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# Prejudice With A Conscience: How A Strong Moral Identity Relates To Greater Prejudice

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PREJUDICE WITH A CONSCIENCE: HOW A STRONG MORAL IDENTITY RELATES TO  
GREATER PREJUDICE

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by

Moira Shaw

2010

## **Dedication**

I would like to dedicate this work to the memory of Dr. George Larimer, my original mentor.

PREJUDICE WITH A CONSCIENCE: HOW A STRONG MORAL IDENTITY RELATES TO  
GREATER PREJUDICE

by

MOIRA P. SHAW, M.A.

DISSERTATION

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## **Abstract**

The present research investigated the effects of moral licensing on prejudice for participants with a strong moral identity. It predicted that, because people with a stronger moral identity are especially motivated to be moral, they would be strongly affected by moral licensing effects on prejudice. Three experiments tested this prediction by measuring moral identity, experimentally manipulating and measuring three sources of moral license (moral affirmation, moral superiority, and moral threat), and measuring inter-group prejudice. The results demonstrated that with moral affirmation and moral superiority, a strong moral identity relates to greater prejudice (Experiment 1), moral superiority moderates the relation between moral identity and prejudice both when it is a sense of general moral superiority and when it implies superiority to a set of out-groups (Experiment 2), and with moral affirmation a stronger moral identity relates to greater implicit prejudice towards Middle Eastern Muslims (Experiment 3). The implications of the roles of moral identity and moral licensing in inter-group relations are discussed.

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## **Abstract**

The present research investigated the effects of moral licensing on prejudice for participants with a strong moral identity. It predicted that, because people with a stronger moral identity are especially motivated to be moral, they would be strongly affected by moral licensing effects on prejudice. Three experiments tested this prediction by measuring moral identity, experimentally manipulating and measuring three sources of moral license (moral affirmation, moral superiority, and moral threat), and measuring inter-group prejudice. The results demonstrated that with moral affirmation and moral superiority, a strong moral identity relates to greater prejudice (Experiment 1), moral superiority moderates the relation between moral identity and prejudice both when it is a sense of general moral superiority and when it implies superiority to a set of out-groups (Experiment 2), and with moral affirmation a stronger moral identity relates to greater implicit prejudice towards Middle Eastern Muslims (Experiment 3). The implications of the roles of moral identity and moral licensing in inter-group relations are discussed.

## **Prejudice with a Conscience: How a Strong Moral Identity Relates to Greater Prejudice**

The link between morality and inter-group relations is complex. There are clear historical instances of social movements that invoke moral principles to solve deeply ingrained conflicts between groups. The Civil Rights Movement, for example, was a morally-based catalyst for achieving inter-group cooperation between Black and White Americans. Yet, worldwide, perpetrators of violent conflict, war, and terrorism believe they are doing what is right and moral (e.g. Kruglanski, 2009; Jurguensmeyer, 2002). At times, people believe that violence in the service of a greater, transcendental cause is morally justified. For instance, Sayed Qutb, the grandfather of present day radical Muslim terrorism, wrote a manifesto claiming that “the earth should be cleansed of our corruption, by force if necessary. . .” (As cited in Saucier, Akers, Shen-Miller, Knezevic, & Stankov, 2009; p. 262). Other violent groups promote the idea that inter-group violence is not only morally justified, but also morally imperative. Osama bin Laden published a letter to the United States that quotes the following Surah in the Quran, “Those who believe, fight in the Cause of Allah, and those who disbelieve, fight in the cause of Taghut (anything worshipped other than Allah). So fight you against the friends of Satan” (“Full Text,” 2002).

To be clear, couching violence in moral justification is not confined to radical Muslim terrorism. Mark Rudd of the Weather Underground (a secular, U.S. based, radical left wing organization), said that he “cherished [his] hatred as a badge of moral superiority” (Green & Siegel, 2003). The Ku Klux Klan, one of the most notorious hate groups, sees itself as primarily motivated by Christian moral principles (The Southern Poverty Law Center, 2010). Rhetoric regarding the morality of conflict permeates almost every type of inter-group violence (e.g. McAlister, Bandura, & Owen, 2006). Sometimes it seems that people who are most motivated to

do the right and moral thing fill two deeply contradictory roles. They are the most likely to work and sacrifice for peace among nations, races, ethnicities, and cultures. But, they also seem to be the most likely to hate, fight, and kill members of other nations, races, ethnicities, and cultures in the name of a moral cause (Skitka & Mullen, 2002).

Research on morality and prejudice reveals a similar pattern. In some studies, people's morals cause them to support inter-group hostility, prejudice, and violent warfare (e.g., Cohen, Montoya, & Insko, 2006). In other studies, people's morals cause them to be more compassionate and forgiving towards members of other races, cultures, and nations (Reed & Aquino, 2003). The research here tests the hypothesis that this discrepancy is a result of the moral licensing effect which states that when persons feel sufficiently moral, they feel entitled to behave in immoral ways (Sachdeva, Iliev, & Medin, 2009). The moral licensing effect finds that people's sense of self worth is attached to whether they perceive themselves as good, moral people. When people's moral self worth is threatened, they can use moral behavior to restore their self worth. As an extension, if they are made to feel that they are sufficiently moral, they become less motivated to behave morally. Evidence that the motivation to be a moral person both increases and decreases inter-group conflict will also be reviewed. It will also review evidence that the discrepant relations between moral identity and prejudice are a result of the moral licensing effect and argues that those with the strongest moral identities will be the most vulnerable to moral licensing effects on prejudice. Then, three studies that directly test the extent to which three sources of moral licensing (moral affirmation, moral superiority, and moral threat) increase inter-group prejudice for those with a stronger motivation to be moral will be introduced.

## **An Introduction to Moral Psychology**

Decades of research has explored how people's morals, or standards regarding right and wrong, are developed and incorporated into their thinking and their behavior (Cohen et al., 2006; Kohlberg & Hersh, 1977). Bandura, Barbaranelli, Caprara, and Pastorelli (1996) theorized that morals are constructed through direct experience with moral behavior, others' moral evaluations of a person's behavior, and through others' modeling of moral behavior. Kohlberg and Hersh (1977), on the other hand, proposed that morals come from developing cognitive structures that follow a hierarchical and relatively fixed sequence throughout a person's lifetime. At the preconventional stage of moral reasoning, morals are anything that helps people avoid punishment and to satisfy their own personal needs. At the conventional stage, morals are motivated by social conformity. At the postconventional stage of moral reasoning, morality is defined by a desire to live up to a set of abstract principles such as justice, reciprocity, and equality.

The Social Intuitionist Model of moral reasoning argues that people develop their morals from gut-level intuitions and emotions first, and then construct post-hoc explanations for these intuitions afterwards (Haidt, 2001; Mullen & Skitka, 2006). Regardless of the developmental underpinnings and content of a person's morals, these and other studies on morality agree that moral principles regarding right and wrong play a role in a variety of attitudes and behaviors- including how people evaluate and treat members of their own group (in-groups) and members of other groups (out-groups; Aquino & Reed, 2002; Graham, Haidt, & Nosek, 2009; Haidt, Rosenberg, & Hom, 2003; Leach, Ellemers, & Barreto, 2007; Sachdeva, Iliev, & Medin, 2009).

## **Individual Differences in Moral Identity**

Moral identity describes the extent to which a person considers her or his standards of right and wrong central to the self-concept. Furthermore, moral identity accounts for individual differences in people's motivation to be moral (Blasi, 1993). The concept of moral identity focuses on the link between moral standards and the self-concept (Hart, Atkins, & Ford, 1998). The self-concept is defined as, "an idea or set of ideas of who we are" (p.6; Oyersman, 2004). Congruently, research demonstrates that the self-concept is not always fixed and stable (Markus & Wurf, 1987). Rather, everyone has multiple identities that construct the self-concept, and the influence of these identities will depend on how accessible they are in a person's working memory. Centrality and context are two factors that strongly influence the availability of a particular identity in one's working memory. Centrality describes how important a particular identity is to a person's self-concept. The more central a particular identity, the more elaborated it will be in memory. Similarly, a particular context can elicit a certain identity, making it more accessible in memory. For example, a student at the University of Texas at El Paso (UTEP) might simultaneously fulfill the roles of student and parent. These identities, together, construct a working self-concept.

Moral identity, then, is considered one of many parts of the self-concept (Aquino & Reed, 2002). There are several key characteristics of moral identity that make it conceptually distinct from other moral constructs (Blasi, 1984). First, research on moral identity assumes that it can vary in content. To have a moral identity does not necessitate adherence to or a progression through any fixed set of moral principles. Instead, a strong moral identity will predict stronger adherence to *whatever* moral principles a person values. Second, like other parts of one's identity, moral identity can vary in strength and centrality to one's self-definition. Some authors

argue that, because it accounts for the role of the self-concept, understanding moral identity is central to predicting when one's moral principles will influence their attitudes and behaviors (Bergman, 2002; Blasi, 1993).

Research shows that individual differences in the centrality of persons moral identity predict how much their moral principles influence their attitudes and behavior (Aquino, Freeman, Reed, Felps, & Lim, 2009; Aquino & Reed, 2002; Bandura, 1991). For instance, Aquino and Reed (2002) show that a stronger moral identity leads to more pro-social behavior. Aquino and Reed (2002) built on Hart and colleagues' (1998) definition of moral identity as a "commitment to lines of action benefiting others (p. 513)". From this definition, they constructed a measure of moral identity and then conducted two studies demonstrating a link between moral identity and moral behavior. The moral identity scale measures the importance of nine moral traits to people's self-concept (internalization) and the extent to which those traits are reflected in people's every day actions (symbolization). For instance, participants were asked to indicate how important it was to them, personally, to be caring, kind, and generous. The authors found that a strong moral identity increases the likelihood that people will report volunteering for charities (e.g. homeless shelters, mentoring troubled youth) and the likelihood that they donate to a food drive.

In another study, Aquino and colleagues (2009) experimentally primed research participants' moral identity by asking them to recall as many of the 10 Commandments as they could. Afterwards, they measured participants' willingness to allocate funds to cancer prevention in a hypothetical marketing campaign. Compared to participants in a control group, those in the "10 Commandments" group were more likely to allocate money for a cancer prevention fund in

their marketing plan. Therefore, making a person's moral identity contextually salient appears to increase pro-social behavior.

Bandura et al. (1996) also predicted that a lack of moral identity causes an individual to behave in antisocial, "immoral", and harmful ways. They tested the extent to which disengaging a person's moral identity leads to immoral behavior through looking at the effects of eight mechanisms of "moral disengagement." These mechanisms of moral disengagement include moral justification, palliative comparison, euphemistic labeling, minimizing, ignoring, or misconstruing the consequences of violence and aggression, dehumanization, attribution of blame, displacement of responsibility, and diffusion of responsibility (Bandura et al., 1996, p. 365). They predicted and found that all eight mechanisms of moral disengagement related to increased violence and aggression among students in an elementary school and a junior high school. Three major findings supported the prediction that moral disengagement relates to violence, delinquency, and antisocial behavior. First, the authors found that the tendency to morally disengage was positively related to aggressive behaviors such as physical and verbal aggression. Second, moral disengagement related to delinquent behaviors such as theft, cheating, and lying. Third, moral disengagement was negatively related to pro-social behaviors such as helping others and sharing things.

Together, the research on moral identity and moral disengagement implies that people vary in their individual motivations to be moral. The extent to which a person's moral identity plays a central role in their sense of self and the extent to which moral identity is contextually salient both predict the influence of a person's morals on their attitudes and behavior. Thus far, research shows that a strong moral identity typically is associated with more pro-social behavior, including better inter-group relations. Moral disengagement, conceptualized here as a diminished

or absent moral identity, relates to less pro-social behavior. The following section will review the impact of moral identity specifically on prejudice between groups.

### **Moral Identity as a Contributor to Peaceful Inter-Group Relations**

The research reported above adopts the perspective that moral identity is generally defined as a commitment to others' welfare (Hart et al., 1998). This type of moral identity explicitly measures people's commitment to others' welfare. For the sake of clarity, it will be referred to as a pro-social moral identity because its associated traits relate to treating others well. Research on pro-social moral identity finds that a central and salient pro-social moral identity predicts less prejudice towards out-groups, and disengaging a pro-social moral identity predicts more prejudice towards out-groups.

Reed and Aquino (2003) used September 11<sup>th</sup>'s aftermath as a real-world example of how a pro-social moral identity improves inter-group relations. After September 11<sup>th</sup>, there was a backlash against Arabs, Arab-Americans, and Middle Eastern Muslims. Acts of inter-group aggression were common. Mosques were vandalized and people of Middle Eastern descent were victimized. On the other hand, there was also evidence that some people were being exceptionally friendly and self-sacrificing towards these groups. Reed and Aquino predicted that the people most likely to be kind to Middle Eastern people and Muslims were the ones with particularly strong and central pro-social moral identities. Over four studies, results showed that a stronger pro-social moral identity predicted (1) a sense of obligation to concern themselves with the welfare of a variety of out-groups (religious, ethnic, national, etc.), (2) a greater willingness to support a humanitarian effort that would benefit Afghani refugees, (3) a stronger tendency to allocate funds fairly when confronted with the choice between allocating funds to a charity that would benefit an in-group and a charity that would benefit an out-group, (4) a

stronger belief that taking human lives as collateral damage is unacceptable, (5) greater perceptions that revenge is morally unacceptable, and (6) greater forgiveness for the perpetrators of the September 11<sup>th</sup> attacks.

The lack of pro-social moral identity also relates to increased prejudice towards social out-groups (McAlister et al., 2006). McAlister et al. (2006) showed that higher moral disengagement was associated with greater support for military force in retaliation for the September 11<sup>th</sup> attacks. Furthermore, the effects of moral disengagement can be eliminated by priming a person's pro-social moral identity. Specifically, activating a person's pro-social moral identity decreases support for punitive responses to the attacks against the United States on September 11<sup>th</sup> and increases negative emotional reactions to the abuse of Iraqis at U.S. detention camps (Aquino, Reed, Thau, & Freeman, 2007). Overall, this research shows that strong and salient pro-social moral identities cause more charitable, more inclusive, and less violent relations between social groups. The research above demonstrates that the motivation to live up to a strong pro-social moral identity has the power to decrease prejudice between groups.

### **Moral Identity as a Contributor to Inter-group Conflict**

*Moral convictions and intolerance for people with opposing views.* Research on moral mandates, however, indicates that a strong motivation to be a moral person may not be limited to a commitment to others' welfare. Skitka, Bauman, and Sargis (2005), define moral mandates as strong attitudes rooted in the conviction that something is right or wrong, moral or immoral. Moral mandates are considered specific attitude stands that are idiosyncratic to an individual. For instance, one person may have a moral mandate about abortion and another may have a moral mandate about protecting the environment. Across several studies, Skitka et al. (2005) find that strong endorsement of a moral mandate relates to greater intolerance toward people who violate

that moral mandate. In Experiment 1, Participants rated how close issues such as the death penalty and nuclear energy were to their core moral convictions. Then participants indicated how much social and physical distance they wanted from those with different moral beliefs. The authors found that stronger moral mandates predicted a stronger desire for greater social distance from those with discrepant moral convictions. In Experiment 3, participants indicated their attitudes about abortion and were told that they would interact with another participant. When they entered the room, there was a chair with a backpack on it that had a pro-choice button. Participants were given the opportunity to place a chair anywhere in the room and the experimenters measured the distance they gave between themselves and the pro-choice person. Skitka and colleagues found an Attitude Dissimilarity x Moral Conviction interaction. Participants who were pro-life with stronger moral convictions about abortion placed their chair the farthest from the chair with the pro-choice backpack.

Thus, people who place great importance on their moral principles show a strong aversion to people and groups who violate or threaten those moral principles. Scattered evidence across other lines of research reveals a similar relation between a strong emphasis on moral principles and prejudice. One study found that individuals who believe that their moral standards are absolute truth express more prejudice towards social groups in general (Peterson, Smith, Tannenbaum, & Shaw, 2009). Similarly, research shows that stronger moral conviction for one's religious beliefs relates to stronger prejudice towards Middle Eastern immigrants and Arab Americans (Shaw, 2007).

### **Moral superiority and group morality positively predict prejudice.**

Research on moral superiority and group morality also indicates that the motivation to be moral increases prejudice between groups. Across a set of seven studies, Brown (1999) found

that causing participants to believe that their groups are “more moral” than other groups causes them to become more prejudiced towards a variety of out-groups. In one study, for instance, she told participants that students at their university were found to be more moral than students at a different university. Results revealed that participants who were made to feel morally superior were more likely to support restrictive policies against foreign nationals at their university. In another study, Brown found that causing participants to believe that the United States is “more moral” than other countries increased support for restrictive immigration policies.

