of superordinate identification may be more complex. Specifically, identification with the superordinate category may simultaneously discourage and promote the endorsement of DIB.

Identification with a superordinate category leads individuals to more readily extend benefits normally reserved for ingroup members to those who were previously outgroup members (Gaertner et al., 1993). This is because self-categorization at the level of the superordinate category has the effect of changing those who were previously outgroup members into ingroup members within this now more broadly defined ingroup. The result can be decreased pro-ingroup biases (Gaertner et al., 1989) and outgroup prejudice (Dovidio et al., 1992), as well as increased empathy (Dovidio et al., 1997; Dovidio et al., 2004) and prosocial behaviour towards members of the outgroup (Dovidio et al., 1997; Nier et al., 2001). It has also been suggested that when individuals from different groups share a superordinate identity there is an expectation that members of both groups will be treated fairly and equally (Wenzel, 2004).

Thus, identification with the superordinate category can foster more positive intergroup attitudes and should reduce the likelihood one would endorse harmful actions towards outgroup members (Cehajic et al., 2008; Dovidio et al., 2009; Eggins et al., 2002; Gaertner et al., 1993; Simon & Ruhs, 2008; Tausch et al., 2009; Wohl & Branscombe, 2005). Therefore, insofar as identification with the superordinate category leads people to recategorize outgroup members as part of the more inclusive superordinate category, it seems that superordinate identification will discourage the endorsement of DIB.

However, there are also reasons to predict the opposite, namely that once the outgroup is recategorized at the superordinate level, outgroup members may be susceptible to even harsher treatment when they violate the standards or norms of the superordinate category. For instance, Wenzel and Theilmann (2006) have shown that compared to low identifiers, highly identified Australians (i.e., the superordinate

category) responded to instances of fraud by another Australian with a stronger preference for punishment. This desire for punishment was thought to represent an attempt to reaffirm the superordinate category's standards. Similarly, Marques and Paez's (1994) 'black sheep effect' describes how ingroup offenders are at times punished more severely than outgroup offenders as the former's misconduct is particularly threatening to the ingroup's image (Pinto et al., 2010; van Prooijen & Lam, 2007). In this way, identification with the superordinate category may instead promote DIB endorsement against members of subgroups who appear to threaten the image of the superordinate category.

Additionally, because superordinate categories define the norms, values, and standards for all subgroups contained within, they often serve as a comparative standard for determining the worth and relative status of subgroups. Subgroups are thought to be 'prototypical' to the degree that they are perceived to embody the norms, values and standards that define the ideal for the superordinate category (i.e., they embody the superordinate category's *prototype*; Oakes et al., 1998), and prototypicality is associated with positive evaluations and status. In contrast, subgroups that are perceived as less prototypical receive more negative evaluations and lower social status. Thus, if identification with the superordinate category leads subgroup members to hold other groups accountable to a set of shared norms, values, and attitudes, it could increase DIB endorsement when a subgroup is seen to violate these norms, values, and attitudes.

In summary, identification with the superordinate category may act to both discourage and promote the endorsement of DIB against an outgroup. When people recategorize former outgroup members as part of a more broadly defined superordinate category, they are more likely to extend benefits normally reserved for the ingroup to those who were previously members of the outgroup. Therefore, identification with the superordinate category may reduce DIB endorsement. Yet, because superordinate categories provide the norms, values and standards for all subgroups contained within, an outgroup whose conduct is perceived to violate the superordinate category norms may be more likely to be seen as deserving targets of DIB by those who identify more strongly with the superordinate category.

Ingroup projection and DIB endorsement

If the superordinate category provides a framework by which subgroups are evaluated and these evaluations can be used to justify DIB, one important consideration is how individuals from different subgroups determine what the standards, norms and values of the superordinate category are. Mummendey and Wenzel's (1999) ingroup projection model provides one account (see also Wenzel et al., 2008). According to these authors, the superordinate category prototype is not static or objective, but instead is a subjective construction. Thus, one subgroup's understanding of the content of the superordinate category prototype need not be the same as another's. Instead, each group *projects* some of their own group-specific characteristics onto the superordinate category prototype. This enables subgroup members to claim greater superordinate category prototypicality, to be evaluated more positively, and ultimately, to maintain a sense of positive distinctiveness within the superordinate category. In support of their theorizing, these researchers have shown that members of different groups often disagree about the relative prototypicality of their ingroup (Waldzus et al., 2004; Wenzel et al., 2003), and that these disagreements can result in outgroup devaluation, discrimination and conflict (Wenzel et al., 2008; Waldzus & Mummendey, 2004; Waldzus & Mummendey, 2002).

Wenzel et al. (2008) also point out that ingroup projection is constrained by social reality. For instance, in most cases it is very difficult for a disadvantaged group to claim greater absolute prototypicality within the larger superordinate category than an advantaged group, and groups often agree that the advantaged group is more prototypical than the disadvantaged group. However, ingroup projection may still lead groups to disagree on their relative prototypicality. For instance, Devos and Anderson (2019) used an implicit measure of prototypicality and reported that both Asian- and European-Americans agreed that European-Americans were more representative of the American prototype. However, these two groups disagreed about Asian-Americans' relative prototypicality such that Asian-Americans saw their group as closer to the prototypical American identity than did European-Americans. In some contexts, disadvantaged groups appear able to overcome reality constraints entirely and view the ingroup as more prototypical than the advantaged outgroup (see Rosa, 2011).

In order for individuals to engage in ingroup projection, both the subordinate ingroup and the superordinate category identities must be simultaneously salient, and an individual must be identified with both groups (Wenzel et al., 2008). On the one hand, individuals will use the superordinate category prototype as the basis for subgroup evaluations only if they identify with the superordinate category – only then will the superordinate category prototype offer meaningful evaluation criteria. On the other hand, identification with the local ingroup provides the motivation to project ingroup-specific characteristics onto the superordinate category prototype. In other words, ingroup projection is most likely when individuals are *dual identified* with both a local ingroup and the superordinate category (Huo et al., 1996; Waldzus et al., 2007; Waldzus et al., 2003; Wenzel et al., 2003).

When dual identified group members engage in ingroup projection two things occur. First, they will perceive their ingroup as relatively more prototypical. Second, to the degree that an outgroup differs from the ingroup, the outgroup will be perceived as less prototypical and even as deviants. Herein lies another psychological mechanism through which identification with the superordinate category can act as an antecedent to DIB endorsement. Because the superordinate category prototype serves as an evaluative dimension for all subgroups contained within, ingroup projection can lead members of one group to hold outgroups accountable to their own ingroup-derived standards. When an outgroup violates a standard that has been projected onto the superordinate category this violation is doubly problematic. Not only does it violate an ingroup standard, but it also violates a superordinate category standard. As a result, they may be particularly likely to respond with devaluation, discrimination, and hostility.

Absolute standards and DIB endorsement

However, identification and ingroup projection by themselves might be insufficient to explain how group members come to endorse DIB. For instance, at a university, while the lessons taught by other departments may not align with how psychologists define the university's core values, even the most highly identified psychologists (thankfully) do not endorse the idea of interdepartmental harm-doing.

Thus, additional criteria are required in order for an outgroup's violation to justify DIB. Most obviously, the outgroup must be seen as directly responsible for the violation. If the outgroup's violation is attributed to causes beyond their control it is unlikely that they will be seen as deserving targets of DIB (Walzdus et al., 2012). More importantly, however, the outgroup's violation must be seen as illegitimate and inspire strong negative emotional reactions (Jost et al., 2012; Mackie et al., 2000; Tajfel & Turner, 1979; Thomas et al., 2009; Van Zomeren et al., 2008; Wright et al., 1990). Thus, when an ingroup projects a given standard onto the superordinate category, the nature of the standard has important consequences for how the ingroup reacts to an outgroup that violates said standard. On the one hand, some violations have practically no effect on our evaluations and treatment of the perpetrating outgroup. On the other hand, violations of standards can also justify dehumanization, punishment, intergroup violence, and even war.

To explain why the violation of some standards evoke stronger reactions than the violation of others, Kessler et al. (2010) distinguish between *gradual* and *absolute* standards¹. According to these authors, gradual standards are ideals which all members of a group should attempt to meet to the highest degree possible. They are defined imprecisely, and individuals receive increasingly positive (or negative) evaluations the closer (or farther) their actions are from the ideal. Thus, violations of gradual standards are judged and responded to in a graded manner. On the other hand, absolute standards are essential requirements that must be met by all group members and are assessed in either/or terms. Importantly, any failure to meet an absolute standard is completely unacceptable. Deviations are judged in an absolute, all-or-none fashion, and negative evaluations of the perpetrator and recommendations for punishment are independent of the degree to which the perpetrator's actions deviated from the absolute standard. Thus, negative judgements about those who violate an absolute standard are made with more

¹I use the terminology *absolute* and *gradual* standards, which has been used recently by others (e.g., Barth et al., 2015; van Zomeren et al., 2011). However, these standards were initially referred to as *minimal* and *maximal* (e.g., Fritsche et al., 2009; Kessler et al., 2002; Kessler et al., 2010). I believe the absolute/gradual terminology provides more information about how these standards are judged and how punishment is assigned when each is violated. However, there are no conceptual differences between absolute/gradual and minimal/maximal standards.

certainty and lead to harsher reactions than a violation of a gradual standard (Fritsche et al., 2009; Kessler et al., 2002).

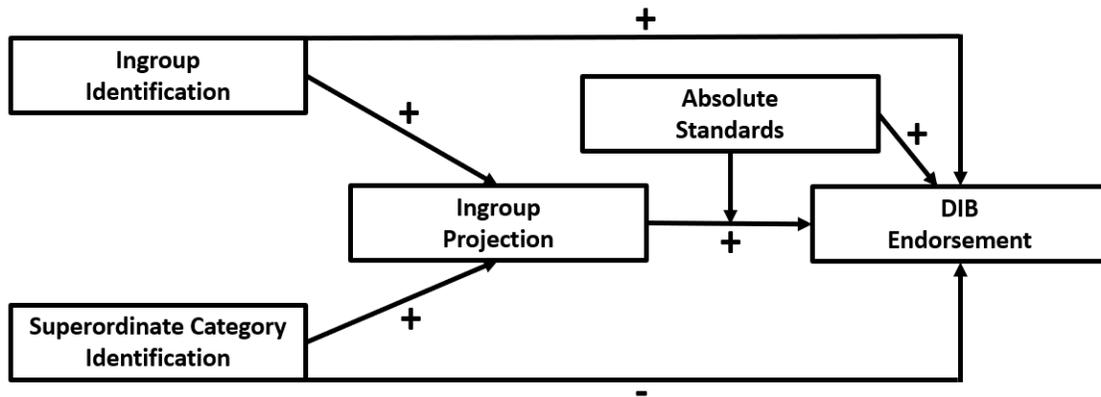
For instance, Fritsche et al. (2009) reported that when participants conceived of torture as a violation of an absolute standard, no differences were found in their negative evaluations of a police officer who engaged in moderate (e.g., a slap to the face) versus severe (e.g., a punch) forms of torture. Additionally, no differences were found in the severity of punishment assigned to the police officer. In contrast, participants who conceived of torture as a violation of a gradual standard reported more negative evaluations and recommended harsher punishments to the police officer who engaged in the more severe form of torture. It has also been shown that even after controlling for participants' perceived severity of a given violation, violations of absolute standards still predict harsher punishments than did violations of gradual standards (Kessler et al., 2002).

In addition to being applied to the actions of individuals, both types of standards can be applied at the group level. Recalling that superordinate groups encompass both the ingroup and other local outgroups (Tajfel & Tajfel, 1979), Fritsche et al. (2009) has argued that because absolute standards represent actions that are essential requirements for all groups contained within the superordinate category, violations of absolute standards are met with harsh punishment and/or exclusion of the offending group (Schubert et al., 2006). In contrast, because gradual standards represent ideals, their violation often leads the offending group to be seen as less prototypical of the superordinate category, and while groups that do not seem to be working towards meeting these standards may face pressure to assimilate and to “do better”, exclusion and harsh punishment are less likely. Thus, we reason that in comparison to gradual standards, violations of absolute standards are more likely to lead to the endorsement of DIB against the offending outgroup.

Modelling DIB endorsement

The model that emerges when we combine this theorizing to predict DIB endorsement is presented in Figure 1:

Figure 1. The proposed theoretical model of DIB endorsement



Note. + represents a positive relationship between variables, - represents a negative relationship between variables.

This model poses three key hypotheses:

- 1) Ingroup identification will have a positive total effect on DIB endorsement, controlling for the effect of identification with the superordinate category. Part of this effect will be direct and part of this effect will be indirect mediated by ingroup projection.
- 2) Identification with the superordinate category will have a negative direct effect on DIB endorsement but a positive indirect effect on DIB endorsement mediated by ingroup projection, controlling for the effect of ingroup identification.
- 3) The relationship between ingroup projection and DIB endorsement will be moderated by absolute standards, such that the more an outgroup's actions are seen as a violation of an absolute standard, the stronger the relationship between ingroup projection and DIB endorsement.

I conducted two studies to test these predictions with participants who belonged to two groups currently involved in widespread social movements. Study 1 tested this model in the context of the African American-law enforcement intergroup relations in the United States. Study 2 tested a refined version of these predictions in the context of the 2019/2020 Hong Kong Anti-Extradition Law Amendment Bill movement.

Study 1

The disproportionate abuse and violence suffered by the African American community at the hands of American law-enforcement is well-documented. One analysis conducted in 2015 found that African Americans were 2.5 times more likely to be killed by police compared to White Americans (Palma, 2015). A study from that same year found that unarmed African Americans were almost 3.5 times more likely to be shot than unarmed White Americans, between the years 2011-2014 (Ross, 2015). Many more analyses have yielded similar results (Buehler, 2017; DeGue et al., 2016; Edwards et al., 2018; Ross et al., 2020). In social psychology, the prevalence of this issue has long been known: Correll et al.'s (2007) classic demonstration of the shooter bias made clear the life-threatening consequences of implicit biases and stereotypes surrounding African Americans.

Following the acquittal of George Zimmerman for the shooting of Trayvon Martin in 2013, the hashtag #BlackLivesMatter began circulating on social media. In the months that followed, Black Lives Matter (BLM) developed into a full-blown social movement, and since then, BLM has held dozens of protests in the United States, has received international media attention, and has grown in both membership and public popularity. Broadly speaking, the BLM movement is a decentralized social movement that advocates for non-violent civil disobedience in protest of police brutality and racially-motivated violence against African Americans. Although the BLM movement has publicly denounced acts of violence that were affiliated with the movement in the past (CBS, 2016), it is also true that those affiliated with the BLM movement have committed acts of DIB. Riots have erupted from protests in several American cities over the years, and the 2020 protests in the wake of the killing of George Floyd saw looting, vandalism, destruction of public property, and violent confrontations between protestors, counter-protestors, and law-enforcement. DIB via social media-based public shaming also become increasingly common in the months following George Floyd's murder (Kornhaber, 2020).

Despite the increase in these destructive and directly harmful acts, the vast majority of African Americans support the BLM movement (Thomas & Horowitz, 2020). To the degree that continued support for the BLM movement can be understood as tacit approval for at least some forms of DIB, this social context provided an excellent opportunity to test the hypothesized model in a real-world intergroup struggle. Specifically, we predicted that among a sample of African Americans:

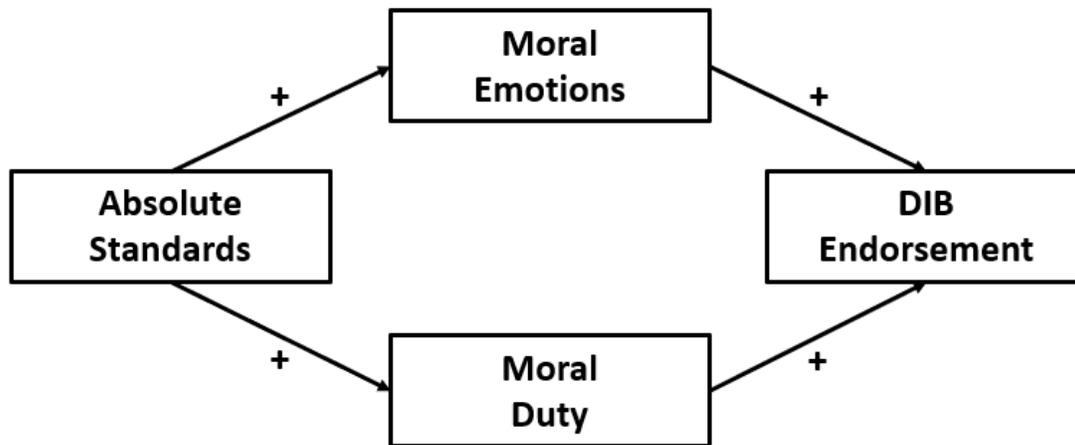
- 1) Identification with African Americans will have a positive total effect on endorsement of DIB against the police by members of the African American community, controlling for American Identification (the superordinate category). Part of this effect will be direct, and part will be indirect mediated by Ingroup Projection.
- 2) American Identification will have a negative direct effect on endorsement of DIB against the police, but a positive indirect effect on DIB endorsement mediated by Ingroup Projection, controlling for Identification with African Americans.
- 3) The relationship between Ingroup Projection and endorsement of DIB against the police will be moderated by Absolute Standards, such that the more that the actions of the police are seen as violations of absolute standards, the stronger the relationship between Ingroup Projection and DIB endorsement will be.

