'Not one of us': Predictors and Consequences of Denying Ingroup Characteristics to Ambiguous Targets

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#### Abstract

We investigated individual difference predictors of ascribing ingroup characteristics to negative and positive ambiguous targets. Studies 1 and 2 investigated events involving negative targets whose status as racial (Tsarnaev brothers) or national (Woolwich attackers) ingroup members remained ambiguous. Immediately following the attacks, we presented White Americans and British individuals with the suspects' images. Those higher in social dominance orientation and right-wing authoritarianism - concerned with enforcing status boundaries and adherence to ingroup norms, respectively- perceived these low status and low conformity suspects as looking less White and less British, thus denying them ingroup characteristics. Perceiving suspects in more exclusionary terms increased support for treating them harshly, and for militaristic counterterrorism policies prioritizing ingroup safety over outgroup harm. Studies 3 and 4 experimentally manipulated a racially ambiguous target's status and conformity. Results suggested that target status and conformity critically influence SDO (status) and RWA (conformity)'s effects on inclusionary vs. exclusionary perceptions.


Keywords: Group categorization; Ingroup Overexclusion; Social dominance orientation; RightWing Authoritarianism; Terrorism

On the $15^{\text {th }}$ of April, 2013, two bombs exploded near the finish line of the Boston Marathon, killing three people and injuring two hundred and eighty others. Surveillance footage quickly determined two primary suspects, captured in grainy photos wearing backpacks near the incident. Speculation immediately abounded about their background and potential motivations, fueled by the ambiguity of their skin color and the difficulty in determining whether the incident was carried out by foreign or American actors. Shortly thereafter, the FBI released the names of Tamerlan and Dzhokhar Tsarnaev. Unusually, although we quickly learned more about their life histories, many of the outstanding questions about the motivation behind the attacks, and the racial and ethnic status of the perpetrators, remained unanswered (Walsh, 2013).

A complex picture emerged: although their names clearly sounded foreign to most Americans, we learned that they had been living in the United States for many years. Moreover, in spite of the fact that they did not quite fit the physical profile and background of the average White person familiar to Americans, their ethnic background was from the North Caucasus, the very region that gave name to the term 'Caucasian'. In light of their ambiguous background, the question of whether or not the bombers were White became highly salient and hotly debated by social commentators and media members. For example, David Sirota wrote in Salon the day after the attacks (prior to their identities being known) about his hope that the terrorists were White and homegrown. He argued that if the bombers turned out to be White, they would be perceived as an aberration or an anomaly and would not provoke aggressive responses toward other groups by the U.S. government (Sirota, 2013). This prompted significant backlash among individuals bothered by the assertion that a White individual could be capable of these attacks (Walsh, 2013). Nevertheless, even after the images of the brothers were released, their racial identity was the subject of much debate, as evidenced by headlines such as "Are the Tsarnaev Brothers

White?" (Walsh, 2013), "Are the Tsarnaevs White?" (Beinart, 2013), and "The Unbearable Whiteness of the Brothers Tsarnaev" (First Post, 2013). In sum, the potential Whiteness of the Tsarnaev brothers became a highly salient dimension in the aftermath of the Marathon attacks, and one that we assumed would be highly relevant to White Americans. ${ }^{1}$

Shortly after the attack in Boston, another incident occurred in Woolwich, a workingclass neighborhood in southeast London, United Kingdom. In this case, the suspects- Michael Adebolajo and Michael Adebowale- were racially unambiguous. Nevertheless, in the immediate aftermath of their suspected lethal attack on a British soldier, their national status (as British citizens or as foreigners) remained unclear. Thus, although there were important differences in the nature and context of the terrorist attacks, an important and unusual similarity between these two events was the fact that the status of the perpetrators as members of individuals' own group or members of an external group was ambiguous.

These two incidents provided naturalistic settings in which to investigate an important question: namely, the variables predicting the perception of ambiguous targets in ingroup vs. outgroup terms. Indeed, the issue of imbuing targets with ingroup characteristics is one with important consequences, both for the individuals being characterized and for the groups involved. Research in intergroup relations has long shown that categorization into groups results in a preference for one's own group over the outgroup (Allport, 1954; Gramzow \& Gaertner, 2005; Sherif, 1967). This bias manifests itself in terms of increased positive regard and

[^0]favoritism towards the ingroup relative to the outgroup (Mullen, Brown, \& Smith, 1992; Tajfel \& Turner, 1986), increased empathy and prosocial behavior towards members of the ingroup (Hornstein, 1976; Piliavin, Dovidio, Gaertner, \& Clark, 1981), construal of other ingroup members as closer to the self (Turner, Hogg, Oakes, Reicher, Wetherell, 1987), and increased levels of trust and cooperation (Miller, Maner and Becker, 2010). In sum, group members' orientation towards other individuals is importantly influenced by whether they perceive these individuals in ingroup versus outgroup terms.

The determination of who belongs to the ingroup also matters for the group itself. Individuals are motivated to hold their group in positive regard (Tajfel \& Turner, 1986) and are concerned with its level of overall functioning, as well as its status and standing in society (Stelzl, Janes, \& Seligman, 2007). These concerns should influence the ascription of ingroup membership to others. Firstly, we would expect individuals to be sensitive to how those they admit to the ingroup influence its operation. Thus, they should attempt to ensure that those ascribed ingroup status will conform to the norms and practices of the group and support its smooth functioning and cohesiveness (Feldman, 1984). Secondly, we expect that group members will employ strategies to enhance and protect its image: one such strategy is to ascribe group membership to valued individuals and deny it to undesirable others (Castano, Yzerbyt, Bourguignon, \& Seron, 2002; Leyens \& Yzerbyt, 1992). Examples of this include the conferral of honorary degrees to venerated individuals by universities, and companies dropping celebrity endorsees who engage in egregious, socially undesirable behavior from their 'corporate family'.

Consistent with the notion that group members are concerned with the consequences for their group of granting membership to others, Castano and colleagues (2002) argue that individuals take care when making ingroup categorizations. Such caution helps avoid the
'contamination' of the ingroup and any damage to its functioning or status that that might ensue (see also Ho, Sidanius, Cuddy, \& Banaji, 2013; Stelzl et al., 2007; Leyens \& Yzerbyt, 1992). At the same time, it may pay not only to exclude negative ambiguous targets that may contaminate the group but also to include positive ambiguous targets, and thus to 'bask in their reflected glory'. Indeed, consistent with both exclusion of negative and inclusion of positive ambiguous targets, Stelzl et al. (2007) found that Canadians were more likely to see Ben Johnson (a Jamaican-born Canadian sprinter) as Canadian after he won the gold medal at the 1988 Olympics, but as Jamaican after he was subsequently disqualified for steroid use.

## Individual differences in the conferral of ingroup characteristics

Although our reasoning suggests that all group members should show some concern with determining who does and who does not belong to their group, there is nevertheless theoretical reason to expect individual differences in how discriminating individuals are in ascribing others with ingroup characteristics, a question that has received scant empirical investigation (but see Blascovich, Wyer, Swart, \& Kibler, 1997; Ho et al., 2013; Krosch, Bernsten, Amodio, Jost, \& Van Bavel, 2013).

In this work, we considered the role of two individual difference variables - social dominance orientation (SDO; Pratto, Sidanius, Stallworth, \& Malle, 1994) and right-wing authoritarianism (RWA; Altemeyer, 1981) - that both relate to a wide variety of socio-political attitudes and behaviors (e.g., racism, sexism, support for war, support for the death penalty; Altemeyer, 1981; Kteily, Ho, \& Sidanius, 2012). Although these variables predict prejudice towards similar groups in practice, they do so independently of one another, and for unique reasons (Duckitt, 2001).

Whereas being high in RWA reflects a concern with traditionalism, submission to established authorities, and aggression towards those who violate the social norms of the ingroup, individuals high in SDO favor the maintenance of anti-egalitarian, hierarchical relationships between social groups, and the domination of 'inferior' groups by 'superior' ones. As such, when it comes to perceiving ambiguous targets in inclusionary vs. exclusionary terms, it is important to consider the role of both ideological orientations rather than either one alone. Individuals high in RWA should be especially sensitive to the conformity of ambiguous targets in their ascription of ingroup characteristics. As such, we expected individuals high in RWA to see nonconformist individuals as potential threats to group cohesion and thus to be more willing to perceive them in exclusionary terms (Duckitt, 2001; Thomsen, Green \& Sidanius, 2008). On the other hand, if our expectation about the role for ambiguous target conformity is correct, such exclusionary perceptions may not be extended by high RWA individuals to more conformist ambiguous targets.

Unlike RWA, individuals high in SDO should be primarily concerned with the status of ambiguous targets, given high SDO individuals' concerns about maintaining and reifying group status boundaries (Ho et al., 2013). Thus, individuals high in SDO should tend to exclude low status ambiguous targets who they might perceive as threats to the status boundary between their group and inferior groups. In contrast, including higher status ambiguous targets should not blur (and may in fact sharpen) group status boundaries, and thus, we would not expect high SDO individuals to see such targets in exclusionary terms.

Whereas a few studies (Ho et al., 2013; Krosch et al., 2013) have investigated a role for SDO in the realm of hypodescent research (the tendency to categorize half-racials, a specific case of ambiguous target, as members of the low status group), no studies have investigated the
relationship between RWA and the ascription of ingroup characteristics to ambiguous targets. Finally, no studies have looked at individual differences in the ascription of ingroup characteristics to positive ambiguous targets.

## The present work

We tested our ideas across four studies. In studies 1 and 2, we assessed the role of SDO and RWA in the ascription of ingroup characteristics to low status and low conformity (i.e., negative) ambiguous suspects in the immediate aftermath of terrorist attacks. By collecting data within days of the attacks, we were able to examine our hypotheses in the context of highly salient real-world incidents. By assessing two different contexts, and two different bases of ingroup membership, we were also able to investigate the generalizability of our hypotheses. Thus, we examined the role of SDO and RWA in influencing perceptions of the Whiteness of the racially ambiguous Tsarnaev brothers (study 1), as well as investigating perceptions of the Britishness of Michael Adebolajo (study 2), one of the suspected Woolwich attackers. These targets' actions were perceived, in no uncertain terms, to be extremely low in status and conformity.