Cohen et al. (2006) found that when a person’s group identity is salient, the moral principles of the group take precedence over one’s own morals. This effect is referred to as “group morality”, and Cohen et al. find that being loyal to a group that morally condones inter-group conflict increases support for conflict and competition between groups. Also, Ginges, Hansen, & Norenzayan (2009) conducted a study that demonstrated that Muslim support for suicide attacks in Middle Eastern countries was more related to indices of commitment to violent, radicalized Muslim groups than to religious devotion. The researchers surveyed a large sample of Palestinian Muslims reported praying (a measure of religious belief), how often they attended services at a Mosque (a measure of group commitment), and the extent to which they supported anti-Western suicide attacks. They found that Mosque attendance, but not frequency of prayer, predicted greater support for suicide attacks. Thus, stronger identification with groups that morally endorse inter-group violence creates inter-group hostility.

In sum, the results of these experiments indicate that certain parts of people’s moral identity increase inter-group conflict. These results stand in contrast to research demonstrating that a pro-social moral identity has the power to decrease prejudice and promote inter-group understanding and forgiveness. While a pro-social moral identity leads to less prejudice, moral

convictions, group morality, moral absolutism, and moral superiority are associated with stronger prejudice between groups. Therefore, moral identity can both increase and decrease prejudice.

### **Moral licensing as a Moderator between the Motivation to be Moral and Prejudice**

The effect of moral identity in both directions may be attributable to a common tendency to regulate moral behavior. Recent research on the “moral licensing” effect suggests that people who feel that they are already moral people will behave immorally (Sachdeva, et al., 2009). Sachdeva and colleagues (2009) provided participants with a list of the same pro-social moral traits in Aquino and colleagues’ (2002) moral identity scale. The researchers asked participants to write a story about themselves that included all of the traits in the list. Results indicated that participants who wrote a story about themselves that included the moral traits in a story (e.g., kindness and compassion) donated about four dollars less to charity than participants who wrote about negative moral traits, (e.g., greed and selfishness). In the same studies, authors also found a “moral cleansing” effect, such that asking participants to write about negative moral traits increased the amount they donated to charity and the tendency to adhere to environmentally positive business practices. What is particularly powerful about Sachdeva and colleagues’ findings is that they used the same pro-social moral traits that typically related to more pro-social behavior. Therefore, even affirming a person’s pro-social moral identity can lead to more immoral behavior.

Similarly, Khan and Dar (2006; study 4) gave participants the opportunity to commit to helping an international student understand a lecture. The researchers then gave them two dollars and asked them to indicate how much of their money they wanted to allocate to charity. Participants who previously committed to helping the international student donated about 20 cents less than participants who had not helped the international student. Similar research on

moral disengagement shows that a person's ability to morally justify violence and aggression absolves him from concerning himself with the rights of others (e.g. McAlistler, et al., 2006). These results are interpreted as evidence that people regulate their moral behavior. Specifically, people up-regulate their moral behavior when they feel they are not moral enough, and down-regulate their moral behavior when they feel that they are already moral people.

Moral licensing effects are also found in the literature on prejudice. Monin and Miller (2001) showed that allowing people to argue against sexist statements increases the likelihood that they discriminate against women and African-Americans interviewing for a job. Effron, Cameron, and Monin (2009) followed up on this effect by testing the extent to which voting for President Barack Obama caused participants to feel licensed to express prejudice in ostensibly unrelated tasks. In one study, participants indicated whether or not they would vote for Barack Obama in the 2008 elections. In the "licensing" condition, participants projected that they would vote for Barack Obama before making a hiring decision. The hiring decision involved deciding whether an important position was more suitable for a White person than a Black person. In the control condition, participants made the hiring decision first, and then indicated whether they would vote for Barack Obama or John McCain. Effron et al. found that, compared to the participants in the control condition, those who established their "moral credentials" as a non-racist, were more likely to say that the position was more suitable for a white person. In another study, participants who said they would vote for Barack Obama allocated more money to a community service organization that benefits White Americans over a community service organization that benefits Black Americans. Together, these studies show that moral licensing can also in increase racial prejudice.

Research on moral licensing provides a parsimonious explanation for the discrepant relations between moral identity and prejudice. Simply put, when a person's motivation to become a moral person is highlighted, that individual will express less prejudice. When that person feels that they are already moral, they will express more prejudice. In Aquino's research on moral identity, participants are never given the opportunity to affirm their morality. Rather, people are left only with an attention to their motivation to be moral. Thus, people use greater benevolence towards out-groups as a strategy to feel that they are sufficiently moral. In contrast, research on moral absolutism, moral superiority, group morality, and moral convictions allow people to focus on the ways in which they are already moral which undermines their motivation to treat members of out-groups well

The effects of moral licensing on prejudice may also explain how a strong moral identity can both increase and decrease prejudice between groups. Although it is counterintuitive to predict that a stronger moral identity would lead to greater prejudice, there are both theoretical and empirical reasons to suggest that people with a stronger moral identity are more vulnerable to the moral licensing effect. First, theoretically, the more importance a person places on feeling like a moral person, the more they will be affected by the feeling that they are moral. Second, empirical research on moral convictions indicates that individual differences in the strength of a person's convictions lead to greater intolerance, indicating that the strength of a person's moral identity can sometimes lead to greater prejudice. If those with a stronger moral identity are more susceptible to moral licensing effects on prejudice, that would help explain why the same people who are attracted to moral causes are sometimes more likely to hate, fight, and kill in the name of that cause.

## **Conclusion and Outline of the Present Research**

Thus, the following studies were conducted in hopes that the moral licensing effect would clarify why people who are more motivated to be moral are simultaneously the ones most involved in both solving and perpetuating inter-group conflict. Although a moral licensing account of inter-group prejudice predicts that moral licensing will increase prejudice overall, the following experiments focus on the effect of moral licensing on prejudice for those with a stronger moral identity. The following three experiments test three hypotheses that moral affirmation (focusing on one's own morality), moral superiority (the sense that one is more moral than others), and moral threat (the belief that an outgroup is immoral) can all increase a person's view of themselves as sufficiently moral and lead participants with a strong moral identity to express greater prejudice.

These predictions were tested over three studies that experimentally manipulated moral affirmation, measured individual differences in moral identity, moral threat, and moral superiority, and measured the joint impact of moral identity and these three sources of moral licensing on inter-group prejudice. Moral identity is defined here as the extent to which people have integrated their beliefs about what is moral and immoral into their self-concept. In Experiment 1 moral identity is operationalized as a strong belief in one's own moral principles. In Experiments 2 and 3, moral identity is operationalized as a personal motivation to live up to a set of moral principles. In Experiment 1, individual differences in the strength of participants' moral identity, moral superiority, and moral threat were measured, moral affirmation was manipulated, and prejudice towards a diverse set of out-groups was measured. In Experiment 2, multiple types of moral affirmation were manipulated and multiple types of moral superiority were measured. Rather than affirming an individual's moral identity, Experiment 3 affirmed the

morality of the social groups that participants belonged to, and moral licensing effects on implicit and explicit prejudice were measured.

## **Experiment 1**

Experiment 1 created an initial test of the relation between moral identity and prejudice with moral affirmation, moral superiority, and moral threat. This experiment was a single factor, two-level (moral affirmation vs. control) design with prejudice towards two different types of out-groups (immoral vs. racial) as dependent measures and moral superiority and moral threat as moderator variables. The strength of including multiple out-groups in this prejudice measure is that it ensures that moral licensing does not increase prejudice idiosyncratically to individual groups. The first set of groups was defined by behaviors that a person may (or may not) consider immoral (e.g. KKK members). The second set of groups consisted of racial out-groups (e.g. Black Americans). These two different types of groups were included to account for the possibility that moral threat may only cause prejudice towards out-groups a person considers immoral.

Moral identity is typically measured by having participants reflect on the importance of specific moral traits that focus on a person's commitment to others' welfare. The research on moral convictions and moral absolutism, however, suggest that a person's moral identity can reflect a broader commitment to a set of abstract moral principles and specific attitudes. Also, it may be difficult to get participants to admit to greater inter-group prejudice after focusing on traits that give explicit directives regarding how to treat other people (e.g. with care and compassion). Therefore, this experiment defined moral identity as a strong belief in a set of moral principles. This experiment also focused on moral licensing effects by simply asking participants to focus on a time when they "did the right thing." Within this design, moral licensing predicts that with moral affirmation, moral superiority, and moral threat, a stronger moral identity will relate to greater racial and moral prejudice.

## Method

**Participants and procedure.** Based on an a-priori power analysis, sixty-three students were recruited for a study on moral reasoning at the University of Texas at El Paso in exchange for partial course credit. The sample was 75% female and 25% male, with 51 Latinos (Mexican American, Mexican National, or Hispanic other than Mexican), 6 White Americans, and 6 participants who listed “other” as their ethnicity.

The experiment took place over two sessions to prevent the measures of moral identity from changing participants’ reactions to the moral affirmation manipulation. Both sessions of the experiment were completed through online survey software. When participants signed up for the experiment, they were linked to the first set of questionnaires. The first set of questionnaires included the moral superiority measure and the moral identity measure (in that order; Aquino & Reed, 2002; Peterson, et al, 2009). For the second session, participants came to the laboratory to complete the moral affirmation manipulation and the prejudice and moral threat measures (in that order).

### Time-1 Materials

**Moral Superiority.** Participants first completed the moral superiority measure. This measure was derived from Aquino and Reed’s (2002) measure of Moral Identity. The measure consisted of 15 moral traits including *caring, greedy, compassionate, fair, disloyal, hardworking, mean, honest, selfish, kind, generous, helpful, friendly, righteous, and ruthless*. In the instructions, participants read: “A moral person is a person who always does what is right even when it might be the difficult thing to do. The following words are words that are typically used to describe moral people.” Then they were asked to rate on an 8-point scale how they compared to most people on the 15 traits. For instance, when asked to indicate whether they were more or

less “caring” than most people, participants rated themselves between 1 (much less caring than most people) and 8 (much more caring than most people). Negatively valenced moral traits such as “greedy” and “selfish” were reverse scored to create a composite measure of a morally superiority, where higher numbers reflected a stronger sense of moral superiority ( $\alpha = .85$ ).

**Moral identity.** Principled moral identity was measured with the moral absolutism measure (Peterson et al., 2009). This is a six-item measure of the extent to which people believe their morals are absolute, inviolable truth. For example, participants were asked to respond to the item “There are absolutely clear guidelines about good and evil. These apply to everyone, whatever the circumstances” on a scale from 1 (the guidelines about good and evil are different for everyone) to 8 (the guidelines about good and evil are the same for everyone). Items such as “Morality is relative to each person – there is no truly “correct” set of rules that should govern one’s conduct” were reverse scored such that higher scores reflected a stronger belief in one’s moral principles. Some of the wording on these items proved confusing for participants. Particularly, the sixth item, “The moral values and beliefs that enrich my life may not necessarily work for everyone” did not correlate with the other items ( $r = -.04$ ). Therefore, this item was not included in the analyses for this measure. Without the sixth item, the Cronbach alpha was acceptable ( $\alpha = .62$ ).

## **Time-2 Materials**

**Moral affirmation manipulation.** The moral affirmation prime allowed participants to recall a time when they did the “right” thing to affirm their own morality. Upon arriving, participants were randomly assigned to one of two conditions. In the experimental condition they read the following instructions:

In this study, we are asking you to think about morality, defined as “doing the right thing, even when it is not easy”. Please write a short description of a time when you did the

right thing even though it was difficult. You may write about what you did and how it made you feel.

Participants in the control condition read the following instructions,

In this study, we are interested in the things students enjoy. Please write a short description of a time when you played a sport or a game that you really enjoyed. Write about what you did and how it made you feel.

This control condition still asks participants to describe a positive experience, without engaging their moral identity. Participants were given an unlimited amount of time to write their responses to these questions.

**Moral threat measure.** Moral threat is defined here as the extent to which a person sees an out-group as offensive to their moral principles. To measure moral threat, participants were asked to rate the extent to which they considered each of the groups they would later evaluate moral or immoral. It included both the racial groups (White Americans, Mexican Nationals, Black Americans, Asian Americans, Arab Americans, and Native Americans [ $\alpha = .85$ ]) and the “immoral” groups (Wall Street bankers, pornographers, people who are unfaithful to their romantic partners, illegal immigrants, drug users, drunk drivers, members of the Ku Klux Klan, and members of radical Muslim terrorist groups [ $\alpha = .70$ ]). Responses were scaled from 1 (extremely immoral) to 8 (extremely moral). However, all responses were reversed scored for ease of interpretation such that higher scores indicated more moral threat.

**Prejudice measures.** The prejudice measures were embedded in the moral threat measure. Here, participants were asked to evaluate their feelings towards the racial (racial prejudice) and “immoral” groups (moral prejudice). The racial and immoral groups were the same groups used for the moral threat measure. The alpha coefficient was acceptable both for the racial groups ( $\alpha = .80$ ) and the moral groups ( $\alpha = .68$ ). For each group, participants were asked to indicate their attitudes towards each group on a scale from 1 (very negative) to 8 (very positive).

All items were reverse-scored such that higher scores indicated more prejudice towards the out-groups.

## Results

**Data Analysis.** These hypotheses were tested using the Statistical Analysis Software's (SAS) General Linear Model (GLM) to run Simultaneous Multiple Regression analyses testing moral affirmation, moral superiority, and moral threat as moderators of the relation between moral identity and prejudice. This model can test the effects of both categorical and continuous predictors on multiple dependent variables in Multiple Regression analyses. The GLM automatically deletes observations with missing data, which accounts for small changes in degrees of freedom in the following three experiments. Finally, tests for violations of normality were conducted for each variable in the design and, unless otherwise reported, each variable fell within the acceptable range for skewness and kurtosis.

Because this design included measures of prejudice towards two different types of groups ("immoral" and racial), each of the following analyses was first tested with repeated-measures Multiple Regression to detect differential effects of moral affirmation, moral superiority, and moral threat in the relation between moral identity and the two types of prejudice (Preacher, Curran, & Bauer, 2006). Where the results did not differ for the two types of prejudice, the results of the regression were interpreted for the two types of prejudice together.

**Descriptive statistics.** To ensure that moral identity, moral superiority, and moral threat were uncorrelated predictors in the main tests of these hypotheses, bivariate correlations between each of these variables were conducted. The results of these analyses indicated that moral identity and moral superiority were uncorrelated,  $r(61) = .12, p = .367$ , and moral identity and moral threat were also uncorrelated,  $r(61) = .05, p = .723$ . Contrary to previous research, there

was no significant relation between moral identity and prejudice,  $r(61) = .06, p = .648$ . For a full report of the correlations between moral identity, moral threat, and each type of prejudice, refer to Table 1.

It is interesting to note that the mean prejudice for the racial groups ( $M = 3.31, SD = .97$ ) was significantly lower than prejudice towards the moral groups ( $M = 6.30, SD = .75; t(63) = 20.95, p < .001$ ). Also, the mean for moral superiority was about six ( $M = 5.98, SD = .90$ ) on an eight-point scale, suggesting that most people think of themselves as more kind, generous, compassionate, and forgiving than the average. For a full report of the means for each predictor and each dependent variable, refer to Table 1.

**The moral licensing effect.** In an attempt to replicate the overall findings of the moral licensing effect on prejudice, an independent samples t-test was employed to detect a difference in prejudice between the moral affirmation and the control conditions. The results revealed no overall effect of moral affirmation on prejudice towards the two groups combined,  $t(61) = -.03, p = .976$ , racial prejudice,  $t(61) = .66, p = .510$ , or moral prejudice,  $t(61) = -.92, p = .362$ . Therefore, these results did not replicate the effects of moral licensing on prejudice.

**The moral affirmation hypothesis.** The moral affirmation hypothesis predicted that relative to the control condition, in the moral affirmation condition, a strong moral identity would relate to greater prejudice. Thus, a multiple regression was conducted to test whether the effects of moral affirmation and moral identity differed for the two types of prejudice. This analysis involved regressing moral and racial prejudice on a Moral Identity x Moral Affirmation interaction with prejudice type as a within-subjects factor. The results indicated that the Moral Identity x Moral Affirmation interaction did not have differential effects on the two types of prejudice,  $F(1, 57) = .33, p = .570$ . Therefore, the two prejudice measures were combined into

one composite measure of prejudice and the Moral Identity x Moral Affirmation interaction on prejudice was tested for both types of prejudice together (for separate tests of the Moral Identity x Moral Affirmation interaction on racial and moral prejudice refer to Tables 2 and 3). The results of this analysis yielded the predicted interaction,  $R^2 = .08$ ,  $F(1, 57) = 4.88$ ,  $p = .031$ . There was no main effect of moral affirmation or moral identity on prejudice,  $\beta = .03$ ,  $SE = .26$ ,  $t(57) = -.11$ ,  $p = .910$ , 95% CI [-.55, .49],  $\beta = -.25$ ,  $SE = .19$ ,  $t(57) = -1.32$ ,  $p = .192$ , 95% CI [-.63, .13] (in order). However, the interaction indicated that, relative to the control condition, in the moral affirmation condition, a strong moral identity related to greater prejudice,  $\beta = .56$ ,  $SE = .25$ ,  $t(57) = 2.21$ ,  $p = .031$ , 95% CI [.08, 1.04] (see Figure 1).