This study operationalized DIB as a Facebook post intended to publicly shame an officer who engaged in police brutality. DIB was operationalized this way for three reasons. First, as a relatively minor form of DIB, it was expected that there would be more variation in endorsement scores than if a more extreme form of DIB was used. Second, this act of DIB was consistent with real-world campaigns and cancel culture more broadly, and thus this operationalization was consistent with a form of DIB employed regularly today. Finally, operationalizing DIB as a social media post allowed for the inclusion of a measure of participants' willingness to directly demonstrate their endorsement of the DIB through behaviour. It was reasoned that 'liking', 'sharing', and displaying the social media post on their own wall would be compelling forms of DIB endorsement.

Absolute standards and morally-motivated DIB Endorsement

As described in detail above, perceiving the actions of the outgroup as a violation of an absolute standard is a critical step on the road to DIB endorsement. In addition to serving as a moderator of the effect of ingroup projection, there is reason to believe that the degree to which an outgroup's mistreatment of the ingroup is seen as a violation of an absolute standard could also play a more direct role in inspiring DIB endorsement. Given their all-or-none, either-or nature, similarities between absolute standards and concepts in the moral psychology literature have been noted (Baron & Spranca, 1997; Barth et al., 2015; Skitka, 2010; Tetlock et al., 2000). When considering the relationship between absolute standards and DIB endorsement, two of these similarities seem particularly relevant. First, violations of absolute standards can evoke strong moral emotions (Skitka et al., 2005; van Zomeren & Lodewijkx, 2005), which have been shown to predict support for and participation in extreme forms of collection action (Mooijman et al., 2018; Tausch et al., 2011). Second, when absolute standards are violated, people experience a sense of moral duty to enforce the standard and punish the transgressing group (Barth et al., 2015; Fritsche et al., 2009; Kessler et al., 2002). In short, the more a violation is seen to involve an absolute standard, the more group members will experience moral emotions and a sense of moral duty to punish the offending outgroup, which will in turn predict high endorsement of DIB. Thus, in Study 1 I tested the additional hypothesis that perceiving the mistreatment of the ingroup as a violation of an absolute standard would increase DIB endorsement, and that this effect will be mediated by moral emotions and moral duty to punish. This model is presented in Figure 2:

Figure 2. A model for the relationship between Absolute Standards and DIB Endorsement



Note. In this model, the effect of Absolute Standards on DIB Endorsement results from two indirect effects mediated by Moral Emotions and Moral Duty. + represent a positive relationship between variables.

Methods

Recruitment

Participants were recruited using PrimePanels, a service offered by CloudResearch (formerly TurkPrime) that enables screening for specific subsamples in the CloudResearch participant pool. Only participants who identified as African American, had a HIT² approval rating of 95-100%, and had a minimum of 20 previously completed surveys were recruited, resulting in 368 responses. To ensure proper screening by PrimePanels, participants were asked to report their ethnicity. Those who did not identify as African American (N=6) were removed from the data set prior to analyses. Participants who did not provide consent (N=54), failed the comprehension check (N=19), and spam entries (N=6) were also removed.

²Participants' HIT approval ratings reflect how often their completed work is approved by the requester. For example, a participant who has completed 1000 surveys via PrimePanels and had their work rejected by the requester 50 times has a HIT approval rating of 95%.

Participants

The final sample included 283 African Americans, with 267 identifying only as African American, and 16 identifying as bi/multiracial. The sample included 185 participants who identified as female and 98 who identified as male, with a mean age of 35.33 (SD=11.05). A total of 179 participants reported prior negative personal experiences with the police, 23 preferred not to respond to this item, and 81 reported no negative personal experiences.

Procedure

Participants began by providing consent and demographic information (ethnicity, age, gender and personal experience with the police). Following this, participants completed measures of African American Identification, American Identification, and Ingroup Projection.

Next, participants were asked to read a news story (see *Appendix A*) ostensibly written by a local newspaper describing an incident in which a Black man was approached by a white police officer after committing a minor offense (jaywalking). Relying on ‘body-cam footage’, the story described the encounter, which escalated quickly and ended when several officers beat, tazed, and piled on top of the Black man. The events and quotes in this part of the news story were drawn from a real-world incident, however all names, dates, and locations were changed.

The story then described the subsequent fallout from this incident, with an emphasis on two points. First, it was made clear that the arresting officer would not be punished by authorities. Second, the news story described a public-shaming social media campaign started by the local African American group (Concerned Citizens Against Police Brutality). Participants were then shown the Facebook post described in news story (see *Appendix B*). This post included a picture of the arresting officer overlaid with the word “RACIST” and his full name. The comments added to the post including statements about the officer, calling him a “racist piece of shit” and “loser”, and encouraged social media users to “Like” and “Share” the post.

Next, participants completed measures of Absolute and Gradual Standards, Moral Emotions, Moral Duty, DIB endorsement measures, a Comprehension Check, and additional demographics. Participants were debriefed, asked to provide post-debrief consent, and remunerated \$3.50 USD for their participation.

Measures³

Comprehension Check. This single-item asked participants to answer Yes/No to the statement “Did the authorities (police, government) do anything about the civil rights violations of the arresting officer from the news article?”. This item was used to confirm that participants had understood that the arresting police officer had not been punished. Participants who answered this question incorrectly were removed from the dataset prior to analysis.

African American Identification. Cameron’s (2004) ingroup identification scale was adapted for the group “Black/African Americans”. Participants completed 12 items (e.g., “I often think about the fact that I am Black/African American”; “In general I am glad to be Black/African American”; “I feel strong ties to other Black/African Americans”) using a 7-point Likert scale (endpoints “strongly disagree” and “strongly agree”). Additionally, an adapted version of Tropp and Wright’s (2001) Inclusion of the Ingroup into the Self scale (originally adapted from Aron et al., 1992) was included. This scale presents participants with a series of seven increasingly overlapping pairs of circles, one labeled “Self” and the other “African Americans”. Participants select the pair of circles that best represents their identification with African Americans. Relevant items were reverse-coded and the mean for all 13 items was calculated ($\alpha = .91$). Higher scores indicate higher levels of identification.

American Identification. Cameron’s (2004) ingroup identification scale was adapted for the group “Americans”. Participants completed 12 items (e.g., “I often think

³In addition to the variables outlined in this section, we also collected measures of positive, negative, and global affect towards the police officer and Black Activists, infra- and dehumanization of the police officer, as well as support for normative and non-normative collective actions more generally. However, these variables were not the focus of the current study and were thus not included in the analysis that follows.

about the fact that I am American”; “In general I am glad to be American”; “I feel strong ties to other Americans”) using a 7-point Likert scale (endpoints “strongly disagree” and “strongly agree”). Additionally, an adapted version of Tropp and Wright’s (2001) Inclusion of the Ingroup into the Self scale was included. Relevant items were reverse-coded and the mean for all 13 items was calculated ($\alpha = .91$). Higher scores indicate higher levels of identification.

Ingroup Projection. An adapted version of Tropp and Wright’s (2001) Inclusion of the Ingroup into the Self scale was used as a single-item measure of ingroup projection. This measure presents participants with a series of seven increasingly overlapping pairs of circles, one labeled Americans and the other African Americans. Participants select the pair that best represent the level of overlap that they believe existed between the values of Americans and African Americans (1=no overlap; 7=complete overlap).

Absolute Standards. This single-item measure included a short statement that used absolute and moral language to frame the arresting officer’s behaviour as a violation of an absolute standard. Participants responded to this statement on a 7-point Likert scale (endpoints “strongly disagree” and “strongly agree”).

The actions of the arresting police officer from the news article violated standards regarding the civil rights of African Americans which are essential and absolute requirements of all Americans. Meeting these standards is a moral requirement and even the smallest failure to do so is completely unacceptable. The actions of the arresting police officer should not be described as “disappointing” but rather as an egregious violation that must be punished.

Moral Emotions. This measure included a 4-item anger subscale (e.g., “I am angry towards the arresting police officer”), a 4-item contempt subscale (e.g., “I am contemptuous towards the arresting police officer”), and a 4-item disgust subscale (e.g., “The actions of the arresting police officer disgust me”). Participants responded using 7-point Likert scales (endpoints “strongly disagree” and “strongly agree”). The Scree plot as well as the results of an exploratory principal components analysis indicated that these

12 items loaded onto a single component (see *Appendix C*). Thus, the mean was calculated for all 12 items ($\alpha = .96$).

Moral Duty. This measure began with the prompt “When a group, such as the police, faces no consequences for violating the civil rights of African Americans...”, followed by five statements (e.g., “...Americans have a responsibility to punish the offenders”; “...it is important that the offenders know that good members of American society will punish them”). Participants responded using a 7-point Likert scale (endpoints “strong disagree” and “strongly agree”). The Scree plot and results of an exploratory principal components analysis indicated these five items loaded onto a single component (see *Appendix C*). The mean was calculated for all five items ($\alpha = .87$).

DIB Endorsement: Behavioural⁴. This measure included 5 items. On 7-point Likert scales (endpoints “strongly disagree” and “strongly agree”), participants responded to statements that described various ways they might endorse the post using social media (e.g., “I would be willing to ‘like’ the police shaming social media post about the arresting officer from the news article”; “I would be willing to ‘share’ the social media post on my Facebook wall, making it visible to all of my friends, including acquaintances and coworkers”). The mean was calculated for all five items ($\alpha = .93$).

DIB Endorsement: General. This measure included 16 items. On 7-point Likert scales (endpoints “strongly disagree” and “strongly agree”), participants responded to statements expressing endorsement of the individuals responsible for the social media post (e.g., “I endorse the actions of the members of the African American community who created and distributed the social media post”; “I consider the members of the African American community who created and distributed the social media post to be on my ‘team’”; “The actions taken by the members of the African American community

⁴ To address the possibility that Behavioural and General measures of DIB endorsement may load onto a single component, an exploratory PCA was conducted (see *Appendix C*). Results suggested that Behavioural Endorsement and General Endorsement items loaded onto their own unique components, and thus, the five Behavioural Endorsement items were mean-scored and used as the first dependent variable. Similarly, the 16 General Endorsement items were mean-scored and used as the second dependent variable.

who created and distributed the social media post are necessary”). The mean was calculated for all 16 items ($\alpha = .96$).

Gradual Standards. This single-item measure included a short statement that used gradual and lenient language to frame the arresting officer’s behaviour as violation of a gradual standard. Participants responded to this statement on a 7-point Likert scale (endpoints “strongly disagree” and “strongly agree”).

The actions of the arresting police officer from the news article violated a standard regarding the treatment of African Americans that all Americans should strive to achieve to the greatest extent possible. All police officers should work to achieve these “gold standards” for respecting the civil rights of African Americans, and they should be praised for efforts to get as close to these standards. It is disappointing that the arresting police officer fell short of these high standards and they need to be encouraged to do better.

Personal Experience. Studies have demonstrated that personal experiences of victimization during intergroup conflicts can predict less outgroup tolerance (Canetti-Nisim et al., 2009) and decreased forgiveness (Myers et al., 2009). In addition, theoretical work has linked personal grievances with radicalism and terrorism (McCauley & Moskaleiko, 2008). Thus, it seems reasonable that personal experiences of mistreatment by police officers might increase endorsement of DIB. To control for these effects, participants reported Yes/No/Prefer Not to Answer to the statement “Have you personally experience a “negative” interaction with a police officer in which you felt your civil rights were being infringed upon?”. This item was used as a covariate in all analyses.

Results

Summary statistics for all variables included in analyses are provided in Table 1 and bivariate correlations are provided in Table 2.

Table 1. Summary statistics of all variables in Study 1

| | Mean | Standard Deviation | Skewness (SE) | Kurtosis (SE) |
|--|-------------|---------------------------|----------------------|----------------------|
| African American Identification | 5.38 | 1.14 | -1.05 (0.15) | 1.18 (0.29) |
| American Identification | 4.57 | 1.23 | -0.29 (0.15) | -0.08 (0.29) |
| Ingroup Projection | 4.08 | 1.59 | 0.05 (0.15) | -0.74 (0.29) |
| Absolute Standards | 6.20 | 1.37 | -2.11 (0.15) | 4.45 (0.29) |
| Gradual Standards | 4.96 | 2.07 | -0.66 (0.15) | -0.81 (0.29) |
| Moral Emotions | 5.83 | 1.28 | -1.35 (0.15) | 1.48 (0.29) |
| Moral Duty | 4.73 | 1.61 | -0.55 (0.15) | -0.38 (0.29) |
| DIB Endorsement: Behavioural | 4.09 | 2.13 | -0.17 (0.15) | -1.38 (0.29) |
| DIB Endorsement: General | 5.00 | 1.52 | -0.66 (0.15) | -0.45 (0.29) |

Table 2. Bivariate correlation matrix for all variables in Study 1

| | African American ID | American ID | Ingroup Projection | Absolute Standards | Gradual Standards | Moral Emotions | Moral Duty | DIB Endorse: Behavioural | DIB Endorse: General |
|---------------------------------|---------------------|-------------|--------------------|--------------------|-------------------|----------------|------------|--------------------------|----------------------|
| African American ID | 1 | - | - | - | - | - | - | - | - |
| American ID | .28** | 1 | - | - | - | - | - | - | - |
| Ingroup Projection | .03 | .43** | 1 | - | - | - | - | - | - |
| Absolute Standards | .27** | .02 | -.09 | 1 | - | - | - | - | - |
| Gradual Standards | .24** | .18** | .003 | .17** | 1 | - | - | - | - |
| Moral Emotions | .34** | -.06 | -.09 | .47** | .20** | 1 | - | - | - |
| Moral Duty | .23** | -.02 | -.15* | .20** | .12 | .32** | 1 | - | - |
| DIB Endorse: Behavioural | .20** | .02 | -.07 | .26** | .17** | .42** | .43** | 1 | - |
| DIB Endorse: General | .34** | -.05 | -.12* | .42** | .19** | .58** | .56** | .67** | 1 |

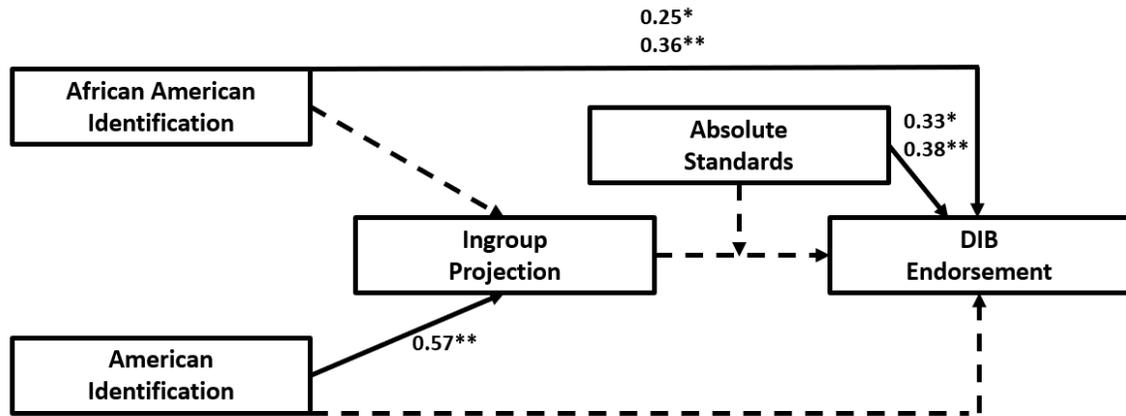
*p < .05, **p < .01.