Because individuals high in RWA tend to reject nonconformist behavior that challenges established authorities and threatens group cohesion, we hypothesized that White individuals high on RWA would downplay the 'Whiteness' of the Tsarnaev brothers, and British individuals high on RWA would similarly downplay the 'Britishness' of the Woolwich suspects. Because individuals high in SDO seek to avoid blurring group status boundaries, we also expected that high SDO would be associated with exclusionary perceptions of the Tsarnaev brothers and the Woolwich suspects. Distancing them from the ingroup in this way allows individuals high in SDO to avoid having the status of their group 'contaminated' by an association with the
extremely low status targets. Because RWA and SDO have been frequently observed to operate in parallel, we expected each construct to contribute uniquely to exclusionary perceptions targeted at the negative ambiguous targets.

In studies 3 and 4, we sought to extend our examination to more positive ambiguous targets and in so doing, assess our claims about the reasons for SDO and RWA's effects. Specifically, we experimentally manipulated the status (study 3 ) and conformity (study 4 ) of a racially ambiguous target to be low or high. Consistent with our expectation that individuals high in SDO would be influenced by target status, we expected ambiguous targets' status to moderate the effect of high SDO (but not high RWA) on individuals' ascription of ingroup characteristics. Consistent with our expectation that individuals high in RWA would be influenced by target conformity, we expected high RWA (but not high SDO) individuals' ascription of ingroup characteristics to be moderated by information about how conformist vs. nonconformist the ambiguous target was.

Our central theoretical interest in this work was determining the predictors of perceiving ambiguous target in ingroup terms. Nevertheless, we also expected that ingroup characteristcsonce ascribed or denied- would have important consequences. We assessed these ideas in our first two studies. We expected the perception of the Tsarnaev brothers and the Woolwich attackers in ingroup vs. outgroup terms to matter. Previous work has described the benefits ingroup members receive from their membership within the group (e.g., trust: Brewer, 2008; empathy: Piliavin et al., 1981; altruism: Stürmer, Snyder, Kropp \& Siem, 2006). On the other hand, being a member of an outgroup subjects one to the potential application of any of a number of processes-such as stereotyping, prejudice, and dehumanization- that can be used to justify aggressive attitudes and behavior, much more difficult to justify towards members of the
ingroup. Thus, we hypothesized that the perception of the Tsarnaev brothers and Woolwich attackers as outgroup (as opposed to ingroup) members would be associated with harsher judgments about the punishments they deserve. ${ }^{2}$

Along these same lines, characterizing negative ambiguous targets who have harmed the group as outgroup members might contribute to the justification of aggressive policies towards outsiders more generally. Perceiving the ingroup to have been targeted from the outside may increase group members' support for policies and institutions designed to protect the ingroup, at the expense of outsiders, shifting group members' moral calculus to further prioritize ingroup over outgroup outcomes (Stürmer et al., 2006; see also Lickel et al., 2006). As such, we hypothesized that perceptions of the Tsarnaev brothers as less White and the Woolwich attackers as less British would relate to support for aggressive counter-terrorism measures: measures with the stated aim of protecting the ingroup, but that nevertheless had the potential for grave consequences and negative outcomes for those not belonging to the group (see also Asbrock \& Fristche, 2013).

## Study 1

In a first study testing these hypotheses, we conducted a two-wave survey with White American participants in the direct aftermath of the Boston Marathon attacks. Two days

[^1]following the attack, we assessed, among other things, the individual difference variables of interest and demographics. We then followed up with participants approximately ten days later. In this second wave, we measured perceptions of the Whiteness of the Tsarnaev brothers, a construct that we expected would be salient to White participants given the heated debates about the brothers' racial background. Our assessment of Whiteness perceptions was based on a purely perceptual measure, with participants rating how White the Tsarnaev brothers looked in the photos released by the FBI. At the second wave, we also assessed their support for punishment of the Tsarnaev brothers and for militaristic counter-terrorism policies.

## Method

Participants. 574 participants completed wave 1 of the study ( $52.2 \%$ female; $M$ age $=$ 32.45 years, $S D=10.84$ years). Of these participants we selected only White Americans ( $\mathrm{N}=426$ participants). 30 participants were excluded because they reported a score less than 6 on a 1-7 scale asking participants to indicate how seriously they took the study at wave 1 . Thus, our final wave 1 sample was 396 White American participants ( $51.8 \%$ female, $M$ age $=33.53, S D=$ 11.24). Of these participants, 259 (65.4\%) also completed wave 2 of the survey. 8 further participants were excluded from wave 2 analyses on the basis of the same seriousness check at wave 2. Thus, the final wave 2 sample was 251 White American participants ( $54.0 \%$ female; $M$ age $=34.11, S D=11.56) .{ }^{34}$

[^2]Data were collected using Amazon's Mechanical Turk platform, as part of a broader data collection effort on attitudes towards the Boston Marathon attacks. The first wave was administered at 5 P.M. on April 18, 2013. At this time, pictures of the suspects had just been released by law enforcement officials, but their names, identities, and backgrounds were still unknown (as remained the case until completion of wave 1 data collection). Data collection was completed within a few hours, ensuring that all participants had essentially the same amount of information about the events and the suspects. The second wave of the study was launched on April $26^{\text {th }}, 2013$, after the first suspect had been killed, and the second arrested. Data collection for this wave was terminated on May 1, 2013.

## Measures

## Wave 1 variables.

Demographics. We assessed participants' age and gender ( $1=$ male; $2=$ female $)$. We assessed social class by asking them to answer the following question: "How would you describe your family's social class position?" ( $1=$ Poor; $2=$ Working class; $3=$ Middle Class; 4= Upper Middle Class; $5=$ Upper Class). We assessed their level of education by asking them to indicate the highest level of education they had completed ( $1=$ No formal education; 2=Elementary school; $3=$ Some high school; $4=$ Completed high school; $5=$ Some College; $6=\mathrm{BA} / \mathrm{BS}$ degree; $7=$ Some graduate/professional school; $8=$ Hold graduate/professional degree).

Social dominance orientation (SDO) was measured using eight randomly selected, counter-balanced, items from the sixteen-item SDO-6 scale (Pratto et al., 1994). Sample items include, "It's OK if some groups have more of a chance in life than others," and "No one group should dominate in society" (reverse-coded).
both waves, $F(1,396)=5.97, p=.02$. Thus, those completing both waves did not differ markedly from those who completed only wave 1 .

Right-wing authoritarianism (RWA) was assessed with twelve items taken from Altemeyer (1981)'s scale. Sample items include, "People should pay less attention to the Bible and other old traditional forms of religious guidance and instead develop their own personal standards of what is moral and immoral (reverse-coded)" and "Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down".

Experimental Condition. At the end of wave 1, participants were asked to read a text (see Appendix) that served as an experimental manipulation for purposes unrelated to the current study. In one condition, participants read a text arguing that Americans should consider the effects of America's own policies on the world rather than only considering the costs of terrorism to Americans. In a second condition, participants read a text arguing that America was facing increasing threats to its security. In a third (control) condition, participants read no text. We included experimental condition as a control variable in all analyses. ${ }^{5}$

## Wave 2 variables.

Whiteness perceptions. Perceptions of the Whiteness of the Tsarnaev brothers was measured at wave 2 , and assessed using four items. Participants were shown the two sets of pictures of the Tsarnaev brothers released by law enforcement officials. For each set of pictures, participants read, "Above is a photograph released by the FBI on Thursday, April 18th of the lead suspects in the Boston Marathon bombing investigation. On the left is Dzhokhar Tsarnaev and on the right is Tamerlan Tsarnaev. How White do you think the suspects look? Use the slider to indicate where you think each of the suspects falls on a continuum from Non-White to White." For each of the brothers, participants indicated their Whiteness perceptions using a 100-point

[^3]slider scale, where " 0 " indicated "Non-White" and 100 indicated "White." Thus, participants completed four slider scale items in total (once for each brother in each picture). We averaged these items to create our index of Whiteness perceptions.

## Aggressive Responses to the Marathon Attacks

Harsh treatment. Like Whiteness perceptions, this construct was also assessed at wave 2. First, we assessed participants' responses to seven items: "The perpetrator of the Boston Marathon attacks deserves to die as painful a death as possible", "I hope the perpetrator of the Boston Marathon attacks rots in hell", "The perpetrator of the Boston Marathon attacks is entitled to the best legal counsel available" (reverse-coded), "We shouldn't rush to judgment in bringing the perpetrator of the Boston Marathon attacks to justice" (reverse-coded), "It is OK for Tsarnaev not to have been read his Miranda rights before interrogation", and "It is appropriate to charge Tsarnaev with the use of a weapon of mass destruction". Participants indicated their responses to each item using a seven-point scale, where 1 indicated "Strongly disagree" and 7 indicated "Strongly agree". Second, participants were asked the following question: "If found guilty of planning and executing the Boston marathon attack, I would recommend that Tsarnaev be sentenced with: $1=$ Maximum of 20 years in prison with the possibility of parole; $2=20-40$ years in prison with the possibility of parole; $3=$ Life in prison with the possibility of parole; $4=$ Life in prison without the possibility of parole; $5=$ The death penalty". Because the final item was on a different scale from the remaining items, we standardized all scores to compute the composite index of harshness.

Militaristic counter-terrorism. This construct was measured at wave 2 by asking participants to rate their agreement with each of the following eleven items: "To put an end to terrorist acts, I think it is OK to use enhanced interrogation techniques", "To put an end to
terrorist acts, I think it is OK to use torture", "To put an end to terrorist acts, I think it is OK to use waterboarding", "To put an end to terrorist acts, I think it is OK to target civilians and combatants alike in foreign terrorist strongholds", "To put an end to terrorist acts, I think it is OK to bomb an entire country if it is known to harbor anti-American terrorists", "To put and end to terrorist acts, I think it is OK to target Muslims with extra profiling and surveillance", "I support the war in Afghanistan", "I support continued military efforts abroad to root out potential terrorists", "We should spend more time on diplomatic efforts as opposed to engaging in military activity abroad" (reverse-scored), "We shouldn't be afraid to hunt down anyone who threatens our country anywhere", and "We should strike back with brutal force against anyone who seeks to intimidate us". Participants responded to each item using a 7-point Likert scale where 1 indicated "Strongly disagree" and 7 indicated "Strongly agree".