To further test the relation between moral identity and prejudice by moral affirmation condition, simple slope analyses tested and found that the relation between moral identity and prejudice was marginally different than zero in the moral affirmation condition  $R^2 = .12$ ,  $\beta = .31$ ,  $SE = .16$ ,  $t(27) = 1.96$ ,  $p = .061$ , 95% CI [-.01, .63], but not in the control condition,  $R^2 = .05$ ,  $\beta = -.25$ ,  $SE = .20$ ,  $t(30) = -1.25$ ,  $p = .220$ , 95% CI [-.65, .15]. This implies that, without moral affirmation, there is no relation between moral identity and prejudice. Yet, with moral affirmation, a strong moral identity predicts marginally greater prejudice.

**The moral superiority hypothesis.** The moral superiority hypothesis predicted that, at higher levels of moral superiority, a stronger moral identity would relate to greater prejudice. This was also first tested with repeated-measures Multiple Regression, testing for a Moral Identity x Moral Superiority interaction on racial and moral prejudice with prejudice type as a within-subjects factor. The results indicated that the effects of the Moral Identity x Moral Superiority interaction were not different for racial and moral prejudice,  $F(1,57) = 0.00$ ,  $p = .956$ . Therefore, the two types of prejudice were combined into a composite prejudice measure and the

effects of the Moral Identity x Moral Superiority interaction were analyzed for prejudice towards all the groups combined (for separate tests of the Moral Identity x Moral Superiority interaction on racial and moral prejudice refer to Tables 2 and 3). The results of this analysis yielded support for the predicted interaction,  $R^2 = .13$ ,  $F(1, 57) = 5.37$ ,  $p = .024$ . Further analyses indicated no main effect of moral identity,  $\beta = .06$ ,  $SE = .12$ ,  $t(57) = .46$ ,  $p = .645$ , 95% CI [-.30, .18], and a marginal main effect of moral superiority,  $\beta = -.20$ ,  $SE = .12$ ,  $t(57) = -1.71$ ,  $p = .093$ , 95% CI [-.44, .04]. However, this main effect was qualified by the predicted Moral Identity x Moral Superiority interaction on prejudice,  $\beta = .28$ ,  $SE = .12$ ,  $t(57) = .232$ ,  $p = .024$ , 95% CI [.04, .52]. This interaction indicates that, relative to lower levels of moral superiority, at higher levels of moral superiority a stronger moral identity relates to greater prejudice (see Figure 2).

To further determine the relation between moral identity and prejudice at higher levels of moral superiority, simple slope analyses were conducted to test whether the relation between moral identity and prejudice was statistically different than zero at one *SD* above the mean of moral superiority and one *SD* below the mean for moral superiority (Aiken & West, 1991). The results indicated that, at 1 *SD* above the mean, the positive relation between moral identity and prejudice was marginally different from zero,  $B = .15$ ,  $SE = .08$ ,  $t(57) = 1.83$ ,  $p = .072$ , 95% CI [-.01, .31], but not marginally different from zero at 1 *SD* below the mean,  $B = -.002$ ,  $SE = .10$ ,  $t(57) = -.02$ ,  $p = .98$ , 95% CI [-.19, .21]. This shows that, without a sense of moral superiority, moral identity is unrelated to prejudice overall. However, at higher levels of moral superiority, a stronger moral identity relates to marginally greater prejudice overall.

**The moral threat hypothesis.** Finally, the moral threat hypothesis predicted that, at higher levels of moral threat, a strong moral identity would relate to greater prejudice. This was tested with a Repeated-Measures Multiple Regression, regressing racial and moral prejudice on a

Moral Identity x Moral Threat interaction with prejudice type as a within subjects factor. The results indicated that the effects of the Moral Identity x Moral Threat interaction were not different for the two types of prejudice,  $F(1, 57) = .41, p = .525$ . Thus, the moral threat hypothesis was tested for the two types of prejudice combined (for separate tests of the Moral Identity x Moral Threat interaction on racial and moral prejudice refer to Tables 2 and 3). The results of this analysis showed no support for the moral threat hypothesis,  $F(1, 57) = .01, p = .937$ . Further analysis indicated no relation between moral identity and prejudice,  $\beta = .02, SE = .09, t(57) = .29, p = .773, 95\% CI [-.16, .20]$ , and no support for the predicted Moral Identity x Moral Threat interaction,  $\beta = .07, SE = .09, t(57) = .75, p = .458, 95\% CI [-.11, .25]$ . However, there was a strong, positive relation between moral threat and prejudice,  $R^2 = .46, \beta = .73, SE = .09, t(57) = 7.7, p = <.001, 95\% CI [.55, .91]$ .

## **Discussion**

The results of this study indicate that with moral affirmation and moral superiority, a stronger moral identity relates to stronger prejudice. These results imply that participants who have a strong moral identity are more likely to express prejudice when they feel they are sufficiently moral people. Also, the positive relation between moral identity and prejudice in the moral affirmation condition and at higher levels of moral superiority were marginally different than zero, indicating the possibility that moral licensing can contribute to prejudice overall. In general, the directions of the effects were the same regardless of whether participants were evaluating racial or “immoral” groups. Also, tests of the moral superiority and the moral affirmation hypotheses did not have a differential impact on the two different types of prejudice. This interaction between moral identity and moral superiority is particularly striking in light of how moral superiority was measured. Participants indicated whether they were more or less kind,

generous, and forgiving than the average person. This effect demonstrates that a strong moral identity and a strong sense that one is nicer, kinder and more forgiving than others actually relate to an increased expression of prejudice. The effects also attest to the power of moral licensing to increase prejudice for those who place strong importance on their moral principles.

Moral threat, while related to stronger prejudice overall, did not interact with moral identity. This finding can be interpreted in multiple ways. First, it may have been purely methodological in the sense that moral threat and prejudice were measured at the same time and people's responses to these measures may have been affected by one another. Second, because moral licensing is tied to a person's self concept, focusing on the immorality of the out-group may not cause a moral licensing effect. The next two studies follow up on the methodological explanation.

It is also noteworthy that, the effects of moral licensing in this experiment only affected people with a strong moral identity. Overall tests of a main effect of moral affirmation indicated that moral affirmation did not increase prejudice overall, failing to replicate the effects of moral licensing on prejudice. This may be because this moral affirmation manipulation was relatively subtle, indicating that people with a strong moral identity may be sensitive to even extremely subtle forms of moral licensing. Furthermore, the finding that, without moral affirmation and moral superiority a strong moral identity is unrelated to prejudice between groups is also important. It implies that when a person's moral identity is operationalized as moral absolutism, the decrease in prejudice typically associated with moral identity is not observed. In this case moral identity only contributes to greater prejudice.

## Experiment 2

Experiment 1 tested whether moral affirmation, moral superiority, and moral threat moderate the relation between moral identity and prejudice. Experiment 2 tested these same hypotheses, but expanded on them in several important ways. For instance, the literature on moral identity suggests that there are multiple factors that can cause a person to feel that they are a moral person. Therefore, Experiment 2 tested the effects of two different types of moral affirmation on prejudice. In one condition, moral affirmation was manipulated by having participants focus on a time when they did something in line with their own moral principles (moral principle affirmation). In another condition, moral affirmation was manipulated by having participants focus on a time when they did something in service of others' welfare (pro-social moral affirmation).

Also, Experiment 1 did not find that moral threat had a moral licensing effect on prejudice. Tests of this hypothesis, however, may have been skewed by the fact that the moral threat posed by the two sets of out-groups was measured right before participants expressed their overall attitudes towards those groups. Therefore, participants' evaluations of the moral status of the group could have been affected by their general evaluations and vice versa. If participants responded consistently on the prejudice and moral threat measures, it would make it difficult to detect the true effects of moral threat on prejudice. Therefore, Experiment 2 measured participants' perceptions of out-group moral threat and prejudice at different times. Also, the moral threat measure in Experiment 1 asked participants to indicate how moral or immoral they considered the out-groups. Because the moral licensing effect is strongly tied to participants' moral self-concept, the moral threat measure in this experiment captured the extent to which participants viewed these groups as a threat to their personal moral principles.

In addition, Experiment 1 used the moral absolutism measure to capture moral identity. Experiment 2 changed the way that it measured moral identity for two reasons. First, in Experiment 1, moral absolutism had poor alpha reliability ( $\alpha = .62$ ). Second, although moral absolutism measures a commitment to one's moral principles, it does not directly assess the extent to which a person has integrated that commitment into their self-concept. Because moral licensing predicts that the moral self-concept is essential to the moral licensing effect, Experiment 2 used the original moral identity measure that determines the extent to which people integrate their beliefs about what is moral and immoral into their self-concept. In addition, Experiment 2 tested whether there is something unique to affirming a moral self-concept that causes the moral licensing effect, or whether the effects of moral licensing on prejudice occur with any strong motivation to have a positive self-concept. Thus, Experiment 2 included a parallel identity measure that has participants focus on positive, non-moral traits (e.g. intelligence and competence).

Finally, Experiment 1 demonstrated that moral superiority, in general, licenses those with a strong moral identity to express more prejudice. This measure asked participants to focus on whether they were more moral than most people. However, rhetoric about inter-group conflict often focuses on moral superiority to specific out-groups (e.g. the Jews in the Holocaust; Brown, 1999). Therefore, in addition to measuring moral superiority by asking participants to compare themselves to "most people" on the moral traits, Experiment 2 asked participants to indicate if they consider themselves more (or less) moral than the out-groups they would later evaluate.

In sum, Experiment 2 tested the same hypotheses that with moral affirmation, moral superiority, and moral threat at strong moral identity relates to greater prejudice. However, it extends Experiment 1 and strengthens its conclusions by manipulating multiple types of moral

affirmation and measuring moral identity and moral superiority in different ways. Since a number of the measures in this study are designed to test a concept, rather than to create scales and measures, these variations in measurement have the added benefit of ensuring that participants' responses are not tied to the specific materials in Experiment 1. Altogether, Experiment 2 was a single factor, 3-level (moral affirmation type; principled vs. pro-social vs. control) experimental design with prejudice towards racial and immoral groups as dependent variables. Individual differences in general and specific moral superiority and moral threat were included as moderators in the design.

## **Method**

**Participants and procedure.** Ninety-five Introductory Psychology students from UTEP were recruited to participate in a study on attitudes about current events in exchange for course credit. In this experiment, we wanted to ensure that participants were only evaluating racial outgroups and eliminated those participants that belonged to one of the outgroups they would later evaluate from analysis. Thus, the sample was 88% Latino (Mexican American, Mexican National, and Hispanic other than Mexican), and 12% White American, 41% male and 59% female.

When participants signed up for Experiment 2, they were linked to an initial online survey that included moral identity, moral superiority, and moral threat measures (in that order). Participants were asked to complete this preliminary study at least 3 days ahead of time. However, participants had control over the number of days between their Time-1 and Time-2 sessions. Therefore, this was recorded to ensure that the time interval between Time-1 and Time-2 did not influence the results of the study. Then, in the second session, they completed the moral affirmation manipulation and the prejudice measures.

## **Time-1 Materials**

**Moral identity.** Moral identity is defined here as the extent to which a person has integrated their principles about what is moral and immoral into their self-concept. Thus, moral identity was measured using an adaptation of the pro-social moral identity scale to reflect a self-consistent commitment to one's moral principles ( $\alpha = .77$ ). For this measure, students read the following instructions:

Listed below are some moral principles that some people consider important. In the list, identify the principles you consider important. If the moral principles that are most important to you are not on the list, then think of which ones are.

The moral principles that the participants were asked to consider were protecting people from harm, fairness or equality, loyalty, respect for authority, maintaining physical purity, and honesty. These particular principles were drawn from research on the moral principles that people value and were included to provide participants with examples of moral principles they might endorse (Graham, Haidt & Nosek, 2009). Then participants read:

Then, for a moment, visualize in your mind the kind of person who is committed to these principles. Imagine how that person would think, feel, and act. When you have a clear image of what it means to you to believe in these principles, answer the following questions (adapted from Aquino & Reed, 2002):

Participants were then asked to rate their agreement with six items such as, "It would make me feel good to be a person who stands up for these principles" and "my beliefs about these moral principles are an important part of who I am" on a scale from 1 (strongly disagree) to 8 (strongly agree).

**Moral threat measure.** Following the moral identity measure, participants completed a moral threat measure. The moral threat measure was designed to capture the extent to which participants considered particular groups offensive to their personal moral principles ( $\alpha = .90$ ). The directions were slightly different from the first study. Rather than evaluating groups as

moral or immoral, participants were asked to focus on whether these groups were offensive to their own personal moral principles. They were given a list of “immoral” and racial groups including: adulterers, atheists, drunk drivers, Arab-Americans, Wall Street Bankers, racists, illegal immigrants, homosexuals, feminists, Mexican immigrants, Asian Americans, illegal drug users, Middle Eastern Muslims, prostitutes, drug dealers, members of different political parties, Native Americans, politicians, sexists, and Black Americans with the following instructions:

Moral principles are the principles that define our beliefs about right and wrong. On this survey, you will be provided with a list of different groups of people. For each, please rate the extent to which each group behaves in a way that is offensive to your personal moral principles on a scale from 1 (not at all) to 8 (very much). If a group does not offend your moral principles at all, rate them at the low end of the scale. If a group is very offensive to your moral principles, rate them at the higher end of the scale.

**Moral superiority measures.** Moral superiority was measured in two ways. First, the group-specific moral superiority measure allowed participants to express their moral superiority specifically towards the groups they would later evaluate ( $\alpha = .94$ ). Therefore, participants were provided with the same list of groups that appeared in the moral threat measure and were asked to continue to think about the moral principles that are important to them. Based on these principles, participants were asked to indicate how moral they are compared to each group. For example, they rated whether compared to politicians (in general) they are 1 (very immoral) to 8 (very moral). Responses on these items were reverse-scored such that higher scores indicated a stronger sense of superiority towards the out-groups. Secondly, moral superiority was also assessed using the same measure from the first study in which participants were asked to indicate whether they were more (or less) caring, greedy, compassionate, fair, disloyal, hardworking, mean, honest, selfish, kind, generous, helpful, friendly, righteous, and ruthless than most people ( $\alpha = .89$ ).

**Positive self-concept measure.** One of the aims of this study was to control for the possibility that the effects of moral licensing on prejudice stem from an overall motivation to embody positive traits rather than a motivation to be a moral person. Thus, Experiment 2 also included a measure of participants' motivation to embody positive, but non-moral traits ( $\alpha = .79$ ). This measure followed the same format as the moral identity scale. On the survey, participants read: "Listed below are some other characteristics that people consider important. In the list, identify the characteristics you consider important." Participants read a list of traits including intelligent, competent, successful, ambitious, and skilled and then read:

Now, for a moment, visualize in your mind what it means to be committed to having these characteristics. Imagine how a person who is committed to having these characteristics would think, feel, and act. When you have a clear image of what it means to you to have these characteristics, answer the following questions.

With those characteristics in mind, participants responded to the same items that appeared on the moral identity measure ( $\alpha = .80$ ).

## **Time-2 Materials**

At Time-2, participants were told that they would be asked to write about a personal experience and then share their opinions about different groups of people. They were reminded of the confidentiality of their answers and were then randomly assigned to one of three moral affirmation conditions (pro-social moral affirmation, moral principle affirmation, or control). Participants in the pro-social moral affirmation group were then asked to read and respond to the following passage that asked them to focus on their commitment to others' welfare:

To be a moral person means to always be concerned about others' welfare. A moral person will always strive to be caring, generous, and compassionate- even when it is hard to do. Write about a time when you behaved in a moral way.

Participants in the principled moral identity group were asked to read and respond to a passage that asked them to focus on their commitment to their moral principles:

To be a moral person means to always stand up for the moral principles you care about. A moral person will always strive to be good, stand up against evil, and follow standards of what is moral—even when it is hard to do. Write about a time when you behaved in a moral way.

Participants assigned to the control condition read and responded to the same control passage from Experiment 1:

In this study, we are interested in the things students enjoy. Please write a short description of a time when you played a sport or a game that you really enjoyed. Write about what you did and how it made you feel.