Table 3. Results of PROCESS model 14 for DIB Endorsement: Behavioural and DIB: General

| | Ingroup Projection | | | DIB Endorsement: Behavioural | | | DIB Endorsement: General | | |
|--|---|-----------|----------|--|-----------|----------|---|-----------|----------|
| | B | SE | p | B | SE | p | B | SE | p |
| African American Identification | -0.14 | 0.08 | .07 | 0.25 | 0.12 | .04 | 0.35 | 0.08 | < .001 |
| American Identification | 0.57 | 0.07 | < .001 | < 0.001 | 0.12 | .99 | -0.12 | 0.08 | .13 |
| Ingroup Projection | - | - | - | -0.02 | 0.09 | .86 | -0.05 | 0.06 | .44 |
| Absolute Standards | - | - | - | 0.33 | 0.10 | .001 | 0.38 | 0.06 | < .001 |
| Projection X Absolute Standards | - | - | - | -0.04 | 0.06 | .51 | 0.01 | 0.04 | .78 |
| Personal Experience | -0.07 | 0.19 | .70 | 0.73 | 0.27 | .007 | 0.33 | 0.18 | .07 |
| Constant | 0.07 | 0.11 | .52 | 3.83 | 0.15 | < .001 | 4.90 | 0.10 | < .001 |
| | R ² = 0.186 F(3, 256) = 19.51, p < .001 | | | R ² = 0.112 F(6, 253) = 5.33, p < .001 | | | R ² = 0.259 F(6, 253) = 14.71, p < .001 | | |

Note. Coefficients are unstandardized and predictors were mean-centered.

Figure 3. Visualization of the results of PROCESS model 14 for DIB Endorsement: Behavioural and DIB Endorsement: General



Note. Top coefficients represent those for the DIB Endorsement: Behavioural model, and bottom coefficients represent those for the DIB Endorsement: General model. Personal Experience was entered as a covariate in both models. Dotted lines indicate predicted effects that were not significant. Coefficients are unstandardized and predictors were mean centered. * $p < .05$, ** $p < .001$.

Primary analyses

The two DIB Endorsement measures (Behavioural and General) were entered as dependent variables in two separate analyses using PROCESS model 14. African American Identification was entered as the IV, Ingroup Projection as the mediator, and Absolute Standards as the moderator. American Identification and Personal Experience were entered as covariates. Interactions were assessed at -1SD, mean and +0.58 SD scores of Absolute Standards. The results for these two models are presented in Table 3 and Figure 3.

Ingroup Projection. As shown in the first set of columns in Table 3, African American Identification, American Identification, and Personal Experience explained 18.6% of the variance in Ingroup Projection scores. American Identification emerged the only significant predictor of Ingroup Projection, with high American Identification predicting greater Ingroup Projection.

DIB Endorsement: Behavioural. As shown in the second set of columns in Table 3, all predictors explained 11.2% of the variance in DIB Endorsement: Behavioural. The effects of African American Identification, Absolute Standards and Personal Experience were significant, with high African American Identification, high Absolute Standards, and negative experiences

with the police predicting greater DIB Endorsement. The effects of American Identification, Ingroup Projection, and the interaction between Ingroup Projection and Absolute Standards were not significant. Thus, the indirect effects of African American Identification and American Identification mediated by Ingroup Projection were not significantly influenced by participants' Absolute Standard scores.

DIB Endorsement: General. As shown in the final set of columns in Table 3, all predictors explained 25.9% of the variance in DIB Endorsement: General. The effects of African American Identification and Absolute Standards were significant, with high African American Identification and high Absolute Standards predicting greater DIB Endorsement. The effects of American Identification, Ingroup Projection, Personal Experience, and the interaction between Ingroup Projection and Absolute Standards were not significant. None of the conditional indirect effects were significant.

Further Investigation of the Impact of Absolute Standards on DIB⁵

The two DIB Endorsement measures (Behavioural and General) were entered as dependent variables in two separate analyses using PROCESS model 4. Absolute Standards was entered as the independent variable, Moral Emotions and Moral Duty as mediators, and Gradual Standards, African American Identification, American Identification, and Personal Experience as covariates⁶. To test for differences between indirect effects, bootstrapped confidence intervals of pairwise contrasts were calculated. The results are presented in Tables 4 and 5, as well as Figure 4.

⁵A separate correlational analysis provided additional support for the exploratory hypothesis and can be found in Appendix D.

⁶Gradual Standards was included as a covariate so that its effects on DIB Endorsement could be compared with the effects of Absolute Standards. Ingroup Projection was not included as a covariate because – as will be discussed – it is unclear whether this measure accurately reflected participants' levels of ingroup projection.

Table 4. Results from PROCESS model 4 for DIB Endorsement: Behavioural and DIB Endorsement: General

| | Moral Emotions | | | Moral Duty | | | DIB Endorsement: Behavioural | | | DIB Endorsement: General | | |
|----------------------------|---|-----------|----------|--|-----------|----------|---|-----------|----------|--|-----------|----------|
| | <i>B</i> | <i>SE</i> | <i>p</i> | <i>B</i> | <i>SE</i> | <i>p</i> | <i>B</i> | <i>SE</i> | <i>p</i> | <i>B</i> | <i>SE</i> | <i>p</i> |
| Absolute Standards | 0.39 | 0.05 | < .001 | 0.15 | 0.07 | .044 | 0.06 | 0.10 | .52 | 0.17 | 0.06 | .003 |
| Moral Emotions | - | - | - | - | - | - | 0.43 | 0.11 | < .001 | 0.39 | 0.07 | < .001 |
| Moral Duty | - | - | - | - | - | - | 0.42 | 0.08 | < .001 | 0.38 | 0.05 | < .001 |
| Gradual Standards | 0.05 | 0.03 | .098 | 0.05 | 0.05 | .25 | 0.06 | 0.06 | .27 | 0.03 | 0.03 | .43 |
| African American ID | 0.26 | 0.06 | < .001 | 0.31 | 0.09 | .001 | -0.02 | 0.11 | .88 | 0.11 | 0.07 | .11 |
| American ID | -0.14 | 0.06 | .015 | -0.12 | 0.08 | .14 | 0.07 | 0.10 | .48 | -0.06 | 0.06 | .30 |
| Personal Experience | 0.23 | 0.14 | .097 | 0.42 | 0.20 | .041 | 0.48 | 0.25 | .055 | 0.08 | 0.15 | .59 |
| Constant | - | - | - | - | - | - | 3.91 | 0.14 | < .001 | 4.96 | 0.08 | < .001 |
| | R ² = 0.328 F(5, 254) = 24.83, p < .001 | | | R ² = 0.113 F(5, 254) = 6.44, p < .001 | | | R ² = 0.274 F(7, 252) = 13.59, p < .001 | | | R ² = 0.504 F(7, 252) = 36.577, p < .001 | | |

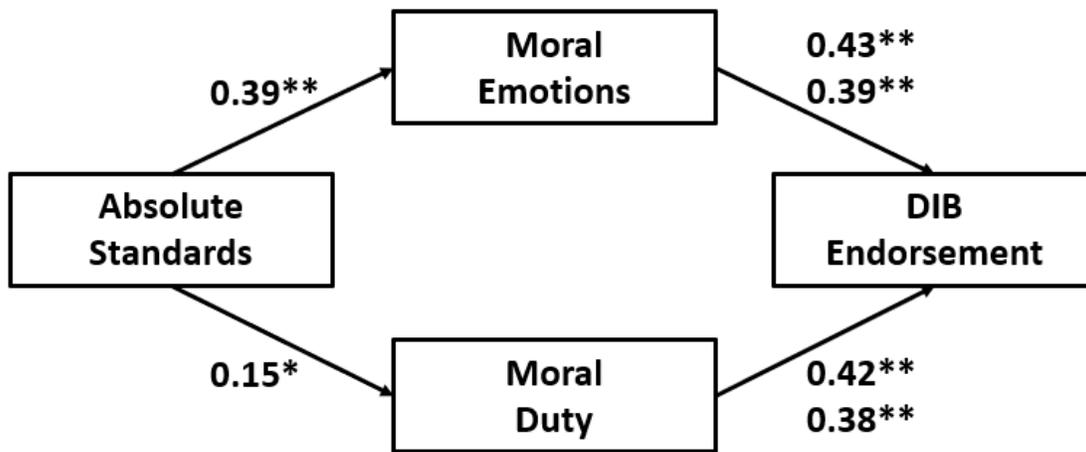
Note. Coefficients are unstandardized and predictors were mean-centered.

Table 5. Total effects, indirect effects, and pairwise contrasts for PROCESS model 4

| | DIB Endorsement: Behavioural | | | DIB Endorsement: General | | |
|---|-------------------------------------|-----------|-----------------|---------------------------------|-----------|-----------------|
| | c/ab | SE | 90% CI | c/ab | SE | 90% CI |
| Total effect of Absolute Standards | 0.29 | 0.10 | [0.135, 0.449] | 0.38 | 0.06 | [0.275, 0.482] |
| Indirect effect 1: Absolute Standards via Moral Emotions | 0.17 | 0.05 | [0.093, 0.269] | 0.15 | 0.04 | [0.089, 0.228] |
| Indirect effect 2: Absolute Standards via Moral Duty | 0.06 | 0.04 | [-0.002, 0.131] | 0.06 | 0.04 | [-0.001, 0.115] |
| Contrast between indirect effect 1 and indirect effect 2 | 0.11 | 0.07 | [-0.004, 0.233] | 0.10 | 0.06 | [-0.002, 0.196] |

Note. Standard errors and 90% confidence intervals were calculated using bootstrapping (5000 bootstrap samples).

Figure 4. Visualization of results from PROCESS model 4 for DIB Endorsement: Behavioural and DIB Endorsement: General



Note. Top coefficients represent those for the DIB Endorsement: Behavioural model, and bottom coefficients represent those for the DIB Endorsement: General model. Gradual Standards, African American Identification, American Identification, and Personal Experience were entered as covariates. Solid lines indicate significant effects. Coefficients are unstandardized and predictors were mean centered. * $p < .05$, ** $p < .001$.

Moral Emotions. As shown in the first set of columns in Table 4, Absolute Standards and the covariates explained 32.8% of the variance in Moral Emotions. The effects of Absolute Standards, African American Identification, and American Identification were significant, with high African American Identification, low American Identification, and high Absolute Standards predicting greater Moral Emotions. The effects of Gradual Standards and Personal Experience were not significant.

Moral Duty. As shown in the second set of columns in Table 4, Absolute Standards and the covariates explained 11.3% of the variance in Moral Duty. The effects of Absolute Standards, African American Identification and Personal Experience were significant, with high African American Identification, high Absolute Standards, and negative experiences with police predicting greater Moral Duty. The effects of Gradual Standards and American Identification were not significant.

DIB Endorsement: Behavioural. As shown in the third set of columns in Table 4, all predictors explained 27.2% of the variance in DIB Endorsement: Behavioural. The effects of Moral Emotions and Moral Duty were significant, with high Moral Emotions and high Moral Duty predicting greater DIB Endorsement. The effect of Personal Experience was marginally

significant. As shown in the first set of columns in Table 5, Absolute Standards exerted its total effect on DIB Endorsement: Behavioural via two indirect effects, the first mediated by Moral Emotions and the second mediated by Moral Duty. Pairwise contrasts revealed no significant difference between these two indirect effects.

DIB Endorsement: General. As shown in the final set of columns in Table 4, all predictors explained 50.4% of the variance in DIB Endorsement: General. The effects of Absolute Standards, Moral Emotions, and Moral Duty were significant, with high Absolute Standards, high Moral Emotions, and high Moral Duty predicting greater DIB Endorsement. As shown in the second set of columns in Table 5, Absolute Standards exerted a portion of its total effect on DIB Endorsement: General via two indirect effects, the first mediated by Moral Emotions and the second mediated by Moral Duty. Pairwise contrasts revealed a nonsignificant difference between these two indirect effects.

Discussion

Overall, the results provided limited evidence for the primary theorized model. Identification with the African American ingroup showed the hypothesized positive effect on both measures of DIB endorsement. However, because the measure of ingroup projection did not significantly predict DIB endorsement, the predicted indirect effect of identification with the ingroup (i.e., African Americans) via ingroup projection was also nonsignificant. Thus, the first hypothesis posed by the primary theorized model received partial support: high ingroup identification did indeed predict greater DIB endorsement, but this effect was not mediated by high levels of ingroup projection.

While identification with the superordinate category (Americans) was negatively related to the measure of General endorsement of DIB, this association was not statistically significant. Once again, because the measure of ingroup projection did not significantly predict DIB endorsement, the predicted indirect effect of identification with the superordinate category (Americans) via ingroup projection was also nonsignificant. Thus, the second hypothesis posed by the primary theorized model of DIB endorsement was not supported: while high superordinate category identification related to lower DIB endorsement, this relationship was

non-significant, and high superordinate category identification did not predict greater DIB endorsement indirectly via high levels of ingroup projection. Lastly, the predicted interaction between ingroup projection and absolute standards was nonsignificant. Thus, the final hypothesis posed by the primary theorized model was not supported. The lack of effect of ingroup projection on DIB was not qualified by the degree to which the actions of the police officer were seen as violations of absolute standards.

However, although it did not moderate the effect of ingroup projection, Absolute Standards emerged as a strong predictor of both DIB endorsement measures. Furthermore, the second set of analyses provided additional evidence for the importance of seeing the mistreatment of the ingroup as a violation of an absolute standard. Two findings in particular are worth noting. First, Absolute Standards was a stronger predictor of DIB endorsement than Gradual Standards. Absolute Standards (compared to Gradual Standards) showed larger total effects on both DIB endorsement measures as well as a significant direct effect on DIB Endorsement: General scores. These findings align with Kessler et al.'s (2010) original distinction between absolute and gradual standards, our own theorizing, and research that has shown that violations of absolute standards (compared to gradual standards) evoke harsher reactions (Fritsche et al., 2009; Kessler et al., 2002).

Second, these results suggest that the effects of absolute standards on DIB endorsement is in part a result of the moral reactions that violations of absolute standards (but not gradual standards) bring about. Namely, a significant portion of the total effect exerted by Absolute Standards on DIB endorsement was due to two indirect effects, the first mediated by Moral Emotions and the second mediated by Moral Duty. Thus, the degree to which mistreatment of the ingroup is seen to be a violation of an absolute standard strongly predicts the level of DIB endorsement, and this effect seem to be largely due to the way in which perceptions of absolute standard violations evoke stronger feelings of moral emotions and a strong sense of moral duty to see offenders are punished.

It is interesting that Ingroup Projection was not significantly predicted by African American Identification and did not mediate the effect of African American Identification on DIB endorsement. It is particularly surprising that there was virtually no correlation between the

measure of identification with the African American ingroup and the measure of ingroup projection. Given a plethora of evidence that has demonstrated a relationship between ingroup identification and ingroup projection (see Wenzel et al., 2008), the most plausible explanation for these findings seems to be an issue with how ingroup projection was measured. The measure used in Study 1 was a novel measure involving an adaptation of Tropp and Wright's (2000) one-item visual measure of ingroup identification. It is possible that participants interpreted this measure not as an indicator of the degree to which African American values were represented in American society, but instead, as the opposite: the degree to which mainstream American values can be imposed on African Americans. If interpreted this way, the Ingroup Projection measure would instead be capturing something akin to participants' perceptions of the degree to which African Americans have been assimilated into mainstream American society. There is little reason to believe that perceptions of assimilation should be predicted by levels of identification with the assimilated ingroup, nor that these perceptions should predict levels of DIB endorsement.

However, if this measure was truly capturing participants' levels of ingroup projection, and the lack of a significant relationship between African American Identification and Ingroup Projection was due to some other confounding variable(s), why might Ingroup Projection have been unrelated to DIB endorsement? Recalling that ingroup projection is constrained by a group's social reality, it is possible that for disadvantaged groups, ingroup projection is insufficient for DIB endorsement. It may be that it is too difficult for the disadvantaged group to claim to be prototypical of the superordinate category. In other words, a recognition that the group's values *are not* represented at the broader societal level is not enough of a psychological 'push' for the endorsement of DIB. Instead, it seems likely that the disadvantaged group members' thoughts about how the world *ought to be* (i.e., the belief that the values of African Americans *ought to be* the values of Americans) should play a more important role in motivating support for DIB. This focus on thoughts about what should be as the motivation for collective actions is consistent with Social Identity Theory's concept of 'cognitive alternatives', which refer to an individuals' visions for a different status quo (see Tajfel & Turner, 1979). Tajfel and Turner originally conceptualized cognitive alternatives as essential requirements for system-challenging forms of collective action. Recently, cognitive alternatives specific to the

environmental movement have been shown to predict identification as an environmental activist as well as willingness to engage in environmental collective action (Wright et al., 2020).

This thinking is also consistent with research by Berthold et al. (2012) showing that ingroup projection was stronger when ideal (vs. actual) ingroup goals were applied to the superordinate category. Perhaps more importantly, however, was that outgroups' deviations from this 'ideal superordinate group' best predicted negative evaluations of the outgroup. One can argue, then, that disadvantaged group members may be particularly likely to endorse DIB when they believe that the ingroup goals should be the shared goals of the superordinate category (i.e., *ideal ingroup projection*). For instance, while tearing down the statue of a Confederate general is certainly a condemnation of the status quo, such actions may not be motivated by the belief that most/all Americans currently condemn anti-Black oppression. Rather, such acts of DIB may be motivated by an idealized vision for America that no longer idolizes those who fought to preserve a system of anti-Black oppression. Thus, it seems that in addition to measuring *actual ingroup projection* (as was attempted in the current study), future work would benefit from including a measure of ideal ingroup projection, as the latter may be a particularly strong predictor of DIB endorsement for disadvantaged groups members.

