Prejudice Formation and Stereotype Internalization from Media: A Deliberative Moral Judgment Perspective

DISSERTATION

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Abstract

Media are a powerful societal entity, and their portrayals of social groups in a stereotypical and prejudiced manner is a serious issue in need of study. One framework for understanding the influence of prejudice and stereotypes presented in the media is moral judgments. However, moral judgments in media have most often been studied with a spontaneous processing frame and very little attention has been paid to deliberation about moral issues in the media. Three experiments examine deliberative moral judgments about prejudice and stereotyping in the media, and how those judgments translate to internalization of prejudice and stereotypes to influence attitudes and behaviors. The first experiment presented participants with audiovisual scenarios in which a fictional outgroup is derogated, or in which an ingroup is bolstered, or a no message control condition. In addition, the extent that participants were encouraged to deliberate on the message was manipulated. The results of Experiment 1 suggest that deliberation is an important aspect of moral judgments about prejudice and stereotyping, and moral judgments can go on to influence whether the prejudice and stereotypes to which one is exposed is internalized. Compared to a control group who answered judgment and stereotype questions based solely on photographs of the group member, participants who were exposed to either outgroup derogating or ingroup bolstering gave more positive moral judgments about the main actor the more they deliberated about the
content. The moral judgments of participants who were exposed to outgroup derogation or an ingroup bolstering scenario then predicted stereotype internalization and behavior. Experiment 2 replicated the first, but using a more externally valid media-based manipulation of deliberation, using formal features of medium to influence participants’ ability to deliberate. Experiment 2 also varied whether the ingroup characters were unanimous in their stereotyping or if there was dissent, focusing on outgroup derogation. The results of Experiment 2 mirrored Experiment 1, where participants exposed to outgroup derogation gave more positive moral judgments about the main actor the more they deliberated about the content, as well as about the other human character who was more directly involved in the stereotyping. Interestingly, these positive moral judgments of stereotypers predicted lower stereotype internalization and perpetuation. The third experiment tested moral license as a possible explanation of the results of the first two experiments. Results indicated that moral license may play a role in the relationship between moral judgments and stereotype internalization, where people who had the opportunity to affirm their non-prejudice were more likely to judge the ingroup stereotypers positively, and in this case positive moral judgments were associated with more stereotype internalization. The three experiments together inform our understanding of how media narratives can influence moral judgments about prejudice and stereotyping, and how that may in turn influence discriminatory behaviors.
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Prejudice Formation and Stereotype Internalization from Media: A Deliberative Moral Judgment Perspective

Media messages are everywhere, from the billboards we pass on our way to work to the television shows and movies we watch. Unfortunately, media messages often contain elements that stereotype people, or indicate prejudice toward various groups. For example, there is sexism in our advertising (Coltrane & Messineo, 2000), racism in our news (Dixon, 2007), and homophobia in our sitcoms (Kim et al., 2007). All across the spectrum of media messages, it is easy to find examples of prejudice and stereotyping of many different groups and in many different situations. We know a great deal about the stereotyping and prejudicial content in our media messages, as well as some of the ways that exposure to these messages affect viewers (e.g., Mastro, 2009a; Smith & Granados, 2009). Overall, it is a landscape of fairly negative outcomes for both the target group and the people exposed to them in the media.

Previous research on stereotyping and prejudice suggests that a message recipient has a certain amount of control and agency in how the messages affect them. For example, work on motivation and its role in the processing of social information has been an integral part of stereotyping research (Dunton & Fazio, 1997; Fazio, 1990; Plant & Devine, 1997). However, very little attention has been paid to the agency of the media message receiver to make deliberate judgments about the stereotyping and prejudice in the message based on the individual’s moral evaluations about the media event.
In order to understand how a message recipient’s moral evaluations can actively influence the effects of prejudice and stereotyping in the media, it is important to acknowledge different approaches to moral judgments and decision-making and their assumptions about message processing. Many models of moral judgments in general (e.g., the social intuition model; Haidt, 2001), and of media and moral judgments in particular (e.g., the MIME; Taborini, 2011), assume that moral judgments are almost always quick, gut-reactions, and that people are not engaging in extensive thought. However, there has recently been a call for more serious study of the role that careful, deliberative thought can play in moral judgments and decision-making (e.g., Bilandzic, 2011; Gibbs, 2013). The present work therefore focuses on what happens when people are encouraged to make more deliberative judgments about the morally-relevant topic of stereotyping and prejudice in the media.

The present experiments examine the processes whereby people make moral judgments about stereotypes and prejudice in media messages, allowing for a potentially larger role for deliberative thought than current theories posit. The experiments test the relationships between primarily spontaneous or deliberative\(^1\) processing and various aspects of the stereotyping scenario people are presented with in order to gain a better understanding of what happens when instances of stereotyping and prejudice in media messages are processed deliberatively. And, the third experiment will explore dynamic

\(^1\) There are many different words we can use to describe quick, less effortful processing and slower, more effortful processing. The former can be referred to as spontaneous, intuitive, heuristic, or automatic. The latter can be referred to as deliberative, rational, reasoning, or careful. I will try to remain consistent in calling the former “spontaneous” and the latter “deliberative.” However, that is not always the way that literatures describe them and some discrepancies may arise.
aspects of multiple judgments from a moral license perspective. The moral license perspective suggests that when people engage in moral behavior it can make them feel “licensed” to be less moral on the next task because their credentials as a moral person have already been confirmed (Monin & Miller, 2001). This indicates that a prior moral judgment could influence processing of a subsequent one, and this dynamic process is potentially crucial for understanding real-world effects of stereotyping and prejudice in media.

Stereotyping, Prejudice, and Media

Research in the domain of prejudice and stereotyping in media has primarily fixated on identifying the (usually problematic) ways minorities are portrayed in the media or the effects of single exposures to members of minority groups (Mastro, 2009a; Mastro, 2009b; Oliver, Ramasubramanian & Kim, 2007). In addition, there has been some work exploring the relationship between media exposure and stereotypes from a cultivation perspective (Busselle & Crandall, 2002; Oliver et al., 2007; Shanahan & Morgan, 1999). This research focused primarily on beliefs about minorities, rather than on more generalized prejudice or stereotypes (Mastro, 2009b; Oliver et al., 2007). Other research has focused on specific outcomes such as perceptions of criminality (Dixon, 2007) or minorities’ economic situations (Busselle and Crandall, 2002; Gandy & Baron, 1998). The topic of stereotyping and prejudice in the media has been studied in regard to many different groups, including race (Mastro, 2009a; 2009b), sex, sexuality, and gender (Coltrane & Messineo, 2000; Dill & Thill, 2007; Gross, 1991), and disability (Haller,
Importantly, most of this research has not made an express link to moral judgments, though there are some who argue that this is what we have really been studying all along (Haidt & Kesebir, 2010; Schnall et al., 2008). This argument, that stereotyping and prejudice in media are inherently a moral judgment issue is based in the idea that “moral” in the context of judgments and decision-making should be conceptualized simply as pertaining to determining right vs. wrong, without necessarily adding the value judgment of whether the eventual decision is normatively good or bad (Haidt, 2007). Therefore, engaging in stereotyping can be “moral” in the sense that it involves determinations of right vs. wrong.

Given that stereotyping and prejudice can theoretically be approached from a moral judgment perspective, this assumption should be studied more explicitly than it has been in the past. And, in addition to a lack of research on prejudice and stereotyping in the media as a morally-relevant decision process, there is also not much information about the mechanism for how stereotypical and prejudiced messages are internalized to influence attitudes and behaviors. The present experiments will expand previous research on media effects and stereotyping by addressing the topic from a moral judgment perspective.

Moral Judgments as Media Effects

If stereotyping and prejudice in the media can be approached as a moral judgment issue, then it is important to consider the theoretical perspectives that predict how people
make moral judgments about media messages. There are several established theories regarding the relationship between media and morality. Two that are particularly relevant for the present experiments are affective disposition theory (ADT; Raney, 2004) and the model of intuitive morality and exemplar salience (MIME; Tamborini, 2011). Both theories assume that processing of moral media content will be spontaneous, with little role for deliberation except for under very specific circumstances. I will discuss this assumption in more detail after a short discussion of the theories and their predictions.

**Affective Disposition Theory (ADT)**

Affective disposition theory predicts that enjoyment of media comes from liked characters experiencing positive outcomes and disliked characters experiencing negative outcomes (Raney, 2003). Importantly, the theory predicts that people will like characters when they evaluate those characters as moral. The outcome is that moral characters are liked and immoral characters are not liked. The moral judgment is assumed to occur very rapidly, without much thought or deliberation (Raney, 2004; 2011). This is because when good things happen to moral characters and bad things happen to immoral characters it is “morally justified and proper” (Raney, 2011, p. 20), and something that is justified and proper does not require further scrutiny. Any deliberation that does occur should serve to rationalize the initial evaluation; if a liked character does something morally bad then the action will be rationalized to be morally good in order to keep one’s positive opinion of the liked character.

Although this theory has research support, there are some criticisms of its approach. First, spontaneous processing should only be predictive to the extent that
people are content with the evaluation (Hartmann, 2011). At the point that the spontaneous judgments fail to provide an acceptable conclusion is when more reflective considerations should play a role in the decision-making (Hartmann, 2011). In addition, ADT cannot explain why we sometimes enjoy when bad things happen to liked characters and good things happen to disliked characters (e.g., tragedy, horror; Oliver & Bartsch, 2011). And finally, some researchers have argued that with mediated texts, it is actually difficult to get people to process truly spontaneously, meaning that deliberation should occur more often than previously considered (Eno & Ewoldsen, 2010). Therefore, although affective disposition theory (Raney, 2003; 2004; 2011) is highly predictive of some moral judgments from media, there are other cases where it is not. This may be partly because of the limits of the assumption of spontaneous processing.

**Model of Intuitive Morality and Exemplar Salience (MIME)**

The model of intuitive morality and exemplar salience (MIME) is a theoretical framework for predicting moral judgments about morally-relevant media events (Tamborini, 2011; 2013). The MIME is based on the social intuitionist model of moral judgments (Haidt, 2001), that assumes that moral judgments are highly spontaneous, and that people have five main “moral intuitions” that they adhere to: harm/care, justice/fairness, ingroup/loyalty, authority/respect, and purity/sanctity. According to the MIME, when a person is exposed to entertainment narratives that include content exemplars that are relevant to one of the five moral intuitions, the salience of the exemplar and the intuition, and the weights assigned to them, will determine the initial spontaneous appraisal (Tamborini, 2011; 2013).
Within the MIME, the spontaneous judgments that people make during a media event should be the default type of processing. Very little deliberation is necessary. That is, however, unless there is moral conflict involved, such as when a moral consideration conflicts with other (e.g., hedonic) considerations (Tamborini, 2011; 2013). Under these circumstances, the audience may be motivated to engage in more effortful deliberation and possibly even reappraise their initial reaction. In this way, the MIME is a dual process model, offering contexts when processing will be relatively spontaneous or relatively deliberative (Tamborini, 2013). Importantly, within the MIME, spontaneous processing is assumed to be the default type of processing unless there is conflict involved between two or more moral considerations, or between a moral consideration and highly valued non-moral considerations. Only if there is a violation will a more deliberation-based reappraisal possibly be predictive of judgment outcomes. However, it is important to note that even in the case of deliberative judgments, the MIME assumes, as does the social intuitionist model, that deliberative reappraisal will usually lead to reinforcement of the initial spontaneous appraisal, and not to actual change of the moral judgment (Haidt, 2001; Tamborini, 2011; 2013). In fact, the MIME is extremely well thought-out and predictive about what happens in the spontaneous, intuition-based path of media processing, but is rather vague when it comes to predicting what happens in the deliberative path. It is this ambiguous deliberative path that the present experiments seek to begin to clarify.

There are some other criticisms of the MIME’s approach to deliberative processing, aside from the issue of lack of clarity when it comes to what happens when
people deliberate (Bilandzic, 2011). For example, in order for an individual to make a moral decision, it must be clear that the issue at hand is morally-relevant. This may not always be obvious to the casual viewer, meaning that the most obvious moral scenarios, such as norm violations, will disproportionately influence the MIME’s predictions (Bilandzic, 2011). In addition, the MIME diverges from some other approaches to morality when it comes to the role of perspective-taking. Perspective-taking is often considered to be an important element in moral decision-making and behavior (Hoffman, 2001), meaning that the presence or absence of perspective-taking could greatly influence a moral judgment. The MIME really only considers perspective-taking to be important when deliberation occurs, but not when processing is spontaneous. However, perspective-taking is often considered to be a necessary aspect of narrative comprehension (Bilandzic, 2011), and should therefore occur on a highly regular basis. If perspective-taking happens very often, and deliberation is necessary for perspective-taking, then deliberation should also occur very often. This, however, is not allowed for in the MIME (Bilandzic, 2011). In all, Bilandzic’s (2011) major critiques of the MIME condense to one central point: there is not enough importance given to deliberation, despite the evidence that is should and likely does occur quite often during media exposure (Bilandzic, 2011). The present experiments will focus on the role of deliberation in the way people make moral judgments in the context of stereotyping and prejudice.