## Results \& Discussion

Descriptive statistics. We report descriptive statistics, scale reliabilities, and variable intercorrelations in Table 1.

We were particularly interested in participants' perceptions of the Whiteness of the Tsarnaev brothers. Consistent with our notion that there was some ambiguity surrounding their racial group membership, the average Whiteness rating in our sample was only slightly above the midpoint, with substantial individual variability.

In this work, we were primarily interested in assessing the predictors of the ascription of ingroup characteristics. Specifically, we predicted that individuals higher in RWA and individuals higher in SDO would be less likely to ascribe ingroup characteristics to the raciallyambiguous Tsarnaev brothers. As such, we included each of these variables as a predictor of our index of Whiteness perceptions in a simultaneous regression, controlling for demographic
variables (age, gender, class, and education) and experimental condition. As expected, we found that each of RWA $(b=-4.33, \beta=-.19, p<.001,95 \%$ CI $[-.05,-.33])$ and $\operatorname{SDO}(b=-6.71, \beta=-$ $.30, p<.001,95 \% \mathrm{CI}[-.16,-.43])$ was uniquely associated with participants reporting that the Tsarnaev brothers looked less White in the photographs they rated. We also observed that age was associated with increased Whiteness perceptions $(b=.28, \beta=.12, p=.04,95 \%$ CI $[.004$, .24]), though it was uncorrelated with Whiteness in zero-order terms.

A secondary question concerned how perceptions of the Whiteness of the Tsarnaev brothers would influence the harshness of attitudes towards them, and might influence the support for aggressive counter-terrorism policies that prioritized the safety of the ingroup at the potential expense of outsiders. We were interested in whether Whiteness perceptions would predict these outcomes uniquely over and above the other variables we were investigating. As such, we first included each of RWA, SDO, the demographic controls, and experimental condition in the first step of a hierarchical regression, and then added Whiteness perceptions at the second step. As can be seen in Table 2a, RWA and SDO emerged as significant predictors of greater harshness at step 1. Nevertheless, adding Whiteness perceptions at the second step significantly increased the predicted proportion of variance in harshness, $R_{\text {change }}^{2}=.02, F(1,237)$ $=8.12, p=.005$. Similarly, adding Whiteness perceptions at step 2 significantly increased the proportion of variance explained in support for militaristic counter-terrorism measures, $R_{\text {change }}^{2}=$ $.01, F(1,237)=4.98, p=.03($ see Table 2b).

Although our central concern was whether Whiteness contributed to the prediction of aggressive responses over and above other variables, we further considered whether Whiteness carried indirect effects from each of SDO and RWA on harsh treatment and militaristic counterterrorism. Given that SDO and RWA are known to have well-established and strong
relationships to punitiveness and militarism via mechanisms unrelated to the ascription of ingroup characteristics (e.g., Cohrs, Moschner, Maes, \& Kielmann, 2005; Dambrun, 2007), we expected any indirect effects through Whiteness to be relatively weak. Indeed, using Hayes’ (2013) PROCESS macro, and controlling for all other variables, we found that Whiteness was a weak but significant mediator of the effects of SDO on each of harsh treatment (standardized indirect effect $=.05,95 \% \mathrm{CI}:[.01, .10]$ ) and militaristic counter-terrorism (standardized indirect effect $=.033,95 \%$ CI: $[.002, .08])$. Similarly, Whiteness was a weak but significant mediator of the effects of RWA on harsh treatment (standardized indirect effect $=.03,95 \% \mathrm{CI}:[.01, .07]$ ) and


In sum, we observed strong support for our hypotheses: RWA and SDO each had significant and unique effects on the ascription of ingroup characteristics (i.e., Whiteness) to the Tsarnaev brothers-racially-ambiguous targets suspected of committing a hugely norm-violating and reviled act, and thus posing a threat to group status and conformity. Moreover, the extent to which Whites perceived these targets to belong to their racial ingroup was consequential. Although the effect of Whiteness on aggressive responses was relatively small in size, it is impressive when one considers both the subtlety of the predictor and the consequentiality of the dependent variables, involving responses such as supporting the death penalty and endorsing torture. Indeed, it uniquely predicted aggressive responses to the marathon attacks, both in terms of increased harshness towards the brothers, and in terms of support of militaristic counterterrorism policies. In fact, our results suggested that Whiteness accounted for a part of SDO and RWA's effects on aggressive responses to the attacks, impressive considering these variables' well-established relationships to punitiveness and militarism through other mechanisms.

## Study 2

Shortly after the Boston Marathon attacks, a violent incident in Woolwich in the United Kingdom provided an excellent opportunity to investigate the generality of our theorizing. In the Woolwich case, the suspects were racially unambiguous, but, in the immediate aftermath of their suspected attack, their status as British citizens versus foreign nationals remained unclear. Indeed, rather than applying to racial group membership per se, our theorizing centers on the predictors of the ascription of ingroup membership to ambiguous targets more generally. As such, we were able to test our hypotheses again, assessing whether SDO and RWA predicted ascription of ingroup charactersitics - this time based on national identity - to highly nonconformist and low status ambiguous targets. Previous research has observed a role for identification in making individuals more cautious in their ascription of ingroup membership to ambiguous individuals (Castano et al., 2002; Leyens \& Yzerbyt, 1992). As such, although we did not have measures of British identification per se in this study, we assessed the role of patriotism (a related construct) in predicting Britishness perceptions. Finally, as in study 1, we examined whether perceiving negative ambiguous targets in less ingroup terms was associated with more aggressive responses.

## Method

Participants. The Woolwich attack occurred on May 22, 2013, and data were collected from 179 participants between May 24, 2013 and May 27, 2013. Data were collected using the services of Qualtrics Panels, a company which provides targeted online sampling. For the present analyses, we used data only from White (80.1\%) participants who also indicated that they were British citizens (92.6\%). Eight participants were excluded because they failed our seriousness check. Our final sample was thus 107 participants ( $52.8 \%$ male; $M$ age $=42.28, S D=15.31$ ).

Measures. Data used in the present analyses were taken from a survey packet administered as part of a broader data collection effort, and due to limitations on survey length, included only a subset of the variables in study 1 .

Demographic variables. Age, gender, class, and education were all measured as in study 1.

Social dominance orientation. SDO was measured as in study 1.
Right Wing Authoritarianism. Participants indicated their agreement with eight items taken from Altemeyer's (1981) RWA scale ( $1=$ 'strongly disagree'; $7=$ 'strongly agree'). The reliability using the 8 items was poor $(\alpha=.52)$. Thus, we conducted sequential reliability analyses to remove the item with the lowest item-total correlation until analyses suggested adequate reliability or that removing a further item would no longer improve scale reliability. Our final RWA scale measure, which had adequate reliability (see Table 3), was composed of the following four items: "In these troubled times, laws have to be enforced without mercy, especially when dealing with the agitators and revolutionaries who are stirring things up," "Our customs and national heritage are the things that have made us great, and certain people should be made to show greater respect for them," "It may be considered old fashioned by some, but having a decent respectable appearance is still the mark of a gentleman and, especially, a lady," and "Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down." ${ }^{6}$

Patriotism. Using the same 7-point scale, participants rated their agreement with four items assessing their patriotism (e.g., "I have great love for my country"; "I am proud to be a Brit").

[^4]Perceptions of "Britishness". Similarly to Study 1, participants were presented a picture released in the press of one of the suspected attackers, Michael Adebolajo. They were asked to indicate how foreign the suspect looked using a slider bar anchored at 1 and 100 , where 1 indicated "Not at all foreign" and 100 indicated "Very foreign". For the same picture, they were also asked to indicate the extent to which the suspect seemed British, using a second 100 -point slider scale, where 1 indicated "Not British at all" and 100 indicated "Very British." The question assessing foreignness was reverse-coded for the purposes of the present analyses.

Harsh treatment. We used seven items in total to measure this construct in the UK. Firstly, we assessed agreement with the following items: "The perpetrators of the Woolwich attacks deserve to die as painful a death as possible," "The perpetrators of the Woolwich attacks are entitled to the best legal counsel available (reverse-coded)," "We shouldn't rush to judgment in bringing the perpetrators of the Woolwich attacks to justice (reverse-coded)," "I hope the perpetrators of the Woolwich attacks rot in hell", "We should try to understand the reasons for the Woolwich attack (reverse-coded)." Participants indicated their response using a seven-point scale where 1 indicated "Strongly disagree" and 7 indicated "Strongly agree." Secondly, we assessed agreement with the following two items about sentencing the Woolwich attackers: "If found guilty of planning and executing the Woolwich attacks, I would recommend that the suspects be sentenced to: $1=$ Maximum of 20 years in prison with the possibility of parole; $2=20$ 40 years in prison with the possibility of parole; $3=$ Life in prison with the possibility of parole; 4= Life in prison without the possibility of parole", and "Imagine the U.K. reinstated the death penalty. How likely would you be to recommend the suspects be sentenced to death?" ( $1=$ Not at all likely; $7=$ Very likely). These items were standardized and then averaged.

Militaristic counter-terrorism. This construct was assessed with ten items: "To put an end to terrorist acts, I think it is OK to use enhanced interrogation techniques", "To put an end to terrorist acts, I think it is OK to use torture", "To put an end to terrorist acts, I think it is OK to use waterboarding", "To put an end to terrorist acts, I think it is OK to target civilians and combatants alike in foreign terrorist strongholds", "To put an end to terrorist acts I think it is OK to bomb an entire country if it is known to harbor anti-British terrorists", "To put an end to terrorist acts I think it is OK to target Muslims with extra profiling and surveillance", "I support the war in Afghanistan", "We should strike back with brutal force against anyone who seeks to intimidate us", "The U.K. should no longer provide military aid to the war on terror", and "The U.K. should continue to support US efforts to fight radical Islam" ( $1=$ "Strongly disagree"; $7=$ Strongly agree").

## Results \& Discussion

Descriptive statistics. Descriptive statistics, scale reliabilities, variable intercorrelations can be found in Table 3.