Finally, it is worth noting that while absolute standards did not appear to moderate the impact of ingroup projection on DIB endorsement, the current findings provided strong evidence that individuals see violations of absolute standards as moral violations, and as a result, violations of absolute standards can be accompanied by the corresponding affective (i.e., moral emotions), cognitive (i.e., perceived moral duty to punish), and behavioural (i.e., DIB endorsement) reactions. This finding is consistent with others who have argued for the mobilizing effects of collective moral emotions (Lodewikx et al., 2008; Skitka, 2010; Thomas et al., 2012; van Zomeren et al., 2012). Given that individuals who belong to disadvantaged groups face strong reality constraints that limit *actual* ingroup projection, it instead seems more likely that *ideal* ingroup projection of absolute standards most strongly predict DIB endorsement.

Study 2

Study 2 expanded upon Study 1 in two ways. First, given the previously discussed concern with how ingroup projection was measured in Study 1, a new measure of ingroup projection was created in an attempt to minimize ambiguity and alternative interpretations. Second, in addition to measuring actual ingroup projection, ideal ingroup projection was also measured. Thus, the newly hypothesized role of this unique form of projection could be tested empirically.

Similar to Study 1, Study 2 tested the refined model in a real-world intergroup context, namely, the 2019/2020 Hong Kong Anti-Extradition Law Amendment Bill Movement. In March 2019, the Hong Kong government proposed an amendment to the *Fugitive Offenders and Mutual Legal Assistance in Criminal Matters Legislation Bill* and reignited a social movement which had begun years prior. Broadly speaking, this amendment specified a mechanism of extradition between Mainland China, Hong Kong, and Macau that would have exposed citizens of Hong Kong to the legal system of the Peoples Republic of China (PRC). The amendment was met with widespread criticism in Hong Kong and worldwide, and dissenters argued that the bill would directly threaten Hong Kong's legal and legislative autonomy and erode the "one country, two systems" principle that had been the cornerstone of the relationship between Hong Kong and China since 1997. Perhaps the most acute concern among Hong Kong residents was that this amendment would enable the PRC to heavily suppress dissenting political voices and movements. On June 9th 2019, hundreds of thousands of Hong Kong residents took to the streets and gathered outside government buildings to stall legislative progress on the bill. Three days later, these protests gained international attention when violent confrontations broke out between the Hong Kong Police Force and the overwhelmingly peaceful protestors.

The protests that followed made immediate demands from the Hong Kong government (including the withdrawal of the bill and an independent investigation into police brutality). Many have also understood these protests as a re-emergence of the Umbrella Movement of four years prior. This movement, which began in opposition to electoral reform in Hong Kong in 2014, sought to maintain the region's autonomy and pushed back against what many viewed as anti-democratic election processes. While Hong Kong lawmakers made no concessions during

this initial movement (Cheung, 2019), the sentiment that Mainland China and the PRC are encroaching upon the civil rights of Hong Kong citizens has not only persisted but grown, particularly among the youth. In the face of increasingly anti-democratic representation, registered Hong Kong voters rose from 58 to 70-percent between 2000 and 2016. In 2020, hundreds of thousands of Hong Kong residents became newly registered voters, many of these between the ages of 18-30 (Caixin, 2020).

However, the 2019/2020 prodemocracy protests following the proposal and eventual withdrawal of the 2019 amendment (referred throughout as the Anti-Extradition Law Amendment Bill Movement, or *Anti-ELAB Movement*) have also demonstrated that the citizens of Hong Kong are willing to engage in acts of DIB to support their pro-democratic agendas. Large-scale protests at the Hong Kong International airport have caused massive disruptions to flight schedules. Pro-Beijing establishments and symbols have been vandalized. Anti-ELAB protestors, or “Yellow Ribbons”⁷, have used homemade petrol bombs and doxxed public officials⁸. Despite these acts of DIB, a substantial number of individuals – both in Hong Kong and internationally – continue to support the Yellow Ribbon movement. In January 2020, local shops and restaurants voiced their support for the movement by labelling themselves ‘yellow’ (Beech, 2020). On June 9th, 2019, during the early period of the movement in which acts of DIB were most common, worldwide solidarity protests emerged alongside a massive public demonstration in Hong Kong. Some have even noted that this movement has shown an unusually high level of solidarity between moderate and radical flanks (Lee, 2020).

In this social context, it seemed likely that the new extradition law and the violence perpetrated by agents of the Hong Kong government and the Hong Kong Police Force were interpreted as violations of absolute standards by many Hong Kong residents. Thus, perceptions that absolute standards had been violated were expected to play a significant role in DIB

⁷The Yellow Ribbon identity emerged in 2014 wherein yellow ribbons were used throughout the Umbrella Movement to symbolize support for the prodemocratic values and goals of the movement (namely, universal suffrage for the people of Hong Kong). Given the shared goals of the Umbrella Movement and the 2019/2020 Anti-ELAB Movement, the symbolic meaning of the colour yellow and yellow ribbons has persisted. Thus, identification as a Yellow Ribbon indicates identification with and support for the Anti-ELAB movement. In contrast, the colour blue and the Blue Ribbon identity has come to represent support for the Hong Kong Police Force, and more generally, opposition to the Anti-ELAB movement.

⁸‘Doxxing’ refers to leaking personal information in order to humiliate or intimidate one’s opponents.

endorsement in this context. Moreover, the disadvantaged position of the Yellow Ribbons and the clear reality constraints that this posed for actual ingroup projections provided an opportunity to test the hypothesized role of ideal ingroup projection as a motivator of DIB endorsement.

Specifically, the following hypotheses were tested:

- 1) Yellow Ribbon Identification (ingroup identification) will have a positive total effect on DIB endorsement, controlling for the effect of Hongkonger Identification. Part of this effect will be direct and part will be indirect, mediated by Ideal Ingroup Projection.
- 2) Hongkonger Identification (superordinate category identification) will have a negative direct effect on DIB endorsement and a positive indirect effect on DIB endorsement mediated by Ideal Ingroup Projection, controlling for the effect of Yellow Ribbon Identification.
- 3) The relationship between Ideal Ingroup Projection and DIB endorsement will be moderated by Absolute Standards, such that the more the actions of the Hong Kong government and Police Force are perceived to be violations of absolute standards, the stronger the relationship between Ideal Ingroup Projection and DIB endorsement will be.

Additionally, in Study 2, both actual and ingroup projection will be measured. This will allow a comparison of the degree to which each of these variables might be influenced by ingroup and superordinate category identification, as well as how each will subsequently influence DIB endorsement. Given the theorizing presented in the earlier discussion of the findings from Study 1, I predict that ideal ingroup projection will emerge as an important part of the model predicting DIB, while actual ingroup projection will not.

Methods

Participants

Data was collected from 200 students at a university in Hong Kong. Eleven participants were removed due to insufficient data (i.e., did not complete the dependent variable). The resulting sample of 189 participants included 131 participants who identified as female, 54 who identified as male, and three who did not specify their gender. Participants mean age was 19.78 (SD=1.97).

Procedure

Data was collected in the fall of 2019. Participants began by providing consent. After completing a series of other measures⁹, participants completed measures of Yellow Ribbon Identification, Hongkonger Identification, Ideal Ingroup Projection, Actual Ingroup Projection, Absolute Standards, and DIB Endorsement.

Measures¹⁰

Yellow Ribbon Identification. Two items were used to measure ingroup identification. The first asked participants to respond to the statement “You would describe yourself as a supporter of the Yellow Ribbons” using a 7-point Likert scale (endpoints “extremely disagree” and “extremely agree”). The second item was a version of Tropp and Wright’s (2001) *Inclusion of the Ingroup into the Self* scale used in Study 1, adapted for the group “Yellow Ribbons”. These two items were mean-scored to create a single variable ($r = .76$).

Hongkonger Identification. Two items were used to measure superordinate category identification. The first asked participants to respond to the statement “You would describe yourself as a Hongkonger” using a 7-point Likert scale (endpoints “extremely disagree” and “extremely agree”). The second item was an adapted version of Tropp and Wright’s (2001) *Inclusion of the Ingroup into the Self* scale used in Study 1, adapted for the group “Hongkongers”. These two items were mean-scored to create a single variable ($r = .48$).

Ideal Ingroup Projection. The new measure of Ideal Ingroup Projection used a single-item visual measure similar to the *Inclusion of the Ingroup in the Self* scale, where participants are presented with a series of seven increasingly overlapping pairs of circles. However, two significant changes were made from previously used measures. First, the difference in size between the two circles was more obvious, such that it was obvious to participants that the measure was intended to represent the projection of the values of a smaller group (i.e., Yellow

⁹The data used in this analysis was collected as part of a larger project in collaboration with Priscilla Shum (MEd). In addition to the variables included in the present analysis, various measures of threat, stereotypes, attitudes and identification were also collected.

¹⁰Participants completed all measures in Chinese. They have been translated to English here.

Ribbon movement) onto a much larger superordinate category (i.e., Hongkongers). Second, instead of the circle pairs terminating at a high degree of overlap, the midpoint of this scale showed complete overlap, while the final three circle pairs showed the smaller circle becoming progressively closer to the center of the larger. This was intended to distinguish between the ingroup being included but marginalized and being included and highly representative of the ideal superordinate group. Moreover, to make this clearer for participants, they were also given the following instructions:

Please select the pair of circles below that best represents the extent to which the values, beliefs and behaviours of Hongkongers ought to be, or should be, like those of the Yellow Ribbon movement. The small circle represents “Yellow Ribbon movement”, while the large circle represents “Hongkongers”.

“Completely excluded” implies that Hongkongers’ values, beliefs and behaviours should not be at all similar to those of the Yellow Ribbon movement.

“Included but marginalized” implies that while Hongkongers’ values, beliefs and behaviours should include those of the Yellow Ribbon movement, they should not be a defining feature for Hongkongers.

“Completely included” implies that Hongkongers’ values, beliefs, and behaviours should be almost identical to those of the Yellow Ribbon movement.

Participants selected the pair of circles that best represented their perception of the ideal level to which the Hongkonger identity was influenced by the Yellow Ribbon identity, with 1 = completely excluded, 4 = included but marginalized, and 7 = completely included.

Actual Ingroup Projection. The measure of Actual Ingroup projection was identical to the measure of Ideal Ingroup Projection, with modified instructions to focus on the actual level of influence the ingroup had on the prototype of the superordinate category. Participants were given the following instructions:

Please select the pair of circles below that best represents the extent to which the values, beliefs and behaviours of Hongkongers are, like those of the Yellow Ribbon movement. The small circle represents “Yellow Ribbon movement”, while the large circle represents “Hongkongers”.

“Completely excluded” implies that Hongkongers’ values, beliefs and behaviours are not at all similar to those of the Yellow Ribbon movement.

“Included but marginalized” implies that while Hongkongers’ values, beliefs and behaviours include those of the Yellow Ribbon movement, they are not a defining feature for Hongkongers.

“Completely included” implies that Hongkongers’ values, beliefs, and behaviours are almost identical to those of the Yellow Ribbon movement.

Participants selected the pair of circles that best represented their perception of the actual level to which the Hongkonger identity was influenced by the Yellow Ribbon identity, with 1 = completely excluded, 4 = included but marginalized, and 7 = completely included.

Absolute Standards¹¹. In order to ensure no participants felt pressured to complete measures they fundamentally disagreed with, perceptions of the degree to which the outgroup had violated an absolute standard was assessed in a two-step procedure. First, participants were asked “Do you personally think the following behaviours were appropriate” and provided their responses on a 7-point Likert scale (endpoints “extremely inappropriate” and “extremely appropriate”) to six behaviours engaged in by the Hong Kong governments or Police Force. These items included “The government tried to rush the implementation of the bill”, “The police used violence to disperse protestors”, and “The government refuses to allow true democracy”.

Second, all participants who scored between a 1-4 (indicating that they saw the actions as at least somewhat inappropriate) were then routed to a second set of items that asked them to rate whether each of the six behaviours they indicated were inappropriate violated a gradual versus an absolute standard. This was done using a 7-point Likert scale with the endpoints -3 labelled “an absolute standard that everyone must meet” and +3 labelled “an ideal standard that everyone should try to meet to the highest degree possible”. The vast majority of participants (N=182) perceived the majority of the six behaviours by the Hong Kong government and Police Force to be inappropriate and thus provided responses on the key measures about whether they believed the actions described violated a gradual or an absolute standard. All responses were reverse coded such that low scores represent the perception that the behaviours violated a gradual standard, and high scores represent the perception that the behaviours violated an absolute standard. Responses for these six items were mean-scored ($\alpha = .86$).

¹¹An exploratory PCA was conducted on all items in the Absolute Standards scale (see *Appendix E*). Results suggested all items loaded onto a single component.

DIB Endorsement^{12,13}. Participants were asked “Do you personally think the following behaviours were appropriate” and provided their responses on a 7-point Likert scale (endpoints “extremely inappropriate” and “extremely appropriate”) to seven behaviours engaged in by Anti-ELAB protestors. These items included “Surround police stations, the HK Liaison Officer, or other government buildings”, “Destroy or deface public property and government buildings”, “Doxxing officials and police officers” and “Organize and participate in violent protests”. Responses for these seven items were mean-scored ($\alpha = .96$), and higher scores represent higher levels of DIB endorsement.

Results

Summary statistics for all variables are provided in Table 6 and bivariate correlations between all variables are shown in Table 7.

Table 6. Summary statistics of all variables in Study 2

| | Mean | Standard Deviation | Skewness (SE) | Kurtosis (SE) |
|-------------------------------------|------|--------------------|---------------|---------------|
| Yellow Ribbon Identification | 5.15 | 1.58 | -0.55 (0.18) | -0.44 (0.35) |
| Hongkonger Identification | 6.15 | 1.08 | -1.79 (0.18) | 4.00 (0.35) |
| Ideal Ingroup Projection | 5.58 | 1.46 | -1.13 (0.18) | 1.00 (0.35) |
| Actual Ingroup Projection | 4.64 | 1.27 | -0.33 (0.18) | 0.11 (0.35) |
| Absolute Standards | 5.72 | 1.23 | -1.39 (0.18) | 1.77 (0.35) |
| DIB Endorsement | 4.41 | 1.47 | -0.28 (0.18) | -0.20 (0.35) |

¹²The initial measure included 10 items, three of which were intended to be normative forms of collective action (items 1-3). Results of an exploratory PCA (see *Appendix E*) suggested items 4-10 (i.e., DIB) loaded on a first component, while items 1-3 (i.e., normative items) loaded onto a second.

¹³Due to the nature in which this data was collected and the current political atmosphere in China, we were unable to ask many questions about support for DIB as well as the ‘moral’ concepts assessed in Study 1. Thus, only essential measures were included in Study 2 and very little exploratory analysis could be conducted.

Table 7. Bivariate correlation matrix for all variables in Study 2

| | Yellow Ribbon Identification | Hongkonger Identification | Ideal Ingroup Projection | Actual Ingroup Projection | Absolute Standards | DIB Endorsement |
|-------------------------------------|-------------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------|------------------------|
| Yellow Ribbon Identification | 1 | - | - | - | - | - |
| Hongkonger Identification | .55** | 1 | - | - | - | - |
| Ideal Ingroup Projection | .54** | .33** | 1 | - | - | - |
| Actual Ingroup Projection | .11 | -.01 | .42** | 1 | - | - |
| Absolute Standards | .53** | .42** | .40** | .17* | 1 | - |
| DIB Endorsement | .66** | .34** | .46** | .16* | .52** | 1 |

*p < .05, **p < .01.

Table 8. Results of PROCESS model 14 for DIB Endorsement

| | Ideal Ingroup Projection | | | Actual Ingroup Projection | | | DIB Endorsement | | |
|---|---|------|-------|---|------|-----|---|------|--------|
| | B | SE | p | B | SE | p | B | SE | p |
| Yellow Ribbon Identification | 0.44 | 0.07 | <.001 | 0.11 | 0.07 | .11 | 0.45 | 0.07 | < .001 |
| Hongkonger Identification | 0.11 | 0.10 | .28 | -0.03 | 0.11 | .80 | -0.09 | 0.09 | .33 |
| Ideal Ingroup Projection | - | - | - | - | - | - | 0.12 | 0.07 | .11 |
| Actual Ingroup Projection | - | - | - | - | - | - | 0.02 | 0.07 | .80 |
| Absolute Standards | - | - | - | - | - | - | 0.34 | 0.08 | < .001 |
| Absolute Standards X Ideal Ingroup Projection | - | - | - | - | - | - | 0.14 | 0.05 | .01 |
| Absolute Standards X Actual Ingroup Projection | - | - | - | - | - | - | -0.05 | 0.06 | .41 |
| Constant | - | - | - | - | - | - | 4.35 | 0.08 | <.001 |
| | R ² = 0.281 F(2, 182) = 35.59, p < .001 | | | R ² = 0.017 F(2, 182) = 1.53, p = .22 | | | R ² = 0.493 F(7, 177) = 24.63, p < .001 | | |

Note. Coefficients are unstandardized and predictors were mean-centered.