The MODE Model: A Larger Role for Deliberation

In the cases of both Affective Disposition Theory (Raney, 2004) and the MIME (Tamborini, 2011), some major criticisms involve their general disregard for the potential
importance of deliberative processes. Therefore, it is also necessary to consider dual process models that allow deliberation to take a larger role in predicting judgments. One such model is the Motivation and Opportunity as DEterminants (MODE) model (Fazio, 1990). According to the MODE model, any given judgment will be spontaneous or deliberative based on the individual’s motivation and opportunity to deliberate. When both are present, processing will be deliberative. When one or both are absent, processing will be spontaneous. Importantly, the MODE model provides for a relatively larger role for deliberation than either the MIME or ADT do. Having general motivation and opportunity to deliberate is a much lower threshold to achieve than the more specific scenarios offered by the MIME and the intuitionist model such as conflicting values (Tamborini, 2011; Haidt, 2001). Therefore, it is based on these aspects of the MODE model that I predict that deliberation about stereotyping and prejudice in the media will be fairly easy to encourage, and that it should have interesting effects on stereotype and prejudice internalization.

Spontaneous and Deliberative Processing in Moral Theorizing

I have already outlined the two major morality-based models of media effects (the MIME and ADT), as well as a more general model of spontaneous and deliberative processing (the MODE). Before moving on, however, it is important to consider the theories of morality that some of these models are based on. As previously mentioned, the major basis of ADT and the MIME is the intuition-based moral models. Intuition-based models assume that moral judgments primarily reflect spontaneous processing (Haidt, 2001; Haidt & Bjorklund, 2008a; Haidt & Graham, 2007; Haidt & Joseph, 2007).
However, there are also reasoning-based models that assume that moral judgments primarily reflect deliberate processing (Gibbs, 2013; Hoffman, 2001; Kohlberg, 1976).

*Morality as Spontaneous: Moral Intuition*

The intuition-based perspective of morality, captured in moral foundations theory (MFT; Haidt & Graham, 2007) or the social intuitionist model (SIM; Haidt, 2001; Haidt & Bjorklund, 2008a; Haidt & Joseph, 2007), asserts that moral decision-making is largely spontaneous in nature. People make very fast decisions in a moral decision context, driven by the relative accessibility of the five moral intuitions, or modules. Those five intuitions are harm/care, justice/fairness, ingroup/loyalty, purity/sanctity, and authority/respect (see table 1 for more detail; Haidt, 2007). These intuitions are thought to be largely innate, with some cultural and familial learning to shape which of the five are most prominent and when they are activated (Haidt & Bjorklund, 2008a).

Table 1. Five moral intuitions and their bases.

<table>
<thead>
<tr>
<th>Intuition</th>
<th>Harm/Care</th>
<th>Justice/ Fairness</th>
<th>Ingroup/Loyalty</th>
<th>Purity/Sanctity</th>
<th>Authority/ Respect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basis for decisions when intuition is salient</strong></td>
<td>Was there harm? Is caring or concern for wellbeing involved?</td>
<td>Is there equality and/or impartiality?</td>
<td>Is the in-group favored and/or receiving benefits?</td>
<td>Is something disgusting? Does something violate propriety or is reprehensible?</td>
<td>Are tradition and/or authority figures being followed and respected?</td>
</tr>
</tbody>
</table>
Application and use of the intuition categories. According to the intuition approach, the initial, spontaneous reaction to a moral dilemma will be based on these intuitions, to the extent that each intuition is accessible and applicable (Haidt, 2001; 2007). For example, previous research has found that priming people with disgust makes the purity/sanctity intuition more accessible, and therefore more likely to be used when judging non-harmful but socially undesirable actions (Schnall et al. 2008). In addition, the intuitionist perspective suggests that the norms of the culture in which an individual develops will determine which intuitions are chronically accessible (Haidt, 2001). Whether the given intuition is something the individual adheres to on a chronic basis can increase the likelihood that they will use it (e.g., politically liberal individuals tend to adhere more to harm/care and justice/fairness, but less to the other three; Graham et al., 2009). This is because frequency and recency of activation of a construct increase the likelihood of the construct being accessible in future scenarios (Higgins, Bargh, & Lombardi, 1985).

Deliberation as post-hoc rationalization. Perhaps the most important and heated argument within the moral judgment domain is about the role that deliberative thought plays in moral judgments. Intuition-based proponents claim that most moral decisions consist of spontaneous processing, with very little deliberation involved (Haidt, 2001; 2007; Haidt & Bjorklund, 2008b). Any deliberation, should it occur, will serve only as post-hoc justification for the decision that was arrived at spontaneously. Substantiation for this lies in the statistic that most of the time people cannot offer rational arguments for why they have made an intuitive moral decision, a phenomenon termed “moral
dumbfounding” (Haidt, 2007; Haidt, Bjorklund, & Murphy, 2000). Moral dumbfounding, according to the intuition-based perspective, is confirmation that deliberation has very little importance in determining moral judgments.

There has been some pushback to the argument that moral dumbfounding indicates a lack of deliberation prior to a judgment. In particular, Jacobson (2012) calls moral dumbfounding a particularly pessimistic view of moral decision-making, and brings up methodological issues in the way that moral dumbfounding has been operationalized and measured. Specifically, experimenter pressure and context cues may have stopped participants from arguing to support their opinions (Jacobson, 2012). And in addition, lack of ability to verbalize about rational thought does not preclude the possibility that rational thought could have occurred (Jacobson, 2012). And, previous work on the validity of verbalizations as data indicates that many things can influence how much verbalizations reflect internal processes, including the way the question is asked, whether the verbalization is concurrent or retrospective, and whether the verbalization task actually links correctly back to the original task (Ericsson & Simon, 1980). The intuition-based perspective, however, continues to view deliberation as rare, and as usually resulting in rationalization of the initial reaction (Haidt & Bjorklund, 2008b).

Morality as Deliberative: Moral Reasoning

The moral reasoning perspective (Gibbs, 2013; Hoffman, 2001; Kohlberg, 1976) contrasts with the intuition-based view. The reasoning-based perspective suggests a much larger role for deliberative thought than the intuition-based one allows for. Moral
reasoning was first popularized by Kohlberg (1976), and was recently expanded by Gibbs (2013). The moral reasoning perspective begins with the idea that as children humans are superficial and selfish, but as they mature they develop a more nuanced and other-focused understanding of moral choices. Young children, therefore, tend to make judgments and decisions that are highly focused on the self, with concern for others not a large part of the decision-making process. However, as they develop, children begin to show an increase in perspective-taking and concern for others in their decision-making (Gibbs, 2013).

Eventually, according to the reasoning-based perspective, most people reach a stage known as ideal reciprocity, in which there is an emphasis on fair treatment and maximizing care for others (Gibbs, 2013). Moral judgments and behavior are then based on how sophisticated the individual’s moral reasoning system is, and on the extent of deliberation in a given moral judgment situation. The idea that spontaneous activation could elicit a reaction without deliberate thought is not something that is extensively considered by this perspective, because moral decisions are assumed to be based on reasoned thought and careful consideration of contextual cues. Based on the reasoning system, behavior should be more prosocial and less antisocial as reasoning sophistication and ability increase (Gibbs, 2013). Moral reasoning researchers contend that any antisocial activity engaged in by an otherwise higher-stage adult is due to errors or biases in reasoning. These errors could be caused by a variety of things, such as situational difficulty with perspective-taking (Gibbs, 2013; Hoffman, 2001).
Dual Process Models and Morality

Based on extensive research on dual processing models (e.g., the MODE, Fazio (1990) and the ELM, Petty & Cacioppo, 1986), the most probable answer to this debate is not one or the other, but a combination of the two where sometimes spontaneous processing is more predictive of outcomes and other times deliberation is more predictive. People engage in either or both in different contexts, and pinpointing the moderators and limiting conditions of the relationship between spontaneous and deliberative moral decision-making is a challenge that moral psychologists have begun to turn their focus to. The MIME (Tamborini, 2011; 2013) is a dual process model in that it does allow for some role for deliberative processing, but there are compelling arguments that it does not give the deliberative path quite enough attention in its predictions (Bilandzic, 2011).

Stereotyping and Prejudice as a Moral Issue

I will now turn to a short discussion of how the intuition-based and reasoning-based perspectives of moral judgment view the ways stereotyping and prejudice manifest.

Ingroup and Purity: The Intuitionist Perspective

From the intuitionist point of view, the ingroup/loyalty and purity/sanctity domains are legitimate moral considerations that may have the unfortunate side effect of encouraging stereotyping and prejudice (Haidt & Bjorklund, 2008b). Most of the empirical evidence for a relationship between the ingroup and purity intuitions and prejudice focuses on homosexuality, and specifically gay men, as a target group (Inbar, Pizarro, Knobe, & Bloom, 2009; Lai, Haidt, & Nosek, 2013). These studies have
demonstrated that disgust, something related to the purity intuition, predicts increased prejudice toward gay men (Inbar et al., 2009). In addition, moral elevation, offered as something akin to the opposite of disgust, seems to weakly decrease prejudice toward gay men when compared to a neutral or positive control (Lai et al., 2013). Elevation did not, however, influence prejudice against African Americans, a finding that Lai et al. (2013) explain by claiming that attitudes toward African Americans are not as influenced by disgust as those toward homosexuality are.

A Breakdown in Care and Justice: The Reasoning-Based Perspective

In contrast to the way intuitionists view ingroup and purity considerations and their relationship to stereotyping and prejudice, the reasoning-based perspective sees reliance on ingroup and purity concerns as what happens when there is a fault in the system (Gibbs, 2013). The reasoning-based perspective claims that, given adequate opportunity, a person may deliberate and overcome his or her ingroup and purity instincts. This is the main reason why deliberative and spontaneous processing may predict different judgment outcomes. However, unlike the moral intuitions, moral reasoning and deliberation have been highly understudied in a media effects context. Therefore, the present studies focus on deliberation as a new layer to the foundation laid by the MIME (Tamborini, 2011; 2013) and the more spontaneous, intuition-based perspectives.

The Combined Perspective

There is evidence in previous research on stereotyping and prejudice that both spontaneous and deliberative processes can play a role in predicting when people will
report stereotypical and prejudiced beliefs. As an empirical foundation, consider experiments that found that when not given an opportunity to deliberate, both high- and low-prejudiced participants responded in a stereotype-consistent manner (Devine, 1989). However, once an opportunity to deliberate was presented only the participants who were high in prejudice continued to respond in a stereotype-consistent way, and those low in prejudice did not (Devine, 1989). Follow-up work studied how people who are low in prejudice are able to suppress stereotype activation in order to act in a non-prejudiced manner using brain imaging (Amodio, Devine, & Harmon-Jones, 2008). They found that in low-prejudice people who were internally motivated to avoid being prejudiced (meaning that being egalitarian was important to their own self-concept), the regions of the brain associated with conflict monitoring and control were more activated (Amodio et al., 2008). The assumption was that when conflict and control processes are activated, the controlled process of deliberation is more likely to be occurring. However, when those processes are not activated, processing is most likely the less-controlled spontaneous processing. These results indicate that there is a role for both deliberative and spontaneous thought in judgments about stereotyping and prejudice. The present experiments will explore these issues further in a media effects context.

The Present Experiments

Overall, the major takeaway from previous theorizing and research on stereotyping and prejudice, moral judgments, and media effects is that both spontaneous and deliberative processing should be important. However, so far most research that combines all three domains has focused almost exclusively on the intuitive, spontaneous
part of the puzzle and largely ignored deliberation as an equally important process. The current experiments therefore test the ways that people judge instances of stereotyping and prejudice in media messages, as predicted by the extent of their deliberative processing. In addition, the second experiment tests the ability of the media to influence deliberation through formal features of medium and narrative structure. This will provide information about how these processes could occur in a situation analogous to a real-world experience. It also tests the role of ingroup reactions—specifically, whether all ingroup members agree about the stereotype or if there is a dissenter. And finally, the third experiment examines moral license and the dynamic aspects of media and moral judgments. Media messages are not encountered in a vacuum, and it is important to understand how experiences with a previous judgment might influence later judgments, a topic that has been neglected in both the general morality and the media effects domains (for a discussion of why dynamic effects are important, see Lang & Ewoldsen, 2010). And finally, these experiments explore how deliberation-based moral judgments may be associated with internalization of stereotypes and prejudice in the media, as well as whether people are willing to engage in behavior that perpetuates those stereotypes and prejudice.