**Prejudice measures.** The two dependent measures of moral and racial prejudice followed a similar format to the measures in Experiment 1. There were two differences in the prejudice measures. The first difference involved the item anchors. Experiment 2 sought to reduce participants' reactivity associated with negative and positive evaluations by replacing the item anchors with a thermometer-type scale in which participants rated their feelings towards each group (e.g. illegal immigrants) on a scale from 1 (extremely cold) to 8 (extremely warm; Kawakami, Young, & Dovidio, 2001). The second difference is that the immoral groups prejudice measures included a larger range of out-groups. The racial prejudice measure included Arab Americans, Black/African Americans, Native Americans, and Asian Americans ( $\alpha = .86$ ). The moral prejudice measure included homosexuals, prostitutes, drunk drivers, drug dealers, politicians, Middle Eastern Muslims, adulterers, illegal drug users, Wall Street bankers, feminists, atheists, racists, sexists, illegal immigrants, and members of different political parties ( $\alpha = .90$ ). The groups included in this measure matched those that were evaluated in the moral threat and the group-based moral superiority measures.

## Results

**Data analysis.** The hypotheses for Experiment 2 were also tested with Multiple Regression using the GLM in SAS. Each hypothesis was first tested using a multivariate

approach to test if any of the predictors had differential effects on the two different types of prejudice. If there was no difference, the results were interpreted together. However, the effects of the predictors on each type of prejudice are also reported. Analysis of these results also included several statistical controls. Because the amounts of time that elapsed between Time-1 and Time-2 varied from participant to participant, this information was collected and included as a covariate in the initial test of each hypothesis. Where the number of days between sessions did not account for a significant amount of variance, it was dropped from the model and is not reported. Also, participants completed the moral affirmation manipulation between the moral superiority and moral threat measures from Time-1 and the prejudice measures from Time-2. Therefore, when testing the effects of moral superiority and moral threat on the relation between moral identity and prejudice, we controlled for the effect of the moral affirmation manipulation. Where the moral affirmation manipulation had no effect, it was also dropped from the statistical model.

**Descriptive statistics.** To establish that the predictors, moral threat, moral superiority, and moral identity were unrelated, tests of bivariate correlations between predictors were conducted. The results indicated that moral identity was unrelated to general moral superiority,  $r(94) = .13, p = .209$ , specific moral superiority,  $r(92) = -.03, p = .757$ , and moral threat,  $r(95) = .13, p = .210$ . This indicates that each measure captures different constructs. Also important and contrary to previous research, a strong moral identity was unrelated to prejudice,  $r(95) = .043, p = .679$ . For a full report of intercorrelations among all of the continuous predictors and prejudice in this experiment, refer to Table 4. Finally, similar to Experiment 1, people expressed significantly greater moral prejudice ( $M = 5.48, SD = 1.03$ ) than racial prejudice ( $M = 3.09, SD = 1.36; t(93) = 15.94, p < .001$ ). Also, the mean for general moral superiority was well above the

midpoint ( $M = 6.08$ ,  $SD = 1.29$ ), indicating that most people consider themselves more moral than the average. For a full report the means for all of the predictors and dependent variables, refer to Table 4.

**The moral licensing effect.** The moral licensing effect proposes that, when people feel sufficiently moral, they feel licensed to behave in immoral ways, including expressing greater prejudice. To replicate this effect, we conducted a single factor, 3 level (Moral Affirmation Type; Moral Principle vs. Pro-social vs. Control) ANOVA, testing for differences in prejudice across conditions. There was a marginal effect of moral affirmation on prejudice towards both groups combined,  $F(2, 92) = 2.76$ ,  $p = .068$ . Specifically, participants in the pro-social moral affirmation condition expressed marginally less prejudice ( $M = 3.96$ ,  $SD = 1.00$ ) than participants in the moral principle affirmation condition ( $M = 4.37$ ,  $SD = .84$ ;  $t(66) = 1.70$ ,  $p = .092$ ) and significantly less prejudice than the control condition ( $M = 4.53$ ,  $SD = 1.04$ ;  $t(59) = 2.29$ ,  $p = .023$ ). There was no difference between the moral principle affirmation condition and the control condition,  $t(67) = .68$ ,  $p = .50$ .

**The moral affirmation hypothesis.** The moral affirmation hypothesis predicted that, relative to the control condition, in the pro-social and moral principle affirmation manipulations, a stronger moral identity would relate to greater prejudice. This was tested using a Multiple Regression to regress both types of prejudice on a Moral Identity x Moral Affirmation interaction. The two different types of prejudice were treated as a within subject variable in this analysis. The results of this analysis indicated that the interaction did not have a differential impact on moral and racial prejudice,  $F(2, 86) = 2.03$ ,  $p = .138$ . Therefore, the effects of the Moral Identity x Moral Affirmation interaction were tested on one composite prejudice measure. To test the moral affirmation hypothesis, Multiple Regression was employed to regress total

prejudice on a Moral Identity x Moral Affirmation interaction. The results did not support the predicted interactions for the composite measure of prejudice,  $R^2 = .06$ ,  $F(2, 86) = .53$ ,  $p = .593$ . Follow up analyses further yielded no evidence of a Moral Identity x Moral Affirmation interaction on racial prejudice,  $R^2 = .10$ ,  $F(2, 86) = 1.58$ ,  $p = .212$ ), or moral prejudice,  $R^2 = .02$ ,  $F(2, 86) = .26$ ,  $p = .773$  (for the full source tables for the Moral Identity x Moral Affirmation interactions on total prejudice, racial prejudice, and moral prejudice refer to Tables 5-7[in order]). Thus, there is no evidence that in the two moral affirmation conditions, a stronger moral identity related to greater prejudice.

**The moral superiority hypothesis.** The moral superiority hypothesis predicts that at higher levels of both general and group specific moral superiority, a stronger moral identity will be associated with greater prejudice. This was first tested with a multiple regression, regressing racial and moral prejudice on a Moral Identity x General Moral Superiority interaction with prejudice type as a within-subjects factor. The results indicated that the Moral Identity x Moral Superiority interaction did not have differential effects for the two types of prejudice,  $F(1, 90) = .30$ ,  $p = .584$ . Therefore, the two types of prejudice were combined into one composite measure (for a report of the effects of the Moral Identity x General Moral Superiority interaction and the Moral Identity x Group-Specific Moral Superiority interaction on racial and moral prejudice separately, refer to Tables 8 and 9 [in order]). Another regression was then conducted, regressing composite prejudice scores on the Moral Identity x General Moral Superiority interaction. The results of this test revealed the predicted interaction,  $R^2 = .06$ ,  $F(1, 90) = 4.92$ ,  $p = .03$ . While there was no main effect of moral identity,  $\beta = .04$ ,  $SE = .10$ ,  $t(91) = .41$ ,  $p = .685$ , 95% CI [-.16, .24], and no main effect of moral superiority  $\beta = .01$ ,  $SE = .10$ ,  $t(91) = .12$ ,  $p = .904$ , 95% CI [-.19, .20], the interaction indicated that, relative to lower levels of moral identity, at higher levels

of general moral superiority, a stronger moral identity predicted greater prejudice,  $\beta = .27$ ,  $SE = .11$ ,  $t(91) = 2.34$ ,  $p = .021$ , 95% CI [.05, .48], (see Figure 3).

To further probe this effect, the relations between moral identity and prejudice were tested at 1 *SD* above the mean and 1 *SD* below the mean of general moral superiority. The results of these analyses indicated that at 1 *SD* above the mean of general moral superiority, the relation between moral identity and prejudice is marginally different than zero,  $\beta = .22$ ,  $SE = .12$ ,  $t(91) = 1.86$ ,  $p = .067$ , 95% CI [-.02, .46], but not at 1 *SD* below the mean of general moral superiority,  $\beta = .08$ ,  $SE = .14$ ,  $t(91) = -.57$ ,  $p = .571$ , 95% CI [-.36, .20]. This indicates that, at higher levels of moral superiority, a stronger moral identity relates marginally to stronger prejudice overall.

This pattern was repeated for the effects of moral identity and group-specific moral superiority on total prejudice. The repeated-measures Moral Identity x Group-Specific Moral Superiority interaction did not have a differential impact on racial and moral prejudice,  $F(1, 88) = .40$ ,  $p = .529$ . Therefore, the Moral Identity x Group-Specific Moral Superiority interaction was tested for the two types of prejudice together (for the source tables regarding the effects of the Moral Identity x Group-Specific Moral Superiority interaction on racial and moral prejudice separately, refer to Tables 6 and 7). The results yielded the predicted interaction,  $R^2 = .06$ ,  $F(1, 89) = 4.76$ ,  $p = .032$ . Simple slope analyses indicated no independent effect of moral identity,  $\beta = -.04$ ,  $SE = .11$ ,  $t(89) = -.33$ ,  $p = .740$ , 95% CI [-.26, .18], or group specific moral superiority,  $\beta = -.04$ ,  $SE = .10$ ,  $t(91) = -.41$ ,  $p = .684$ , 95% CI [-.23, .16], but a Moral Identity x Group-Specific Moral Superiority interaction emerged,  $\beta = .23$ ,  $SE = .11$ ,  $t(91) = 2.18$ ,  $p = .032$ , 95% CI [.01, .44]. This provides evidence that, relative to lower levels of moral superiority, at higher levels of group-specific moral superiority, a stronger moral identity relates to greater prejudice.

Additional analyses tested whether the relations between moral identity and prejudice at lower (1 *SD* below the mean) and higher (1 *SD* above the mean) levels for group-specific moral superiority were different from zero. The results indicated that the relation between moral identity and prejudice was not significantly different from zero at either 1 *SD* below the mean for group-specific moral superiority,  $\beta = -.07$ ,  $SE = .15$ ,  $t(89) = -.50$ ,  $p = .621$ , 95% CI [-.37, .23], or 1 *SD* above the mean for moral superiority,  $\beta = .18$ ,  $SE = .12$ ,  $t(89) = 1.56$ ,  $p = .122$ , 95% CI [-.06, .42]. Consequently, it can be concluded that the slope of the relation between stronger moral identity and prejudice at lower and higher levels of moral superiority only differ from each other, not from zero.

**The moral threat hypothesis.** Finally, the moral threat hypothesis predicted that, at higher levels of moral threat, a strong moral identity would relate to greater prejudice. This was tested with a repeated-measures Multiple Regression, regressing racial and moral prejudice on a Moral Identity x Moral Threat interaction with prejudice types as a within subjects factor. The results indicated that the effects of the Moral Identity x Moral Threat interaction were not different for the two types of prejudice,  $F(1, 90) = .16$ ,  $p = .694$ . Thus, the moral threat hypothesis was tested for the two types of prejudice combined. Results from this analysis showed no support for the moral threat hypothesis,  $F(1, 92) = .40$ ,  $p = .548$ . Further analysis indicated no relation between moral identity and prejudice,  $\beta = -.12$ ,  $SE = .21$ ,  $t(92) = -.58$ ,  $p = .563$ , 95% CI [-.54, .30], and no support for the predicted Moral Identity x Moral Threat interaction,  $\beta = .04$ ,  $SE = .07$ ,  $t(92) = .63$ ,  $p = .523$ , 95% CI [-.10, .20]. However, there was a strong, positive relation between moral threat and prejudice,  $R^2 = .19$ ,  $\beta = .37$ ,  $SE = .08$ ,  $t(94) = 4.60$ ,  $p < .001$ , 95% CI [.21, .52]. For the full source tables reflecting the tests of Moral Identity

x Moral Threat interactions on total prejudice, racial prejudice, and moral prejudice, refer to Table 10.

**Control identity results.** An alternative explanation for the effects of moral affirmation (in Experiment 1) and moral superiority on prejudice for participants with a strong moral identity is that these effects might emanate from an overall desire to embody positive traits. Therefore, the moral affirmation, moral superiority, and moral threat hypotheses were re-analyzed using the control identity measure that assessed participants' desire to live up to positive, non-moral traits. If the effects of the motivation to live up to any positive traits has the same effect as the motivation to be a moral person, then there should be a Control Identity x Moral Affirmation interaction, a Control Identity x General Moral Superiority interaction, a Control Identity x Group Specific Moral Superiority interaction, and a Control Identity x Moral Threat interaction. The results of these analyses provided no support for this explanation,  $R^2 = .07$ ,  $F(2, 88) = .44$ ,  $p = .649$ ,  $R^2 = .02$ ,  $F(1, 88) = 0.18$ ,  $p = .670$ ;  $R^2 = .01$ ,  $F(1, 89) = .89$ ,  $p = .347$ , and  $R^2 = .22$   $F(1, 89) = .19$ ,  $p = .664$ , respectively. These results suggest that the moral licensing effect is tied specifically to people's motivation to be moral people, rather than a more general motivation to embody positive traits.

## **Discussion**

The results of this study provide further support for the prediction that, at higher levels of moral superiority, a stronger moral identity relates to greater prejudice. Replicating the effects of Experiment 1, at higher levels of moral identity, moral superiority predicts greater prejudice. Experiment 2 adds to the findings of Experiment 1 by demonstrating that the moral licensing effect of moral superiority remains, regardless of whether a person feels that they are more moral than most people or whether they feel morally superior to the specific groups they evaluated.

Further, the culmination of the findings of Experiments 1 and 2 suggests that moral superiority relates to a greater license to express prejudice towards out-groups. For this effect to emerge, it does not matter whether a strong moral identity is characterized by a strong belief in one's moral principles or the integration of one's moral principles into the self-concept. Finally, moral superiority did not affect people who have a general desire to live up to positive traits in the same way as it affected those with a strong moral identity. These results suggest that the effects of moral licensing on prejudice are tied to one's moral self-concept, rather than a more general positive self-concept.

There was a difference in the effects of the moral affirmation manipulation in the first and second experiments. Moral affirmation increased prejudice in Experiment 1, but not in Experiment 2. This lack of convergence has several potential interpretations. First, this disparity could indicate that moral affirmation only leads to greater prejudice for people with a strong absolutist moral identity, but not for those who see their moral principles as part of their self-concept. Second, this disparity could indicate that the more specific moral affirmation manipulations in Experiment 2 do not have the same effect as the moral affirmation manipulation in Experiment 1. Third, this disparity may indicate that people are unwilling to explicitly express prejudice after talking about their moral principles and moral traits.

Similar to Experiment 1, there was no observed interaction between moral identity and moral threat. These two experiments together suggest that moral threat, unlike moral superiority, does not influence the relation between moral identity and prejudice. Also, the failure of moral identity to correlate with prejudice adds to mounting evidence that a strong moral identity does not predict less prejudice towards this set of out-groups. Furthermore, the effects of moral licensing on prejudice did not emerge in this experiment. In fact, the effects of moral affirmation

on prejudice were opposite to what the moral licensing effect would predict. Participants in the pro-social moral affirmation condition expressed less prejudice than participants in the control condition. While this may be an indictment of the moral licensing effect overall, it may also arise from participants' need for consistency. Simply put, it may be difficult to get participants to admit they are prejudiced after talking about themselves as good people. To account for this possibility, Experiment 3 used an implicit measure of prejudice to determine if the effects of moral affirmation on prejudice are more consistent when the measure of prejudice is not susceptible to participants' conscious control.

### Experiment 3

Research suggests that it may be difficult to detect an existing moral licensing effect on prejudice because participants may be unwilling to express explicit prejudice in general, but especially after talking about specific moral principles and traits (e.g. Fazio, Dunton, Jackson, & Williams, 1995). Experiment 1, which produced an effect of moral affirmation for participants with a strong moral identity, was relatively vague in asking participants to think about a time when they did the right thing. Therefore, in Experiment 2, moral superiority (for those with a stronger moral identity) was subtle enough to license participants to express prejudice on the self report measures, but moral affirmation was not. To avoid the problem of participants adjusting their responses to the prejudice measures, Experiment 3 did not rely solely on explicit measures of prejudice. Instead, an implicit measure (Lexical Decision Task) of prejudice towards one specific group was also included in Experiment 3.

The Lexical Decision Task (LDT) was developed to measure the strength of association between two concepts (Meyer & Schvaneveldt, 1971). The strength of association between two concepts is operationalized as the speed with which a person decides that a string of letters is a word or a non-word after a viewing another word (e.g. HARE/RABBIT). Research shows that when a person has a strong association between two words, they correctly identify a target word as a “word” faster after viewing a related word (Gaertner & McLaughlin, 1983). Thus, the LDT is a useful way to determine the extent to which a person automatically associates out-groups with negative or positive traits.