PROCESS model 14 was used to test the model proposed in hypotheses 1-3. Yellow Ribbon Identification was entered as the independent variable, DIB Endorsement as the dependent variable, Ideal Ingroup Projection and Actual Ingroup Projection as parallel mediators, Absolute Standards as the moderator, and Hongkonger Identification as the only covariate¹⁴. The results from this analysis are shown in Table 8.

Ideal Ingroup Projection. As shown in the first set of columns in Table 8, Yellow Ribbon Identification and Hongkonger Identification explained 28.1% of the variance in Ideal Ingroup Projection. The effect of Yellow Ribbon Identification was significant, with high Yellow Ribbon Identification predicting greater Ideal Ingroup Projection. The effect of Hongkonger Identification was not significant¹⁵.

Actual Ingroup Projection. As shown in the second set of columns in Table 8, Yellow Ribbon Identification and Hongkonger Identification explained 1.7% of the variance in Actual Ingroup Projection. The effects of Yellow Ribbon Identification and Hongkonger Identification were not significant.

DIB Endorsement. As shown in the third set of columns in Table 8, all predictors and interaction terms explained 49.3% of the variance in DIB Endorsement. The effects of Yellow Ribbon Identification and Absolute Standards were significant, with high Yellow Ribbon Identification and high Absolute Standards predicting greater DIB Endorsement. The effects of Hongkonger Identification, Ideal Ingroup Projection and Actual Ingroup Projection were not significant.

The Ideal Ingroup Projection by Absolute Standards interaction term significantly predicted DIB Endorsement (see Table 8). As shown in the first set of columns in Table 9, results demonstrated the expected two-way interaction such that high Ideal Ingroup

¹⁴This model was run once more specifying Hongkonger Identification as the independent variable and Yellow Ribbon Identification as a covariate to obtain bootstrap estimates for the indirect effects of Hongkonger identification on DIB endorsement.

¹⁵It is worth noting that Hongkonger Identification displayed a large degree of positive kurtosis and was also moderately negatively skewed. Assumption checking for OLS linear regression revealed the inclusion of this variable did not lead to violations, however, any interpretations of Hongkonger Identification-specific results should be made with some caution.

Projection scores predicted greater DIB Endorsement only at moderate to high levels of Absolute Standards. As shown in Figure 5, simple slope analysis of this interaction showed a positive relationship between Ideal Ingroup Projection and DIB Endorsement that became stronger at higher levels of Absolute Standards. Lastly, as can be seen in the first set of columns in Table 10, pairwise contrasts of the indirect effects of Yellow Ribbon Identification via Ideal Ingroup Projection revealed that these indirect effects were significantly different when conditioned on low, moderate, and high Absolute Standards. Thus, the indirect effect of Yellow Ribbon Identification on DIB Endorsement via Ideal Ingroup Projection became stronger with higher Absolute Standards.

Finally, to test whether Ideal Ingroup Projection acted as a stronger predictor of DIB Endorsement than did Actual Ingroup Projection, Cumming et al.'s (2012) suggestion for testing differences in beta weights based on visualization of confidence intervals for point estimates was used. Specifically, these authors propose that when the 95% confidence intervals of two effects overlap by no more than 50%, one can conclude that their effect is significantly different at $\alpha = 0.05$ significance. As can be seen in Figure 6, at low levels of Absolute Standards, the indirect effects of Yellow Ribbon Identification (via Ideal Ingroup Projection and Actual Ingroup Projection) were statistically indistinguishable. However, at both moderate and high levels of Absolute Standards, the indirect effects of Yellow Ribbon Identification via Ideal Ingroup Projection were significantly higher than were those that were mediated via Actual Ingroup Projection.

Table 9. Conditional direct effects of Ideal Ingroup Projection and Actual Ingroup Projection based on Absolute Standards scores.

| Value of Absolute Standards | Direct effect of Ideal Ingroup Projection conditioned on Absolute Standards | | | | Direct effect of Actual Ingroup Projection conditioned on Absolute Standards | | | |
|-----------------------------|---|---------------|----------|-----------------|--|---------------|----------|-----------------|
| | B | <i>BootSE</i> | <i>p</i> | 95% CI | B | <i>BootSE</i> | <i>p</i> | 95% CI |
| -1.34 | -0.07 | 0.09 | .43 | [-0.237, 0.102] | -0.08 | 0.09 | .37 | [-0.093, 0.249] |
| 0.44 | 0.18 | 0.08 | .034 | [0.014, 0.349] | -0.001 | 0.08 | .98 | [-0.162, 0.158] |
| 1.11 | 0.27 | 0.11 | .012 | [0.061, 0.487] | -0.03 | 0.11 | .76 | [-0.241, 0.177] |

Note. Values represent estimated effects after controlling for all other variables in the model. The specific values of Absolutes Standards reflect the 16th, 50th, and 84th quartiles.

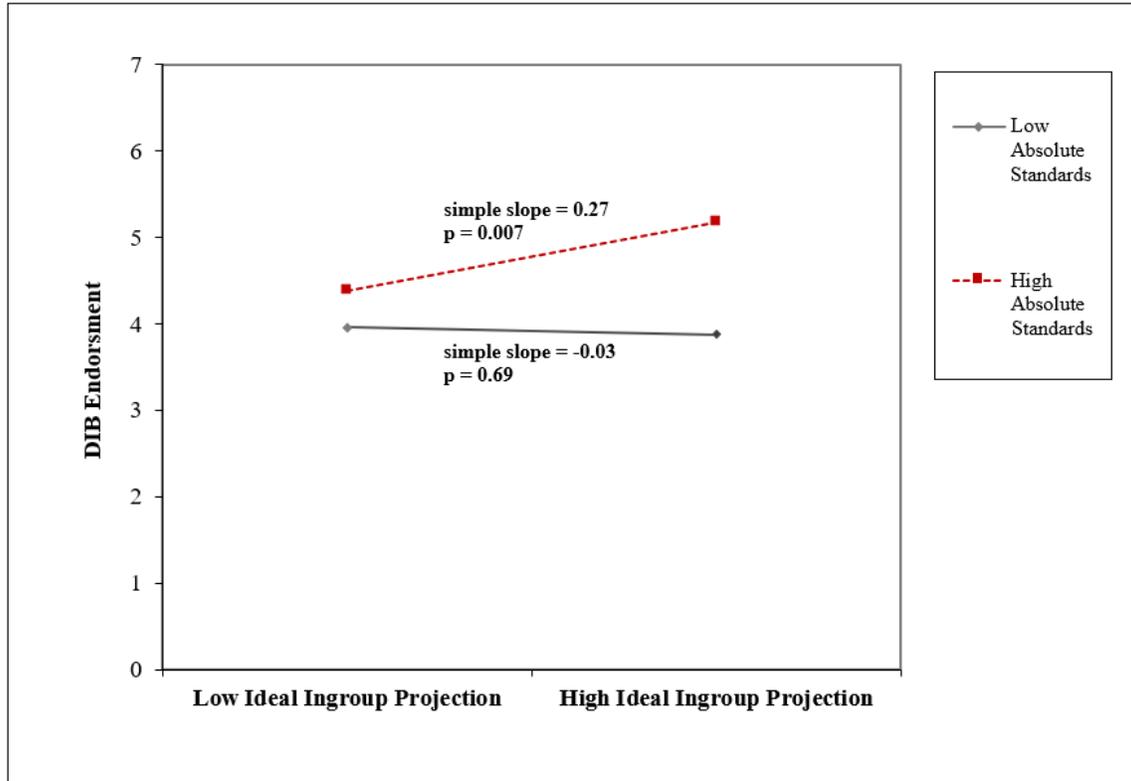
Table 10. Conditional indirect effects of Yellow Ribbon Identification and Hongkonger identification via Ideal Ingroup Projection and Actual Ingroup Projection

| Value of Absolute Standards | Indirect effects of Yellow Ribbon Identification conditioned on Absolute Standards | | | | Indirect effects of Hongkonger Identification conditioned on Absolute Standards | | | |
|-----------------------------|--|-----------------|-------------------------------|-----------------|---|-----------------|-------------------------------|-----------------|
| | Via Ideal Ingroup Projection | | Via Actual Ingroup Projection | | Via Ideal Ingroup Projection | | Via Actual Ingroup Projection | |
| | ab | 95% CI | ab | 95% CI | ab | 95% CI | ab | 95% CI |
| -1.34 | -0.03* | [-0.107, 0.057] | 0.01 | [-0.013, 0.045] | -0.01 | [-0.062, 0.015] | -0.002 | [-0.044, 0.025] |
| 0.44 | 0.08* | [-0.002, 0.185] | -0.000 | [-0.030, 0.030] | 0.02 | [-0.027, 0.103] | 0.000 | [-0.027, 0.030] |
| 1.11 | 0.12* | [0.014, 0.256] | -0.004 | [-0.048, 0.033] | 0.03 | [-0.039, 0.148] | 0.001 | [-0.034, 0.045] |

Note. Values represent estimated effects after controlling for all other variables in the model. The specific values of Absolutes Standards reflect the 16th, 50th, and 84th quartiles.

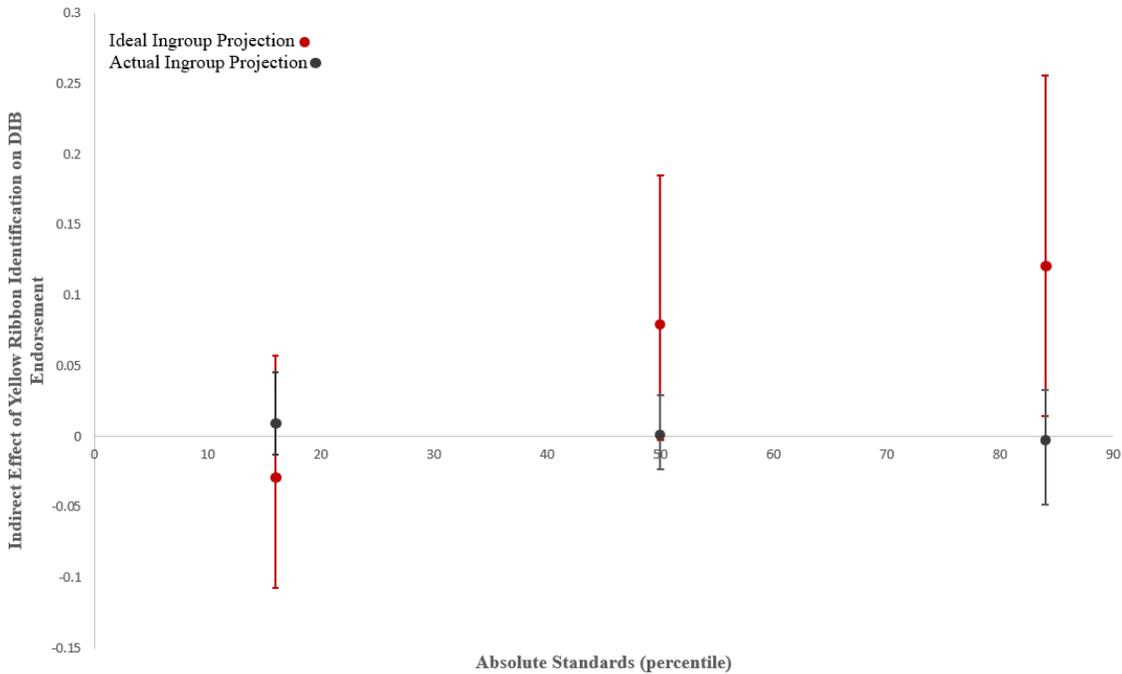
*indicates that the marked indirect effects in a given column were found to be significantly different.

Figure 5. Simple slope analysis of the two-way interaction between Ideal Ingroup Projection and Absolute Standards.



Note. Low/High Ideal Ingroup Projection and Absolute Standards represent ± 1 SD on these variables.

Figure 6. Point estimates and 95% confidence intervals for effects sizes of both Ideal Ingroup Projection and Actual Ingroup Projection on DIB Endorsement, conditioned on Absolute Standards



Note. Values represent estimated effects after controlling for all other variables in the model. The specific values of Absolutes Standards reflect the 16th, 50th, and 84th quartiles.

Discussion

Overall, Study 2 provided strong evidence for many elements of the revised model. Identification with the more specific activist ingroup (i.e., Yellow Ribbons) showed the expected direct positive effect on DIB endorsement, and as hypothesized, identification with the Yellow Ribbon ingroup predicted ideal ingroup projection such that those who identified more strongly with the activist ingroup were also more likely to believe that this ingroup’s norms, values, and standards *should be* the norms, values, and standards of the larger superordinate category (i.e., Hongkongers). As in Study 1, there was strong support for the importance of seeing the actions of the outgroup as a violation of absolute standards. However, unlike Study 1, the impact of absolute standards was not only directly on DIB endorsement but also because absolute standards moderated the relationship between ideal ingroup projection and the endorsement of DIB. Specifically, the level of ideal ingroup projection positively predicted support for DIB only when

participants were moderately to extremely confident that the actions of the Hong Kong government and Police Force had violated an absolute standard. In contrast, for those who saw the government and police's actions as violations of a gradual standard, the degree to which they were engaged in ideal ingroup projection had no impact on their support for DIB.

However, the predicted effects of superordinate category identification did not emerge. Hongkonger Identification showed neither a significant direct nor indirect effect via Ideal Ingroup Projection on DIB Endorsement. Although high Hongkonger identification was associated with lower endorsement of DIB (as predicted), this relationship was not statistically significant. Furthermore, more strongly identifying with the Hongkonger superordinate category did not influence beliefs that the Yellow Ribbon ingroup's norms, values, and standards should be the norms, values, and standards of the superordinate category. For this reason, identification with the superordinate category did not indirectly influence support for DIB through ideal ingroup projection, regardless of the degree to which the actions of the Hong Kong government and Police Force were seen as having violated absolute standards.

Finally, the introduction of the concept of *ideal ingroup projection* in Study 2 proved valuable. As in Study 1, higher ingroup identification did not appear to increase actual ingroup projection and actual ingroup projection did not play a significant role in predictions of DIB endorsement. Given the role of reality constraints in limiting actual ingroup projection for this group in this intergroup context, the results for actual ingroup projection are not surprising. However, as reported earlier, higher identification with the activist ingroup did predict stronger beliefs that the ingroup norms, values, and standards should be the values, norms, and standards of the larger superordinate category (i.e., ideal ingroup projection). In addition, this ideal ingroup projection played an important role in predicting the endorsement of DIB. Thus, for clearly disadvantaged groups, the belief that the ingroup's standards *ought to be* the standards of the superordinate category is a stronger predictor of DIB endorsement than the belief that the ingroup's standards *are* the standards of the superordinate category.

General Discussion

The present research investigated the psychological processes that underlie individuals' endorsement of destructive intergroup behaviour: collective action taken with the proximal intent of harming an outgroup or its members (Waldzus et al., 2012). Using data collected from two important, volatile, and timely intergroup contexts, I tested predictions posed by a model of DIB endorsement that incorporates Kessler et al.'s (2010) concept of absolute standards and the ingroup projection model (Mummendey & Wenzel, 1999). Overall, results provided support for several elements of the model, however, not all findings were consistent with the model's predictions.

Ingroup identification

Across both studies, ingroup identification emerged as an important predictor of DIB endorsement. In Study 1, higher identification with the African American ingroup was associated with higher DIB endorsement. In Study 2, this finding was replicated, with high identification with the Yellow Ribbon ingroup predicting greater DIB endorsement. However, Study 2 also demonstrated that ingroup identification can exert an indirect influence on DIB endorsement via its effect on ingroup projection, such that high ingroup identification predicts greater ingroup projection, which in turn predicts greater support for DIB.