Justification of methods

There are important aspects of the methods of the present experiments that should be discussed. First, the groups used as outgroups in the experiments are groups that only exist in fictional media narratives, and not in real life. This allows for experimental testing of the formation of new stereotypes and prejudice from media, a clearer
manipulation of group affiliation, as well as reduces issues of motivation and social desirability bias inherent in most research on real-world intergroup dynamics. This does present a possible threat to external validity; however, internal validity will increase as a result and that is a more important concern given the present focus on theory testing (Mook, 1984). The use of fictional groups is based on previous work examining the creation of a stereotype in a context where the stereotype could not have already existed (Hoffman & Hurst, 1990). Following the assumptions of Hoffman and Hurst (1990) that fictional groups can be one of the best ways to study the specifics of stereotyping and prejudice without as many real-world issues causing bias, the use of fictional groups in the present experiments will provide a cleaner test of how stereotypes and prejudice in the media are first internalized and influence subsequent attitudes and behavior through the potential mechanism of moral judgments.

Second, the experiments employ clips from role-playing video games as stimuli. Video games were chosen for multiple reasons. First, they were chosen for their use of fictional, non-human groups which could be used as target outgroups. Second, video games allowed for a higher degree of control over the dialogue and tone in the clip, given their multiple dialogue options and branches, as well as their ability to include both male and female main characters. And finally, video games have become more narrative-based, and are beginning to include plots which reflect many real-world societal tensions, including issues like stereotyping and prejudice. This reflection of the real world in video game narratives makes them more similar to other, more traditional media such as television and film. When combining this enhanced realism with higher levels of control
over content, video games become the ideal source for stimuli for the present experiments.

Experiment 1

It has already been demonstrated across many studies that stereotyping and prejudice in the media have effects on viewers. This preliminary experiment situates moral judgments and decision-making processes as one possible explanation. The major focus is on better explicating what happens specifically when people deliberate about the situation. Therefore, the five moral intuitions will act as potentially important covariates, but not as predictors. This will allow for testing of the influence of deliberation above and beyond the influence of intuitive judgments.

A major aspect of this first study is to find out the role, if any, for deliberation in the moral judgments about stereotyping and prejudice in the media. The moral intuition perspective asserts that deliberation will only serve to reinforce the initial spontaneous reaction, and any change is likely to be due to social desirability considerations rather than actual change. But there have recently been some arguments that intuition-based models do not give enough credit to deliberative processing (Bilandzic, 2011; Jacobson, 2012). And, there are other models, like the MODE model (Fazio, 1990), that offer deliberation as an important process. In addition, the use of fictional groups in the present experiment should help to mitigate social desirability concerns, as participants should have little social desirability considerations regarding a group that does not actually exist. And, research on prejudice and stereotyping already provides evidence to suggest that deliberation should influence decisions (e.g., those low in prejudice and/or those high in
motivation to avoid prejudice; Amodio et al., 2008; Devine, 1989). Furthermore, other research has also pointed to the idea that deliberation should be able to change moral judgment responses rather than simply justifying a prior intuitive response (Cushman et al., 2006; Greene et al., 2001; 2004). However, although there is a lot of evidence to support a prediction that there will be an effect of deliberation, there is less information to predict the direction of the effect on judgments. Will deliberation increase or decrease moral evaluations of stereotyping? I therefore propose the following hypothesis and research question:

H1: Deliberation extent will predict moral judgments.

RQ1: Will deliberation be associated with positive or negative moral judgments about stereotyping?

A potentially important distinction for predicting moral judgments about members of an outgroup is whether the ingroup-outgroup scenario involves bolstering the ingroup versus derogating the outgroup. Previous work on the moral intuitions has mostly operationalized the ingroup/loyalty intuition in the context of bolstering the ingroup, but not as much in direct derogation of the outgroup (e.g., Joeckel et al., 2012). Identity theory (Hornsey, 2008; Tajfel & Turner, 1986), a theoretical basis often used to explain ingroup-outgroup processes, suggests that ingroup bolstering and outgroup derogating go hand-in-hand. Both are used simultaneously to maintain group identity-based self-esteem (Tajfel & Turner, 1986). For example, previous work has found that when outgroup derogating is often used as a way to bolster the ingroup, especially when the ingroup identity has been threatened (Fein & Spencer, 1997). When the ingroup identity has been
affirmed, however, there no longer seems to be a need to derogate the outgroup (Fein & Spencer, 1997; McGregor, Haji, & Kang, 2008). This relationship between ingroup bolstering and outgroup derogating has been fairly extensively tested in the social identity theory domain, but it is understudied in the moral judgment literature. The possibility remains that exposure to a scenario where the ingroup is specifically derogating an outgroup, as compared to one where the ingroup is bolstering and defending themselves in the face of an outgroup, might be qualitatively different enough to produce different responses. This is an understudied issue, and so I offer a non-directional research question:

**RQ2**: Will judgments of the scenarios differ when comparing the ingroup bolstering to the outgroup derogating scenarios, and/or when comparing both scenarios to a control?

And finally, when it comes to predicting how moral judgments will translate to actual attitudes and behaviors toward the target group, there is some previous research on which to base a hypothesis. Specifically, previous research has focused on prejudice towards gay men as an outcome. In that research, negative moral judgments of gay actions (e.g., two men kissing in public) predicted more negative attitudes toward gay men as measured by an implicit association test (Inbar et al., 2009; Lai et al., 2013). This provides evidence that moral judgments are related to the more attitude-based prejudice; however, there is no evidence to link moral judgments to more belief-based stereotypes. Nevertheless, it does provide a basis for offering a prediction about the influence moral judgments will have on prejudice and stereotyping about the target groups presented in the stimuli:
H2: Moral judgments which are more positive toward ingroup bolstering and to outgroup derogation will be associated with higher internalization of prejudice and stereotypes about the target groups.

Experiment 1 Method

The following are the methods by which the hypotheses and research questions were tested.

**Design.** This experiment employed a 2(Deliberation: high vs. low) by 3(Scenario: bolstering the ingroup vs. derogating the outgroup vs. control) between-subjects design. Deliberation was manipulated by pre-stimulus instructions, telling participants that we were interested in their gut reactions to the scenario and that they shouldn’t spend too much energy thinking about the events (low deliberation), or telling them we were interested in their reasoning associated with the scenario and that they should think hard about the events and picture what they would do in that situation (high deliberation). Scenario was manipulated based on the media clip that participants are randomly assigned to watch. The two target scenarios involved bolstering the ingroup and derogating an outgroup, respectively; the control condition saw no video clip. A no-video control condition was chosen because of the difficulty of presenting an outgroup neutrally. In addition, a no-video control will present a more accurate baseline for attitudes toward and beliefs about each of the target outgroups with no prior information.

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2 Participants were asked at the beginning of the study whether they have previously been exposed to the video games used as stimuli. Those who indicated they have been exposed to *Mass Effect* were assigned a clip from *Dragon Age* within condition, and vice versa. Assignment to condition is still random. Participants who have been exposed to both games were excluded from the data set.
about them, providing a cleaner test of changes between the control condition and the other conditions.

The present experiment used clips from video games where fictional races (e.g., aliens, mages) experience stereotyping and prejudice at the hands of humans. Therefore, humans become the ingroup for participants, and the fictional races become the outgroups. The use of humans as the ingroup and non-humans as the outgroup has been used successfully in past stereotyping research (Ellithorpe, Ewoldsen, & Porreca, under review). Clips from the games were created through the use of cut-scenes and dialogue scenes, and involve little actual gameplay. The stimuli have some ambiguity in them regarding the positivity of the groups presented. For example, in the clips used as outgroup derogation, the main theme of the dialogue is negative toward the target group, but there is a character who briefly interjects to defend the derogated group. As argued by some critics of intuition-based moral judgment theories (e.g., Bilandzic, 2011), ambiguity should serve as a narrative cue for deliberation and should lead to different outcomes for people processing a media message deliberately. Without any ambiguity in the negativity of the outgroup, even those deliberating carefully would have no information with which to plausibly increase the positivity of their evaluation and would have no choice but to report stereotypical beliefs. But if they are given some ambiguity as to the nature of the target group, it should give them a basis for combating stereotyping and prejudice. This type of situation, in which the information about an outgroup is mostly negative but has some ambiguity or ambivalence, can also be considered more analogous to the complex intergroup relations present in the real world. Multiple possible examples were used
within each condition to lessen stimulus sampling concerns (Wells & Windschitl, 1999). The clips were pilot tested ($N = 43$) before the launch of the full experiment.

*Pilot test.* Six potential video clips were pilot tested (three each for ingroup bolstering and outgroup derogating) to ensure a clean manipulation. The ingroup bolstering clips involved the following: a Batari (non-human) accusing humans of spreading a deadly plague from the game *Mass Effect 2*, a human advocate discussing the need for human dominance against the Reapers (non-human) from the game *Mass Effect 2*, and the leader of the Qunari (non-human) accusing humans of being chaotic and needing to be taught the Qunari way of life from the game *Dragon Age 2*. The outgroup derogating clips involved the following: a Quarian (non-human) being accused by a human and another non-human species of stealing money from the game *Mass Effect 2*, Mages (non-human) being accused of using forbidden magic to allow demons to take over the world from the game *Dragon Age 2*, and Qunari (non-human) being accused of religious zealotry and barbarism by a human clergy member from the game *Dragon Age 2*.

Forty-three adults in the general population participated as part of a panel through the survey research firm Qualtrics. Their median age was in the range of 46 to 52 years, and 30 (69.8%) were female. Participants watched a random four of the six videos, each with a main character matching their self-reported sex. Participants then rated the videos on a $0$ (not at all) to $10$ (very much) scale for the following: how much they established prejudice against the target (non-human) group ($M = 5.97$, $SD = 1.52$), how much they established at least one stereotype about the target (non-human) group ($M = 6.39$, $SD = $
1.76), how much the clip made them want to defend humans as a positive group \((M = 5.99, SD = 1.71)\), how much they identified with the human main character \((M = 5.80, SD = 2.28)\), how much they enjoyed the clip \((M = 5.38, SD = 2.44)\), how immersed they felt in the clip \((M = 5.54, SD = 2.26)\), and their emotional reactions to the clip (in this case on a -5 [very negative] to +5 [very positive] scale; \(M = 0.38, SD = 1.82\)).

Differences between conditions were tested using paired samples t-tests. For how much the clip established prejudice toward the target group, the outgroup derogate clips \((M = 6.57, SD = 1.80)\) elicited significantly higher responses than the ingroup bolster clips \((M = 5.54, SD = 2.08)\), \(t(42) = 3.04, p < .01\). Similarly, for how much the clip established at least one stereotype about the target group, the outgroup derogate clips \((M = 6.78, SD = 1.81)\) prompted significantly higher reports than the ingroup bolster clips \((M = 6.10, SD = 2.08)\), \(t(42) = 2.58, p < .05\). There were not significant differences between the outgroup derogate and ingroup bolster clips in defending humans as a positive group (derogate \(M = 6.03, SD = 1.89\); bolster \(M = 5.85, SD = 2.04\) ), \(t(42) = 0.63, p = .54\), identification with the human main character (derogate \(M = 5.74, SD = 2.31\); bolster \(M = 5.76, SD = 2.47\) ), \(t(42) = -0.08, p = .93\), clip enjoyment (derogate \(M = 5.36, SD = 2.48\); bolster \(M = 5.36, SD = 2.72\) ), \(t(42) = -0.30, p = .98\), clip immersion (derogate \(M = 5.37, SD = 2.41\); bolster \(M = 5.61, SD = 2.42\) ), \(t(42) = -1.01, p = .32\), or emotional reactions to the clip (derogate \(M = 0.40, SD = 2.10\); bolster \(M = 0.34, SD = 1.93\) ), \(t(42) = 0.25, p = .80\). The results indicate that the manipulation of prejudice and stereotypes in the outgroup derogate clips was successful, and that the clips are equivalent across conditions.
for other potentially relevant media processing variables such as enjoyment, immersion, and emotion.