Experiment 3 predicts that with moral affirmation, moral superiority, and moral threat, a stronger moral identity will relate to greater implicit prejudice. A particularly strong test of this would be to test the effects of moral licensing on prejudice for participants with a strong pro-

social moral identity because this type of moral identity reliably relates to less prejudice (Aquino & Reed, 2002). If affirming a person's pro-social moral identity actually increases implicit prejudice, it would imply that there is a discrepancy between the prejudice people are willing to express and the prejudice they actually experience under moral licensing conditions. It would also imply that moral licensing effects on prejudice are tied to people's automatic attitudes towards outgroups rather than just their willingness to express prejudice.

Experiment 3 also sought to extend the results of the first two studies to the impact of group-based moral identity and group based moral licensing on prejudice. Research reviewed above demonstrates that multiple intragroup processes cause people to base their moral identities on the moral principles of a social ingroup (Cohen, 1998; Cohen et al., 2006, Smith & Hogg, 2008). Thus, Experiment 3's measures of moral identity, moral superiority, and moral threat were basically the same as the measures in Experiments 1 and 2. The main difference between Experiments 1 and 2 and Experiment 3 was that participants were asked to complete the moral affirmation manipulations, the moral threat, moral superiority, and moral identity measures with the moral principles of an important social group in mind.

In sum, Experiment 3 tested the same moral affirmation, moral superiority, and moral threat hypotheses as Experiments 1 and 2. However, it focused on determining the impact of group-based moral affirmation, moral threat, moral superiority and moral identity on implicit and explicit prejudice. Since, methodologically, it is difficult to conduct a Lexical Decision Task to measure attitudes towards a large number of out-groups, Experiment 3 focused on one out-group Middle Eastern Muslims. Including Middle Eastern Muslims as an out-group allows for direct comparisons with earlier research that indicates that pro-social moral identity relates to less prejudice towards Middle Eastern Muslims. Therefore, Experiment 3 predicted that participants a

strong moral identity would relate to greater prejudice when (1) they affirmed the morality of their group, (2) they viewed their group as morally superior, and (3) they felt that the out-group violated an in-group's moral principles. These predictions were tested through a single factor, 3-level design (Moral affirmation type; pro-social vs. moral principle affirmation vs control) with group-based moral identity, moral superiority and moral threat as additional predictors in the design.

## **Method**

**Pretest.** To ensure that participants could correctly identify the ethnicity of the primes in the Lexical Decision Task, 32 Participants were recruited to complete a photograph pretest. In this pretest, participants were shown 10 photographs of Middle Eastern and 10 photographs of Latino people and were asked to identify the ethnicity of the person in each photograph. The pictures were displayed with Superlab 4.0 software (Cedrus, 2009) for the same amount of time they would be displayed in the LDT (350 ms). They were given a list of racial categories (White, Black, Middle Eastern/Muslim, Hispanic, Southeast Asian, etc.) and were asked to press the button corresponding with the ethnicity of the person in the photo they viewed. For eight of the photos (two Middle Eastern males, two Middle Eastern females, two Latino males, and two Latina females), at least 85% of participants correctly identified the person in the photograph as Latino or Middle Eastern. The photographs of the Middle Eastern Muslims that passed the pretest as highly distinguishable from Latinos included some kind of physical marker that the person was Muslim (e.g. women wearing a Hijab). These eight pictures were used as the stimuli for the LDT.

**Participants and procedure.** Based on an a-priori power analysis, eighty-three participants; were recruited from UTEP's Psychology Department's undergraduate research

participant pool in exchange for course credit. Because this experiment tests for differential effects of moral identity and moral licensing on out-group bias relative to in-group bias, only data for Latino Participants was analyzed. Participants were told that they would participate in a study on current events and were linked with the online preliminary survey when they signed up for the experiment. The preliminary survey included the group-based moral identity measure, the group-based moral threat measure, and the two group-based (specific and general) moral superiority measures. Participants were asked to complete the preliminary survey at least 3 days before their scheduled session the date and time that they completed the preliminary survey was recorded. When participants arrived for their scheduled, Time-2 session, they were randomly assigned to one of three moral affirmation conditions (pro-social moral affirmation, moral principle affirmation, or control condition). Following the moral affirmation manipulation, participants completed the LDT and a scale that measured their explicit prejudice towards Middle Eastern Muslims.

### **Time-1 Materials**

**Moral identity.** Group-based moral identity was measured by using an adapted version of the pro-social moral identity scale (Aquino & Reed, 2002). The scale was adapted to measure the extent to which participants have integrated the moral traits of an important social group into their self-concept. Therefore, participants were provided with a list of nine moral traits (caring, compassionate, fair, friendly, generous, hardworking, helpful, honest, and kind). Then, they were asked to rate their agreement with six items such as, “It makes me feel good to be part of a group that has these characteristics” on a scale from 1 (strongly disagree) to 8 (strongly agree;  $\alpha = .85$ ).

**Group-based moral threat measure.** After the participants completed the moral identity measure, they were given a list of the same “immoral” and racial out-groups from Experiment 2.

Participants were instructed to rate the extent to which these groups were offensive to their group's moral principles. For each out-group, participants rated the extent to which the group violated their group's moral principles on a scale from 1 (not at all) to 8 (very much). Although the entire list of out-groups from Experiment 2 was used to prevent the participants from becoming aware that we were measuring their attitudes towards Middle Eastern Muslims in particular, only moral threat for Middle Eastern Muslims was analyzed.

**Group-based moral superiority measures.** Similarly, for the group based-moral superiority measure, participants were provided the same list of groups as in Experiment 2 ( $\alpha = .89$ ). This time, they were asked to compare their in-group with each out-group. Participants were instructed to "Continue to think about the group that has the strongest influence on [their] moral principles and the principles that are important to that group. We would like you to indicate how moral your group is compared to the members of each of these groups." For instance, Participants were asked to respond to the following item: "Compared to politicians, [the members of the group they identified as having a strong influence on their moral beliefs]" are 1 (very immoral) to 8 (very moral).

Since higher levels of both general and group-specific moral superiority interacted with stronger moral identity to produce more prejudice in Experiment 2, general moral superiority was also assessed in Experiment 3. In Experiment 3, Participants evaluated the extent to which the members of their group live up to these moral characteristics compared to members of other groups (in general;  $\alpha = .90$ ).

## **Time-2 Materials**

**Moral affirmation manipulations.** At Time-2, participants were randomly assigned to one of three moral affirmation conditions (group based pro-social moral affirmation, group-based

moral principle affirmation, or control). Participants in the pro-social affirmation condition were instructed to name the social group that had the strongest influence on their ability to be a good, moral person. Then they were asked to read and respond to the following passage:

To be moral means to always be concerned about others' welfare. This means always striving to be caring, generous, and compassionate- even when it is hard to do. Do the members of your group consider it important to live up to these characteristics? In the space below, write about which of these characteristics your group values most. If possible, give examples of ways in which the members of your group display these characteristics.

Participants in moral principle affirmation group were also asked to name the group that has the strongest influence on their moral principles. Participants also read and responded to a similar passage as the pro-social affirmation condition:

To be moral means to always stand up for the moral principles of one's group. This means always striving to stand up for what is right- even if others disagree with the actions of your group. In the space below, write about which moral principles your group values most. If possible, give examples of ways in which the members of your group stand up for their moral principles.

Participants assigned to the control condition read and responded to the following passage:

In this study, we are interested in the groups that students belong to. Please write a short description of a sports team, class, student organization, or club that you belong to. Describe the goals of that group and its members.

The control condition was designed to prime group identity without emphasizing the morality of the participants' groups.

**Implicit measure of prejudice towards Middle Eastern Muslims.** After the moral affirmation manipulation, participants completed the LDT to measure their implicit prejudice towards Middle Eastern Muslims. The LDT included 32 pictures to prime participants' concepts of Middle Eastern Muslims and Latinos. In this set, there were four pictures of Muslim males, four pictures of Muslim females, four pictures of Latino males, and four pictures of Latina

females. There were also 16 filler photographs with pictures of computers, windmills, and cars to help prevent participants from adjusting their responses after becoming aware that this task was intended to measure prejudice towards Middle Eastern Muslims. The trials paired each of these photographs with one of 8 positive words (pure, love, nice, sweet, good, kind, joy, and moral), 8 negative words (hate, hurt, scary, ugly, bad, die, evil, and mean), 8 neutral words (e.g. folder), and (to prevent a “yes” response bias) 24 non-words. These words were pretested in previous research to ensure that participants correctly identify the words as positive, negative, neutral, or non-words.

There were two blocks of 196 trials, for a total of 384 trials. In each block every photo was matched with one positive word, one negative word, one neutral word, and three non-words. Each picture was paired equally with the negative words, positive words, neutral words, and non-words. To control for ethnicity and gender effects, the primes and targets were counterbalanced such that Middle Eastern male primes were matched with the same positive word, negative word, neutral word, and non-words as the Latina female primes. Likewise, Latino male primes were matched with the same words as the Middle Eastern female primes. Then, in the next block, the pairings were switched such that the words that were matched with Latino male primes (and Middle Eastern female primes) in the first block were matched with Latina female primes (and Middle Eastern male primes) in the second block. Participants were randomly assigned to blocks such that half were assigned to do the first block first and half were assigned to do the second block first.

Participants were told that this task was designed to measure how well they could categorize strings of letters as either words or non-words while being distracted by pictures. They were asked to keep one index finger on each of two buttons labeled “yes” (left hand) and

“no” (right hand). Participants were given the opportunity to practice with six of the filler photographs and they were given feedback on whether they completed the task correctly. In each trial, participants viewed one picture for 350 ms followed by a blank screen for 100 ms, and then a letter-string for up to 1500 ms (Neely, 1977). If participants responded before the 1500 ms ended, the string disappeared and the next trial began. If participants did not respond before 1500 ms ended, the next trial began automatically. Each trial was separated by a 2500 ms blank screen (inter-trial interval). Participants’ responses and response latencies were measured using SuperLab 4.0 software and hardware designed to record reaction time (Cedrus, 2009).

**Anti-Middle Eastern Muslim prejudice.** Explicit prejudice towards Middle Eastern Muslims was also measured with an Anti-Muslim prejudice measure (Park, Felix, & Lee, 2007). The anti-Middle Eastern Muslim prejudice measure consists of 20 items and taps into negative stereotypes about Middle Eastern Muslims. This measure instructs participants to rate their agreement with items such as “Muslims as a rule are much more devious than other people” and “Islam, by its nature, is contrary to the American way of life” on a scale from 1 (strongly disagree) to 8 (strongly agree;  $\alpha = .92$ ).

## **Results**

**Data analysis.** All of the reported analyses were simultaneous Multiple Regressions to test the interactions to test the whether moral affirmation, moral superiority, and moral threat moderate the relation between moral identity and anti-Middle Eastern Muslims prejudice. The analyses were conducted using the GLM in SAS. For responses to the LDT, response latencies less than 200 ms were deleted because response times of 200 ms or less typically indicate that participants’ accidentally pressed the button. Also, the response latencies across all conditions and prime types were highly skewed (*Shapiro-Wilk* = .89,  $p < .001$ ). Therefore, to bring these

values into a normal range, outliers 2 standard deviations above the mean were truncated to 2 standard deviations ( $SD = 95.82$ ) above the mean (722 ms).

Implicit prejudice is operationalized in this experiment as (1) faster response times to Middle Eastern prime-negative word pairs relative to Latino prime-negative word pairs and (2) slower response times to Middle Eastern prime-positive word pairs relative to Latino prime-positive word pairs. To capture both faster responses to Middle Eastern prime-negative word pairs and slower responses to Middle Eastern prime-positive word pairs, we constructed difference scores that subtracted the response latencies of Middle Eastern prime-negative word pairs from Latino prime-negative word pairs. For example, if a participant's mean response to the Latino prime-negative word pair was 500 ms and their response to the Middle Eastern prime-negative word pair was 400 ms that would indicate that they were much faster to respond to Middle Eastern prime-negative word pairs relative to Latino prime-negative word pairs indicating prejudice towards Middle Eastern Muslims. Difference scores that subtracted Latino prime-positive word pairs from Middle Eastern prime-negative word pairs (slower positive difference scores) were also constructed. For instance, if participants responded to a Latino prime-positive word pair at 400 ms and a Middle Eastern prime-positive word pair at 500 ms, the difference would be also 100 ms indicating greater prejudice towards Middle Eastern Muslims.

All analyses of the hypotheses initially used repeated measures Multiple-Regression to test for differential effects on these two sets of difference scores. Where there was a significant criterion variable x difference score type interaction, results are presented separately for the two sets of difference scores. If there was no difference, the difference scores were averaged in a way that higher numbers always indicated greater implicit prejudice towards Middle Eastern Muslims. Initial analyses of the moral affirmation, moral superiority, and moral threat

hypotheses controlled for the block participants completed first. Where there was no effect, the block was dropped from the statistical model. Finally, the results for implicit and explicit prejudice are reported separately.

**Descriptive statistics.** To establish that the predictors, moral threat, moral superiority, and moral identity were unrelated, tests of bivariate correlations between predictors were conducted. The results indicated that moral identity was unrelated to group-specific moral superiority,  $r(82) = .09, p = .408$ , and moral threat,  $r(82) = .14, p = .217$ . This implies that each of these measures captures different constructs. However, there was a small correlation between moral identity and general moral superiority,  $r(82) = .24, p = .03$ . Also important and contrary to previous research, a strong moral identity was also unrelated to implicit prejudice,  $r(83) = .08, p = .49$ , and explicit prejudice,  $r(82) = -.05, p = .65$ . For a full report of intercorrelations among all of the continuous predictors and prejudice in this experiment, refer to Table 11. Also, the mean for general moral superiority was well above the midpoint ( $M = 6.42, SD = .92$ , on an 8-point scale), indicating that most people consider their group more moral than the average. For a full report of the means for all of the predictors and dependent variables, refer also to Table 11.

**The moral licensing effect.** The moral licensing effect proposes that, when people feel sufficiently moral, they feel licensed to behave in immoral ways, including expressing greater implicit and explicit prejudice. To replicate this effect, we conducted 2 single factor, 3 level (Moral Affirmation Type; Moral Principles vs. Pro-social vs. Control) ANOVAs, testing for differences in implicit and explicit prejudice across conditions. The results of the ANOVA for implicit prejudice indicated no difference between the experimental conditions,  $F(2, 80) = .32, p = .728$ . Similarly there was no difference in explicit anti-Muslim prejudice across conditions,

$F(2, 79) = .27, p = .762$ . Thus, in this third experiment, no main effect of moral affirmation was observed and the moral licensing effect was not replicated.

**The moral affirmation hypothesis-implicit measure of prejudice.** The moral affirmation hypothesis predicts that in both the pro-social moral affirmation and moral principle affirmation conditions, a stronger moral identity will relate to greater prejudice. Simultaneous Multiple Regression was used to regress implicit prejudice on a Moral Identity x Moral Affirmation interaction. The results revealed the predicted interaction,  $R^2 = .17, F(2, 77) = 7.04, p = .002$  (see Figure 5). Follow up comparisons indicated that there was no main effect of moral identity,  $\beta = .24, SE = .15, t(77) = 1.60, p = .114, 95\% CI [-.06, .53]$ . However, stronger moral identity was related to relatively greater prejudice in the pro-social moral affirmation condition,  $\beta = 1.11, SE = .15, t(51) = 3.65, p < .001, 95\% CI [.81, 1.41]$ , and the principled moral affirmation condition,  $\beta = .94, SE = .28, t(49) = 3.39, p = .002, 95\% CI [.37, 1.50]$ , compared to the control condition. The slope in the principled moral affirmation condition was not significantly different than the slope in the pro-social moral affirmation condition,  $\beta = -.12, SE = .19, t(58) = -.69, p = .494, 95\% CI [-.51, .25]$ . Consistent with the moral affirmation hypothesis, the results displayed in Figure 5 demonstrate that, compared to control, moral identity relates to relatively greater prejudice in both the pro-social moral affirmation and moral principle affirmation condition.

Because approximately half of the participants responded at the highest end of the scale (either a seven or an eight), follow up analyses were conducted, excluding these participants from the analyses. The results indicate that the effect was essentially the same ( $F(1, 48) = 5.04, p = .010$ ), without these participants and the number of participants with scores of seven or above were equally distributed across conditions,  $\chi(41) = 1.11, p = .573$ .

Plots of this effect also indicated the possibility that there were leverage points that may have strongly influenced this interaction. To account for this possibility, the Moral Identity x Moral Affirmation interaction was re-analyzed using Robust Regression. Robust Regression is a technique that is less sensitive to outliers and leverage points in a dataset (Cohen, Cohen, West, & Aiken, 2003). The results of this analysis yielded the same effects as the Ordinary Least Squares Regression analyses. Relative to the control condition, in the pro-social moral affirmation condition,  $\beta = -.77$ ,  $SE = .21$ ,  $\chi(53) = 11.45$ ,  $p < .001$ , 95% CI [.35, 1.20], and the moral principle affirmation condition  $\beta = .80$ ,  $SE = .24$ ,  $\chi(53) = 10.72$ ,  $p = .001$ , 95% CI [.32, 1.28], participants high in moral identity expressed greater implicit prejudice. There was no difference between the slopes in the two moral affirmation conditions,  $\beta = -.11$ ,  $SE = .25$ ,  $\chi(60) = .20$ ,  $p = .651$ , 95% CI [-.61, .39].