The importance of politicized ingroup identities

While Study 1 asked participants to report their identification with a non-politicized ingroup (i.e., African Americans), Study 2 assessed participants' *politicized identity* (i.e., Yellow Ribbons). According to Simon and Klandermans (2001), a politicized identity is a type of collective identity that is defined by a power struggle between the ingroup and an outgroup. Specifically, politicized identity involves a connection with a specific social movement; an ingroup engaged in a struggle with the outgroup over the broader rules of society. Simon and Klandermans demonstrated that politicized identities were a stronger predictor of collective action than were the relevant

non-politicized identities and theorized that politicized identities should also predict more destructive forms of collective action. In the context of the current research, this explains why the politicized Yellow Ribbon identity measured in Study 2 more strongly predicted ideal ingroup projection than the non-politicized African American identity measured in Study 1. After all, considering politicized groups are highly concerned with defining the broader rules of society, the collective actions of politicized group members are likely motivated by the belief that the ingroup's norms and values ought to be the standards of the broader societal level. Therefore, in addition to measuring non-politicized identities, future studies examining DIB endorsement might benefit from measuring politicized identities as well, as the latter may serve as particularly strong predictors of DIB endorsement and the related intergroup processes.

Actual vs. Ideal Ingroup Projection

Study 2 included measures for two distinct forms of ingroup projection. In addition to participants' actual ingroup projection (as measured in Study 1), Study 2 also included a measure of participants' levels of ideal ingroup projection because ideal ingroup projection should be an important predictor of DIB endorsement in contexts in which the ingroup is clearly disadvantaged. Consistent with this theorizing, Study 2 revealed that beliefs that the superordinate category ought to resemble the ingroup can be a stronger predictor of support for DIB than beliefs about how the superordinate group currently is. These findings, of course, do not refute the possibility that DIB can be motivated by actual ingroup projection as well. Indeed, advantaged group members may endorse DIB because they see ingroup norms and values as the actual norms and values of the larger social category, and thus see an outgroup which acts inconsistently with these norms as having violated the current status quo. Thus, what these findings suggest is that the current status relations between a given ingroup and the relevant outgroup may determine whether actual or ideal forms of ingroup projection play a more important role in motivating DIB endorsement. Future research could provide causal evidence for this claim by manipulating the perceived status of the ingroup and examining whether this influences the form of ingroup projection that predicts DIB endorsement. Such a manipulation seems most likely to succeed in intergroup contexts in which the status

hierarchy is already heavily contested, for instance, between political parties during a closely contested national election.

Absolute standards

Both Study 1 and Study 2 demonstrated that absolute standards play an important role in individuals' support for DIB. Study 1 provided evidence that violations of absolute standards can be accompanied by moral reactions – strong moral emotions and a sense of duty to punish the offender – that subsequently predict higher levels of support for DIB. Thus, these results suggest that absolute standards can take on moral overtones, and when this occurs, their violation makes DIB endorsement more likely. Study 2 demonstrated that absolute standards and ideal ingroup projection interact to predict DIB endorsement, and specifically, that high levels of ideal ingroup projection predict greater support for DIB only when the standards that are being projected are absolute standards.

In contrast to gradual and absolute standards being measured separately in Study 1, Study 2 set gradual standards and absolute standards on opposite endpoints of the same scale. Doing so offered the advantage of forcing participants to contrast these two types of standards more explicitly, thereby ensuring their responses more closely corresponded to the type of standard they believed was violated. However, this also introduced a conceptual problem, namely, the existence of a midpoint between absolute and gradual standards that has no obvious theoretical meaning. It is unclear what type of standard a score of 4 on this measure represents, and while the findings regarding absolute standards in Study 2 are consistent with the proposed model of DIB endorsement, future research would benefit from manipulating participants' perceptions of a given standard to be absolute or gradual, and then examining how this manipulation influences the relationship between ingroup projection and DIB endorsement. This may only be possible in situations where the relevant standards are ambiguous, or alternatively, in situations which ask participants to think of themselves in a novel intergroup context. Otherwise, attempts to manipulate standards in established intergroup contexts are likely to be hampered by participants' preformed beliefs that are resistant to change (Barth et al.,

2015). Such a manipulation could provide strong causal evidence for the importance of absolute standards in our theorizing.

Identification with the superordinate category

While the roles of ingroup identification, ingroup projection, and absolute standards were largely clarified by the findings from Study 1 and Study 2, identification with the superordinate category did not behave as expected in either study. Identification with the superordinate category did not demonstrate the predicted negative direct relationship with DIB endorsement: higher identification as an American did not lead to less support for DIB taken against other Americans, nor did higher identification as a Hongkonger predict lower support for DIB taken against other Hongkongers. Moreover, identification with the superordinate category did not exert an effect on ingroup projection. These findings are inconsistent with research that has demonstrated the conflict-reducing properties of a common-ingroup identity (e.g., Gaertner et al., 1993) and the importance of dual-identification for ingroup projection (e.g., Waldzus et al., 2007), as well as previous work that has demonstrated this theorized indirect effect (Waddell et al., 2019). However, given the plethora of research implicating superordinate category identities as theoretically-relevant predictors of intergroup harmdoing, this variable should not be abandoned. Instead, more evidence must be collected before confident claims regarding the relationships between superordinate category identification, ingroup projection, and DIB endorsement can be made.

Final thoughts

Results from Study 1 and Study 2 advanced our understanding of the psychological processes that underlie DIB endorsement, while also providing important sophistication to the theorized model. Both studies provide evidence that perceptions that the advantaged outgroup's actions have violated an absolute (rather than gradual) standard is an important predictor of DIB endorsement. Furthermore, while Study 1 demonstrated that actual ingroup projection did not motivate support for DIB, Study 2 revealed ideal ingroup projection to be the more important predictor of support for DIB in

disadvantaged groups. While this latter finding requires replication, this result provides the basis for a more complex understanding of ingroup projection as well as its relationship to DIB endorsement.

DIB is a collective behaviour employed by contemporary social movements, and DIB could very well be necessary for disadvantaged group members to achieve social change. At the same time, some forms of DIB can also cause immeasurable levels of human suffering, can justify and perpetuate a cycle of tit-for-tat extremism between groups, and can even be used by powerful actors to maintain an unjust status quo. Yet, regardless of the “good” an individual act of DIB serves, it is clear that DIB is endorsed by members of a broad range of groups and that this endorsement can have socially important outcomes. Thus, DIB and its broader endorsement is worthy of further investigation.

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Appendix A.

News Story

Please read the entire news report carefully.

FREE PRESS NETWORK

New videos show police in Florida beating, choking black man stopped for jaywalking

By James Willen

Oct. 3, 2018

Brauer County, FL— Recent body cam footage of several Florida police officers beating, choking, and tazing a Black Brauer County resident has sparked outrage in the local African-American community. The target of the attack had been jaywalking.

The confrontation began early Monday morning when Officer Martins, [a Caucasian police constable], approached Jamal Edwards after witnessing Edwards cross the road without using the crosswalk.

Martins' body camera footage, which was released by local authorities, captured the entire interaction.

It started when Martins approached Edwards on the sidewalk.

Martins: Can I see some identification sir? Thank you. Now Mr. ... Edwards. I just saw you jaywalk, which is against the law here in Brauer County.

Edwards: Oh come on, man. People jaywalk everyday in this city. You're just targeting me 'cause I'm black.

Martins: Listen here Mr. Edwards, I can either write you a ticket, or I can arrest you.

Edwards: Do what you have to do, man ... besides keep harassing me.

Martins: Mr. Edwards put your hands behind your back!

Martins is then seen grabbing Edwards and forcibly smashing him into the side of his squad car. Edwards, visibly distraught, shakes loose from the officer's grip and flees. While calling for backup, Martins is recorded saying "Our boy thinks this is funny ... You know what's funny? He's going to get fucked up hardcore".

The remainder of the bodycam footage showed officers tackling Edwards to the ground while trying to apply handcuffs. With multiple officers on his back, Edwards was heard yelling he was unable to breathe. Despite his complaints, officer Martins was seen repeatedly punching Edwards to the back of the head.

Still unable to handcuff Edwards, officer Martins tazed him while instructing that he put his hands behind his back. When Edwards was unable to comply officer Martins was seen

choking Edwards from behind until unconscious, at which point Edwards was handcuffed and forced into the back of a police cruiser.

Many members of the local African-American community have expressed outrage at the footage of Edwards' arrest and have called for a formal investigation of the officers' involved. However, based on how similar cases have been handled in the past, most are not optimistic that any of the officers involved will face substantial punishment. These concerns seem well-founded: sources have confirmed that punitive action seems unlikely, with one senior police officer quoted as saying "With my men, when you throw a fit on the sidewalk, you're going to get roughed up a little".

As a result, some members of the African-American community have taken matters into their own hands, launching a social media campaign to shame the local police department and to embarrass and publicly shame the arresting officer. The social media campaign features the picture and full name of the arresting officer. In the post, the arresting officer is described as being a "racist piece of shit" and a "bully".

One of the organizers of the social media campaign was quoted saying "We need to stand up against the corrupt police and start calling people out for this kind of bullshit, because we all know that nothing is going to change otherwise". "We need to make an example out of these guys...then maybe they'll think twice before doing this kind of crap again."

When asked whether the campaign was designed to put pressure on the police department to punish the arresting officer, one protester replied "No. It's too late for that now...they'd probably just give him a slap on the wrist anyway. They'd probably just send him on a paid vacation."

Appendix B.

Social media post (DIB)



Like Follow Share

Concerned Citizens Against Police Brutality
Like This Page · October 30 · 🌐

NO PUNISHMENT FOR RACIST COP WHO TAZED AND PUNCHED AN AFRICAN AMERICAN GUY FOR JAYWALKING.

WATCH OUT FOR THIS GUY!

This is OFFICER RICHARD MARTINS. He is a Florida cop who ARRESTED and ASSAULTED an AFRICAN AMERICAN guy for JAYWALKING! Do you think he would have treated a WHITE person like that!!?

Once again, the police are doing NOTHING to punish this RACIST piece of shit.

We, as a community, can't allow this bs to continue to happen!

PLEASE LIKE AND SHARE THIS POST TO LET EVERYONE KNOW ABOUT THIS LOSER!

Write a comment... 🗨️ 📷 🎬 🗑️

Press Enter to post.

Appendix C.

Study 1 principal components analyses

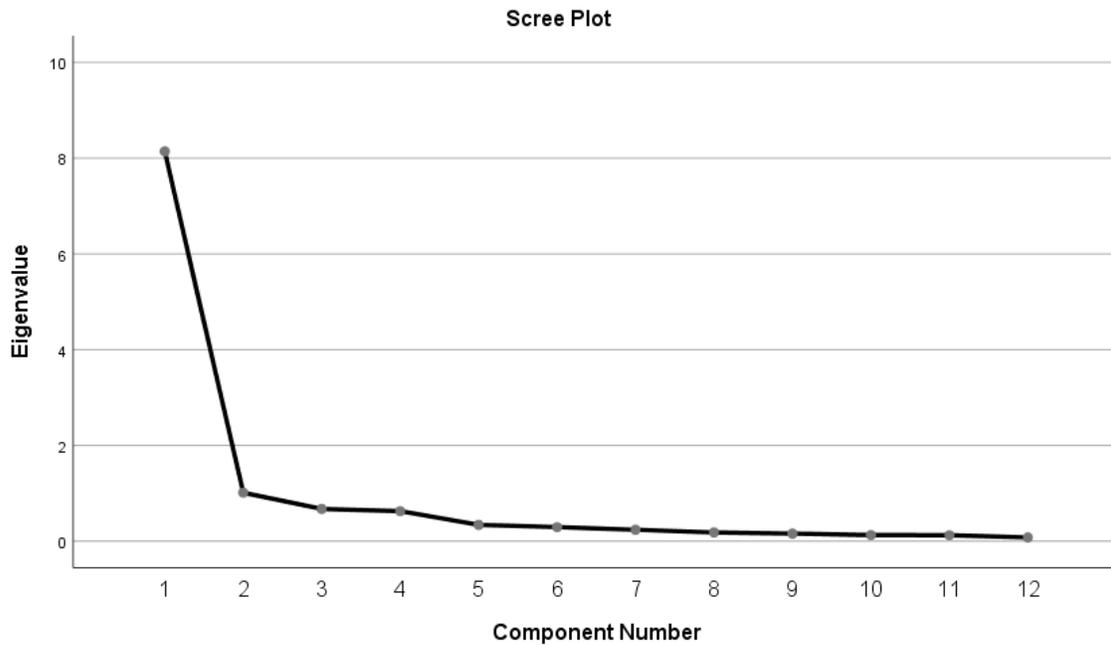
Moral Emotions. To determine if the 4-item anger scale, 4-item contempt scale, and 4-item disgust scales loaded onto a single component, an exploratory principal components analysis (promax rotation, $kappa = 4$) was conducted. Promax rotation was used because it is a non-orthogonal rotation that allows components to correlate, and it was expected that if these emotions loaded onto separate components, these components would be highly correlated. Examination of the Scree plot suggested a single component. While the pattern matrix suggested a two-component solution in which contempt items loaded onto their own component, the structure matrix suggested that all items were moderately to highly correlated with the first component, and the two components themselves were correlated at 0.723. Thus, to avoid issues of collinearity in regression analyses, a single measure of Moral Emotions was created by mean-scoring all 12 items ($\alpha = 0.956$). The output from this analysis is shown below.

Total Variance Explained

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | Rotation Sums of Squared Loadings ^a | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--|-------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total |
| 1 | 8.141 | 67.846 | 67.846 | 8.141 | 67.846 | 67.846 | 7.391 |
| 2 | 1.013 | 8.443 | 76.289 | 1.013 | 8.443 | 76.289 | 6.890 |
| 3 | .674 | 5.617 | 81.905 | | | | |
| 4 | .628 | 5.230 | 87.135 | | | | |
| 5 | .341 | 2.838 | 89.973 | | | | |
| 6 | .294 | 2.450 | 92.423 | | | | |
| 7 | .238 | 1.987 | 94.410 | | | | |
| 8 | .182 | 1.518 | 95.928 | | | | |
| 9 | .157 | 1.310 | 97.238 | | | | |
| 10 | .128 | 1.071 | 98.309 | | | | |
| 11 | .125 | 1.038 | 99.346 | | | | |
| 12 | .078 | .654 | 100.000 | | | | |

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.



Pattern Matrix^a

| | Component | |
|---|-----------|-------|
| | 1 | 2 |
| I am angry towards the arresting police officer. | .698 | .221 |
| I am resentful towards the arresting police officer. | .269 | .605 |
| I am furious towards the arresting police officer. | .663 | .249 |
| I am very displeased with the arresting police officer . | .575 | .097 |
| I am contemptuous towards the arresting police officer. | -.053 | .952 |
| I hold contempt towards the arresting police officer. | -.055 | .961 |
| I detest the arresting police officer. | .102 | .813 |
| I have disdain for the arresting police officer. | .062 | .841 |
| The actions of the arresting police officer disgust me. | .880 | .044 |
| The actions of the arresting police officer make my stomach turn. | .928 | -.063 |
| I find the actions of the arresting police officer to be repulsive. | .957 | -.062 |
| I am disgusted by the arresting police officer. | .917 | .006 |

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Structure Matrix

| | Component | |
|---|-----------|------|
| | 1 | 2 |
| I am angry towards the arresting police officer. | .858 | .725 |
| I am resentful towards the arresting police officer. | .706 | .799 |
| I am furious towards the arresting police officer. | .843 | .728 |
| I am very displeased with the arresting police officer . | .644 | .512 |
| I am contemptuous towards the arresting police officer. | .635 | .914 |
| I hold contempt towards the arresting police officer. | .639 | .921 |
| I detest the arresting police officer. | .690 | .887 |
| I have disdain for the arresting police officer. | .670 | .886 |
| The actions of the arresting police officer disgust me. | .912 | .680 |
| The actions of the arresting police officer make my stomach turn. | .883 | .608 |
| I find the actions of the arresting police officer to be repulsive. | .912 | .630 |
| I am disgusted by the arresting police officer. | .922 | .669 |

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Component Correlation Matrix

| Component | 1 | 2 |
|-----------|-------|-------|
| 1 | 1.000 | .723 |
| 2 | .723 | 1.000 |

Extraction Method: Principal

Component Analysis.