Within each condition, there was one video that did not work as closely together with the other two. In the outgroup derogate condition, the clip about the Qunari being religious zealots was significantly lower than the clip about the Quarian being a thief in how much prejudice it established, $t(16) = -3.31, p < .01$, and in how much stereotyping it established, $t(16) = -2.16, p < .05$. It was not significantly different from the Mage clip, but the Mage clip was also not significantly different from the Quarian clip, making the Qunari clip the odd one out. In addition, in the ingroup bolstering condition, the clip with the human talking about Reapers showed no significant differences from the outgroup derogate clips on these two critical items, indicating that it may have elicited some prejudice and stereotyping about Reapers on par with the outgroup derogating clips. Removing these two clips does not change the pattern of significant and non-significant differences between conditions on the pilot test items, and both video games are equally represented within condition in the remaining four clips. Therefore, these two clips were not used in the subsequent studies.

*Study 1 participants.* Participants were 352 adults recruited from the general population through a Qualtrics panel. The median age group was 53-59 years (range 18 to 81 years), and 204 (58%) were female. In actuality 540 participants completed some part of the study (54% female); however, participants were screened out of the final sample of 352 using two techniques. The first is the use of attention checks/disclosure of non-participation (Peifer & Garrett, 2014). An attention check was inserted in the midst of the
10-item transportation scale, stating, “For data quality purposes, please select ‘4’.” Participants who failed to select option four were automatically ejected from the survey ($N = 84$). The disclosure of non-participation was inserted in the demographics section, and stated, “It is vital we only include responses from people who devoted their full attention to this study. In your honest opinion, should we use your data?” Participants who selected “no” were excluded from analysis ($N = 10$). The second technique to screen unsuitable participants was through previous exposure to the two video games from which the clips were taken. It was important that participants did not have previous experience with the groups in the clips. Therefore, if a participant had been exposed to one of the two games he or she would be assigned to watch the clip or answer control questions from the other game after being assigned to condition. However, if a participant had been exposed to both games, he or she was not eligible for the study and was ejected from the survey ($n = 94$).

**Procedure.** Participants completed the experiment electronically, with the cover story that we were interested in processing of and memory for video clips. They provided informed consent electronically, before completing a pre-test that included prior exposure to the video games, how chronically they adhere to each of the five moral considerations, and some short filler items to keep up the cover story that the study was about processing and memory (e.g., self-ratings of memory). They were then presented with the deliberation instruction manipulation, and one of the video clips (in the clip conditions) or went straight to the post-test questions (in the control conditions). Participants who self-identified as female were shown clips and photographs with female main human
characters and those who self-identified as male or other/prefer not to answer \((N = 2)\) were shown clips and photographs with male main human characters. After the video clip participants were asked for their moral judgment of the main character involved in the event (the target outcome), as well as some items asking for memory for details from the stories in order to continue the cover story. Next, participants indicated how much they perceived they thought about the dilemma as a manipulation check of deliberation. Upon completion of the scenarios participants were asked to fill out some measures regarding agreement with stereotyping statements about the groups, behavioral measures, and enjoyment and transportation (in clip conditions only), before being debriefed.

**Measures.** All items were measured on a scale from 0 to 10 unless otherwise specified.

The first measure used in the pre-test part of the study is the moral foundations questionnaire, using the five-factor structure which has been validated across multiple studies as superior to lower-factor models (Graham et al., 2009). The MFQ measures how much people tend to adhere to each of the five moral foundations when making judgments, and was as a covariate in all analyses. The sample statistics for each subscale were as follows: Harm \((M = 7.60, SD = 1.52, \text{Cronbach } \alpha = .70)\), Fairness \((M = 7.18, SD = 1.50, \text{Cronbach } \alpha = .73)\), Ingroup \((M = 6.59, SD = 1.66, \text{Cronbach } \alpha = .73)\), Authority \((M = 7.10, SD = 1.50, \text{Cronbach } \alpha = .72)\), and Purity \((M = 6.68, SD = 2.04, \text{Cronbach } \alpha = .85)\).

The filler measure in the pre-test was global self-ratings for memory (4 items; Crook & Larrabee, 1990), and has been found to be correlated with a number of
outcomes associated with memory. Global self-rating for memory ($M = 6.38$, $SD = 1.88$, Cronbach $\alpha = .86$) was chosen to protect the cover story and decrease participant suspicion.

Participants were also asked their level of prior exposure to the video games used in the stimuli, answering with one of the following for each of the two games: “Yes, I have played at least one Mass Effect/Dragon Age game, Yes, I have watched someone else play at least one Mass Effect/Dragon Age game, No, I have never played or watched someone else play any Mass Effect/Dragon Age games, I’m not sure if I have ever played or watched someone else play a Mass Effect/Dragon Age game.” As previously mentioned, participants who indicated they had been exposed to one game (defined as having played or having watched someone else play) were assigned to a clip from the other game within condition ($N = 47$); those who have been exposed to both were filtered out completely ($N = 94$).

After watching the video clip (or not, in the case of the control condition), participants were asked to judge the actions of the main actor. In the ingroup bolster condition this was the ingroup member who is defending humans, and in the outgroup derogating condition it was the ingroup member who is defending the non-human outgroup. Participants were given a photograph (screen shot) of the character for reference. Those in the clip conditions were told “This is [character name], a character in the clip you just watched. Please rate his/her actions in the clip on the following dimensions.” Those in the control condition were told “This is [character name], a character in the Mass Effect/Dragon Age game series. Based on this photograph, rate
his/her likely actions on the following dimensions.” Participants rated the actions on an 11-point Likert scale on the two dimensions of extremely wrong – perfectly OK and strongly disapprove – strongly approve based on previous work on moral judgments (Schnall et al., 2008). In addition, they were asked whether the actions were extremely prejudiced – extremely unprejudiced. Sample statistics for these three items were as follows: $M = 7.21$, $SD = 2.12$, Cronbach $\alpha = .92$.

They were then given four questions asking them to recall details from the scenario, to continue the cover story that the study is about memory. Participants were also asked to answer a scale measuring their deliberation during the clips as a manipulation check for deliberation (3 items, $M = 7.67$, $SD = 1.95$, Cronbach $\alpha = .83$; Barden & Petty, 2008). And finally, participants answered a single item assessing enjoyment (“How much did you enjoy watching the clip?” Green, Brock, & Kaufman, 2004; $M = 6.37$, $SD = 3.06$), as well as a scale assessing their levels of transportation (Green & Brock, 2001; $M = 5.58$, $SD = 1.70$, Cronbach $\alpha = .82$).

Participants were then asked to indicate agreement with a list of stereotypes about the target group, four of which were general and based on Devine (1989): “[Group] are violent”, “[Group] are dirty”, “[Group] cannot be trusted”, and “[Group] are uneducated”, and two of which were specific to the group presented in the clip: “Quarians are vagrants”, “Quarians are more likely to steal than other groups are”, “Mages are dangerous”, “Mages are more likely to deal with demons than other groups are”, “Qunari are dangerous zealots”, “Qunari are more likely to harm society than other groups are”, “Batarians are dangerous”, and “Batarians are more likely to release a plague than other
groups are”. Participants also indicated their agreement with three affective (prejudice) items regarding the group, “I dislike [Group]”, “[Group] are harmful to society”, and “[Group] make me feel uneasy”, and three behavioral intentions regarding hypothetical interactions with the group, “If I met a [Group member] I would be friendly (reverse scored)”, “I would not let a [Group member] near my family”, and “I would tell my friends to stay away from [Group]”. The entire scale of 12 items was highly reliable as a single scale, and so was analyzed as such ($M = 4.75$, $SD = 2.12$, Cronbach $\alpha = .93$).

Additionally, two questions assessing actual behavior were asked. The first was “the next participant who fills out this survey will have to watch a video clip. Of the following clip titles, please choose the one the next participant will watch.” There were three choices, one positive (“the wisdom of [non-human group]”), one negative (“the trouble caused by [non-human group]”), and one neutral (“all about the [non-human group]”), and the choices were coded with the negative choice as negative one, neutral choice as zero, and positive choice as positive one ($M = 0.07$, $SD = 0.77$). The other behavioral measure was open-ended response, prompted by “Picture a scenario in which you have been chosen to write a screenplay about [Group]-Human relations. Please describe the summary of your screenplay.” Of the final 352 participants, 226 (73%) filled in something fitting the topic. Participants were excluded if they left the item blank or wrote something indicating they were passing on the item (e.g., “I am not a writer” and “I wouldn’t know what to say”). The qualifying responses were coded by a research assistant who was blind to condition as negative one if they were negative toward the outgroup (e.g., “the Qunari invade and enslave all the humans”), as zero if neutral (e.g.,
“Quarians and Humans interact with each other”), and as positive one if positive toward the outgroup (e.g., “Batarians and Humans find their common ground and work together to save planet Earth”) \((M = 0.08, SD = 0.83)\). The post-test measures were meant to capture the extent to which participants have internalized and are willing to perpetuate the prejudices and stereotypes that they were presented. Finally, participants were asked for demographics information and the disclosure check, and were probed for suspicion, before being debriefed.

**Experiment 1 Results**

For purposes of analysis the scenario conditions were dummy coded such that the control condition was the reference condition for comparison (i.e., for D1 the outgroup derogate condition was coded as one and the other two as zero, and for D2 the ingroup bolster condition was coded as one and the other two as zero).

**Probe for suspicion.** The probe for suspicion was coded by a research assistant who was blind to condition such that key words associated with the true focus of the study (e.g., “prejudice”, “race relations”) were coded as “suspicious”. Of the 352 participants, 43 (12.2%) exhibited suspicion that the true purpose of the study had to do with prejudice, stereotyping, and/or race relations. A binary logistic regression was used to check for differences in suspicion by condition, due to the dichotomous nature of the suspicion check coding. There were no significant direct effects of deliberation, \(B = 0.08, \text{Wald}(1) = 0.19, p = .67\), outgroup derogation, \(B = -2.81, \text{Wald}(1) = 1.18, p = .28\), or ingroup bolstering, \(B = -2.98, \text{Wald}(1) = 2.64, p = .26\). There were also no differences in how suspicious a participant was for the interaction between deliberation and the dummy
code for outgroup derogation, Nagelkerke’s $R^2 = .08$, $B = 0.33$, Wald(1) = 1.45, $p = .23$, nor the interaction between deliberation and the dummy code for ingroup bolstering, $R^2 = .08$, $B = 0.38$, Wald(1) = 1.86, $p = .17$. Independent samples t-tests indicated that there was a significant difference between those who were coded as suspicious and those who were not on their responses to the stereotype internalization questions, $t(350) = 3.45, p < .001$. There were no significant differences on moral judgments, $t(350) = 1.41, p = .16$.

Due to the significant effect of suspicion on stereotype internalization and to decrease the likelihood that suspicion and subsequent motivation influenced the results, the 43 participants who exhibited suspicion were removed from the analyses, leaving 309 participants (57.6% female).

**Manipulation check.** The manipulation check for the deliberation instructions revealed a marginally significant difference in deliberation amount when comparing the low deliberation condition ($M = 7.47, SD = 2.07$) to the high deliberation condition ($M = 7.86, SD = 1.81$), with Levene’s test for equality of variances significant at $F = 5.62, p < .02$, $t(300.06) = -1.75, p = .08$. Because the manipulation check was not significant at the standard $p < .05$ level, the manipulation check measure of deliberation was used in place of the manipulation conditions in analyses including deliberation. The replacement of a coded condition variable with a continuous manipulation check variable has been argued to be a stronger and more reliable way of dealing with a predictor (O’Keefe, 2003).

According to O’Keefe’s (2003) argument, what is important is the psychological state produced, and not necessarily the means through which it was influenced. Therefore, I contend that using the manipulation check in place of the high/low deliberation condition
is a valid way to analyze the present results given the marginal difference between manipulation conditions. However, the correlational nature of this measure means that causal conclusions are more difficult to make. Outcomes associated with the manipulation check for deliberation should thus be taken with this limitation in mind.

*Testing for clip differences within condition.* In order to test for differences between the clips within condition on scenario judgments, a one-way univariate ANOVA was run with clip (or group, in the control condition) as the predictor and controlling for deliberation, scenario condition, and the five moral intuitions. The clip groups were coded such that a participant was recorded as exposed to the character if he or she saw the character either in a clip or in the control condition. Results indicate that there were significant differences between the groups overall, $F(3, 299) = 3.52, p < .05$. However, post-hoc tests with a Bonferroni adjustment for multiple comparisons indicated that this difference was driven by differences between conditions and not between the clips within each condition. The Quarian ($M = 7.40, SD = 2.01$) and Mage ($M = 6.48, SD = 2.06$) groups (outgroup derogate/control) were not significantly different from each other, $p = .44$, 95% CI for difference (-1.36, 0.26). In addition, the Batarian ($M = 7.73, SD = 2.12$) and Qunari ($M = 8.25, SD = 2.14$) groups (ingroup bolster/control) were not significantly different from each other, $p = .90$, 95% CI for difference (-1.25, 0.37). Therefore, the clips were combined within condition for analysis.