We were particularly interested in participants' perceptions of the "Britishness" of the Woolwich attackers. The mean for our index of Britishness perceptions was moderately below the midpoint, suggesting a slight overall tendency to view the attackers as foreign rather than British. Nevertheless, there was substantial variation around this mean, indicating ambiguity regarding the attackers' group membership .

We expected that individuals high on SDO would be less likely to perceive the nationally-ambiguous suspects in ingroup terms (i.e., as British). We further expected that, in parallel, individuals high in RWA would be more likely to perceive the suspects in outgroup
terms. Indeed, both of these variables had significant negative zero-order correlations with Britishness (see Table 3).

We included both these variables in a simultaneous regression predicting Britishness perceptions, along with patriotism, and the set of demographic controls (none of which were correlated with Britishness in zero-order terms). Replicating the findings in study 1, SDO significantly predicted Britishness perceptions ( $b=-9.03, \beta=-.31, p=.002,95 \%$ CI $[-.12,-.51]$ ); on the other hand, although its zero-order relationship with Britishness was significant, RWA was not a significant predictor of Britishness controlling for other variables in the model $(b=-$ $.86, \beta=-.04, p=.74,95 \% \mathrm{CI}[-.25, .18])^{7}$. We also observed no significant effect of patriotism $(b=-1.47, \beta=-.07, p=.54,95 \% \mathrm{CI}[-.28, .15])$, nor an interaction between patriotism and either of $\operatorname{SDO}(b=2.64, \beta=.11, p=.28,95 \% \mathrm{CI}[-.08, .26])$ or RWA $(b=3.68, \beta=.14, p=.18,95 \%$ $\mathrm{CI}[-.06, .31])$.

We also predicted that denying the suspected perpetrators ingroup characteristics would have important implications. Thus, we investigated whether, as had been the case with the Tsarnaev brothers, greater perceptions of the suspects as outsiders was associated with harsher attitudes towards them, and increased support for militaristic counter-terrorist policies. Thus, we added Britishness perceptions at the second step of a regression predicting each of these ultimate outcomes. Again, we included patriotism and demographic controls in the regression. As can be seen in Table 4a, SDO, RWA, and gender contributed significantly to predicting harsh punishment at step 1. Nevertheless, adding Britishness perceptions at the second step increased the proportion of variance predicted, $R_{\text {change }}^{2}=.02, F(1,92)=3.64, p=.06$.

[^5]This same pattern was observed for support for militaristic counter-terrorism (see Table 4b). At the first step, each of RWA and SDO emerging as significant predictors. At the same time, adding Britishness perceptions at the second step significantly increased the proportion of variance explained, $R_{\text {change }}^{2}=.04, F(1,92)=6.10, p=.02$.

As in study 1, we assessed, using Hayes' (2013) PROCESS macro and controlling for all other variables, whether SDO exerted indirect effects on aggressive responses to the attacks through its effects on Britishness (seeing as RWA's effects on Britishness were nonsignificant, we did not estimate the indirect pathways for RWA). As in study 1 , there were weak but significant indirect effects of SDO on each of harsh treatment (standardized indirect effect $=.05$, $95 \% \mathrm{CI}:[.003, .14])$ and militaristic counter-terrorism (standardized indirect effect $=.07,95 \%$ CI: [.01, .17]) through Britishness.

In sum, we observed results generally consistent with the findings of Study 1. Once again, higher SDO was significantly associated with exclusionary perceptions of a low status ambiguous target. Unlike study 1, the association between RWA and exclusionary perceptions of a low conformity ambiguous target - though significant in zero-order terms and trending when controlling only for SDO- was not significant controlling for all other variables. This weaker pattern may have had something to do with issues in this study relating to the measurement of RWA: thus, our final RWA measure included only 4 items due to issues with reliability, and was assessed among a substantially smaller sample of participants (resulting in decreased power to detect effects). We considered the role of RWA again in study 4 using an improved measure.

We also assessed the role of patriotism in this study. Somewhat surprisingly given previous research on the role of group identification in the categorization of ambiguous targets, we did not observe patriotism (a related construct) to predict perceptions of the Britishness of the

Woolwich suspects either in terms of a main effect or an interaction with SDO or RWA. We assessed group identification directly in studies 3 and 4 .

In spite of the decreased power in this study due to its smaller sample size, we nevertheless again observed that the ascription of ingroup characteristics had important implications, contributing to the prediction of aggressive responses to the attacks controlling for other variables. In fact, the standardized effect sizes of SDO on Britishness, and Britishness on harshness and militaristic counter-terrorism were very similar to (and indeed slightly higher than) those in study 1. Thus, these results provide further evidence for our theorizing in a novel context, and focusing on another relevant ingroup-outgroup distinction: nationality.

Although studies 1 and 2 provided generally consistent support for our expectations in important real-world contexts, they did not directly provide evidence in support of our proposed mechanism. Our theorizing suggests that the reason why SDO is associated with the ascription of ingroup characteristics to ambiguous targets is due to concerns about their status and its implications for the group. As such, individuals high in SDO should be sensitive to ambiguous targets' status when ascribing or denying them ingroup characteristics. We theorize that RWA, on the other hand, is associated with the ascription of ingroup characterstics due to concerns about the conformity of ambiguous targets. As such, high RWA individuals should consider ambiguous targets' conformity when perceiving them in ingroup vs. outgroup terms. In studies 3 and 4 , we tested these predictions experimentally.

## Study 3

In a third study, we experimentally assessed whether the status of ambiguous targets influences high SDO individuals' perceptions of them in ingroup versus outgroup terms. The targets in studies 1 and 2 (the Tsarnaev brothers and Michael Adebolajo, respectively) were
clearly low in status. However, these studies only included targets of low status, thus making it difficult to firmly ascertain the role of status in driving these effects. In the present study, we presented participants with an image of an ambiguous target and experimentally manipulated their relative status. Thus, in one condition the ambiguous target was relatively high in status, and in the other condition, the same target was described in relatively low status terms. We expected individuals high in SDO - those especially sensitive to the threat of status boundary blurring - to be more likely to deny the ambiguous target ingroup characteristics when this target was low in status compared to when the target was relatively high in status. For low SDO individuals, who are less concerned with maintaining group status boundaries, we expected the status of the ambiguous target to be less relevant to the ascription of ingroup characteristics. Because we manipulated target status but not conformity, we did not expect RWA to interact with the target condition to influence the ascription of ingroup characteristics.

## Method

Participants. We collected data from 234 participants on Amazon's Mechanical Turk platform. For the present analyses, we used data only from White participants who reported that they had not previously completed a similar study $(\mathrm{N}=170)$. As in studies 1 and 2, we excluded 17 participants who reported a score lower than 6 on a 1-7 scale indicating how carefully, seriously, and honestly they completed the study ${ }^{8}$. Our final sample thus included 153 participants ( $56.9 \%$ female; $M$ age $=34.73, S D=12.39$ ).

## Measures.

[^6]Participants began by answering a series of demographic questions (such as age, gender, and ethnicity), before completing the SDO and RWA scales, as well as a measure of ethnic identification.

Social dominance orientation. SDO was measured using an updated version of the 16item $\mathrm{SDO}_{6}$ scale (Ho et al., 2014). The scale ranged from 0 ('strongly disagree') to 100 ('strongly agree'). This scale was highly reliable $(\alpha=.94)$.

Right-wing authoritarianism. RWA was assessed using the same 12-item scale used in study $1(\alpha=.86)$.

Ethnic identification. Ethnic identification was measured using the following 3 items $(0=$ 'not at all'; $100=$ 'very much so'): "How close do you feel to other members of your ethnic group?", "How important is your ethnic group to your identity?", and "How strongly do you identify with other members of your ethnic group?" $(\alpha=.88)$.

Subsequently, participants were randomly assigned to a high status vs. low status ambiguous target condition. Participants were presented with the image of a white-black facial morph taken from Ho, Sidanius, Levin, and Banaji (2011) that was pretested to determine that it was racially ambiguous. ${ }^{9}$ Participants read that we were "interested in assessing people's ratings of others' characteristics as a function of their facial appearance" and that, as such, they would be shown an image of an individual and provided with some basic information about them before making a series of ratings about the individual. In both conditions, participants were presented

[^7]with information in bullet point format accompanying the image of the individual. In the high status condition, the information stated the individual resided in Connecticut, completed his MBA in May 2010, launched his own online business selling electronics in March 2012, and had achieved $\$ 180,000$ in profits in his first year. In the low status condition, participants were told that the (same) individual had dropped out of high school in the $11^{\text {th }}$ grade, apprenticed as an electrician, and was currently unemployed and collecting welfare benefits since March 2012. Subsequently, participants were asked to rate the individual on a series of filler items (e.g., "How good a listener?"; "How sensitive?") as well as two questions indexing participants' ratings of the individual's status ("How respected?"; "How high in status?" ( $r=.86, p<.001$ ). We then assessed our key outcome measure, participants' ratings of the Whiteness of the ambiguous target, using the following two items: "Please rate how White the individual in the photo looks" ( $0=$ Not White at all; $100=$ Very White) and "Please rate the extent to which the individual in the photo looks of European descent" ( $0=$ Not European at all; 100=Very European) $(r=.63, p<$ .001). Because we were concerned that some participants might be suspicious about the veracity of the information they were provided about the individual in the photo, which could influence results, the final question we asked participants was "How suspicious were you about the information you were provided about the individual in the photo" $(0=$ not at all; $100=$ very much so; $M=28.48, S D=32.25$ ).