To probe the nature of this effect, simple slope analyses were conducted to determine if the relation between moral identity and prejudice in each affirmation condition was significantly different than zero. The results indicated that the positive relation between moral identity and prejudice in the pro-social moral affirmation condition and the moral principle affirmation conditions were non-significant,  $\beta = .14$ ,  $SE = .15$ ,  $t(37) = .92$ ,  $p = .365$ , 95% CI [.16, .44];  $\beta = .11$ ,  $SE = .11$ ,  $t(38) = .90$ ,  $p = .373$ , 95% CI [-.11, .33] (in order). There was, however, a negative association between moral identity and prejudice in the control condition,  $\beta = -.63$ ,  $SE = .28$ ,  $t(35) = -2.22$ ,  $p = .033$ , 95% CI [-1.19, -.06]. Therefore in the control condition, the negative relation between moral identity anti-Muslim prejudice was different than zero.

**The moral superiority hypothesis-implicit measure of prejudice.** The moral superiority hypothesis predicts that at higher levels of both general and group-specific moral superiority, a stronger moral identity relates to greater implicit anti-Middle Eastern Muslim

prejudice. Therefore, we tested, but did not find a Moral Identity x General Moral Superiority interaction on the implicit prejudice measure,  $R^2 = .04$ ,  $F(1, 79) = 1.27$ ,  $p = .260$ . Then the same analysis was conducted with group-specific moral superiority as the moderator. This analysis tested, but did not find the predicted Moral Identity x Group-Specific Moral Superiority interaction on implicit prejudice towards Middle Eastern Muslims,  $R^2 = .02$ ,  $F(1, 79) = .01$ ,  $p = .938$ . Therefore, a sense that one's group is morally superior to others did not moderate the relation between moral identity and prejudice. For the source Tables describing these interactions, refer to Table 12.

**The moral threat hypothesis-implicit measure of prejudice.** Finally, the moral threat hypothesis predicts that, at higher levels of moral threat, a stronger moral identity would relate to greater implicit Anti Middle East Muslim prejudice. To test this, a Moral Identity x Moral Threat interaction was tested. The results yielded no support for the moral threat hypothesis,  $R^2 = .01$ ,  $F(1, 79) = .45$ ,  $p = .504$ . Thus, there is no evidence that at higher levels of moral threat a strong moral identity relates to greater implicit prejudice. For the source table describing this interaction, refer to Table 13.

**The moral affirmation hypothesis-explicit measure of prejudice.** The moral affirmation hypothesis predicted that, in the two moral affirmation conditions, a strong moral identity would relate to greater prejudice. This was test by regressing anti-Middle Easter Muslim prejudice on a Moral Identity x Moral Affirmation interaction. The results of these analyses produced effects opposite to our predictions and also opposite of the effects of moral identity and moral affirmation on the implicit prejudice measure. There was a Moral Identity x Moral Affirmation interaction  $R^2 = .14$ ,  $F(2, 76) = 5.52$ ,  $p = .006$  (see Figure 6). Simple slope analyses indicated no relation between moral identity and explicit prejudice,  $\beta = -.19$ ,  $SE = .19$ ,  $t(76) = -$

1.06,  $p = .295$ , 95% CI [-.57, .19]. However, simple contrasts between slopes revealed that relative to the control condition, in the pro-social moral affirmation condition, a stronger moral identity related to marginally less explicit prejudice towards Middle Eastern Muslims,  $\beta = -1.18$ ,  $SE = .38$ ,  $t(50) = -2.95$ ,  $p = .005$ , 95% CI [-1.94, -.41]. Also relative to the control condition, in the moral principle affirmation condition, stronger moral identity related to relatively less prejudice,  $\beta = -1.18$ ,  $SE = .34$ ,  $t(48) = 3.52$ ,  $p = .001$ , 95% CI [-1.86, -.49]. The slopes were not significantly different between the pro-social moral affirmation and the moral principle affirmation conditions,  $\beta = .05$ ,  $SE = .27$ ,  $t(56) = .20$ ,  $p = .840$ , 95% CI [-.49, .59]. Thus, for participants who affirmed the morality of their group, a strong moral identity related to relatively less explicit prejudice.

To further follow up on this effect, simple slope analyses tested the extent to which the slopes of the relations between moral identity and prejudice were different than zero in each experimental condition. The results of these analyses showed that a stronger moral identity related to marginally more anti-Muslim prejudice in the control condition, ( $\beta = .47$ ,  $SE = .27$ ,  $t(32) = 1.74$ ,  $p = .091$ , 95% CI [-1.86, -.49]), but was unrelated to explicit prejudice in the moral principle affirmation condition, ( $\beta = -.14$ ,  $SE = .12$ ,  $t(36) = -1.11$ ,  $p = .273$ , 95% CI [-.58, -.30]), and the pro-social moral affirmation condition ( $\beta = -.23$ ,  $SE = .18$ ,  $t(35) = -1.29$ ,  $p = .207$ , 95% CI [-.47, .01]).

**The moral superiority hypothesis-explicit measure of prejudice.** The moral superiority hypothesis predicts that a stronger moral identity should interact with moral superiority and relate to greater prejudice towards Middle Eastern Muslims. Therefore, Moral Identity x General Moral Superiority and Moral Identity x Group-Specific Moral Superiority interactions were tested on explicit Anti-Middle Eastern Muslim prejudice. The results indicated

no evidence that at higher levels of moral superiority a stronger moral identity relates to greater prejudice when participants' had the superiority of their group in mind,  $R^2 = .02$ ,  $F(1, 78) = 1.66$ ,  $p = .201$ ;  $F(1, 78) = 2.10$ ,  $p = .152$  (in order; for the source Table describing the details of this interaction, refer to Table 12).

**The moral threat hypothesis-explicit measure of prejudice.** The moral threat hypothesis predicts that at higher levels of moral threat participants high in moral identity will express relatively greater explicit Anti-Middle Eastern Muslim prejudice. The moral threat hypothesis was examined by testing a Moral Threat x Moral Identity interaction on explicit prejudice. The results revealed no evidence that moral threat increases explicit Anti-Middle Eastern Muslim prejudice,  $R^2 = .09$ ,  $F(1, 77) = .20$ ,  $p = .652$  (for the source table describing this analysis in detail, refer to Table 13). Similar to Experiments 1 and 2, however, a strong sense of moral threat from Middle Eastern Muslims related to greater explicit anti-Middle Eastern Muslim prejudice overall,  $\beta = .30$ ,  $SE = .11$ ,  $t(79) = 2.68$ ,  $p = .009$ , 95% CI [.08, .51].

## **Discussion**

The goal of this study was to test whether, with group based moral affirmation, moral superiority, and, moral threat participants higher in moral identity would express greater implicit and explicit prejudice for participants with a stronger moral identity. The strongest test of these effects was to measure pro-social moral identity because, measured in this way, moral identity usually relates to less self-reported prejudice. The results of Experiment 3 suggest that, relative to the control condition, in both moral affirmation conditions, a stronger moral identity related to greater implicit prejudice (moral principle and pro-social moral affirmation). These results are particularly important because they imply that the relation between moral licensing and prejudice is not just about whether participants feel licensed to report more prejudice. Rather, it suggests

that moral license increases the experience of prejudice. However, it is also important to note that neither of the slopes in the moral affirmation conditions were significantly different from zero. This could mean that strong moral identity does not necessarily relate to greater prejudice, but instead eliminates the negative relation between moral identity and prejudice anti-Muslim prejudice observed in the absence of moral affirmation.

However, the analyses revealed strikingly different results for implicit and explicit prejudice. Participants with a strong group-based moral identity expressed less explicit prejudice when they affirmed the morality of their group. This discrepancy can be interpreted in multiple ways. First, the discrepancy may have resulted from an order effect. The central goal of this study was to test whether moral licensing increased implicit prejudice. Therefore, the implicit measure was always presented first. If participants were aware that the LDT measured prejudice towards Middle Eastern Muslims, this awareness could have impacted how they responded on the explicit prejudice measure. Second, it may indicate that when people believe they belong to a moral group, they experience greater prejudice. However, the normative pressures from and the perceived high moral standards of their group may motivate them to express less prejudice. If participants are motivated by group conformity rather than moral identity, it implies that morally affirming one's group is not the best way to reduce prejudice. While a group-based moral identity decreases the expression of prejudice, it may also increase the experience of prejudice. At the very least, this discrepancy highlights the importance of using unobtrusive measures to determine moral licensing effects on prejudice because the need for consistency and group conformity may lead people to report less prejudice.

In Experiment 3, group-based moral superiority did not have the same moral licensing effects observed in Experiments 1 and 2. This discrepancy could also be interpreted in several

ways. First, it may be that, for moral licensing to cause prejudice it must change a person's moral self-concept. Highlighting the superiority of the group may not effectively cause participants to feel individually licensed to express prejudice. Rather, focusing on the moral superiority of the group that participants belong to may have highlighted deficits in their own morality and motivated them to express less explicit prejudice. This does not necessarily mean that belonging to a morally influential social group can prevent a moral licensing effect. Instead, it implies that belonging to a group will only cause a moral licensing effect to the extent that it gives an individual the sense that he or she is sufficiently moral. Similarly, in Experiment 3, moral threat related to explicit (but not implicit) Anti-Middle Eastern Muslim prejudice overall, but moral threat does not change the relation between moral identity and prejudice. This may be further evidence that for the moral licensing effect to increase prejudice in any way, it must have an affirming effect on participants' view of *themselves* as moral people.

Importantly, overall, there was no relation between moral identity and implicit or explicit Anti-Middle Eastern Muslim prejudice overall, which fails to replicate the findings of past research on moral identity and prejudice. Also, moral affirmation did not cause an increase in prejudice, indicating the moral licensing effect has no effect on prejudice towards Middle Eastern Muslims.

## **General Discussion**

The experiments presented here demonstrate evidence that, under conditions of moral licensing, a strong moral identity sometimes relates to greater prejudice. In Experiment 1, with moral affirmation and moral superiority participants higher in moral identity expressed greater prejudice. In Experiment 2, the effect of moral identity and moral superiority on prejudice was found regardless of whether moral superiority was conceptualized as a sense of superiority to people in general or superiority to specific outgroups. In Experiment 3, when participants affirmed their group's morality, stronger moral identity was associated with relatively greater prejudice. These results also identify one scenario in which a strong moral identity related to less prejudice between groups. When participants focused on the morality of their group, a stronger group-focused moral identity related to less explicit prejudice. However, the effect of affirming moral identity on implicit prejudice warns that moral affirmation may decrease the likelihood that participants will express prejudice while increasing participants' experience of prejudice.

### **The Moral Affirmation Hypothesis**

Support for the moral affirmation hypothesis was relatively inconsistent. In Experiment 1, in the moral affirmation conditions, a stronger moral identity related to greater prejudice. In Experiment 2, a stronger moral identity failed to relate to greater prejudice. In Experiment 3, stronger moral identity related to relatively greater implicit prejudice, but relatively less explicit prejudice. The differences across experiments may be attributable to changes in measures. In Experiment 1, moral identity was conceptualized by a strong belief in one's moral principles. Due to the poor alpha reliability of the moral absolutism scale, moral identity was measured instead as a general motivation to live up to one's moral principles in Experiments 2 and 3. The differences may also be attributable to changes in the ways that participants affirmed their moral

selves. In Experiment 1, the moral affirmation manipulation was relatively vague, asking participants to think of a time when they did the “right” thing. In Experiment 2, participants were more specifically asked to think of their moral principles or their moral commitment others’ welfare. These more specific manipulations may have led participants to avoid responding with greater prejudice. This possibility is supported by the fact that, in Experiment 3, the moral affirmation hypothesis tested valid for implicit prejudice.

### **The Moral Superiority Hypothesis**

The results of these experiments lend more consistent evidence for the moral superiority hypothesis. First, the results of the moral superiority hypothesis in Experiments 1 and 2 replicated. Second, the experiments used different measures of moral identity and multiple measures of moral superiority. This suggests that the effects of moral superiority on the relation between moral identity and prejudice are not idiosyncratic to a particular measure of moral identity or a particular type of moral superiority. Nonetheless, the moral superiority effects did not replicate in Experiment 3. There were multiple changes in methodology in Experiment 3 that could account for this change. First, participants were only evaluating one outgroup, rather than multiple outgroups. Second, participants focused on the moral superiority of their group rather than their own moral superiority. This focus on the group rather than the self may have been insufficient to produce a moral licensing effect. Future studies should therefore directly compare the effects of group-focused vs. individually-focused moral superiority to test for differential effects.

### **The Moral Threat Hypothesis**

The relation between moral threat and prejudice were relatively consistent across studies. While a strong sense of moral threat consistently related to greater prejudice, moral threat did not

moderate the relation between moral identity and prejudice. The only exception to this was that moral threat did not relate to greater implicit prejudice. The consistent absence of support for the moral threat hypothesis further reinforces the notion that the positive relation between moral identity and prejudice depends on whether people feel that they, personally, are moral people. The effects of moral licensing on prejudice may be completely independent of people's opinions about the morality of the out-group. Thus, future research on moral licensing effects on prejudice should focus on affirming individuals' personal morality.

### **Replications of Moral Licensing and Moral Identity Effects on Prejudice**

This research was based on past research demonstrating that the motivation to be a moral person (moral identity) related to less prejudice, and the belief that one is sufficiently moral increases prejudice (moral licensing). Bivariate correlations between moral identity and prejudice across the three experiments indicated that moral identity was consistently unrelated to prejudice overall, which call effects demonstrating that moral identity relates to less prejudice into question.

Furthermore, comparisons across moral affirmation conditions indicated that these manipulations alone produced no moral licensing effect on prejudice. In addition, in Experiment 2, pro-social moral affirmation decreased prejudice relative to the control condition. Therefore, overall moral licensing effects failed to replicate in these Experiments. Nonetheless, with moral affirmation and moral superiority, a strong moral identity related to increased prejudice between groups across multiple effects. These findings suggest that there were moral licensing effects on prejudice, but only for participants with a stronger moral identity. Therefore, the manipulations in these experiments may have only been effective for those who are particularly sensitive to

moral licensing effects and it will be critical for future studies to employ stronger moral licensing manipulations.

### **Theoretical Implications**

These results demonstrate that moral licensing may account for the discrepant relations between moral identity and prejudice. Thus far, moral licensing research suggests that the only people who feel morally licensed to express more prejudice are those who are credentialed as non-racist. These results provide some evidence that when one simply thinks of oneself as moral, a strong moral identity relates to greater prejudice. The results also show that for those with a stronger moral identity, thinking of oneself as moral or morally superior leads to greater explicit prejudice. Similarly, thinking of one's group as moral leads to greater implicit prejudice. Moral licensing may also account for the effects of moral superiority on prejudice observed in past research. While Brown (1999) argued that moral superiority increases prejudice, the results presented here indicate that a sense of superiority is not necessary. For some, simply feeling like a moral person produces a moral licensing effect.

In these experiments a stronger moral identity was a contributor to greater prejudice, implying that those with a stronger moral identity may be more vulnerable to moral licensing effects on prejudice. Specifically, people with a stronger moral identity may have more of their self worth tied to whether they feel like good, moral people. Thus, they may be more affected by the sense that they are already moral people. Across several studies, the moral superiority and moral affirmation manipulations changed the direction of the relations between strong moral identity and prejudice.

These results also imply that it is possible to have a strong and active moral identity and still express prejudice. These findings contradict the literature on moral disengagement

indicating that people's moral identities are often disengaged in conflict (Aquino et al. 2007). The results showing that a strong and active moral identity can increase prejudice between groups is consistent with the results of the research on moral disengagement. However, the present results are not consistent with the interpretation of moral disengagement. For instance, research on moral disengagement and conflict finds that "moral justifications" are a good way to increase support for conflict. From this perspective, perpetrators of conflict use moral justification to restructure people's thinking about conflict by invoking sympathy for their political and social causes (Bandura, 2004). In fact, researchers find that moral justifications for conflict are one of the most effective ways to disengage a person's moral identity (McAlister, 2006). The findings from these studies imply that this effect is the result of an active and engaged moral identity rather than a disengaged one.