*Testing for differences in clip experience.* Participants who were exposed to a video clip (as opposed to the control) answered questions regarding their enjoyment of the clip and their level of transportation experienced. Controlling for deliberation and for
the five moral intuitions, there were no differences between the outgroup derogate and ingroup bolster conditions in clip enjoyment, $F(1, 197) = 1.01, p = .32$, nor in transportation, $F(1, 197) = 1.55, p = .22$. Thus, it is not enjoyment or immersion driving potential differences between the clip conditions.

_Hypothesis testing: Influences on moral judgments._ Hypothesis 1 and research question 1 predicted that deliberation would influence moral judgments (with the direction uncertain), and research question 2 asked if this would be moderated by scenario condition. These were tested using OLS regression and the PROCESS macro for SPSS (Hayes, 2013), with the five moral intuitions included as covariates. There were no significant influences of the five moral intuitions on judgments. There was a significant two-way interaction between deliberation and scenario condition when comparing the outgroup derogate condition to the control condition to predict moral judgments, $R^2 = .26, F(10, 297) = 10.49, b = 0.30, t(297) = 2.28, p < .05$ [Table 2]. Probing this interaction [Figure 1] indicated that there was a significant increase in positive evaluations of the main character in the outgroup derogate scenario the more participants reported they deliberated, $b = 0.47, t(297) = 5.74, p < .001, 95\% \text{ CI} (0.31, 0.63)$. There is not a significant change in positive evaluations of the main character in the control scenario the more participants reported they deliberated, $b = 0.17, t(297) = 1.61, p = .11, 95\% \text{ CI} (-0.04, 0.37)$. The Johnson-Neyman technique was used to determine at which values of deliberation there was a significant difference in judgments between the control and outgroup derogate conditions, which indicated that those who deliberated at or higher than 6.96 (52.57% of the sample) displayed differences. Based on these interaction
results, it indicates that the more people report that they deliberated during exposure to an outgroup derogation scenario, the more positively they judge an ingroup member who defends the targeted outgroup. This occurs regardless of one’s prior moral intuition reliance.

There was also a significant two-way interaction between deliberation and scenario condition when comparing the ingroup bolster condition to the control, $R^2 = .26$, $F(10, 297) = 10.48$, $b = 0.47$, $t(297) = 3.02$, $p < .01$ [Table 2]. Probing this interaction [Figure 1] indicated that there was a significant increase in positive evaluations of the main character in the outgroup derogate scenario the more participants reported they deliberated, $b = 0.63$, $t(297) = 5.32$, $p < .001$, 95% CI (0.40, 0.87). There is not a significant change in positive evaluations of the main character in the control scenario the more participants reported they deliberated (the same test as the previous), $b = 0.17$, $t(297) = 1.61$, $p = .11$, 95% CI (-0.04, 0.37). The Johnson-Neyman technique was used to determine at which values of deliberation there was a significant difference in judgments between the control and outgroup derogate conditions, which indicated that those who deliberated at or higher than 6.32 (64.61% of the sample) displayed differences. Based on these results, it indicates that the more people report deliberating during exposure to an ingroup bolstering scenario, the more positively they judge an ingroup member who bolsters the ingroup against an outgroup derogator. This is the same pattern of results obtained with the outgroup derogate condition, in that higher deliberation is associated with increased judgment positivity toward the main character in both conditions.
Figure 1. Interaction between deliberation and scenario condition on moral judgments (Experiment 1).

Table 2. Interaction between deliberation and scenario condition on moral judgments (Experiment 1).

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<td>Ingroup</td>
<td>-0.09</td>
<td>-0.81</td>
</tr>
<tr>
<td>Purity</td>
<td>-0.01</td>
<td>-0.16</td>
</tr>
<tr>
<td>Authority</td>
<td>0.15</td>
<td>1.11</td>
</tr>
<tr>
<td>Deliberation</td>
<td>0.17</td>
<td>1.61</td>
</tr>
<tr>
<td>Outgroup Derogate (D1)</td>
<td>-2.15</td>
<td>-1.85^</td>
</tr>
<tr>
<td>Ingroup Bolster (D2)</td>
<td>-3.37</td>
<td>-2.38*</td>
</tr>
<tr>
<td>Deliberation X D1</td>
<td>0.30</td>
<td>2.28*</td>
</tr>
<tr>
<td>Deliberation X D2</td>
<td>0.47</td>
<td>3.02**</td>
</tr>
</tbody>
</table>

Note: ^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$. 

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These results provide support for hypothesis 1, and provide an answer for research questions 1 and 2. The results indicate that measured deliberation and scenario condition interact to predict moral judgments about the main character. The more participants reported that they deliberated the more positive they were in their moral evaluations of the main character. Interestingly, this was the case regardless of whether humans were the derogators or the derogated.

Hypothesis testing: Influences on stereotype internalization. Hypothesis 2 predicted that moral judgments would predict stereotype internalization, as operationalized by attitudes and behaviors toward the outgroups presented. This hypothesis was tested as two mediation models (PROCESS model 4), controlling for the five moral intuitions, where moral judgments predicted the mediator of stereotype internalization, and stereotype internalization predicted behavior. The deliberation and clip dummy variables and their interaction terms were entered as covariates to account for their antecedent influence on moral judgments. In order to allow for better comparison of the two behaviors of movie selection and screenplay writing, only those participants who successfully completed the written behavior question were included in these mediation models. It should be noted that an independent samples t-test revealed a significant difference in deliberation between those who answered the screenplay question and those who did not, \( t(122.95) = -2.14, p < .05 \). However, there was not a difference between those groups in their moral judgments, \( t(307) = -1.19, p = .23 \).
Deliberation, and its interaction with scenario, is included in these models as a covariate, meaning that this difference in deliberation for those who successfully answered the question and those who did not should be accounted for. However, this may be a limitation of these analyses. In the first mediation model the focal dependent variable was the movie choice behavioral measure [Model 1; Table 3]. And in the second mediation the written screenplay behavioral measure entered as the focal dependent variable [Model 2; Table 4]. Confidence intervals for indirect effects were obtained using 1,000 bootstrap samples.

Model 1 includes movie choice behavior as the focal dependent variable. Moral judgments were a significant predictor of stereotype internalization, such that more positive moral judgments were associated with lower internalization of stereotypes, $R^2 = .10, F(11, 214) = 2.11, b = -0.17, t(214) = -2.13, p < .05$. Stereotype internalization was then a significant predictor of movie selection, such that the more participants endorsed the stereotypes toward the outgroup the more likely they were to choose a negative movie title for the next participant to watch, $R^2 = .21, F(12, 213) = 4.69, b = -0.15, t(213) = -6.24, p < .001$. The direct effect of moral judgments of the main character on movie selection was not significant, $b = -0.01, t(213) = -0.23, p = .82$. The indirect effect of moral judgments on movie selection through the mediator stereotype internalization was significant, $b = 0.01, 95\% \text{ CI } (0.001, 0.03)$. Therefore, moral judgments of the main character influence behavior as measured by movie selection through the mediator of stereotype internalization. The more positive the moral judgments of the main character, the less likely participants were to endorse the stereotypes presented in the clips, and
therefore the less likely they were to perpetuate those stereotypes in their movie selections.

Table 3. Model 1: Moral judgments predicting movie behavior through stereotype internalization (Experiment 1).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stereotype Internalization</th>
<th>Movie Selection Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>t</td>
</tr>
<tr>
<td>Constant</td>
<td>6.16</td>
<td>3.97***</td>
</tr>
<tr>
<td>Harm</td>
<td>0.08</td>
<td>0.48</td>
</tr>
<tr>
<td>Fairness</td>
<td>-0.16</td>
<td>-1.08</td>
</tr>
<tr>
<td>Ingroup</td>
<td>0.36</td>
<td>2.44*</td>
</tr>
<tr>
<td>Purity</td>
<td>0.07</td>
<td>0.70</td>
</tr>
<tr>
<td>Authority</td>
<td>-0.22</td>
<td>-1.18</td>
</tr>
<tr>
<td>Deliberation</td>
<td>0.01</td>
<td>0.06</td>
</tr>
<tr>
<td>Outgroup Derogate (D1)</td>
<td>0.98</td>
<td>0.59</td>
</tr>
<tr>
<td>Ingroup Bolster (D1)</td>
<td>1.97</td>
<td>1.00</td>
</tr>
<tr>
<td>Delib. X D1</td>
<td>-0.14</td>
<td>-0.75</td>
</tr>
<tr>
<td>Delib. X D2</td>
<td>-0.22</td>
<td>-1.01</td>
</tr>
<tr>
<td>Moral Judgments</td>
<td>-0.17</td>
<td>-2.13*</td>
</tr>
<tr>
<td>Stereotype Internalization</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: ^p < .10, *p < .05, **p < .01, ***p < .001.

In Model 2 the screenplay synopsis behavior is the focal dependent variable. The effect of moral judgments on stereotype internalization was the same as in model 1. Stereotype internalization was a significant predictor of synopsis positivity, such that the more participants endorsed the stereotypes and prejudice toward the outgroup the more likely they were to write a negative screenplay synopsis, $R^2 = .21$, $F(12, 213) = 4.69$, $b = -0.15$, $t(213) = -6.24$, $p < .001$. The direct effect of the interaction between outgroup
derogation scenario condition and deliberation on synopsis positivity was not significant, 
$b = -0.01$, $t(213) = -0.23$, $p = .82$. The indirect effect of the interaction between outgroup
derogation scenario condition and deliberation on synopsis positivity through the
mediators of moral judgment and stereotype internalization was significant, $b = 0.03$, 
95% CI (0.003, 0.05). Overall these results suggest that moral judgments predict behavior
as measured by positivity of a written screenplay synopsis, through the mediator of
stereotype internalization. Specifically, the more positive the moral judgments, the less
likely participants were to endorse the stereotypes, and the less likely they were to
perpetuate that stereotype in their screenplay.

Table 4. Model 1: Moral judgments predicting movie behavior through stereotype
internalization (Experiment 1).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stereotype Internalization</th>
<th>Screenplay Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>6.16</td>
<td>1.49</td>
</tr>
<tr>
<td></td>
<td>3.97***</td>
<td>2.65**</td>
</tr>
<tr>
<td>Harm</td>
<td>0.08</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>0.48</td>
<td>-0.87</td>
</tr>
<tr>
<td>Fairness</td>
<td>-0.16</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>-1.08</td>
<td>-0.91</td>
</tr>
<tr>
<td>Ingroup</td>
<td>0.36</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>2.44*</td>
<td>-1.06</td>
</tr>
<tr>
<td>Purity</td>
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<td>-0.00</td>
</tr>
<tr>
<td></td>
<td>0.70</td>
<td>-0.08</td>
</tr>
<tr>
<td>Authority</td>
<td>-0.22</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>-1.18</td>
<td>1.16</td>
</tr>
<tr>
<td>Deliberation</td>
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<td>-0.04</td>
</tr>
<tr>
<td></td>
<td>0.06</td>
<td>-0.74</td>
</tr>
<tr>
<td>Outgroup Derogate (D1)</td>
<td>0.98</td>
<td>-0.57</td>
</tr>
<tr>
<td></td>
<td>0.59</td>
<td>-0.97</td>
</tr>
<tr>
<td>Ingroup Bolster (D1)</td>
<td>1.97</td>
<td>-0.15</td>
</tr>
<tr>
<td></td>
<td>1.00</td>
<td>-0.22</td>
</tr>
<tr>
<td>Delib. X D1</td>
<td>-0.14</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>-0.75</td>
<td>0.71</td>
</tr>
<tr>
<td>Delib. X D2</td>
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<td>0.01</td>
</tr>
<tr>
<td></td>
<td>-1.01</td>
<td>0.10</td>
</tr>
<tr>
<td>Moral Judgments</td>
<td>-0.17</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>-2.13*</td>
<td>0.30</td>
</tr>
<tr>
<td>Stereotype Internalization</td>
<td>--</td>
<td>-0.08</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>-3.39***</td>
</tr>
</tbody>
</table>

Note: ^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$. 

41
Based on our knowledge of the direction of the interaction between outgroup derogation and ingroup bolstering exposure and deliberation on moral judgments, we can extrapolate that the more participants who were exposed to an outgroup derogation or ingroup bolstering scenario deliberated, the less likely they were to choose a negative movie or write a negative screenplay synopsis, through the mechanisms of more positive moral judgments and subsequent lower likelihood of stereotype internalization. These models provide support for hypothesis 2. Moral judgments did go on to predict stereotype and prejudice internalization, through internalization of stereotypes and behavior as measured by movie selection and written behavior.