## Results \& Discussion

We first considered whether our experimental manipulation of the targets' status successfully influenced participants' ratings of the ambiguous individuals' status. As expected, the target was rated as substantially higher in status when they were in the high status condition $(M=76.08, S D=15.84)$ than when they were in the low status condition $(M=27.03, S D=$
17.76), $F(1,152)=323.71, p<.001$, eta squared $=.68$. Next, we considered our central hypothesis of interest. Using Hayes' (2013) PROCESS macro, we assessed whether participants' SDO interacted with experimental condition (i.e., high vs. low ambiguous target status) to influence Whiteness. Because we expected our hypotheses to be borne out only when participants believed the information provided about the ambiguous target, we modeled the interaction between SDO and condition at varying levels of suspicion (i.e., we considered a three-way interaction between SDO, condition, and suspicion) ${ }^{10}$. We also controlled for RWA and ethnic identification in these analyses. Results suggested that there was a marginal main effect of status condition $(b=5.82, \beta=.14,95 \%$ CI: $[-.02, .30], p=.10)$, with participants more likely to ascribe Whiteness to the high status target. There were no main effects of SDO $(b=.01$, $\beta=.01,95 \% \mathrm{CI}:[-.19, .20] p=.96)$, RWA $(b=-.04, \beta=-.03,95 \% \mathrm{CI}:[-.24, .17], p=.75)$ or ethnic identification ( $b=.12, \beta=.13,95 \% \mathrm{CI}:[-.04, .33], p=.12$ ). More importantly, the results of our three-way interaction analysis suggested that the 2-way interaction between SDO and target status depended on participants' level of suspicion about the information they were provided about the target, $b==-.01, \beta=-.18,95 \% \mathrm{CI}:[-.001,-.34], p=.05$. As such, we considered the results of the SDO by target status interaction when it was modeled at various levels of suspicion. We observed that the interaction between SDO and target status was not significant at high $(b=-.22, \beta=-.09,95 \%$ CI: $[-.36, .16], p=.46)$ or mean suspicion $(b=.16, \beta=$ $.07,95 \% \mathrm{CI}:[-.10, .24], p=.40$ ), but, as expected, was significant for those participants who

[^8]reported low suspicion ( $b=.50, \beta=.22,95 \% \mathrm{CI}:[.02, .43], p=.03$ ). Among participants who believed the information they were provided about the target, we found that, as expected, the relationship between SDO and ascription of ingroup characteristics largely depended on the ambiguous targets' status (see Figure 1). Thus, for individuals low or average on SDO, there was no significant effect of status condition on Whiteness ratings. Nevertheless, and as predicted, for individuals high in SDO, the high status ambiguous target was ascribed significantly more Whiteness than the low status ambiguous target, $b=14.26, \beta=.34,95 \% \mathrm{CI}:[.03, .65], p=.03$. We also considered the interaction from the other (statistically identical) perspective, treating condition rather than SDO as the moderator. Examining the simple slopes this way, we observed that there was a trend for SDO relating to exclusionary perceptions in the low status target condition, $b=-.20, \beta=-.18,95 \% \mathrm{CI}:[-.48, .12], p=.24$, and a marginally significant effect for SDO relating to inclusionary perceptions in the high status ambiguous target condition, $b=.29$, $\beta=.26,95 \% \mathrm{CI}:[-.04, .57], p=.09$.

Given that we manipulated target status and not conformity in this study, we did not expect condition to interact with RWA, controlling for the other variables. This was in fact what we observed at all levels of suspicion (all $|\beta| \mathrm{s}<.04, p s>.76$ ). Similarly, we observed no significant interactions between ethnic identification and target condition (all $|\beta| \mathrm{s}<.04$, $p s>$ $.77)^{11}$.

In sum, our results were largely consistent with expectations. As hypothesized,
individuals high in SDO were sensitive to ambiguous targets' status when ascribing ingroup characteristics. Thus, when participants believed the information they were given about the

[^9]targets, there was approximately a 15 point differential (on our $0-100$ scale) in the perceived Whiteness of the exact same target individual as a function of whether high SDO participants were told that this individual was high or low in status. Given that participants were asked to rate how White the target looked, and the established ambiguousness of the targets' ingroup membership, the fact that Whiteness ratings differed by such a relatively wide margin is particularly impressive. This sensitivity to ambiguous targets' status was specific to high SDO individuals. For low SDO individuals, who are less concerned with maintaining group status boundaries, target status was not significantly associated with Whiteness ratings. Interestingly, the pattern of our results suggested that high SDO is not simply related to exclusionary perceptions of ambiguous targets. Rather, there was a tendency among high SDO individuals to ascribe high status targets more ingroup characteristics. This is consistent with the idea that individuals high in SDO seek not only to resist the 'contamination' of their group with low status targets but also to adopt high status targets who might strengthen the status of the group. Importantly, these results were specific to SDO. Because we manipulated target status and not conformity, there was no reason to expect RWA to interact with experimental condition to influence Whiteness ratings; in fact, no such interaction was observed.

## Study 4

In a fourth study, we sought support for our theorizing that concerns about the conformity of ambiguous targets contributes to the relationship between high RWA and the ascription of ingroup characteristics. Thus, just as in study 3, we presented participants with an ambiguous target, and gave them information about that target. In this case, we manipulated the extent to which the target seemed to be a traditional, conformist individual. We expected individuals high in RWA, especially concerned with conformity, to be more likely to asribe ingroup
characteristics to conformist (compared to nonconformist) ambiguous targets. We expected that ambiguous targets' conformity would be less relevant to the ascription of ingroup characteristics for individuals lower in RWA. Because the results from study 3 suggested that we needed to further break down results by suspicion, we decided to sample more participants in study 4 to maintain sufficient power for our analyses.

## Method

Participants. We collected data from 349 participants on Amazon's Mechanical Turk. For the purposes of these analyses we used only White participants who reported that they had not previously completed a similar study $(\mathrm{N}=208)$. As in previous studies, we excluded 11 participants who failed our seriousness check. Our final sample thus included 197 participants (51.0\% male; $M$ age $=35.85, S D=12.69)$.

Measures. All variables were assessed and procedures followed exactly as in study 3, with the following modifications. Rather than manipulate target status, we gave participants information we expected to be relevant to perceptions about their conformist vs. nonconformist nature. In the low conformity condition, participants were told that the target supported the Occupy movement in 2011, volunteers with an atheism advocacy organization, supports legislation legalizing the use of marijuana, and enjoys cooking vegan food in his downtime. In the high conformity condition, participants were told that the target found the Occupy protestors in 2011 annoying, attends church regularly on Sundays, has a drink or two occasionally but has never taken drugs, and enjoys barbecuing meat in his downtime. In both conditions, participants were told that the target earns about $\$ 60,000$ a year and lives in Chicago. In study 4 , we additionally assessed participants' ratings of the target's conformity by asking them "How conformist?" and "How traditional?" they perceived the target to be ( $r=.71, p<.001$ ).

## Results \& Discussion

As expected, the target was rated as substantially more conformist when they were in the high conformity condition $(M=73.53, S D=18.52)$ than when they were in the low status condition $(M=31.45, S D=18.96), F(1,196)=246.91, p<.001$, eta squared $=.56$. In contrast, the targets were not rated as significantly different in status, $F(1,196)=2.94, p=.09$, eta squared $=.015$.

We assessed the extent to which participants' RWA interacted with experimental condition (i.e., high vs. low conformity) to influence Whiteness ratings of a racially ambiguous target. As in study 3, we modeled the interaction between RWA and condition at varying levels of suspicion, controlling for SDO and ethnic identification. Results suggested that there was no main effect of conformity condition $(b=.81, \beta=.02,95 \% \mathrm{CI}:-.13, .16, p=.81), \mathrm{SDO}(b=-.05$, $\beta=-.05,95 \% \mathrm{CI}:[-.20, .11], p=.57)$, or ethnic identification $(b=.11, \beta=.13,95 \% \mathrm{CI}:[-.03$, $.28], p=.11)$. There was a marginal main effect of RWA $(b=-.19, \beta=-.17,95 \% \mathrm{CI}:[-.35$, .003 ], $p=.05$ ), suggesting that RWA was, on average, associated with more exclusionary perceptions. We next investigated whether RWA interacted with target conformity, as predicted. Similar to study 3, the results of a three-way interaction analysis suggested that the 2-way interaction between RWA and target conformity depended on participants' level of suspicion about the information they were provided about the target, $b=-.01, \beta=-.14,95 \% \mathrm{CI}:[-.01,-$ .27], $p=.04$. We observed that the interaction between RWA and target conformity was not significant at high $(b=-.19, \beta=-.08,95 \% \mathrm{CI}:[-.28, .12], p=.41)$ or mean $(b=.13, \beta=.06,95 \%$ CI: $[-.09, .20], p=.44)$ levels of suspicion, but was significant at low levels of participant suspicion $(b=.41, \beta=.19,95 \% \mathrm{CI}:[.0003, .37], p=.05)$. Further investigating the interaction between RWA and conformity at low levels of suspicion, we observed that the effect of target
conformity on Whiteness ratings increased with increasing levels of RWA (see Figure 2) ${ }^{12}$. Thus, for individuals low on RWA, there was no significant effect of conformity condition on Whiteness ratings; for individuals at the mean of RWA, there was only a trend to perceive ambiguous conformist targets in more ingroup terms. On the other hand, for individuals high in RWA, Whiteness ratings depended importantly on target conformity $(b=15.60, \beta=.34,95 \%$ CI: $[.09, .60], p=.008$, consistent with our theorizing . We also considered the simple slopes with conformity rather than RWA as the moderator. We observed that, when the target was nonconformist, increased RWA was significantly associated with exclusionary perceptions, $b=-$ $.38, \beta=-.35,95 \%$ CI: $[-.09,-.60], p=.008$. When the target was conformist, however, there was no association between RWA and exclusionary perceptions, $b=.03, \beta=.03,95 \% \mathrm{CI}:[-.27, .33]$, $p=.85$. Because we manipulated target conformity and not status in this study, we did not expect condition to interact with SDO. Indeed, at all levels of suspicion, there was no significant interaction between SDO and target condition on Whiteness ratings (all $\beta \mathrm{s}<.08, p s>.46$ ). Similarly, we observed no significant interaction between ethnic identification and target condition at any level of suspicion (all $\beta \mathrm{s}<.13, p s>.18)^{13}$.