Last, these studies also have implications for research on prejudice in general. For example, past research shows that self affirmation is a useful approach in reducing prejudice between groups (Fein & Spencer, 1997; Zarate & Garza, 2000). Three studies conducted by Fein and Spencer (1997) showed that giving people the opportunity to affirm their self image decreased prejudice towards negatively-stereotyped groups. To affirm participants' self-image, they had students write about a value that was particularly important to them (e.g. appreciating the arts) and others write about a value that was not important to them. Afterwards, the researcher measured prejudice towards a negatively stereotyped cultural group and found that the students who wrote about an important value expressed less prejudice towards that out-group. Fein and Spencer also found that giving students negative feedback about themselves increased their prejudice towards the cultural out-group. Also, McGregor, Haji, and Kang (2008) showed

that affirming the value of one's group likewise decrease prejudice. In contrast, the results of these experiments indicate that moral self-affirmation increases prejudice.

### **Limitations**

Nonetheless, these conclusions are limited by several factors in these studies. First, in Experiment 2, simply affirming one's morality did not increase prejudice. Future studies should replicate these effects through additional, unobtrusive measures of prejudice and conflict between groups. Also, the relations between moral identity and prejudice between groups did not increase with stronger moral threat. The lack of support for the moral threat hypothesis is best explained by the idea that the moral licensing effect is more tied to a person's view of themselves rather than an out-group. Furthermore, the results of Experiments 1 and 2 showed a strong relation between moral threat and prejudice. It is possible that moral threat and prejudice measures were both tapping into a general, negative attitude towards the outgroups and that the strength of this relation suppressed the contribution of moral identity to the effect. This possibility could be tested in future studies by measuring prejudice after experimentally manipulating moral threat. Similarly, measuring the effects of moral identity in a paradigm that experimentally manipulates moral superiority would strengthen the conclusion that a stronger moral identity greater prejudice when one feels a sense of moral superiority.

### **Future Studies**

Future studies should to extend the effects of moral licensing to other inter-group conflict-related dependent variables. For instance, one study (Shaw, Quezada, & Zárate, 2010) indicates that moral licensing relates to increased support for violent warfare. However, the effects of moral licensing on aggression, inter-group aggression, terrorism, support for terrorism, and participation in violent warfare remain unexplored. In addition, future research should

identify what other factors besides individual and group moral affirmation, moral threat, and moral superiority cause moral licensing effects. For instance, Shaw et al. (2010) also show that religious group identity can relate to stronger moral licensing effects. Also, real-world conflicts indicate that power, status, and leadership within a group-level hierarchy lead to greater prejudice (Pratto, Sidanius, Stallworth, & Malle, 1994). It may be that power and status give people the sense that they are sufficiently moral which may make them more comfortable expressing hostility towards out-groups.

The moral licensing framework would be incomplete without testing the other side as well. Specifically, how can we capitalize on what we know about moral licensing to decrease inter-group conflict? Future studies should manipulate participants' focus on their motivation to be moral vs. the sense that they are already moral. A moral license framework would predict that focusing on the sense that one is already moral would increase prejudice, but that focusing on the motivation to be moral would decrease prejudice. Altogether, these and other studies on a moral licensing account of inter-group prejudice would provide a better understanding of how the people who are the most motivated to be moral are also the most likely to perpetuate hostile relations between groups. It warns that a strong moral identity can lead to greater prejudice and may imply that the people least likely to perpetuate conflict between groups are not the ones with the strongest moral identity, but perhaps those with the strongest moral humility.

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Table 1

*Summary of Intercorrelations, Means, and Standard Deviations for Moral Identity, Moral Threat, Moral Superiority, Racial Prejudice, Moral Prejudice, and Total Prejudice for Experiment 1*

Measure	1	2	3	4	5	6	<i>M</i>	<i>SD</i>
1. Moral Identity	—						3.64	1.27
2. Moral Threat	.05	—					5.01	.56
3. Moral Superiority	-.10	-.07	—				5.97	.91
4. Racial Prejudice	.05	.62*	-.42*	—			3.21	1.03
5. Moral Prejudice	.09	.50*	.32*	.18	—		6.28	.73
6. Total Prejudice	.05	.74*	-.14	.85	.67	—	4.75	.70

*N* = 63

\**p* < .05

Table 2

*Summary of Moral Identity x Moral Affirmation, Moral Identity x Moral Superiority, and Moral Identity x Moral Threat Interactions on Racial Prejudice for Experiment 1*

Source	$\beta$	SE	t	95% CI	Model $R^2$
Moral Identity x Moral Affirmation					
Moral Identity	-.29	.19	-1.53	[-.67, .09]	
Moral Affirmation	.15	.26	.58	[-.67, .37]	
Moral Identity x Moral Affirmation	.19	.26	2.02	[.01, 1.10]	.07 <sup>1</sup>
Moral Identity x Moral Superiority					
Moral Identity	.04	.11	.38	[-.18, .26]	
Moral Superiority	-.49*	.11	-4.61	[-.71, -.27]	
Moral Identity x Moral Superiority	.22*	.11	2.02	[.00, .44]	.30 <sup>2</sup>
Moral Identity x Moral Threat					
Moral Identity	.02	.10	-.25	[-.18, .22]	
Moral Threat	.61*	.10	6.13	[.41, .81]	
Moral Identity x Moral Threat	.09	.10	.86	[-.11, .29]	.40 <sup>3</sup>

$N = 61$

\* $p < .05$

<sup>1</sup>  $F(3, 59) = 1.58, p = .20$

<sup>2</sup>  $F(3, 59) = 6.14, p = .001$

<sup>3</sup>  $F(3, 59) = 13.00, p < .001$

Table 3

*Summary of Moral Identity x Moral Affirmation and Moral Identity x Moral Superiority Interactions on Moral Prejudice for Experiment 1*

Source	$\beta$	SE	t	95% CI	Model $R^2$
Moral Identity x Moral Affirmation					
Moral Identity	-.06	.19	-.33	[-.44, .32]	
Moral Affirmation	-.24	.26	-.93	[-.76, .28]	
Moral Identity x Moral Affirmation	.32	.26	1.23	[-.84, .20]	.05 <sup>1</sup>
Moral Identity x Moral Superiority					
Moral Identity	.05	.12	.39	[-.19, .29]	
Moral Superiority	.28	.12	2.35	[.04, .52]	
Moral Identity x Moral Superiority	.21	.12	1.75	[-.03, .45]	.14 <sup>2</sup>
Moral Identity x Moral Threat					
Moral Identity	.06	.11	.57	[-.16, .28]	
Moral Threat	.51*	.11	4.38	[.29, .73]	
Moral Identity x Moral Threat	.01*	.11	.11	[-.21, .23]	.25 <sup>3</sup>

$N = 61$

\* $p < .05$

<sup>1</sup> $F(3, 59) = .990, p = .400$

<sup>2</sup> $F(3, 59) = 3.57, p = .019$

<sup>3</sup> $F(3, 59) = 6.65, p = .001$

Table 4

*Summary of Intercorrelations, Means, and Standard Deviations for Moral Identity, Control Identity, Moral Threat, General Moral Superiority, Group Specific Moral Superiority, Racial Prejudice, Moral Prejudice, and Total Prejudice for Experiment 2*

Measure	1	2	3	4	5	6	7	8	<i>M</i>	<i>SD</i>
1. Moral Identity	—								7.25	1.01
2. Control Identity	.24*	—							7.15	1.03
3. Moral Threat	.15	.06	—						3.07	1.18
4. General Moral Superiority	.14	.34*	.13	—					6.06	.98
5. Group Specific Moral Superiority	-.01	.19	.20	.19	—				5.02	1.32
6. Racial Prejudice	.00	-.16	.26	-.18	-.15	—			3.07	1.35
7. Moral Prejudice	.10	.07	.38	.32*	.03	.27	—		5.50	1.04
8. Total Prejudice	.06	-.07	.43*	.07	.03	.85*	.74	—	4.32	1.01

*N* = 92

\**p* < .05

Table 5

*Source Table for Moral Identity x Moral Affirmation Interactions on Total Prejudice for Experiment 2*

Source	$\beta$	SE	t	95% CI	Model $R^2$
Control Condition	.60	.19	2.33	[-.32, .71]	.07 <sup>1</sup>
Moral Principle Affirmation	.47	.26	1.77	[-.35, .98]	
Pro-social Moral Affirmation	—	—	—	—	
Moral Identity	-.09	.26	-.40	[-.35, .53]	
Moral Identity x Control	.09	.27	.35	[-.42, .61]	
Moral Identity x Moral Principle	-.24	.35	-.69	[-.93, .45]	
Moral Identity x Pro-social	—	—	—	—	

*Note.* All  $\beta$ s non significant

$N = 93$

<sup>1</sup>  $F(5, 88) 1.23, p = .303$

Table 6

*Source Table for Moral Identity x Moral Affirmation Interactions on Racial Prejudice for Experiment 2*

Source	$\beta$	SE	t	95% CI	Model $R^2$
Control Condition	.46	.26	1.78	[-.06, .98]	.10 <sup>1</sup>
Moral Principle Affirmation	.57*	.26	2.19	[.05, 1.08]	
Pro-social Moral Affirmation	—	—	—	—	
Moral Identity	-.06	.22	-.29	[-.50, .38]	
Moral Identity x Control	-.04	.26	-.14	[-.56, .48]	
Moral Identity x Moral Principle	-.54	.34	-1.56	[-1.21, .14]	
Moral Identity x Pro-social	—	—	—	—	

$N = 93$

\* $p < .05$

<sup>1</sup> $F(5, 88) = 2.16, p = .066$

Table 7

*Source Table for Moral Identity x Moral Affirmation Interactions on Moral Prejudice for Experiment 2*

Source	$\beta$	SE	t	95% CI	Model $R^2$
Control Condition	.36	.27	1.35	[-.17, .90]	.02 <sup>1</sup>
Moral Principle Affirmation	.16	.28	.60	[-.40, .72]	
Pro-social Moral Affirmation	—	—	—	—	
Moral Identity	-.09	.23	-.40	[-.36, .72]	
Moral Identity x Control	.18	.27	.65	[-.56, .48]	
Moral Identity x Moral Principle	.25	.36	.68	[-.46, .97]	
Moral Identity x Pro-social	—	—	—	—	

*Note.* All  $\beta$ s non-significant

$N = 94$

<sup>1</sup>  $F(5, 89) = .31, p = .908$

Table 8

*Summary of Moral Identity x General Moral Superiority, and Moral Identity x Group-Specific Moral Superiority Interactions on Racial Prejudice for Experiment 2*

Analysis	$\beta$	SE	<i>t</i>	95% CI	Model $R^2$
General Moral Superiority					.07 <sup>1</sup>
Moral Identity	-.01	.11	-1.10	[-.20, .19]	
General Moral Superiority	-.20	.12	-1.94	[-.44, .04]	
Moral Identity x General Moral Superiority	.22	.12	1.86	[.00, .43]	
Group-Specific Moral Superiority					.05 <sup>2</sup>
Moral Identity	.08	.11	-.73	[-.14, .30]	
Group-Specific Moral Superiority	-.15	.11	-1.47	[-.37, .07]	
Moral Identity x Group Specific Moral Superiority	.18	.10	1.62	[-.02, .38]	

*Note.* All  $\beta$ s were non-significant.

$N = 92$  for general moral superiority

$N = 90$  for group-specific moral superiority

<sup>1</sup>  $F(3, 89) = 1.89, p = .136$

<sup>2</sup>  $F(3, 87) = 2.07, p = .110$

Table 9

*Summary of Moral Identity x General Moral Superiority, and Moral Identity x Group-Specific Moral Superiority Interactions on Moral Prejudice for Experiment 2*

Analysis	$\beta$	SE	$t$	95% CI	Model $R^2$
General Moral Superiority					.14 <sup>1</sup>
Moral Identity	.02	.10	.19	[-.18, .22]	
General Moral Superiority	-.29*	.10	3.00	[.10, .49]	
Moral Identity x General Moral Superiority	.20	.11	1.82	[-.02, .42]	
Group-Specific Moral Superiority					.03 <sup>2</sup>
Moral Identity	.03	.11	.28	[-.19, .25]	
Group-Specific Moral Superiority	.03	.10	.30	[-.17, .23]	
Moral Identity x Group Specific Moral Superiority	.16	.11	1.41	[-.06, .38]	

$N = 92$  for general moral superiority

$N = 90$  for group-specific moral superiority

\* $p < .05$

<sup>1</sup> $F(3, 89) = 4.99, p = .003$

<sup>2</sup> $F(3, 87) = .07, p = .974$

Table 10

*Source Table for Moral Identity x Threat Interactions on Total Prejudice, Racial Prejudice, and Moral Prejudice for Experiment 2*

Source	$\beta$	SE	<i>t</i>	95% CI	Model $R^2$
Total Prejudice					.19
Moral Identity	.01	.09	.06	[-.17, .19]	
Moral Threat	.41*	.09	4.57	[.23, .59]	
Moral Threat x Moral Identity	.05	.08	.63	[-.11, .21]	
Racial Prejudice					.07
Moral Identity	-.03	.11	-.30	[-.25, .19]	
Moral Threat	.28*	.11	2.60	[.06, .50]	
Moral Threat x Moral Identity	.00	.09	.05	[-.18, .18]	
Moral Prejudice					.15
Moral Identity	.05	.10	.48	[-.15, .25]	
Moral Threat	.37*	.10	3.85	[.18, .57]	
Moral Threat x Moral Identity	.04	.08	.54	[-.11, .20]	

\* $p < .05$

$N = 93$  for racial prejudice

$N = 95$  for total prejudice and moral prejudice

Table 11

*Summary of Intercorrelations, Means, and Standard Deviations for Moral Identity, Moral Threat, General Moral Superiority, Group Specific Moral Superiority, Implicit and Explicit anti-Middle East Muslim Prejudice for Experiment 3*

Measure	1	2	3	4	5	6	7	8	<i>M</i>	<i>SD</i>
1. Moral Identity	—								7.15	1.21
2. Moral Threat	.01	—							1.20	1.64
3. General Moral Superiority	.24*	-.01	—						6.42	.93
4. Group Specific Moral Superiority	.09	-.01	.21	—					4.66	1.22
5. Implicit Prejudice	.08	.04	-.13	-.12	—				-2.65	20.95
6. Explicit Prejudice	-.05	.29*	-.01	-.00	-.10	—			3.97	1.22

*N* = 83

\**p* < .05

Table 12

*Source Table for Moral Identity x General Moral Superiority and Moral Identity x Group-Specific Moral Superiority Interactions on Anti-Middle Eastern Muslim Prejudice for Experiment 3*

Source	$\beta$	SE	t	95% CI	Model $R^2$
General Moral Superiority- Implicit Prejudice					.04 <sup>1</sup>
Moral Identity	.70	.55	1.27	[-.40, 1.79]	
General Moral Superiority	-.14	.11	-1.35	[-.36, .08]	
Moral Identity x General Moral Superiority	-.10	.09	1.27	[-.30, .08]	
Group-Specific Moral Superiority- Implicit Prejudice					.02 <sup>2</sup>
Moral Identity	.04	.37	.11	[-.70, .78]	
General Moral Superiority	-.09	.08	-1.15	[-.25, .07]	
Moral Identity x General Moral Superiority	.01	.08	.08	[-.15, .17]	
General Moral Superiority-Explicit Prejudice					.04 <sup>3</sup>
Moral Identity	.70	.55	1.27	[-.40, 1.79]	
General Moral Superiority	-.14	.11	-1.35	[-.36, .08]	
Moral Identity x General Moral Superiority	-.10	.09	1.27	[-.30, .08]	
Group-Specific Moral Superiority-Explicit Prejudice					.02 <sup>4</sup>
Moral Identity	.04	.37	.11	[-.70, .78]	
General Moral Superiority	-.09	.08	-1.15	[-.25, .07]	
Moral Identity x General Moral Superiority	.01	.08	.08	[-.15, .17]	

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*Note.* All  $\beta$ s non-significant  
 $N = 82$  for implicit prejudice  
 $N = 83$  for explicit prejudice  
<sup>1</sup>  $F(3, 79) = 1.14, p = .339$   
<sup>2</sup>  $F(3, 79) = .60, p = .620$   
<sup>3</sup>  $F(3, 78) = .62, p = .603$   
<sup>4</sup>  $F(3, 78) = .77, p = .515$

Table 13

*Source Table for Moral Identity x Moral Threat Interactions on Implicit and Explicit Anti-Middle Eastern Muslim Prejudice for Experiment 3*

Source	$\beta$	SE	t	95% CI	Model $R^2$
Implicit Prejudice					.02 <sup>1</sup>
Moral Identity	.17	.14	1.28	[-.15, .17]	
Moral Threat	.03	.06	.48	[-.09, .15]	
Moral Identity x Moral Threat	-.08	.07	-1.11	[-.22, .05]	
Explicit Prejudice					.08 <sup>2</sup>
Moral Identity	-.10	.16	-.66	[-.41, .22]	
Moral Threat	.18*	.07	2.63	[.04, .32]	
Moral Identity x Moral Threat	.04	.08	.45	[-.12, .20]	