Experiment 1 Discussion

The results of Experiment 1 suggest that deliberation is an important aspect of moral judgments about prejudice and stereotyping, and those judgments can go on to influence internalization and perpetuation of the prejudice and stereotypes to which one is exposed. Experiment 1 tested the effects of exposure to two different types of prejudice and stereotyping situations (outgroup derogation and ingroup bolstering), and how people make moral judgments about that content. And, it was predicted that moral judgments about the prejudice and stereotyping would then predict attitudes and behaviors. The results provide insights into the processes by which people make deliberative moral judgments about prejudice and stereotyping as presented in the media and the effects those judgments can have. Importantly, the context in which these processes were tested should involve minimal motivational influences that could otherwise color a person’s reactions. Specifically, participants were exposed to novel fictional outgroups. This
means that the influence of prior attitudes, and of motivation to avoid appearing prejudiced, should both be very low. In addition, participants who indicated suspicion that the experiment was about race or prejudice were removed from the analyses. Although motivational biases cannot be completely ruled out, the present test provides a fairly ideal context where such biases should be minimized.

The results suggest that exposure to either an outgroup derogation or an ingroup bolstering scenario had differential influences on moral judgments of the scenarios’ main actors as compared to a control condition, and this was dependent upon level of deliberation about the scenario that participants reported. The main actor that participants made judgments about was an ingroup member who either defended the outgroup in the outgroup derogation condition, or who defended the ingroup in the ingroup bolstering condition. Compared to a control group who answered judgment and stereotype questions based solely on photographs of the group members, participants who were exposed to either outgroup derogating or ingroup bolstering gave more positive moral judgments about the main actor the more they reported deliberating about the content. Interestingly, it did not matter whether participants were exposed to outgroup derogation or ingroup bolstering; the influence of deliberation was in the same direction in both conditions and there was no significant difference between the two conditions.

Participants’ moral judgments about the main actor went on to predict other outcomes. Specifically, positive moral judgments were associated with a decreased likelihood that participants would endorse negative stereotypes and prejudicial statements about the outgroup in question. In addition, this decreased likelihood of stereotype and
prejudice internalization was associated with more positive behavior toward the outgroup as measured by participants’ selection of clips for future participants to watch and by screenplay synopses that participants wrote at the end of the study. Basically, deliberating about outgroup derogation or ingroup bolstering in the media decreased the likelihood that participants perpetuate negative stereotypes about outgroup members. This occurred through the mechanism of moral judgments.

Overall, the results of Experiment 1 indicate that deliberation about prejudice and stereotyping in the media can have a positive influence on intergroup outcomes through moral judgments as a mechanism. Measured deliberation about outgroup derogation was associated with rejection of the stereotypes and prejudice presented in the narrative. In the present experiment an ingroup member defended the outgroup that was being derogated. It is possible that people who reported deliberating were more likely to pick up on this defense and internalize that nuance rather than internalizing the prejudice. And, it is possible that participants who did not report deliberating highly were less likely to pick up on this defense, and therefore felt more threatened than participants who did deliberate. This feeling threatened could have made participants more eager to derogate the group which was causing the threat, whereas those who felt less threatened did not feel as much need to derogate the outgroup. However, identity threat was not directly measured in the present experiment and therefore this possibility is only speculation. Regardless, when media narratives present situations where an outgroup is derogated it may be important that someone from the ingroup reacts negatively to the derogation. In
addition, it is important that people engage in higher levels of deliberation about the derogating content in order to combat negative and socially detrimental effects.

*Limitations and future research.* There are limitations associated with the design and execution of the present experiment, and many of these limitations will be addressed in Experiment 2. First, Experiment 1 employed a manipulation of deliberation that, while high in internal validity because the use of novel groups should mitigate the influence of motivations to not engage in stereotyping that plagues research in this area. However, Experiment 1 was rather low in external validity. Participants were told before watching the clip or answering the questions that they should either think deeply about the content or go with their gut response. It is true that on rare instances a person may have a friend tell them to “pay attention to this scene” or “this is a movie you really have to pay attention to” but this is not likely to be the most common influence on deliberation about media on a regular basis. Instead, what is perhaps more likely to impact deliberation during an actual media experience are aspects of the medium, the media content, and the context that the media is being consumed in. All of these can combine to affect deliberation. Therefore, Experiment 2 will make use of these formal structures as a way to influence deliberation that is more likely to actually happen in a real world scenario.

Another limitation of the present study comes from the fact that the ingroup bolstering and outgroup derogating conditions predicted the same pattern of effects. In both cases, more deliberation was associated with more positive moral judgments of the main ingroup character and therefore with rejection of negative stereotypes about the outgroup. This same pattern across scenarios therefore presents an alternative explanation
that deliberation simply increases positivity of judgments and attitudes. An argument against this explanation is that the control condition did not show a significant increase in positivity as deliberation increased; however, the direction of the effect did trend that way and perhaps with more statistical power an effect as such would emerge. It is the hope that replicating these effects in Experiment 2 will help to elucidate more clearly the reason that deliberation had the influence that it had.

To that end, there are some aspects of the content of the clips that could have influenced the direction of the effect of deliberation. In Experiment 1, the character that participants made moral judgments about always took the role of defense. In both the ingroup bolstering and outgroup derogating conditions, the main ingroup character defended whichever group was being derogated. Therefore, in the outgroup derogating condition he or she defended the outgroup, and in the ingroup bolstering condition he or she defended the ingroup. It is possible that the participants who deliberated highly about the clips were simply more likely to pick up on this defense, and include it in their moral judgments of the situation and their attitudes about the groups involved. If this is the case, it would indicate that deliberation simply allows participants to pick up on subtlety and does not necessarily mean that deliberation changes something to do with moral considerations. However, deliberation could be influencing moral judgments on a higher level. If so, then participants who are deliberating highly should still reject the stereotypes presented about the outgroup, even if the main character supports them. And, they should reject the stereotypes by evaluating the ingroup character more negatively in their moral judgments when he or she participates in the outgroup derogation than when
he or she defends the outgroup (as in Experiment 1). The role of the main ingroup character as defender or derogator will therefore be manipulated in the second experiment to test this possibility.

Given the shift in focus in Experiment 2 to testing the reasons for the direction of the effect of deliberation in the results of Experiment 1, it is no longer necessary to include both outgroup derogation and ingroup bolstering as manipulation conditions. In Experiment 1 both scenarios revealed the same pattern of effects on outcomes; namely, that deliberation increased positivity of the moral judgments, and that increased rejection of negative stereotypes about outgroup members. Therefore, one of those conditions can be eliminated in order to more efficiently zero in on the issues involved with deliberation. Experiment 2 will focus on outgroup derogation scenarios. The reasoning for the selection of outgroup derogation rather than ingroup bolstering is because negative portrayals of outgroups are more likely to occur in mainstream television and other media (e.g., Tukachinsky, Mastro, & Yarchi, 2014). And, it is well-known the negative influence these portrayals can have on audience attitudes (Mastro, 2009a; Smith & Granados, 2009). This makes such portrayals a more vital topic of study. Therefore, Experiment 2 will compare a no-video control to an outgroup derogation scenario condition.

Experiment 2

Experiment 2 will extend Experiment 1 by employing formal features of media and media environment as the manipulation of deliberation, and by introducing the reaction of the main character as a new manipulation. Both changes will help to further
our understanding of how deliberation about stereotyping and prejudice in the media influence moral judgments, and how those moral judgments influence stereotype internalization and perpetuation. Using formal features of media to manipulate deliberation will provide a more externally valid way to influence deliberation in the real world. And, varying the reaction of the main ingroup character between accepting or rejecting outgroup derogation will help to parse out whether the influence of deliberation was due to picking up on subtle cues, rote positivity, or something more complex.

In terms of using the formal features of media to manipulate deliberation, there are many aspects of media and narrative that should influence the amount of deliberation that viewers engage in (Bilandzic, 2011). The present experiment will examine one potential influence on deliberation in a media context: distraction. Distraction can come from aspects internal to the message (e.g., as an aspect of pacing, or complex story structure, or objects in the scene that distract from the main actions), or external factors (e.g., activity in the room). When a message receiver is distracted, he or she may be less likely to focus attention on the primary message (Petty, Wells, & Brock, 1976). In addition, the limited capacity model of message processing (Lang, 2000) would contend that with a limited pool of mental resources to divide between multiple draws for attention, fewer resources should be spent on processing the message.

I predict that the results of Experiment 2 for the condition when the main character defends the derogated group should replicate the results of Experiment 1, with the media-based manipulations serving as equivalent proxies for the manipulation used previously. The extension of the first experiment to include the formal features of media
as manipulations of deliberative and spontaneous processing will demonstrate that the processes found in Experiment 1 can occur in a less artificial experimental setting.

**H1:** The same effects found in Experiment 1 will be replicated in Experiment 2, with an interaction between scenario condition and deliberation predicting moral judgments, and moral judgments predicting attitudes and behavior.

The influence of the reaction of the main ingroup character on the direction of the effect of deliberation on judgments is more difficult to predict. Previous research on ingroup deviance, also known as the “black sheep effect”, has found that ingroup members who do not conform to ingroup norms or who act as negative counter exemplars tend to be perceived very negatively (Marques & Yzerbyt, 1988; Marques, Yzerbyt, & Leyens, 1988). Often, this negative assessment can be even more negative than the assessment of outgroup members. This is because people want to be able to see the ingroup positively, and a negative or deviant ingroup member may be a bigger threat to one’s identity than a positive outgroup member might be (Marques et al., 1988).

Notably, what is considered deviant for the ingroup is highly dependent on ingroup norms. Identity theory and self-categorization theory predict that discrimination and derogation of outgroups while bolstering the ingroup should be the normative reaction to intergroup threat (Hornsey, 2008; Tajfel & Turner, 1986). Indeed, previous work has found that people tend to reject any attempts to create an anti-discrimination norm in their ingroup (Falomir-Pichastor, Gabarrot, & Mugny, 2009). Based on this work and work on the black sheep effect, it should be expected that participants would more
positively judge an ingroup member who discriminates against an outgroup compared to one who defends the outgroup.

However, there are two reasons why this effect may disappear or even reverse in the present study. First, follow-up work on the anti-discrimination norms research found that level of threat and prior attitude toward the outgroup moderated the effect of discrimination norms on attitudes (Falomir-Pichastor, Chatard, Selimbegovic, Konan, & Mugny, 2013). Specifically, participants were less likely to reject anti-discrimination messages when they did not have a negative prior attitude toward the outgroup, and when threat to the ingroup was low (Falomir-Pichastor et al., 2013). In the present experiment, participants have no prior attitude toward the outgroups in question because the outgroups are novel. And, while the threat to the humans in the video game world are high, these threats do not translate into real-world threats. This lack of prior attitude and low threat to the ingroup may therefore be associated with increased conformity with the anti-discrimination norm (Falomir-Pichastor et al., 2013).

And second, the role of deliberation in these effects has not yet been studied. It is possible that this effect is based on less deliberative, more heuristic processing, and when deliberation occurs it disappears. Of course, the effect of deliberation could also be the opposite, and deliberation could actually enhance rejection of anti-discrimination norms. The present experiment will test these possibilities. However, because of the competing possibilities in terms of the influences of attitude and threat, and the as-yet untested potential moderator of deliberation, I offer a non-directional research question.
**RQ1:** Will the reaction of the main character to the outgroup presented moderate the effect of deliberation on moral judgments?

*Experiment 2 Method*

The following are the methods by which the hypotheses and research questions were tested.

*Design.* This experiment employed a 2(Deliberation: high vs. low) by 3(scenario: outgroup bolstering with prejudiced main character vs. outgroup bolstering with non-prejudiced main character vs. control) between-subjects design with random assignment. As discussed, deliberation was manipulated with distraction in the clip conditions. Participants in the spontaneous processing condition received the message with high distraction, while those in the deliberative processing condition received the message with low distraction. In addition, main character reaction in the clip conditions was manipulated in the video clips through the dialogue options in the video game. The control condition received a high or low deliberation manipulation (same as in Experiment 1), but did not receive the manipulation of main character reaction given that there was nothing to react to without a clip in the control condition.

*Deliberation manipulation.* Deliberation was manipulated through the use of distraction by multitasking. Based on previous work by Petty, Wells, and Brock (1976), the clips were edited such that a letter X appeared periodically in one of the four corners of the screen. Participants were asked to keep track of the number of Xs that flash, and those in the low deliberation condition were also asked to count the number of times an X appeared in each of the four corners. For participants in the high deliberation condition,
the Xs appeared a total of six times during the four minute clip (every 45 seconds) and always in the lower right corner. For participants in the low deliberation condition, the Xs appeared 23 times total, with random intervals of five to 15 seconds between them, and randomly in all four corners of the screen. During the memory questions after the judgments participants were asked to report the number of Xs to continue the cover story (high deliberation $M = 5.22$, $SD = 4.78$; low deliberation $M = 19.09$, $SD = 8.92$).