In sum, these findings were consistent with our expectations. Thus, as expected, we observed that the effect of high RWA on the ascription of ingroup characteristics to an ambiguous target depended on the target's conformity. These effects were specific to participants

[^10]who were not suspicious about the information we gave them about the target. Within this group, there was over a 15 point difference in the rated Whiteness of the same individual among high RWA participants depending on whether this target was described as conformist or nonconformist. As expected, participants' sensitivity to the target's conformity decreased the lower their RWA level. When considering conformity condition rather than RWA as the moderator, we observed that RWA level was associated with exclusionary perceptions only in the low conformity condition. This was consistent with our findings in study 1, where we observed that RWA was associated with exclusionary perceptions of the nonconformist Tsarnaev brothers. This set of results were specific to RWA. Thus, whereas SDO had interacted with target status to influence Whiteness ratings in study 3 consistent with our theorizing, it did not interact with target conformity in study 4.

## General Discussion

Across our four studies, we obtained a set of results in line with our theoretical predictions. We expected that individual differences in relevant ideological orientations would be related to the ascription of ambiguous targets with ingroup characteristics, and that being perceived in ingroup vs. outgroup terms would be consequential. We centered our examination of ideological orientations on two individual difference variables, RWA and SDO, both highly associated with a host of important intergroup outcomes, albeit for different reasons (Duckitt, 2001). Across our studies in both real-world and experimental contexts, we found support for the notion that SDO and RWA influence the manner in which group members perceive targets with ambiguous group membership. Thus, in studies 1 and 2 , we observed in naturalistic contexts of great salience and significance that individuals high in SDO were less likely to perceive a low status ambiguous target in ingroup terms. In study 1 (but with less support in study 2 ), we
observed that individuals high in RWA were less likely to perceive a nonconformist ambiguous target in ingroup terms. Moreover, these two studies investigated two dimensions of ingroup membership (racial in study 1 and national in study 2 ).

While studies 1 and 2 involved real-world targets low in both status and conformity, studies 3 and 4 utilized fictitious targets whose perceived status and conformity we could systematically vary. In study 3 , among those participants who reported low suspicion about the information they were provided about ambiguous targets, we observed that there was a substantial differential ( $\sim 15$ points on a $0-100$ scale) in the perceived Whiteness of the same racially ambiguous target face for high SDO individuals as a function of (experimentally manipulated) target status. A similar differential was observed among high RWA individuals in study 4 as a function of experimentally manipulated target conformity. Importantly, and consistent with our theoretical differentiation between these constructs, SDO responded to target status but not conformity, whereas the reverse was true for RWA. These results add to the research that has differentiated these constructs' effects on intergroup outcomes (e.g., Thomsen et al., 2008; Duckitt, 2001) and extends it to the realm of ambiguous target perception. In addition, although some research has considered SDO's role in hypodescent (e.g., Ho et al., 2013; Krosch et al., 2013), this is the first demonstration, to our knowledge, of the effects of RWA on the perception of ambiguous targets. Moreover, this research is the first to manipulate the status and conformity of ambiguous targets, and thus consider individual difference predictors of both negative and more positive targets.

Intriguingly, we observed in study 3 that the effect of status in moderating SDO seemed to be driven somewhat more strongly by the inclusion of high status targets than by the (tendency) to exclude low status ones. This is worth noting for two reasons: firstly, it marks a
difference (in degree, but not direction) from studies 1 and 2, in which SDO was significantly associated with exclusionary perceptions of low status targets. This likely is due to the fact that the targets in studies 1 and 2 were more extreme in their low status than the relatively low status target in study 3. Future work should examine the relationship between SDO and exclusionary perceptions as a function of a wider range of status than currently examined. At the same time, by including more positive ambiguous targets, our examination also uncovered a theoretically interesting tendency for high SDO targets to be more inclusionary of high status ambiguous targets. This concords with the idea that individuals high in SDO will seek not only to protect but also to sharpen group boundaries. As such, they may seize opportunities not only to exclude low status ambiguous targets who may hurt the status of the group, but also to include high status ambiguous targets who can help it (see also Stelzl et al., 2007). Future work should expand on this idea and test it more systematically.

Though target conformity clearly mattered for RWA's effects on the perception of ambiguous targets, we did not observe that individuals high in RWA were more inclusionary of relatively conformist targets. Rather, they tended to exclude nonconformist targets (consistent with the patterns in studies 1 and 2) but to exhibit no change in perception (either in the inclusionary or exclusionary direction) for more conformist targets. Although it is too early to definitively interpret this difference with the pattern for SDO, it may reflect the fact that high RWA (more so than high SDO) is indicative of a threatened psychology (Duckitt, 2001) and thus such individuals may be more sensitive to the potential losses of including nonconformist ambiguous targets than any potential gains from including conformist ones.

We reasoned that whether or not individuals were perceived in ingroup terms would have important consequences, which we assessed in studies 1 and 2. In fact, the denial of ingroup
characteristics-whether Whiteness in study 1 or Britishness in study 2-predicted increased harshness towards the perpetrators and aggressive responses to the attacks. Importantly, although there has been some research on the antecedents of ambiguous target perception, this study is, to our knowledge, the only one to examine consequences of perceiving targets in more ingroup vs. outgroup terms (see Caruso, Mead, \& Balcetis, 2009 for a study examining the consequences of a related but different variable: rating lighter vs. darker pictures of a biracial candidate as more representative). Impressively, this effect was observed over and above the effects of two variables, RWA and SDO, which have well-established and strong relationships to punitiveness (Pratto et al., 1994; Kteily et al., 2012). Although consistent with research that suggests that individuals generally treat ingroup members with more empathy and understanding (Piliavin et al., 1981), this finding may at first seem somewhat in conflict with research on the black sheep effect (Marques et al., 1988). We suggest that in fact these two perspectives share in common individuals' concern with the standing of their group: when group reputation cannot be restored by exclusion due to the unambiguous ingroup membership of a deviant, distancing is achieved via harsh punishment (signalling that the deviant is a 'black sheep'). On the other hand, when a negative target's membership is ambiguous, distancing can be achieved via the denial of ingroup characteristics. Future research should more systematically manipulate the ambiguousness of a deviant target to see whether this influences the likelihood of 'black sheep' punishment vs. denial of ingroup characteristics.

Aside from its theoretical contributions, this research was also original in its methodology. We introduced a novel, simple, and powerful method of assessing perceptions of the 'ingroupishness' of ambiguous targets. We presented subjects with pictures of ambiguous individuals, and measured, in a gradient fashion, the willingness of participants to grant defining
ingroup characteristics (either Whiteness or Britishness) to these targets. Despite the fact that they saw the exact same pictures, there was nevertheless meaningful variability that was both predicted by theoretically relevant variables and influenced important outcomes. Previous research investigating the ascription of ingroup membership has tended to employ forced-choice tasks that might obscure more subtle differences in the willingness to perceive ambiguous targets in ingroup terms (e.g., Castano et al., 2002). Rather than asking about group membership per se, our measures ask about visual perception of a defining characteristic of group membership. Thus, the findings obtained using our measure raise the intriguing possibility that individuals' ideological orientations and emotional responses can affect the very way in which individuals see negative ambiguous targets, one that would be consistent with research on motivated cognition and perception (e.g., Balcetis \& Dunning, 2006).

Notwithstanding the contributions made by the studies presented here, there remain issues worthy of further consideration. For example, though we found that SDO by target status (study 3) and RWA by target conformity (study 4) interactions were not redundant with ingroup identification, we might have further expected these 2-way interactions to hold more strongly for highly identified individuals. Although weak patterns suggested that effects tended in this direction, they were far from statistically significant. Future work with larger sample sizes should investigate this question more fully. Relatedly, because the effects we observed in studies 3 and 4 were stronger among those low in suspicion about information they received about the target, this work would benefit from follow-up studies with increased sample size, a cover story that would mitigate against any participant suspicion, or both.

It would also be important for follow-up work to establish whether the effects of SDO and RWA are specific to individuals making judgments about ambiguous targets relevant to their
group. Thus, as a general orientation towards hierarchy in society (e.g., Kteily et al., 2012; Sibley \& Liu, 2010) that is not redundant with the desire for ingroup dominance (Pratto et al., 1994), it is plausible that even high SDO members of third-party groups unrelated to the target (e.g., high SDO Chinese individuals judging the Woolwich suspects) may perceive low-status ambiguous targets in such a way as to minimize their association with high-status groups. In this way, these high SDO individuals could prevent the general blurring of status-boundaries between groups in society. Although such a pattern would be consistent with research on SDO, we would nevertheless expect those high SDO individuals for whom the target is more relevant to apply their social dominance drives to group membership judgments more strongly (see Sidanius \& Pratto, 1999, for a discussion of how SDO tends to be applied most strongly to the most contextually-relevant issues). Similarly, one might argue that even though high RWA individuals outside the group might judge those who do not submit to authority (such as the nonconformist targets in our studies) more negatively, RWA should be especially active when it is our group's rules that are contravened. Such research, in addition to research looking at the role of ingroup identification with larger sample sizes, may help definitively determine the extent to which our findings are specific to group motives or reflect more system-relevant concerns.

## Conclusion

We demonstrated, both in the context of real-world high profile incidents and experimental vignettes, that individuals' ideological orientations influence the ways in which they perceive ambiguous targets. We provided evidence for the role of theoretically-relevant moderators of these effects. We further showed that the perception of targets in ingroup versus outgroup terms matters: seeing ambiguous perpetrators of an attack in outgroup terms was

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associated with endorsing harsher treatment of the attackers themselves, as well as greater support for aggressive policies that prioritize ingroup over outgroup outcomes.

## References

Allport, G. W. (1954). The nature of prejudice. Reading, MA: Addison-Wesley.
Altemeyer, B. (1981). Right-wing authoritarianism. Winnipeg: University of Manitoba Press.
Asbrock, F., \& Fritsche, I. (2013). Authoritarian reactions to terrorist threat: who is being threatened, the Me or the We? International journal of psychology, 48(1), 35-49.

Balcetis, E., \& Dunning, D. (2006). See what you want to see: Motivational influences on visual perception. Journal of Personality and Social Psychology, 91(4), 612-625.

Beinart, P. (April 24, 2013). Are the Tsarnaevs White? Daily Beast. Retrieved from http://www.thedailybeast.com

Blascovich, J., Wyer, N. A., Swart, L. A., \& Kibler, J. L. (1997). Racism and Racial Categorization. Journal of Personality and Social Psychology, 73(1), 1364-1372.