Rotation Method: Promax with Kaiser

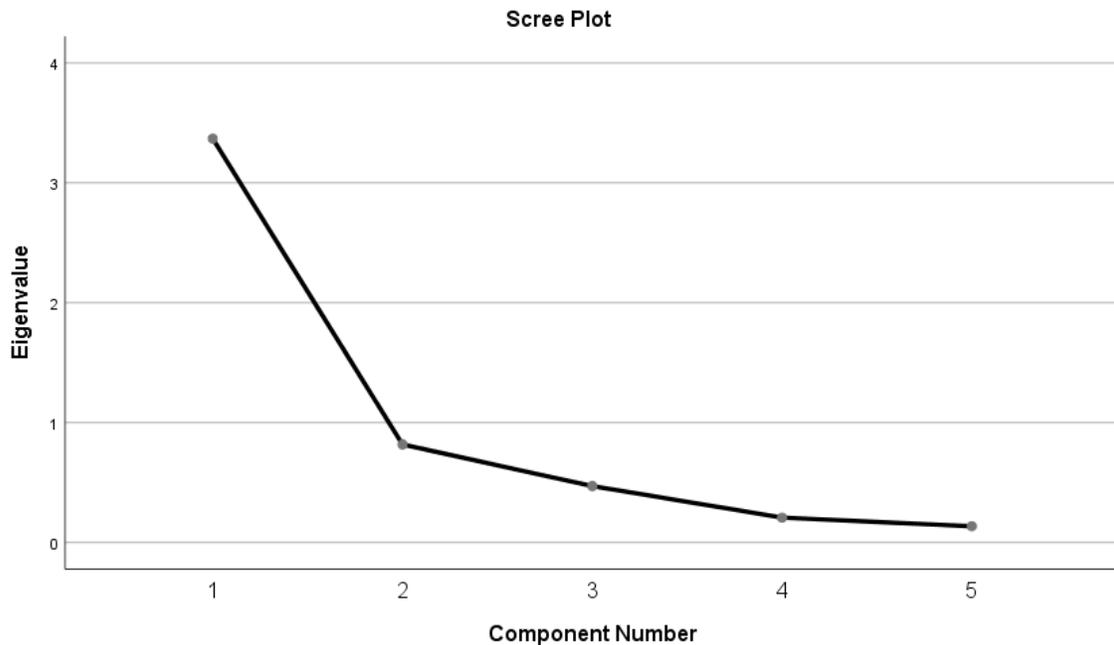
Normalization.

Moral Duty. To determine if the five Moral Duty items loaded onto a single component, an exploratory principal components analysis (promax rotation, kappa = 4) was conducted. Scree plots and PCA results indicated a single-component solution. Thus, a single measure of Moral Duty was created by mean-scoring all five items ($\alpha = 0.873$). The output from this analysis is shown below:

Total Variance Explained

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 3.369 | 67.380 | 67.380 | 3.369 | 67.380 | 67.380 |
| 2 | .818 | 16.351 | 83.731 | | | |
| 3 | .470 | 9.410 | 93.141 | | | |
| 4 | .208 | 4.150 | 97.291 | | | |
| 5 | .135 | 2.709 | 100.000 | | | |

Extraction Method: Principal Component Analysis.



Component Matrix^a

| | Component 1 |
|--|----------------|
| ...Americans have a responsibility to punish the offenders. | .846 |
| ...it is important that the offenders know that good members of American society will punish them. | .851 |
| ...good members of the Black/African American community have a responsibility to punish the offenders. | .904 |
| ...good members of the Black/African American community have a responsibility to hold them accountable, even if it means committing violent or destructive acts. | .581 |
| ...it is important that the offenders know that good Black/African Americans will punish them. | .880 |

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

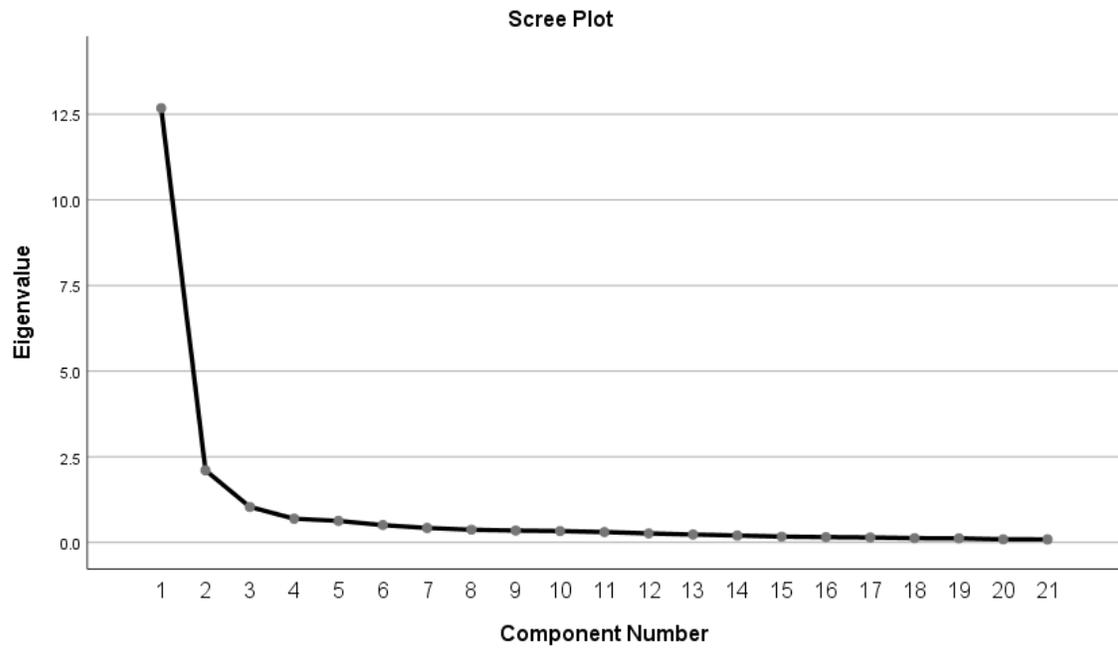
DIB Endorsement: Behavioural and DIB Endorsement: General. To determine if the DIB Endorsement: Behavioural and DIB Endorsement: General items loaded onto two distinct components, an exploratory principal components analysis (promax rotation, $kappa = 4$) was conducted, as it was expected that should multiple components exist, they would be highly correlated. Examination of the Scree plot suggested a two-component solution. At first glance, the pattern matrix suggested a three-component solution, however, upon investigating the items that loaded most heavily onto component three, it became obvious that this component was the result of the heavy loadings of reverse-coded items. Thus, component three was disregarded as an artifact of these items' reversed wording and these items' second highest loading was used. With this in mind, results from both the pattern and structure matrix both suggested two components. All 16 DIB Endorsement: General items loaded and were correlated most strongly with component 1, and all 5 DIB Endorsement: Behavioural items loaded and were correlated most strongly with component 2. These two components themselves correlated at 0.694. Because these were measures of dependent variables, collinearity was not a concern and thus two scales – DIB Endorsement: Behavioural and DIB Endorsement: General – were created by mean-scoring the relevant items ($\alpha = 0.928$ and $\alpha = 0.964$, respectively). The output from this analysis is shown below.

Total Variance Explained

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings ^a |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|--|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total |
| | 1 | 12.679 | 60.377 | 60.377 | 12.679 | 60.377 | 60.377 |
| 2 | 2.104 | 10.017 | 70.394 | 2.104 | 10.017 | 70.394 | 8.485 |
| 3 | 1.036 | 4.932 | 75.326 | 1.036 | 4.932 | 75.326 | 8.531 |
| 4 | .692 | 3.296 | 78.622 | | | | |
| 5 | .628 | 2.992 | 81.614 | | | | |
| 6 | .507 | 2.414 | 84.028 | | | | |
| 7 | .422 | 2.010 | 86.037 | | | | |
| 8 | .371 | 1.766 | 87.804 | | | | |
| 9 | .346 | 1.648 | 89.452 | | | | |
| 10 | .330 | 1.571 | 91.023 | | | | |
| 11 | .301 | 1.434 | 92.457 | | | | |
| 12 | .263 | 1.254 | 93.711 | | | | |
| 13 | .231 | 1.098 | 94.809 | | | | |
| 14 | .201 | .959 | 95.768 | | | | |
| 15 | .170 | .810 | 96.578 | | | | |
| 16 | .154 | .733 | 97.310 | | | | |
| 17 | .146 | .694 | 98.004 | | | | |
| 18 | .124 | .590 | 98.594 | | | | |
| 19 | .118 | .563 | 99.157 | | | | |
| 20 | .090 | .428 | 99.585 | | | | |
| 21 | .087 | .415 | 100.000 | | | | |

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.



Pattern Matrix^a

| | Component | | |
|--|-----------|------|-------|
| | 1 | 2 | 3 |
| I would be willing to 'like' the above social media post. | .014 | .766 | .121 |
| I would be willing to 'share' the social media post on my Facebook wall, making it only visible to my close friends and family, but not visible to my acquaintances and coworkers. | .022 | .902 | -.051 |
| I would be willing to use my Facebook account to write a comment on the social media post, making my opinions about the arresting police officer visible to anyone who views the post. | -.087 | .922 | .020 |
| I would be willing to 'share' the social media post on my Facebook wall, making it visible to all of my friends, including acquaintances and coworkers. | .038 | .923 | -.095 |
| I would be willing to share the social media post on a group-based Facebook page that is designed to publicly shame police officers. | .149 | .797 | -.003 |
| I endorse the actions of the members of the Black/African American community who created and distributed the social media post. | .688 | .175 | .107 |

| | | | |
|---|-------|-------|-------|
| I support the ideals and goals of the members of the Black/African American community who created and distributed the social media post. | .565 | .117 | .307 |
| The members of the Black/African American community who created and distributed the social media post did the right thing. | .794 | .026 | .140 |
| RC: I feel critical of members of the Black/African American community... | -.187 | -.031 | .950 |
| RC: In taking the actions they did, the members of the Black/African American... | -.263 | .048 | 1.014 |
| The Members of the Black/African American community who created and distributed the social media post are fighting the good fight. | .694 | .019 | .238 |
| The actions taken by the members of the Black/African American community who created and distributed the social media post are necessary | .722 | -.026 | .241 |
| I believe that what the members of the Black/African American community who created and distributed the social media post are doing is important. | .647 | .023 | .307 |

| | | | |
|--|-------|-------|-------|
| The world needs more people like the members of the Black/African American community who created and distributed the social media post | .735 | .034 | .216 |
| RC: Publically shaming the arresting officer was unnecessary | .270 | -.037 | .591 |
| The creation and distribution of the police shaming social media post is the best way to punish the officer from the news story | 1.088 | -.038 | -.565 |
| The actions taken by the members of the Black/African American community who created and distributed the social media post reflect my core values. | .941 | .048 | -.131 |
| I identify with the members of the Black/African American community who created and distributed the social media post. | .748 | -.027 | .217 |
| RC: I don't think I would get along with the members... | .364 | -.075 | .565 |
| I consider the members of the Black/African American community who created and distributed the social media post to be on my 'team'. | .826 | -.053 | .095 |
| IOS with AA activists | .706 | .127 | -.040 |

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Structure Matrix

| | Component | | |
|--|-----------|------|------|
| | 1 | 2 | 3 |
| I would be willing to 'like' the above social media post. | .609 | .826 | .455 |
| I would be willing to 'share' the social media post on my Facebook wall, making it only visible to my close friends and family, but not visible to my acquaintances and coworkers. | .589 | .896 | .347 |
| I would be willing to use my Facebook account to write a comment on the social media post, making my opinions about the arresting police officer visible to anyone who views the post. | .543 | .872 | .350 |
| I would be willing to 'share' the social media post on my Facebook wall, making it visible to all of my friends, including acquaintances and coworkers. | .589 | .909 | .323 |
| I would be willing to share the social media post on a group-based Facebook page that is designed to publicly shame police officers. | .679 | .895 | .437 |
| I endorse the actions of the members of the Black/African American community who created and distributed the social media post. | .880 | .680 | .659 |

| | | | |
|---|------|------|------|
| I support the ideals and goals of the members of the Black/African American community who created and distributed the social media post. | .856 | .624 | .748 |
| The members of the Black/African American community who created and distributed the social media post did the right thing. | .908 | .616 | .702 |
| RC: I feel critical of members of the Black/African American community... | .452 | .247 | .807 |
| RC: In taking the actions they did, the members of the Black/African American... | .473 | .302 | .852 |
| The Members of the Black/African American community who created and distributed the social media post are fighting the good fight. | .872 | .584 | .728 |
| The actions taken by the members of the Black/African American community who created and distributed the social media post are necessary | .872 | .558 | .731 |
| I believe that what the members of the Black/African American community who created and distributed the social media post are doing is important. | .875 | .585 | .766 |

| | | | |
|--|------|------|------|
| The world needs more people like the members of the Black/African American community who created and distributed the social media post | .908 | .616 | .740 |
| RC: Publicly shaming the arresting officer was unnecessary | .656 | .394 | .763 |
| The creation and distribution of the police shaming social media post is the best way to punish the officer from the news story | .671 | .450 | .175 |
| The actions taken by the members of the Black/African American community who created and distributed the social media post reflect my core values. | .882 | .621 | .543 |
| I identify with the members of the Black/African American community who created and distributed the social media post. | .881 | .565 | .726 |
| RC: I don't think I would get along with the members... | .706 | .407 | .786 |
| I consider the members of the Black/African American community who created and distributed the social media post to be on my 'team'. | .856 | .539 | .646 |
| IOS with AA activists | .762 | .581 | .503 |

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Component Correlation Matrix

| Component | 1 | 2 | 3 |
|-----------|-------|-------|-------|
| 1 | 1.000 | .668 | .694 |
| 2 | .668 | 1.000 | .423 |
| 3 | .694 | .423 | 1.000 |

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Appendix D.

Exploratory correlational analyses

As a separate test of whether Absolute Standards (compared to Gradual Standards) differentially correlated with Moral Emotions, Moral Duty, and both DIB Endorsement measures (as well as Positive and Negative Affect directed towards the Black activists), an omnibus hypothesis testing the equality of these 6 pairs of correlations was tested using Steiger's (2004) procedure for comparing correlations based on the two-step generalized least square estimation method (conducted using online software MML-WBCORR; Fouladi & Serafini, 2018). The results from this procedure yielded a significant result $\chi^2(6, N=283) = 25.598, p < 0.001$, indicating Moral Emotions, Moral Duty, both DIB Endorsement measures, as well as Positive and Negative Affect did not correlate equally with Absolute vs. Gradual Standards.

Follow-up analysis to test for significant differences between these pairs of correlations was conducted using Steiger's (1980) procedure for comparing dependent correlations with one shared variable using Fisher transformations. Directional hypotheses were tested in the order of largest differences between correlations to smallest differences between correlations. In all cases it was specified that Absolute Standards would have the significantly higher correlation (with the exception of Negative Affect, in which it was specified Absolute Standards would have a significantly lower correlation). Additionally, confidence intervals for these differences were obtained using Zou's (2007) procedure for comparing dependent correlations using Fisher transformations. Both procedures were conducted with online software (Diedenhofen & Much, 2015; cocor). Step-up Bonferroni corrections were used to control for family-wise error rates across both procedures. The results from this analysis are shown in the table below.

| Difference tested ($r_{\text{Absolute, X}} - r_{\text{Gradual, X}}$) | α level | z (Steiger, 1980) | p | CI (Zou, 2007) |
|---|----------------|-------------------|---------|-------------------------------|
| Negative Affect | 0.0071 | -3.966 | < 0.001 | 99% CI [-0.482, -0.105] |
| Moral Emotions | 0.083 | 3.828 | < 0.001 | 99% CI [0.0886, 0.446] |
| DIB Endorsement: General | 0.01 | 3.287 | < 0.001 | 99% CI [0.0513, 0.415] |
| Positive Affect | 0.0125 | 1.807 | 0.0354 | 98.75% CI [-0.0462, 0.327] |
| DIB Endorsement: Behavioural | 0.0125 | 1.246 | 0.106 | 98.75% CI [-0.0297, 0.215] |
| Moral Duty | 0.0125 | 1.122 | 0.131 | 98.75% CI [-0.0396, 0.209] |

Note: Results from comparing dependent correlations; N=283; with the exception of Negative Affect, all directional hypotheses tested whether the correlation with Absolute Standards (compared to Gradual Standards) was significantly higher.

Compared to Gradual Standards, Absolute Standards had significantly higher correlations with Moral Emotions ($z=3.828$, $p=0.0001$; 99% CI [0.0886, 0.446]), DIB Endorsement: General ($z=3.287$, $p=0.0005$; 99% CI [0.0513, 0.415]), and Negative Affect ($z=-3.966$, $p < 0.0001$; 99% CI [-0.482, -0.105]). However, Absolute Standards and Gradual Standards did not differentially correlate with Positive Affect ($z=1.807$, $p=0.0354$; 98.75% CI [-0.0462, 0.327]), DIB Endorsement: Behavioural ($z=1.246$, $p=0.106$; 98.75% CI [-0.0297, 0.215]), and Moral Duty ($z=1.122$, $p=0.131$; 98.75% CI [-0.0396, 0.209]).