*Main character reaction manipulation.* Dragon Age 2, one of the games used for clips in Experiment 1, allows dialogue options where the main character could agree with stereotyping. Specifically, it was possible to edit the clip involving Mages from Experiment 1 so the main character defends the derogated outgroup (as occurred in Experiment 1), or agrees with the discriminator and supports the derogation. Participants assigned to the condition where the main character had a non-prejudiced reaction to the derogation saw the same clip as those in the outgroup derogation condition with the mages as the target group used in Experiment 1. On the other hand, participants assigned to the condition where the main character had a prejudiced reaction to the derogation saw a clip with the exact same scenarios as the negative reaction condition, but in which the main character agreed with and perpetuated the discrimination against the outgroup. Equivalent main character reactions were not possible to manipulate in the scenario from Mass Effect. Because there were no differences between the Dragon Age and Mass Effect clips in the outgroup derogation condition in Experiment 1, the Mass Effect clip was dropped from Experiment 2 and the Dragon Age clip was used for the manipulations.
Participants. Participants were 425 adults recruited from the general population through a Qualtrics panel. The median age group was 46-52 years (range 18 to 81+ years), and 252 (59%) were female. In actuality 606 participants completed some part of the study (57% female); however, participants were screened out using the same techniques used in Experiment 1 so that the final sample was 425. Participants who failed the embedded attention check were automatically ejected from the survey ($N = 53$). Participants who disclosed non-participation at the end of the study were also excluded from analysis ($N = 22$). And finally, if a participant had been exposed to any of the *Dragon Age* games, he or she was not eligible for the study and was ejected from the survey ($n = 106$).

Procedure. The procedure was the same as in Experiment 1, with the only difference being the way deliberation was manipulated.

Measures. The measures were largely the same measures used in Experiment 1, and were also on a scale of 0 to 10 unless otherwise specified.

Given the focus of previous research on the “black sheep effect” and anti-discrimination norms, it may be fruitful to differentiate the influence of the main character’s reaction (defending or derogating) and the influence of the character doing the actual derogation of the outgroup (always derogating). Therefore, in Experiment 2 participants were also asked to make moral judgments about the other human character involved in the derogation. So, participants judged two ingroup characters; one was the same main character from Experiment 1, who in this experiment either agreed or disagreed with the derogation, and the other was the other ingroup character who is
actually the person directly engaging in the outgroup derogation. Participants in the second experiment rated these individuals on only two items, with the item asking if the character acted “extremely prejudiced (0) – extremely unprejudiced (10)” removed. The rate of suspicion in Experiment 1 was fairly high, and one possibility is that this question asking directly about prejudice made the true purpose of the study more obvious to some people. Therefore, this item was removed from the second experiment in an attempt to reduce the rate of suspicion. The two judgments of the main character were highly correlated, Pearson’s $r = .84$, $p < .001$, and so were combined and averaged ($M = 7.00$, $SD = 2.28$), as were the two judgments of the other human character, Pearson’s $r = .83$, $p < .001$ ($M = 6.23$, $SD = 2.32$).

The Moral Foundations Questionnaire was used again in Experiment 2, and the sample statistics for each subscale were as follows: Harm ($M = 7.75$, $SD = 1.48$, Cronbach $\alpha = .73$), Fairness ($M = 7.46$, $SD = 1.46$, Cronbach $\alpha = .72$), Ingroup ($M = 6.73$, $SD = 1.68$, Cronbach $\alpha = .75$), Authority ($M = 7.21$, $SD = 1.47$, Cronbach $\alpha = .68$), and Purity ($M = 6.87$, $SD = 2.01$, Cronbach $\alpha = .83$). The five scales were again used as covariates in analyses.

The filler memory measure of global self-rating for memory ($M = 6.61$, $SD = 1.90$, Cronbach $\alpha = .86$) was again used in order to protect the cover story and decrease participant suspicion. Participants were also given the same four questions asking them to recall details from the scenario, to continue the cover story that the study was about memory.
Participants were also asked to answer the same scale measuring their deliberation during the clips (clip conditions) or during the questions (control conditions) as a manipulation check for deliberation (3 items, $M = 7.00$, $SD = 2.46$, Cronbach $\alpha = .91$; Barden & Petty, 2008). Additionally, participants in the clip conditions were asked “During the video clip we asked you to count Xs on the screen. How distracting was this task?” ($M = 5.78$, $SD = 3.18$). And participants in the clip conditions answered a single item assessing enjoyment (“How much did you enjoy watching the clip?” Green, Brock, & Kaufman, 2004; $M = 5.95$, $SD = 3.16$), as well as the scale assessing their levels of transportation (Green & Brock, 2001; $M = 5.02$, $SD = 1.70$, Cronbach $\alpha = .79$).

Participants were then asked post-test questions after the scenario judgments regarding the non-human group presented in the clip they watched (for the clip conditions) or based on a photograph (for the control condition). They indicated agreement with the same list of stereotypes about the target group used in Experiment 1, and the 12 item scale was again highly reliable as a single scale, and so was analyzed as such ($M = 4.82$, $SD = 1.94$, Cronbach $\alpha = .89$).

Additionally, the same two questions assessing actual behavior were asked, the first being the selection of a clip for the next participant to watch, coded as -1 for the negative clip, 0 for the neutral clip, and 1 for the positive clip ($M = 0.06$, $SD = 0.78$). The other behavioral measure was the open-ended response asking participants to describe a screenplay they would write about Mage-Human relations. Of the final 425 participants, 313 (74%) filled in something fitting the topic. Participants were excluded if they left the item blank or wrote something indicating they were passing on the item (e.g., “I am not a
writer” and “I wouldn’t know what to say”). The qualifying responses were again coded as negative one if they were negative toward the outgroup, as zero if neutral, and as positive one if positive toward the outgroup \( (M = 0.02, SD = 0.86) \). Finally, participants were asked for demographics information and the disclosure check, and were probed for suspicion, before being debriefed.

**Experiment 2 Results**

For purposes of analysis the scenario conditions were dummy coded in two ways, the first being so that the control condition was the reference condition for comparison (i.e., for D1 the outgroup derogate, prejudiced main character condition was coded as one and the other two as zero, and for D2 the outgroup derogate, non-prejudiced main character condition was coded as one and the other two as zero). In the second version, to allow for comparison between the two outgroup derogate conditions, the non-prejudiced main character condition was coded as the reference condition.

*Probe for suspicion.* The probe for suspicion was again coded such that key words associated with the true focus of the study (e.g., “prejudice”, “race relations”) were coded as “suspicious”. Of the 425 participants, 22 (5.2%) exhibited suspicion that the true purpose of the study had to do with prejudice, stereotyping, and/or race relations. A binary logistic regression was used to check for differences in suspicion by condition, due to the dichotomous nature of the suspicion check coding, Nagelkerke’s \( R^2 = .08 \). There were no significant direct effects of deliberation, \( B = -0.02, \text{Wald}(1) = 0.01, p = .91 \), non-prejudiced main character, \( B = -3.19, \text{Wald}(1) = 1.87, p = .17 \), or prejudiced main character, \( B = -4.33, \text{Wald}(1) = 1.06, p = .30 \). There were also no differences in how
suspicious a participant was for the interaction between deliberation and the dummy code for non-prejudiced main character, $B = 0.31$, Wald(1) = 1.48, $p = .22$, nor the interaction between deliberation and the dummy code for prejudiced main character, $B = 0.23$, Wald(1) = 2.07, $p = .15$. There was again a significant effect of suspicion on stereotype internalization according to an independent samples t-test, $t(423) = 2.18$, $p < .05$. There was not a significant difference on moral judgments of the main character, $t(423) = -0.82$, $p = .42$, nor in moral judgments of the other human character, $t(423) = 0.49$, $p = .63$. Due to the significant effect of suspicion on stereotype internalization and to decrease the likelihood that suspicion and subsequent motivation influenced the results, the 22 participants who exhibited suspicion were removed from the analyses, leaving 403 participants (58.3% female).

Manipulation check. The manipulation check for the deliberation manipulation using an independent samples t-test revealed a significant difference in deliberation amount when comparing the low deliberation condition ($M = 6.60$, $SD = 2.63$) to the high deliberation condition ($M = 7.30$, $SD = 2.30$), with Levene’s test for equality of variances significant at $F = 4.51$, $p < .04$, $t(394.75) = -2.84$, $p < .01$. In addition, the question asking participants in the clip conditions how distracting they found the X-finding task was also significantly different between the low deliberation ($M = 6.25$, $SD = 3.16$) and high deliberation ($M = 5.42$, $SD = 3.16$) conditions, $t(257) = 2.12$, $p < .05$. Based on both of these checks, the media-based deliberation manipulation using distraction was successful. However, as previously discussed in Experiment 1, the replacement of a coded condition variable with a continuous manipulation check variable has been argued to be a stronger
and more reliable way of dealing with a predictor (O'Keefe, 2003). Therefore, in
deferece to this idea, and in the interest of consistency with Experiment 1, measured
deliberation will be used as a predictor in place of the manipulation conditions. As in
Experiment 1, the correlational nature of this measure means that causal conclusions are
more difficult to make. Outcomes associated with the manipulation check for deliberation
should thus be taken with this limitation in mind.

*Testing for differences in clip experience.* Participants who were exposed to a
video clip (as opposed to the control) answered questions regarding their enjoyment of
the clip and their level of transportation experienced. Controlling for deliberation and for
the five moral intuitions, there were no differences between the outgroup derogate,
prejudiced main character and outgroup derogate, non-prejudiced main character
conditions in clip enjoyment, $F(1, 252) = 0.17, p = .68$, nor in transportation, $F(1, 252) =
0.01, p = .93$. Thus, it is not clip enjoyment or immersion driving any potential
differences between the clip conditions.

*Hypothesis testing: Influences on moral judgments.* Hypothesis 1 predicted that
Experiment 2 would replicate Experiment 1, in that an interaction between reported
deliberation and scenario would predict moral judgments of the characters, and these
moral judgments would predict stereotype internalization and behavior. Research
question 1 asked whether the reaction of the main character to the prejudice espoused in
the clip would matter for the moral judgments of both that character and the character
doing the stereotyping.
The first test was for the interaction between reported deliberation and scenario on moral judgments. PROCESS model 1 was used to test and probe these interactions (Hayes, 2013), with the five moral intuitions as covariates. The focal predictors of deliberation and scenario and their interaction were entered to predict moral judgments. The first outcome tested was moral judgments of the main character (who in one clip scenario defended the stereotyped group and in the other agreed with the stereotypes), $R^2 = .16$, $F(10, 392) = 7.23, p < .001$ [Table 5]. There was a significant interaction between deliberation and the variable comparing the non-prejudiced main character condition to the control condition, $b = 0.33$, $t(392) = 2.57, p < .05$. Probing the interaction [Figure 2] suggests that there is no significant influence of deliberation on moral judgments in the control condition, $b = -0.02$, $t(392) = -0.16, p = .87$, but there is a significant effect of deliberation on moral judgments in the clip condition, such that the more participants reported that they deliberated, the more positive their moral judgments of the character who defended the outgroup against the stereotyping, $b = 0.31$, $t(392) = 4.10, p < .001$. This replicates Experiment 1.

There was also a significant interaction between deliberation and the variable comparing the prejudiced main character condition to the control condition, $b = 0.37$, $t(392) = 2.93, p < .01$ [Table 5]. Probing the interaction [Figure 2] suggests that there is a significant effect of deliberation on moral judgments in the clip condition, such that the more participants deliberated, the more positive their moral judgments of the character who agreed with the stereotyping, $b = 0.35$, $t(392) = 4.83, p < .001$. The effect of the control condition is the same as previously reported. Based on this, it does not appear to
matter what the main character does, participants who self-reported higher levels of deliberation were more likely to rate his or her actions more positively.

Figure 2. Interaction between deliberation and scenario on moral judgments of the main character (Experiment 2).
Table 5. Interaction between deliberation and scenario condition on moral judgments of the main character (Experiment 2).