Brewer, M. B. (2008). Depersonalized trust and ingroup cooperation. In J. I. Kruger (Ed.), Rationality and social responsibility: Essays in honor of Robyn Mason Dawes (pp. 215232). New York, NY: Psychology Press.

Castano, E., Yzerbyt, V., Bourguignon, D., \& Seron, E. (2002). Who May Enter? The Impact of In-Group Identification on In-Group/Out-Group Categorization. Journal of Experimental Social Psychology, 38(3), 315-322.

Caruso, E. M., Mead, N. L., \& Balcetis, E. (2009). Political partisanship influences perception of biracial candidates' skin tone. Proceedings of the National Academy of Sciences, 106, 20168-20173.

Cohrs, J. C., Moschner, B., Maes, J., \& Kielmann, S. (2005). The motivational bases of rightwing authoritarianism and social dominance orientation: relations to values and attitudes in the aftermath of September 11, 2001. Personality \& social psychology bulletin, 31(10), 1425-1434.

Dambrun, M. (2007). Understanding the relationship between racial prejudice and support for the death penalty: the racist punitive bias hypothesis. Social Justice research, 20, 228-249.

Devos, T., \& Banaji, M. R. (2005). American=white? Journal of Personality and Social Psychology, 88, 447-466.

Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. Advances in Experimental Social Psychology, 33, 41-113.

Feldman, D. C. (1984). The development and enforcement of group norms. Academy of Management Review, 9, 47-53.

First Post (April 25, 2013). Boston bombers: The unbearable whiteness of the brothers Tsarnaev. First Post. Retrieved from htttp://www.firstpost.com

Gramzow, R. H., \& Gaertner, L. (2005). Self-esteem and favoritism toward novel in-groups: the self as an evaluative base. Journal of Personality and Social Psychology, 88, 801-815.

Hayes, A. F. (2013). An introduction to mediation, moderational, and conditional process analysis: A regression-based approach. New York: Guilford press.

Ho, A., Sidanius, J., Levin, D. T., \& Banaji, M. R. (2011). Evidence for hypodescent and racial hierarchy in the categorization and perception of biracial individuals. Journal of Personality and Social Psychology, 100, 492-506.

Ho, A., Sidanius, J., Cuddy, A., \& Banaji, M. (2013). Status boundary enforcement and the categorization of black-white biracials. Journal of Experimental Social Psychology, 49(5), 940-943.

Hornstein, H. (1976). Cruelty and kindness: A new look at aggression and altruism. Englewood Cliffs, NJ: Prentice-Hall.

Kteily, N., Ho, A. K., \& Sidanius, J. (2012). Hierarchy in the mind: The predictive power of social dominance orientation across social contexts and domains. Journal of Experimental Social Psychology, 48, 543-549.

Krosch, A. R., Berntsen, L., Amodio, D. M., Jost, J. T., \& Van Bavel, J. J. (2013). On the ideology of hypodescent: Political conservatism predicts categorization of racially ambiguous faces as Black. Journal of Experimental Social Psychology, 48, 1196-1203.

Leyens, J.-P., \& Yzerbyt, V. Y. (1992). The ingroup overexclusion effect: Impact of valence and confirmation on stereotypical information search. European Journal of Social Psychology, 22(6), 549-569.

Lickel, B., Miller, N., Stenstrom, D. M., Denson, T. F., \& Schmader, T. (2006). Vicarious retribution: the role of collective blame in intergroup aggression. Personality and Social Psychology Review, 10(4), 372-90.

Marques, J. M., Yzerbyt, V. Y., \& Leyens, J.-Ph. (1988). The Black sheep effect: Judgmental extremity towards ingroup members as a function of group identifications. European Journal of Social Psychology, 18, 1-16.

Miller, S. L., Maner, J. K., \& Becker, D. V. (2010). Self-protective biases in group categorization: threat cues shape the psychological boundary between "us" and "them". Journal of Personality and Social Psychology, 99, 62-77.

Mullen, B., Brown, R., \& Smith, C. (1992). Ingroup bias as a function of salience, relevance, and status: An integration. European Journal of Social Psychology, 22, 103-122.

Piliavin, J., Dovidio, J., Gaertner, S., \& Clark III, R. D. (1981). Emergency intervention. New York, NY: Academic Press.

Pratto, F., Sidanius, J., Stallworth, L. M., \& Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. Journal of Personality and Social Psychology, 67, 741-763.

Sibley, C. G., \& Liu, J. H. (2010). Social Dominance Orientation: Testing a Global Individual Difference Perspective. Political Psychology, 31(2), 175-207.

Sherif, M. (1967). Group conflict and co-operation: their social psychology. London: Routledge \& K. Paul.

Sidanius, J., \& Pratto, F. (1999). Social dominance: An intergroup theory of social hierarchy and oppression. Cambridge: Cambridge University Press.

Sirota, D. (2013, April 16). Let's hope the Boston Marathon bomber is a white American. Salon. Retrieved from http://www.salon.com

Stelzl, M., Janes, L., \& Seligman, C. (2007). Champ or chump: strategic utilization of dual social identities of others. European Journal of Social Psychology, 38, 128-138.

Stürmer, S., Snyder, M., Kropp, A., Siem, B., \& Kiel, C. (2006). Empathy-Motivated Helping: The Moderating role of group membership, Society, 32, 943-56.

Tajfel, H., \& Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel \& W. G. Austin (Eds.), Psychology of intergroup relations (pp. 7-24). Chicago: Nelson-Hall.

Thomsen, L., Green, E., \& Sidanius, J. (2008). We will hunt them down: How social dominance orientation and right-wing authoritarianism fuel ethnic persecution of immigrants in fundamentally different ways. Journal of Experimental Social Psychology, 44, 1455-1464.

Turner, J C, Hogg, M. A., Oakes, P. J., Reicher, S. D., \& Wetherell, M. S. (1987). Rediscovering the social group: A self-categorization theory. British Journal of Social Psychology (Vol. 94, pp. 1514-1516).

Walsh, J. (2013, April 22). Are the Tsarnaev brothers white? Salon. Retrieved from http://www.salon.com

Table 1. Descriptive statistics and intercorrelations of variables assessed in the aftermath of the Boston Marathon attacks.

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. SDO | - |  |  |  |  |  |  |  |  |
| 2. RWA | . $36 * * *$ | - |  |  |  |  |  |  |  |
| 3. Whiteness | -. $37^{* * *}$ | -.34*** | - |  |  |  |  |  |  |
| 4. Harsh treatment | .43*** | . $60 * * *$ | $-.37^{* * *}$ | - |  |  |  |  |  |
| 5. Militaristic counter-terrorism | . $56 * * *$ | .64** | -.38*** | .73*** | - |  |  |  |  |
| 6. Age | -. 05 | .13* | . 08 | . 08 | . 11 | - |  |  |  |
| 7. Gender | -. $15^{* *}$ | .16** | -. 09 | .13* | -. 01 | .14** | - |  |  |
| 8. Class | . $19^{* * *}$ | . 01 | . 00 | . 06 | .14* | -. 04 | -. 07 | - |  |
| 9. Education | -. 00 | . 05 | -. 04 | . 02 | . 00 | . 05 | . 02 | . 03 | - |
| M | 2.50 | 3.74 | 63.18 | . 00 | 3.28 | 33.53 | -- | 2.66 | 4.21 |
| $S D$ | 1.22 | 1.14 | 26.91 | . 70 | 1.43 | 11.24 | -- | . 76 | 1.83 |
| $\alpha$ | . 90 | . 87 | . 93 | . 82 | . 92 | -- | -- | -- | -- |

Table 2a. Hierarchical regression predicting White American support for harsh treatment of the Tsarnaev brothers in the aftermath of the Boston Marathon attacks.

| Step 1 $\left(R^{2}=.39\right)$ |  | $\beta$ | 95\% CI | $p$ |
| :---: | :---: | :---: | :---: | :---: |
|  | SDO | . 19 | .07, 30 | . 002 |
|  | RWA | . 51 | . $39, .63$ | <. 001 |
|  | Age | . 01 | -.09, . 11 | . 84 |
|  | Gender | . 04 | -.07, . 14 | . 48 |
|  | Education | -. 01 | -.11, 10 | . 89 |
|  | Class | . 02 | -.08, . 12 | . 72 |
|  | Condition | -. 02 | -.12, . 08 | . 72 |
| Step 2$\left(R^{2}=.41\right)$ |  |  |  |  |
|  | SDO | . 14 | .02, .26 | . 03 |
|  | RWA | . 48 | . $36, .60$ | <. 001 |
|  | Age | . 03 | -.07, . 13 | . 57 |
|  | Gender | . 03 | -.08, . 13 | . 63 |
|  | Education | -. 02 | -.12, . 08 | . 70 |
|  | Class | . 03 | -.07, 13 | . 58 |
|  | Condition | -. 03 | -.13, . 07 | . 54 |
|  | Whiteness | -. 16 | -.05, -. 27 | . 005 |

Table 2b. Hierarchical regression predicting White American support for militaristic counter-terrorism policies in the aftermath of the Boston Marathon attacks.

| Step 1 <br> $\left(R^{2}=.52\right)$ |  | $\beta$ | $95 \% \mathrm{CI}$ | $P$ |
| :--- | :--- | :--- | :--- | :--- |
|  | SDO | .29 | $.19, .40$ | $<.001$ |
|  | RWA | .52 | $.41, .62$ | $<.001$ |
|  | Age | .06 | $-.04, .15$ | .23 |
|  | Gender | -.09 | $-.18, .00$ | .06 |
|  | Education | .01 | $-.08, .11$ | .76 |
|  | Class | .08 | $-.01, .17$ | .07 |
|  | Condition | .07 | $-.02, .16$ | .14 |

Step 2
( $R^{2}=.53$ )

| SDO | .26 | $.15, .37$ | $<.001$ |
| :--- | :--- | :--- | :--- |
| RWA | .50 | $.39, .60$ | $<.001$ |

Table 3. Descriptive statistics and intercorrelations of variables assessed in the aftermath of the Woolwich attacks.