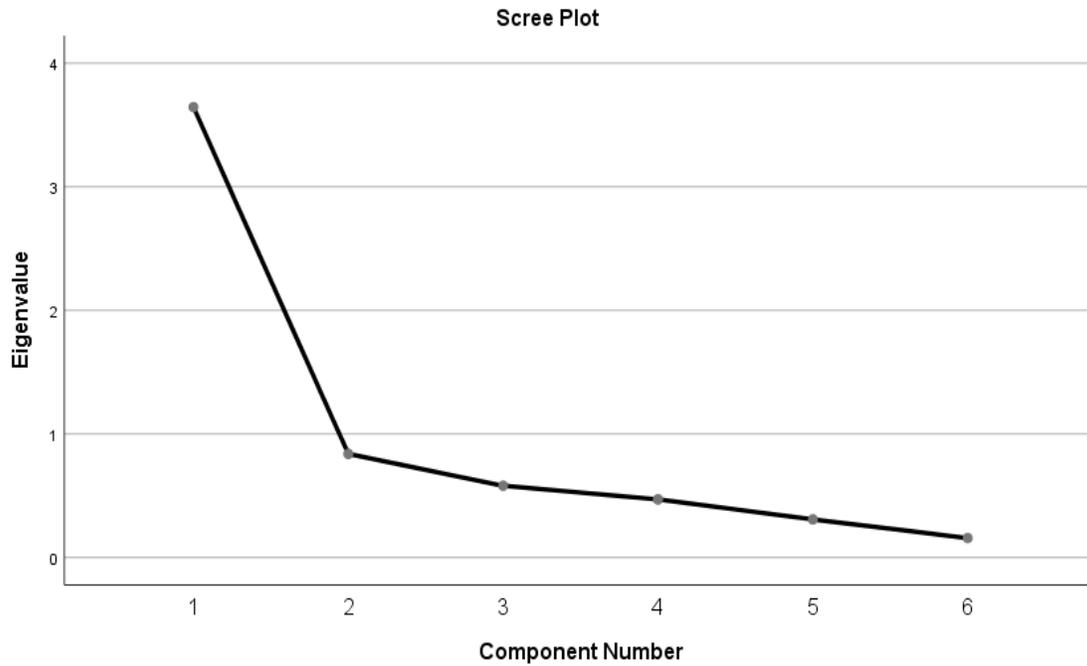
Appendix E.

Study 2 principal components analyses

Absolute Standards. To determine whether the 6 items of this scale loaded onto a single component, an exploratory principal components analysis (promax rotation, kappa = 4). Examination of the Scree plot suggested a single component, as did the component matrix. Thus, a single measure of Absolute Standards was created by mean-scoring all six items ($\alpha = 0.861$). The output from this analysis is shown below.

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 3.644 | 60.741 | 60.741 | 3.644 | 60.741 | 60.741 |
| 2 | .838 | 13.974 | 74.715 | | | |
| 3 | .581 | 9.678 | 84.393 | | | |
| 4 | .470 | 7.838 | 92.231 | | | |
| 5 | .309 | 5.145 | 97.376 | | | |
| 6 | .157 | 2.624 | 100.000 | | | |

Extraction Method: Principal Component Analysis.



Component Matrix^a

| | Component 1 |
|---|----------------|
| The government tried to rush the implementation of the bill (1-4; shown the standard scale; 1-absolute; 7- gradual) | .723 |
| The government refuses to fully retract the bill | .785 |
| The police used violence to disperse protestors | .848 |
| The police arrested protestors for "rioting" | .824 |
| The government refuses to set up an independent investigation into police brutality | .715 |
| The government refuses to allow true democracy | .773 |

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

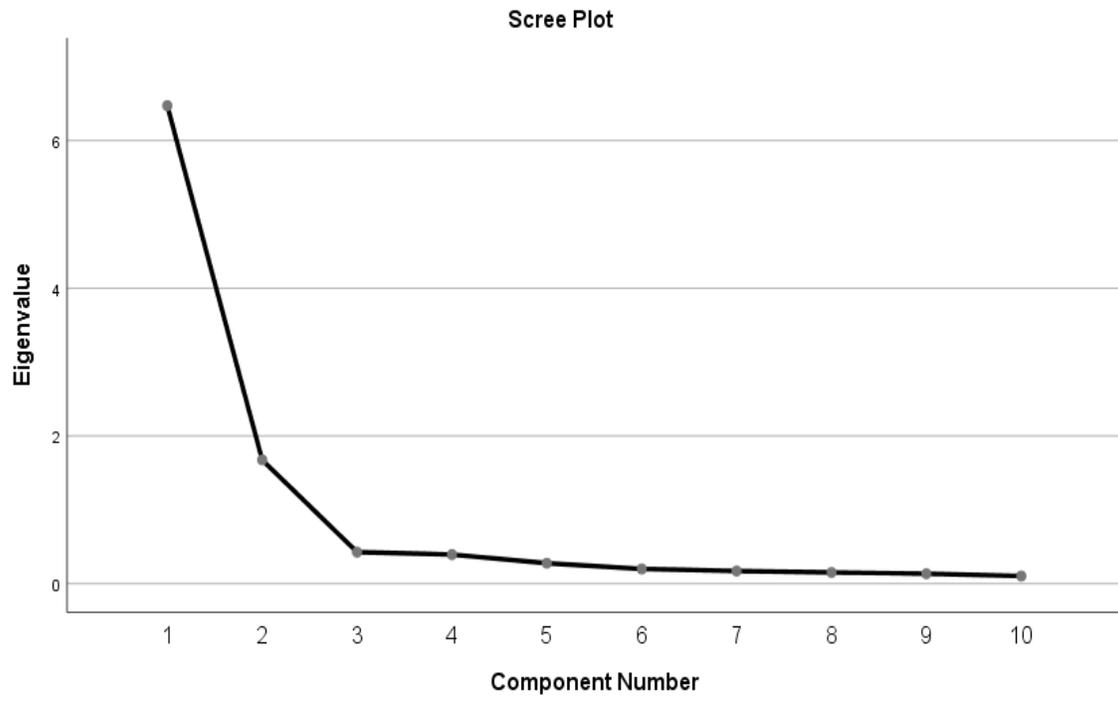
DIB Endorsement. To determine whether the 10 items of this scale loaded onto 2 separate components (corresponding to normative collective action and DIB), an exploratory principal components analysis was conducted (promax rotation, kappa = 4). Examination of the Scree plot, pattern matrix and structure matrix suggested a two-component solution, and the correlation between these components was moderate ($r = 0.486$). As expected, items 4-10 loaded onto the first largest component (DIB Endorsement), while items 1-3 loaded onto their own smaller component. Thus, a single measure of DIB Endorsement was created by mean-scoring items 4-10 ($\alpha = 0.956$). The output from this analysis is shown below.

Total Variance Explained

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings ^a |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|--|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | |
| 1 | 6.471 | 64.715 | 64.715 | 6.471 | 64.715 | 64.715 | 6.195 |
| 2 | 1.675 | 16.747 | 81.461 | 1.675 | 16.747 | 81.461 | 3.903 |
| 3 | .427 | 4.267 | 85.728 | | | | |
| 4 | .393 | 3.934 | 89.662 | | | | |
| 5 | .277 | 2.765 | 92.427 | | | | |
| 6 | .199 | 1.986 | 94.413 | | | | |
| 7 | .171 | 1.709 | 96.122 | | | | |
| 8 | .151 | 1.509 | 97.631 | | | | |
| 9 | .134 | 1.343 | 98.974 | | | | |
| 10 | .103 | 1.026 | 100.000 | | | | |

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.



Pattern Matrix^a

| | Component | |
|--|-----------|-------|
| | 1 | 2 |
| Organize and participate in petitions against the Bill | -.048 | .951 |
| Criticize and make fun of the government and other officials online | .327 | .608 |
| Organize and participate in large-scale peaceful protests | -.194 | 1.007 |
| Occupy roads, parks, or other public areas | .764 | .256 |
| Surround police stations, the HK Liaison Office, or other government buildings | .748 | .265 |
| Engage in cyber-attacks or hacking into government websites | .906 | -.010 |
| Destroy or deface public property and government buildings | .935 | -.003 |
| Send threatening letters to officials and police officers | .985 | -.300 |
| Organize and participate in violent protests | .983 | -.135 |
| Doxing officials and police officers | .798 | .156 |

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Structure Matrix

| | Component | |
|--|-----------|------|
| | 1 | 2 |
| Organize and participate in petitions against the Bill | .414 | .927 |
| Criticize and make fun of the government and other officials online | .623 | .767 |
| Organize and participate in large-scale peaceful protests | .295 | .912 |
| Occupy roads, parks, or other public areas | .888 | .627 |
| Surround police stations, the HK Liaison Office, or other government buildings | .877 | .629 |
| Engage in cyber-attacks or hacking into government websites | .901 | .430 |
| Destroy or deface public property and government buildings | .933 | .452 |
| Send threatening letters to officials and police officers | .839 | .179 |
| Organize and participate in violent protests | .917 | .343 |
| Doxing officials and police officers | .874 | .544 |

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Component Correlation Matrix

| Component | 1 | 2 |
|-----------|-------|-------|
| 1 | 1.000 | .486 |
| 2 | .486 | 1.000 |

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Appendix F.

Probing the ingroup identity × superordinate identity interaction in Study 1

The two DIB Endorsement measures (Behavioural and General) were entered as dependent variables in two separate exploratory analyses using PROCESS model 14. An interaction term was created by multiplying mean-centered African American Identification and American Identification scores, and this interaction term was entered as the IV in the model. Like the primary analyses in Study 1, Ingroup Projection was entered as the mediator and Absolute Standards as the moderator. African American Identification, American Identification, and Personal Experience were entered as covariates.

As can be seen in the first set of columns in Table 1F, inclusion of the interaction term into the model accounted for an additional 3.1% of the variance in Ingroup Projection. An R^2 difference test revealed this was a significant increase in variance explained ($\Delta F(1,255) = 10.10, p = .002$). However, inclusion of the interaction term in the overall model of DIB Endorsement did not significantly improve the model's predictive power for DIB Endorsement: Behavioural ($\Delta F(1,252) = 0.07, p = .80$) nor DIB Endorsement: General ($\Delta F(1,252) = 0.06, p = 0.81$; final two sets of columns in Table F1). Therefore, the interaction term was not included in the primary analyses of Study 1.

To explore how African American Identification and American Identification interacted to predict Ingroup Projection, PROCESS model 1 was used. African American Identification was entered as the IV, Ingroup Projection as the DV, American Identification as the moderator, and Personal Experience as the covariate. As can be seen in Table F2, African American Identification was significantly and negatively related to Ingroup Projection only at low levels of American Identification. However, the results also suggested a trend wherein the relationship between African American Identification and Ingroup Projection was reduced, and even reversed, as identification with America decreased.

Table F1. Results of PROCESS model 14 for DIB Endorsement: Behavioural and DIB: General with African American Identification by American Identification interaction term included

| | Ingroup Projection | | | DIB Endorsement: Behavioural | | | DIB Endorsement: General | | |
|--|---|------|--------|--|------|--------|---|------|---------|
| | B | SE | p | B | SE | p | B | SE | p |
| African American Identification | -0.09 | 0.08 | .25 | 0.25 | 0.12 | .04 | 0.34 | 0.08 | < 0.001 |
| American Identification | 0.57 | 0.07 | < .001 | 0.003 | 0.12 | .98 | -0.12 | 0.08 | 0.13 |
| African American Identification X American Identification | 0.15 | 0.05 | .002 | 0.02 | 0.07 | .80 | -0.01 | 0.05 | .81 |
| Ingroup Projection | - | - | - | -0.02 | 0.09 | .83 | -0.04 | 0.06 | .47 |
| Absolute Standards | - | - | - | 0.33 | 0.10 | .001 | 0.38 | 0.07 | < .001 |
| Projection X Absolute Standards | - | - | - | -0.04 | 0.06 | .51 | 0.01 | 0.04 | .77 |
| Personal Experience | -0.10 | 0.19 | .58 | 0.73 | 0.27 | .008 | 0.33 | 0.18 | .06 |
| Constant | 0.02 | 0.11 | .82 | 3.83 | 0.15 | < .001 | 4.90 | 0.10 | < .001 |
| | R ² = 0.217 F(4, 255) = 17.67, p < .001 | | | R ² = 0.113 F(7, 252) = 4.56, p < .001 | | | R ² = 0.259 F(7, 252) = 12.58, p < .001 | | |

Note. Coefficients are unstandardized and predictors were mean-centered.

Table F2. Conditional direct effects of African American Identification on Ingroup Projection, based on American Identification scores

| | Direct effect of African American Identification conditioned on American Identification | | | |
|---|--|---------------|----------|------------------|
| Value of American Identification | B | <i>BootSE</i> | <i>p</i> | 95% CI |
| -1.26 | -0.28 | 0.09 | .002 | [-0.455, -0.101] |
| 0.05 | -0.09 | 0.08 | .29 | [-0.247, 0.074] |
| 1.20 | 0.08 | 0.11 | .44 | [-0.128, 0.293] |

Note. Values represent estimated effects after controlling for all other variables in the model. The specific values of American Identification reflect the 16th, 50th, and 84th quartiles.

Appendix G.

Probing the ingroup identity × superordinate identity interaction in Study 2

DIB Endorsement was entered as the dependent variable in an exploratory analysis using PROCESS model 14. An interaction term was created by multiplying mean-centered Yellow Ribbon Identification and Hongkonger Identification scores, and this interaction term was entered as the IV in the model. Like the primary analyses in Study 2, Ideal Ingroup Projection and Actual Ingroup Projection were entered as the mediators and Absolute Standards as the moderator. Yellow Ribbon Identification and Hongkonger Identification were entered as covariates.

As can be seen in the first two sets of columns in Table G1, inclusion of the interaction term into the model accounted for an additional 1.6% of the variance in Ideal Ingroup Projection.

An R^2 difference test revealed this was a significant increase in variance explained ($\Delta F(1,181) = 4.27, p = .04$). The interaction term did not account for any additional variance in Actual Ingroup Projection ($\Delta F(1,181) = 0.07, p = .80$). Furthermore, inclusion of the interaction term in the overall model of DIB Endorsement did not significantly improve the model's predictive power ($\Delta F(1,176) = 0.00, p = .99$; final set of columns in Table G1). Therefore, the interaction term was not included in the primary analyses of Study 2.

To explore how Yellow Ribbon Identification and Hongkonger Identification interacted to predict Ideal Ingroup Projection, PROCESS model 1 was used. Yellow Ribbon Identification was entered as the IV, Ideal Ingroup Projection as the DV, and Hongkonger Identification as the moderator. As can be seen in Table G2, although Yellow Ribbon Identification was consistently positively related to Ideal Ingroup Projection, this relationship was strongest at low levels of Hongkonger Identification.

Table G1. Results of PROCESS model 14 for DIB Endorsement with Yellow Ribbon Identification and Hongkonger Identification interaction term included

| | Ideal Ingroup Projection | | | Actual Ingroup Projection | | | DIB Endorsement | | |
|---|---|------|--------|---|------|-----|---|------|--------|
| | B | SE | p | B | SE | p | B | SE | p |
| Yellow Ribbon Identification | 0.47 | 0.07 | < .001 | 0.11 | 0.07 | .13 | 0.45 | 0.07 | < .001 |
| Hongkonger Identification | -0.02 | 0.12 | .85 | -0.01 | 0.13 | .95 | -0.09 | 0.11 | .39 |
| Yellow Ribbon Identification X Hongkonger Identification | -0.11 | 0.05 | .04 | 0.02 | 0.06 | .80 | -0.001 | 0.05 | .99 |
| Ideal Ingroup Projection | - | - | - | - | - | - | 0.12 | 0.08 | .11 |
| Actual Ingroup Projection | - | - | - | - | - | - | 0.02 | 0.07 | .80 |
| Absolute Standards | - | - | - | - | - | - | 0.34 | 0.08 | < .001 |
| Absolute Standards X Ideal Ingroup Projection | - | - | - | - | - | - | 0.14 | 0.06 | .02 |
| Absolute Standards X Actual Ingroup Projection | - | - | - | - | - | - | -0.05 | 0.06 | .43 |
| Constant | - | - | - | - | - | - | 4.35 | 0.09 | < .001 |
| | R ² = 0.297 F(3, 181) = 25.58, p < .001 | | | R ² = 0.017 F(3, 181) = 1.04, p = .38 | | | R ² = 0.493 F(8, 176) = 21.43, p < .001 | | |

Note. Coefficients are unstandardized and predictors were mean-centered.

Table G2. Conditional direct effects of Yellow Ribbon Identification on Ideal Ingroup Projection, based on Hongkonger Identification scores

| | Direct effect of Yellow Ribbon Identification conditioned on Hongkonger Identification | | | |
|---|---|----------------------|-----------------|----------------|
| Value of Hongkonger Identification | B | <i>BootSE</i> | <i>p</i> | 95% CI |
| -0.65 | 0.56 | 0.08 | < .001 | [0.396, 0.720] |
| 0.35 | 0.47 | 0.07 | < .001 | [0.337, 0.603] |
| 0.85 | 0.43 | 0.07 | < .001 | [0.283, 0.570] |

Note. Values represent estimated effects after controlling for all other variables in the model. The specific values of Hongkonger Identification reflect the 16th, 50th, and 84th quartiles.