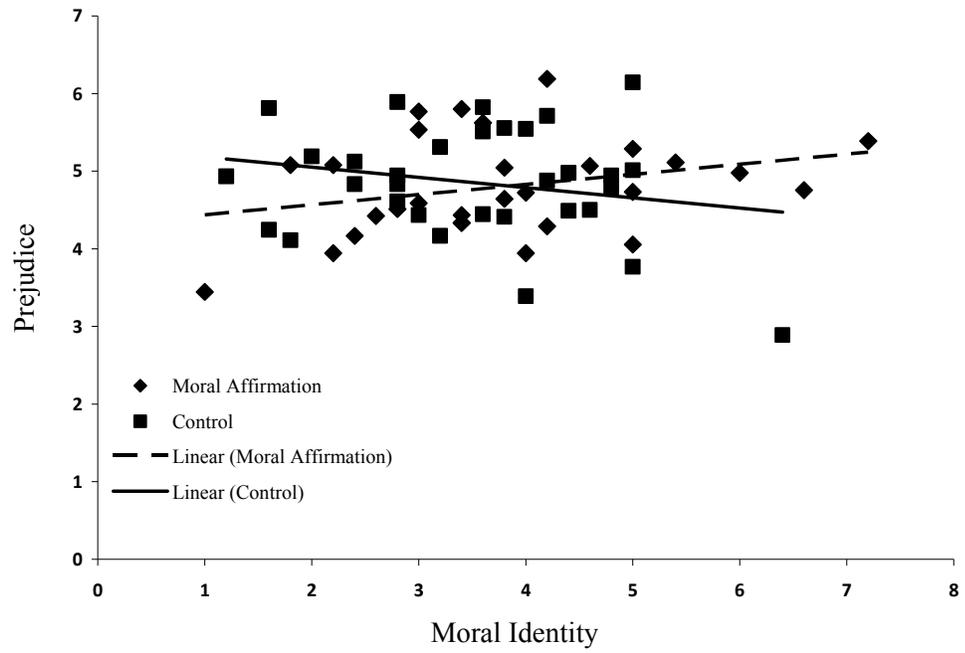
$N = 82$  for implicit prejudice

$N = 81$  for explicit prejudice

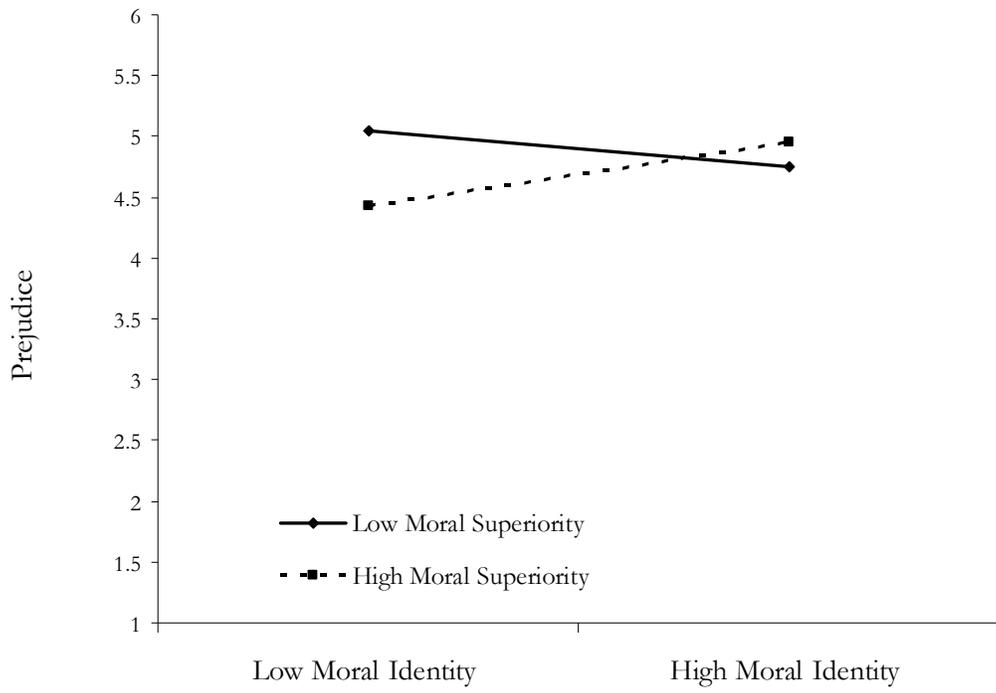
\*  $p < .05$

<sup>1</sup>  $F(3, 79) = .32, p = .811$

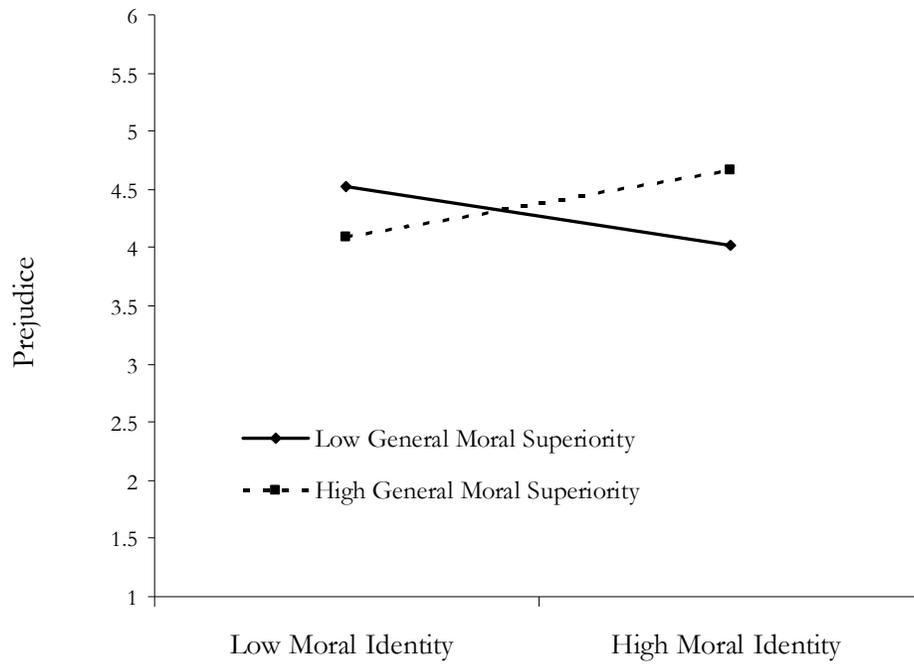
<sup>2</sup>  $F(3, 78) = 1.58, p = .200$



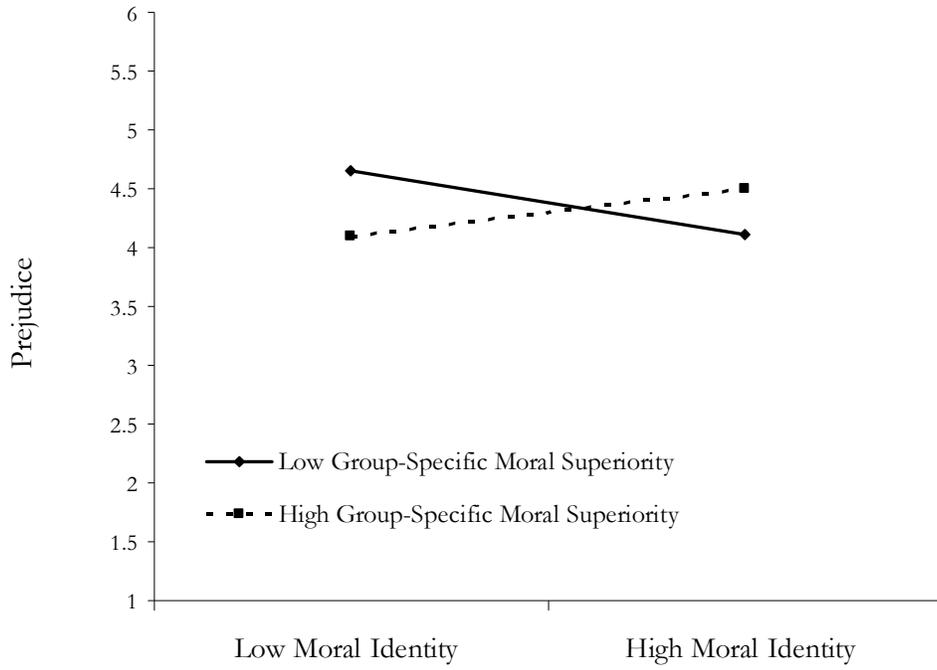
*Figure 1.* The relation between moral identity and prejudice by moral affirmation condition in Experiment



*Figure 2.* The relation between moral identity and prejudice at high and low levels of moral superiority in Experiment 1



*Figure 3.* The relation between moral identity and prejudice at high and low levels of general moral superiority in Experiment 2



*Figure 4.* The relation between moral identity and prejudice at high and low levels of group-specific moral superiority in Experiment 2

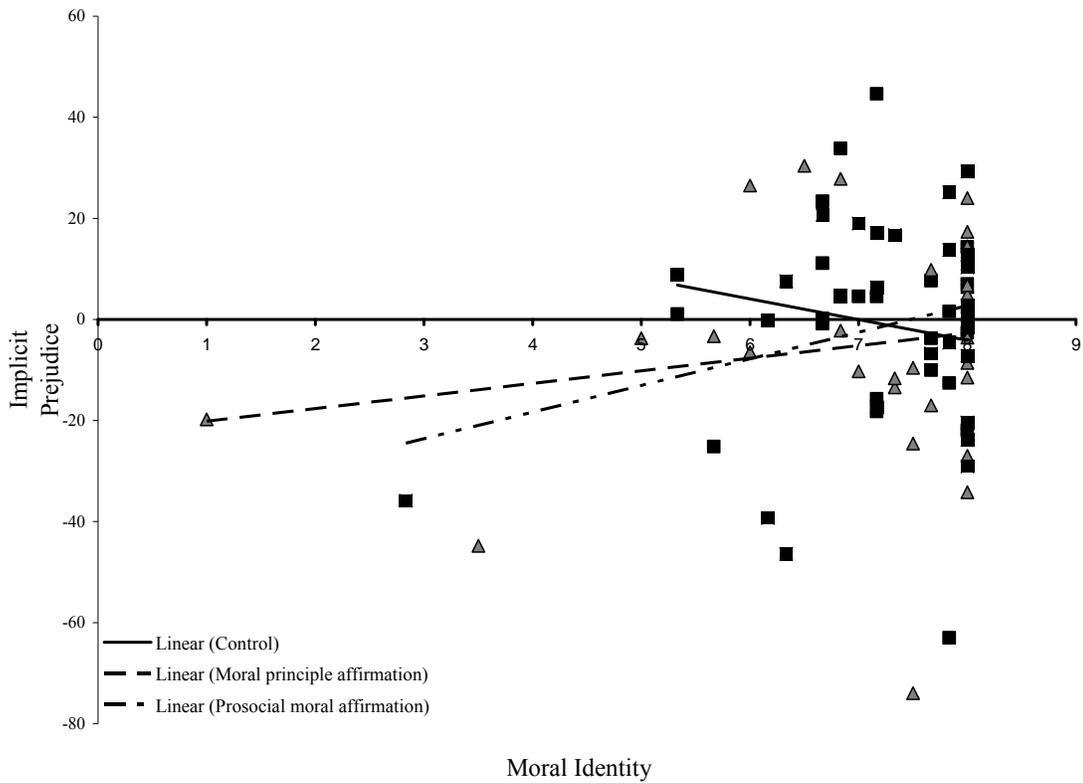


Figure 5. The relation between moral identity and implicit prejudice by moral affirmation condition in Experiment 3

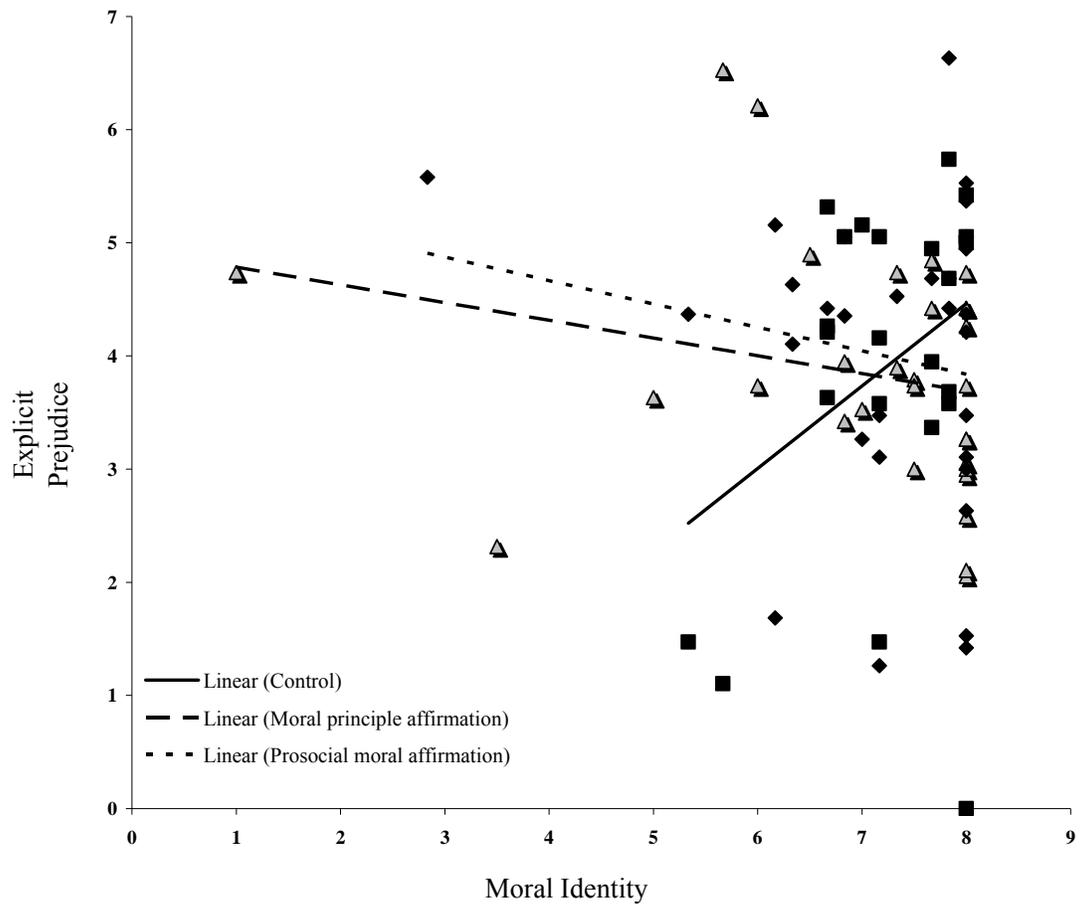


Figure 6. The relation between moral identity and explicit prejudice by moral affirmation condition in Experiment 3

## Vita

Dr. Moira Shaw graduated Phi Beta Kappa from West Virginia University with a degree in Psychology, Spanish and Women's Studies. After graduating, she spent a year as a Rotary Ambassadorial Scholar for Goodwill and Multicultural Understanding in Santa Cruz de la Sierra, Bolivia where she worked with Rotarians on community service projects and studied conflict resolution. She came to the University of Texas at El Paso to study the psychology of religious conflict, with the goal of learning to use science to solve social problems. Dr. Shaw has research publications in *Political Psychology*, *Social Justice Research*, *the Mental Lexicon*, *the Journal of Social Issues*, and *Beyond Hill and Hollow: Original Readings in Appalachian Women's Studies*. She has presented her research at professional meetings, including meetings for the Society for Personality and Social Psychology, the Association for Psychological Science, and the Society for Cross Cultural Research. She also served as a consultant to the Department of Homeland Security, The Hispanic Health Disparities Research Center, CATCH School Health Programs, and as an intern for the Society for the Psychological Study of Social Issues. Finally, she was the instructor of record for Statistical Methods, Social Psychology, and Introductory Psychology courses.

In 2007, she earned a Master's degree in Experimental Psychology for her thesis entitled: "Religion, morality, mandates, and conflict: Exploring the moral mandate effect as a predictor of religious conflict." In 2009, she was selected as a Department of Defense Science, Math, and Research for Transformation scholar and, after defending her doctoral thesis entitled "Prejudice with a conscience: How a strong moral identity relates to greater prejudice," she will work as an Experimental Psychologist for the US Army's Public Health Command.

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