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. SDO | - |  |  |  |  |  |  |  |  |
| 2. RWA | $.20^{*}$ | - |  |  |  |  |  |  |  |
| 3. Patriotism | .11 | $.25^{*}$ | - |  |  |  |  |  |  |
| 4. Britishness | $-.33^{* *}$ | $-.21^{*}$ | -.17 | - |  |  |  |  |  |
| 5. Harsh | $.41^{* * *}$ | $.50^{* * *}$ | .11 | $-.36^{* * *}$ | - |  |  |  |  |
| treatment |  |  |  |  |  |  |  |  |  |
| 6. Militaristic | $.60^{* * *}$ | $.34^{* * *}$ | .08 | $-.41^{* * *}$ | $.62^{* * *}$ | - |  |  |  |
| Counter-terrorism |  |  |  |  |  |  |  |  |  |
| 7. Age | -.12 | $.22^{*}$ | $.28^{* *}$ | -.09 | .02 | -.14 | - |  |  |
| 8. Gender | -.14 | .14 | .16 | -.07 | .17 | -.12 | $.22^{*}$ | - |  |
| 9. Class | .10 | -.08 | $.21^{*}$ | -.08 | $-.21^{*}$ | .06 | .06 | -.16 | - |
| 10. Education | .02 | $-.34^{* * *}$ | -.04 | .07 | $-.29^{* *}$ | -.13 | -.18 | .07 | $.29^{* *}$ |
| $M$ | 2.86 | 5.18 | 5.77 | 35.57 | .01 | 3.70 | 42.28 | -- | 2.40 |
| $S D$ | 1.08 | 1.25 | 1.28 | 29.22 | .71 | 1.44 | 15.31 | -- | .68 |

Table 4a. Hierarchical regression predicting White British support for harsh treatment of the Woolwich suspects in the aftermath of the Woolwich attacks.

| Step 1 $\left(R^{2}=.41\right)$ |  | $\beta$ | 95\% CI | $p$ |
| :---: | :---: | :---: | :---: | :---: |
|  | SDO | . 37 | .20,. 53 | <. 001 |
|  | RWA | . 32 | .14, . 50 | . 001 |
|  | Patriotism | -. 00 | -.18, . 18 | . 99 |
|  | Age | -. 05 | -.23, . 12 | . 55 |
|  | Gender | . 18 | . $01, .36$ | . 04 |
|  | Class | -. 15 | -.33, . 03 | . 10 |
|  | Education | -. 13 | -.31, . 04 | . 14 |
| Step 2$\left(R^{2}=.43\right)$ |  |  |  |  |
|  | SDO | . 32 | .15, . 49 | <. 001 |
|  | RWA | . 32 | .14, . 50 | . 001 |
|  | Patriotism | -. 01 | -.19, . 16 | . 90 |
|  | Age | -. 07 | -.25, . 10 | . 42 |
|  | Gender | . 17 | -.00, .34 | . 05 |
|  | Class | -. 15 | -.32, .03 | . 11 |
|  | Education | -. 15 | -.32, . 03 | . 10 |
|  | Britishness | -. 16 | -.33, . 01 | . 06 |



Figure 1. Whiteness ratings of ambiguous targets as a function of target status and social dominance orientation at low levels of participants suspicion. * $p<.05$


Figure 2. Whiteness ratings of ambiguous targets as a function of target conformity and right-wing authoritarianism at low levels of participants suspicion. ${ }^{* *} p<.01$

Table 4b. Hierarchical regression predicting White British support for militaristic counter-terrorism policies in the aftermath of the Woolwich attacks.

| Step 1 $\left(R^{2}=.40\right)$ |  | $\beta$ | 95\% CI | $p$ |
| :---: | :---: | :---: | :---: | :---: |
|  | SDO | . 52 | . $36, .69$ | <. 001 |
|  | RWA | . 20 | . $02, .38$ | . 03 |
|  | Patriotism | . 00 | -.17, . 18 | . 97 |
|  | Age | -. 12 | -.29, . 06 | . 20 |
|  | Gender | -. 05 | -.22, . 13 | . 59 |
|  | Class | -. 08 | -.27, . 10 | . 36 |
|  | Education | . 05 | -.13, . 23 | . 56 |
| Step 2$\left(R^{2}=.43\right)$ |  |  |  |  |
|  | SDO | . 46 | .29, . 63 | <. 001 |
|  | RWA | . 19 | . $02, .37$ | . 03 |
|  | Patriotism | -. 01 | -.18, . 16 | . 91 |
|  | Age | -. 14 | -.31, . 04 | . 12 |
|  | Gender | -. 07 | -.24, . 11 | . 45 |
|  | Class | -. 07 | -.25, . 10 | . 41 |
|  | Education | . 04 | -.14, . 21 | . 68 |
|  | Britishness | -. 21 | -.04, -. 38 | . 02 |


| $\alpha$ | .79 | .77 | .87 | .85 | .84 | .88 | -- | -- | -- | -- |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of items | 8 | 4 | 4 | 2 | 7 | 1 | 1 | 1 | 1 | 1 |

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

| Age | .07 | $-.02, .16$ | .13 |
| :--- | :--- | :--- | :--- |
| Gender | -.10 | $-.19,-.01$ | .04 |
| Education | .01 | $-.09, .10$ | .91 |
| Class | .09 | $-.00, .18$ | .05 |
| Condition | .06 | $-.03, .15$ | .20 |
| Whiteness | -.11 | $-.01,-.21$ | .03 |


| Number of items | 8 | 12 | 4 | 7 | 11 | 1 | 1 | 1 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

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

It is specifically people high on right-wing and inegalitarian attitudes who come to see the brothers as White


[^0]:    ${ }^{1}$ These debates about the Tsarnaev brothers' Whiteness took place both in parallel and in concert with discussions about their 'Americanness'. Given research suggesting that, for many individuals America is equated with White (Devos \& Banaji, 2005), it is not unlikely that, for some, these concepts were intertwined. Nevertheless, one of the unique and noteworthy factors about the Tsarnaev brothers was specifically the fact that they might have been White, which we expected (and media reports confirmed) to matter to White Americans in addition to any concerns about their Americanness per se.

[^1]:    ${ }^{2}$ Our predictions may at first appear to be in contrast with the "Black sheep effect" (Marques, Yzerbyt, \& Leyens, 1988), which argues that individuals will punish ingroup deviants more heavily than outgroup deviants. However, this perspective suggests that an important reason why individuals punish ingroup members more heavily is to dissociate the group from the reputational costs of deviants' behavior. When a negative target is undoubtedly an ingroup member, punishing them heavily signals to others that their behavior is unacceptable to, and uncharacteristic of, the group, thus restoring the group's reputation. When a negative target's membership is ambiguous, however, distancing can be accomplished by denying the target ingroup characteristics and reframing their actions as abhorrent outgroup behaviors worthy of punitive response.

[^2]:    ${ }^{3}$ Results for this study and all studies reported in this manuscript were qualitatively identical when including the participants excluded on the basis of the seriousness check. The cut-off score of 6 was chosen based on prior research we have conducted suggesting that a very large majority of participants report a score of 6 or higher, and that excluding those participants who report lower scores tends to improve the quality of the data.
    ${ }^{4}$ We conducted attrition analyses to compare those White American participants who completed only wave 1 to those who completed both waves. The two sets of participants did not differ in age, $F(1,394)=2.25, p=.13$, gender $(F<1)$, class $(F<1)$, education $(F<1)$, or SDO $(F<1)$. The only exception was RWA, where we observed slightly lower levels among those completing

[^3]:    ${ }^{5}$ This manipulation did not significantly influence Whiteness perceptions $(F<1)$ or harsh treatment $(F(2,247)=1.11, p=.33)$ at wave 2 . It did, however, influence militaristic counterterrorism at wave $2, F(2,254)=5.54, p=.004$.

[^4]:    ${ }^{6}$ Due to a clerical error, 31 participants received only half the RWA scale. Their scores were computed using these items.

[^5]:    ${ }^{7}$ The effect of RWA on Britishness controlling for SDO but not the demographic controls was trending in the expected direction, $b=-3.53, \beta=-.15, p=.11,95 \% \mathrm{CI}[-.34, .04])$

[^6]:    ${ }^{8}$ As noted previously, including these participants in analyses did not change study results in this (or any of the other) studies.

[^7]:    ${ }^{9} 45$ White American participants ( $M$ age $=29.76 ; S D=8.57 ; 53.3 \%$ male) on Amazon's Mechanical Turk were presented with the white-black facial morph, without any information given about the individual. Participants were asked to rate (using 0-100 scales) the Whiteness of the individual using two items reflecting the extent to which the individual in the image looked White, and the extent to which the individual in the image looked of European descent $(r=.49, p$ $<.001)$. The average Whiteness rating of the individual was $48.17(S D=21.88)$, which did not differ significantly from the midpoint of the scale, $t(43)=-.56, p=.58$, confirming that the baseline Whiteness of the target was indeed ambiguous.

[^8]:    ${ }^{10}$ We chose this analysis strategy, rather than simply excluding suspicious individuals, because we had no straightforward and objective metric by which to exclude participants on suspicion, which was measured on a $0-100$ scale. By modeling our results at levels of suspicion directly, we are able to use all the data without arbitrary cutoffs, and examine our hypothesized SDO*target status interaction at (empirically derived) low levels of suspicion. Nevertheless, we note that we observed the same pattern of results across this study including only participants whose suspicion was below 25 .

[^9]:    ${ }^{11}$ We considered whether the interaction between SDO and target status was further moderated by ethnic identification. Although the pattern suggested that the interaction was stronger for those more identified with their group, the three way interaction did not approach significance on average ( $\beta=.002, p=.55$ ) or among participants low on suspicion ( $\beta=.08, p=.45$ ).

[^10]:    ${ }^{12}$ Results were highly consistent when we excluded participants who rated a level of suspicion above 25 on our $0-100$ scale.
    ${ }^{13}$ We considered whether the RWA x Conformity condition interaction might further be moderated by ethnic identification. Although the pattern of results suggested that the 2-way interaction was stronger on average for those more strongly identified with their group, this effect did not reach significance, $\beta=.01,95 \%$ CI: $[-.06, .19], p=.33$. No 3-way interaction effect was observed when we assessed it only among those low in suspicion, $\beta=-.01,95 \% \mathrm{CI}:[-.21$, .19], $p=.93$.