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>5.33</td>
<td>4.62***</td>
</tr>
<tr>
<td>Harm</td>
<td>0.01</td>
<td>0.11</td>
</tr>
<tr>
<td>Fairness</td>
<td>0.29</td>
<td>2.68**</td>
</tr>
<tr>
<td>Ingroup</td>
<td>-0.03</td>
<td>-0.37</td>
</tr>
<tr>
<td>Purity</td>
<td>-0.10</td>
<td>-1.26</td>
</tr>
<tr>
<td>Authority</td>
<td>0.11</td>
<td>0.88</td>
</tr>
<tr>
<td>Deliberation</td>
<td>-0.02</td>
<td>-0.16</td>
</tr>
<tr>
<td>Non-prejudiced (D1)</td>
<td>-1.85</td>
<td>-1.62</td>
</tr>
<tr>
<td>Prejudiced (D2)</td>
<td>-2.17</td>
<td>-1.94^</td>
</tr>
<tr>
<td>Deliberation X D1</td>
<td>0.33</td>
<td>2.57*</td>
</tr>
<tr>
<td>Deliberation X D2</td>
<td>0.37</td>
<td>2.93**</td>
</tr>
</tbody>
</table>

Note: ^p < .10, *p < .05, **p < .01, ***p < .001.

The next tests used moral judgments of the character who engaged in the stereotyping as the focal outcome in place of judgments of the main character, $R^2 = .15$, $F(10, 392) = 6.94, p < .001$ [Table 6]. There was a significant interaction between deliberation and the variable comparing the condition exposed to the non-prejudiced main character to the control condition in predicting moral judgments of the character doing the stereotyping, $b = 0.33, t(393) = 2.59, p < .01$. Probing the interaction [Figure 3] suggests that there is no significant influence of deliberation on moral judgments in the control condition, $b = -0.05, t(393) = -0.49, p = .62$, but there is a significant effect of deliberation on moral judgments in the clip condition, such that the more participants deliberated, the more positive their moral judgments of the character who engaged in the stereotyping, $b = 0.28, t(393) = 3.78, p < .001$. 
There was also a significant interaction between deliberation and the variable comparing the condition exposed to the prejudiced main character to the control condition, \( b = 0.38, t(393) = 2.89, p < .01 \) [Table 6]. Probing the interaction [Figure 3] suggests that there is a significant effect of deliberation on moral judgments in the clip condition, such that the more participants deliberated, the more positive their moral judgments of the character who engaged in the stereotyping, \( b = 0.33, t(393) = 4.20, p < .001 \). Based on this, it again does not appear to matter what the character does, participants who are deliberating more highly are more likely to approve of the actions of the person doing the stereotyping regardless of whether the main character agrees or disagrees.
Figure 3. Interaction between deliberation and scenario on moral judgments of the other human character (Experiment 2).
Table 6. Interaction between deliberation and scenario condition on moral judgments of the other human character (Experiment 2).

<table>
<thead>
<tr>
<th>Variable</th>
<th>( b )</th>
<th>( t )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>5.01</td>
<td>4.28***</td>
</tr>
<tr>
<td>Harm</td>
<td>-0.04</td>
<td>-0.36</td>
</tr>
<tr>
<td>Fairness</td>
<td>0.09</td>
<td>0.80</td>
</tr>
<tr>
<td>Ingroup</td>
<td>0.23</td>
<td>2.41*</td>
</tr>
<tr>
<td>Purity</td>
<td>-0.11</td>
<td>-1.36</td>
</tr>
<tr>
<td>Authority</td>
<td>0.18</td>
<td>1.44</td>
</tr>
<tr>
<td>Deliberation</td>
<td>-0.05</td>
<td>-0.45</td>
</tr>
<tr>
<td>Non-prejudiced (D1)</td>
<td>-2.43</td>
<td>-2.14*</td>
</tr>
<tr>
<td>Prejudiced (D2)</td>
<td>-3.27</td>
<td>-2.83**</td>
</tr>
<tr>
<td>Deliberation X D1</td>
<td>0.31</td>
<td>2.41*</td>
</tr>
<tr>
<td>Deliberation X D2</td>
<td>0.37</td>
<td>2.87**</td>
</tr>
</tbody>
</table>

Note: ^\( p < .10 \), *\( p < .05 \), **\( p < .01 \), ***\( p < .001 \).

In all, these effects indicate that, as in Experiment 1, deliberation is serving to increase positive moral judgments of the characters. It does not seem to matter what the characters do (i.e., whether they engage in stereotyping or not), people still judge them more positively the more they are deliberating. This is a curious effect that will be discussed in more detail below.

**Hypothesis testing: Influences on stereotype internalization.** Next, the influence of the moral judgments on stereotype internalization and perpetuation behavior was tested. As in Experiment 1, only those participants who successfully completed the written behavior question were included in these analyses. Deliberation, scenario condition, and their interactions, as well as all five moral intuitions, were included as covariates in the models. Moral judgments of each human character acted as predictors,
with stereotype internalization as the mediator and each behavior as the focal outcome. There are therefore four mediation models testing these effects.

Model 1 [Table 7] included the behavior of movie selection as the focal outcome, moral judgments of the main character as the predictor, and stereotype internalization as the mediator. The model predicting the mediator of stereotype internalization was significant, \( R^2 = 0.19, F(11, 279) = 6.11, p < .001 \). Moral judgments of the main character were a significant predictor of stereotype internalization, \( b = -0.11, t(279) = -2.40, p < .05 \). The model predicting movie selection behavior was also significant, \( R^2 = 0.10, F(12, 278) = 2.59, p < .01 \). Stereotype internalization significantly predicted movie selection behavior, such that less internalization was associated with more positive movie selection, \( b = -0.11, t(278) = -4.24, p < .001 \). The indirect effect of the interaction between deliberation and scenario condition on movie selection behavior, through the mediators of moral judgments of the non-prejudiced main character and stereotype internalization, was significant, \( b = 0.01, 95\% CI (0.001, 0.03) \). The direct effect of moral judgment of the main character on movie selection behavior was also significant, \( b = -0.05, t(278) = -2.28, p < .05 \).
Table 7. Model 1: Moral judgments of the main character predicting movie behavior through stereotype internalization (Experiment 2).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stereotype Internalization</th>
<th>Movie Selection Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>t</td>
</tr>
<tr>
<td>Constant</td>
<td>5.96</td>
<td>4.95***</td>
</tr>
<tr>
<td>Harm</td>
<td>-0.05</td>
<td>-0.51</td>
</tr>
<tr>
<td>Fairness</td>
<td>-0.02</td>
<td>-0.21</td>
</tr>
<tr>
<td>Ingroup</td>
<td>-0.04</td>
<td>-0.42</td>
</tr>
<tr>
<td>Purity</td>
<td>0.21</td>
<td>2.76**</td>
</tr>
<tr>
<td>Authority</td>
<td>0.03</td>
<td>0.27</td>
</tr>
<tr>
<td>Deliberation</td>
<td>-0.13</td>
<td>-1.30</td>
</tr>
<tr>
<td>Non-Prejudiced (D1)</td>
<td>-0.26</td>
<td>-0.23</td>
</tr>
<tr>
<td>Prejudiced (D1)</td>
<td>0.28</td>
<td>0.25</td>
</tr>
<tr>
<td>Delib. X D1</td>
<td>0.09</td>
<td>0.73</td>
</tr>
<tr>
<td>Delib. X D2</td>
<td>0.24</td>
<td>1.82^</td>
</tr>
<tr>
<td>Moral Judgments</td>
<td>-0.11</td>
<td>-2.40*</td>
</tr>
<tr>
<td>Stereotype Internalization</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: ^p < .10, *p < .05, **p < .01, ***p < .001.

Model 2 [Table 8] again included the behavior of movie selection as the focal outcome and stereotype internalization as the mediator, but the focal predictor was moral judgments of the other human character. The model predicting the mediator of stereotype internalization was significant, $R^2 = 0.18, F(11, 279) = 5.72, p < .001$. However, moral judgments of the other human character were not a significant predictor of stereotype internalization, $b = -0.07, t(279) = -1.51, p = .13$. The model predicting movie selection behavior was significant, $R^2 = 0.08, F(12, 278) = 2.12, p < .05$. Stereotype internalization was again a significant predictor of movie selection behavior, $b = -0.10, t(278) = -3.89, p < .001$. However, the indirect effect of the interaction between deliberation and scenario condition on movie selection behavior, through the mediators of moral judgments of the
prejudiced main character and stereotype internalization, was not significant due to the non-significant relationship between judgments of the other human character and stereotype internalization, \( b = 0.01, 95\% \text{ CI } (-0.002, 0.02) \). The direct effect of the interaction between deliberation and scenario condition on movie selection behavior was also not significant, \( b = 0.00, t(278) = 0.19, p = .85 \).

Table 8. Model 2: Moral judgments of the other human character predicting movie behavior through stereotype internalization (Experiment 2).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stereotype Internalization</th>
<th>Movie Selection Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( B )</td>
<td>( t )</td>
</tr>
<tr>
<td>Constant</td>
<td>5.61</td>
<td>4.69***</td>
</tr>
<tr>
<td>Harm</td>
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<td>-0.52</td>
</tr>
<tr>
<td>Fairness</td>
<td>-0.04</td>
<td>-0.41</td>
</tr>
<tr>
<td>Ingroup</td>
<td>-0.02</td>
<td>-0.21</td>
</tr>
<tr>
<td>Purity</td>
<td>0.21</td>
<td>2.74**</td>
</tr>
<tr>
<td>Authority</td>
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<td>0.35</td>
</tr>
<tr>
<td>Deliberation</td>
<td>-0.13</td>
<td>-1.32</td>
</tr>
<tr>
<td>Non-Prejudiced (D1)</td>
<td>-0.19</td>
<td>-0.17</td>
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<tr>
<td>Prejudiced (D1)</td>
<td>0.29</td>
<td>0.26</td>
</tr>
<tr>
<td>Delib. X D1</td>
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<td>0.61</td>
</tr>
<tr>
<td>Delib. X D2</td>
<td>0.22</td>
<td>1.67^</td>
</tr>
<tr>
<td>Moral Judgments</td>
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<td>-1.51</td>
</tr>
<tr>
<td>Stereotype Internalization</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: ^\( p < .10 \), *\( p < .05 \), **\( p < .01 \), ***\( p < .001 \).

Model 3 [Table 9] included the behavior of written screenplay synopsis as the focal outcome, moral judgments of the main character as the focal predictor, stereotype internalization as the mediator. The overall model predicting stereotype internalization was significant, \( R^2 = .20, F(11, 280) = 6.19, p < .001 \). Moral judgments of the main
character significantly predicted stereotype internalization, $b = -0.11$, $t(280) = -2.44$, $p < .05$. The overall model predicting screenplay behavior was significant, $R^2 = .13$, $F(12, 279) = 3.49$, $p < .001$. Stereotype internalization was a significant predictor of screenplay behavior, such that less internalization was associated with a more positive screenplay, $b = -0.14$, $t(279) = -5.02$, $p < .001$. The indirect effect of moral judgments on screenplay writing behavior, through stereotype internalization, is significant, $b = 0.02$, 95% CI(0.001, 0.03). The direct effect of the interaction between deliberation and scenario on screenplay behavior is not significant, $b = -0.01$, $t(279) = -0.38$, $p = .70$.

Table 9. Model 3: Moral judgments of the main character predicting screenplay behavior through stereotype internalization (Experiment 2).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stereotype Internalization</th>
<th>Screenplay Behavior</th>
</tr>
</thead>
<tbody>
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<td>$t$</td>
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<tr>
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<td>4.93***</td>
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<tr>
<td>Harm</td>
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<td>-0.51</td>
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<tr>
<td>Fairness</td>
<td>-0.02</td>
<td>-0.20</td>
</tr>
<tr>
<td>Ingroup</td>
<td>-0.04</td>
<td>-0.45</td>
</tr>
<tr>
<td>Purity</td>
<td>0.21</td>
<td>2.76**</td>
</tr>
<tr>
<td>Authority</td>
<td>0.03</td>
<td>0.28</td>
</tr>
<tr>
<td>Deliberation</td>
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<td>-1.25</td>
</tr>
<tr>
<td>Non-Prejudiced (D1)</td>
<td>-0.21</td>
<td>-0.19</td>
</tr>
<tr>
<td>Prejudiced (D1)</td>
<td>0.33</td>
<td>0.30</td>
</tr>
<tr>
<td>Delib. X D1</td>
<td>0.09</td>
<td>0.70</td>
</tr>
<tr>
<td>Delib. X D2</td>
<td>0.23</td>
<td>1.79^</td>
</tr>
<tr>
<td>Moral Judgments</td>
<td>-0.11</td>
<td>-2.44*</td>
</tr>
<tr>
<td>Stereotype Internalization</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: $^p < .10$, $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$. 
Model 4 [Table 10] again included the behavior of written screenplay synopsis as the focal outcome and stereotype internalization as the mediator, but included moral judgments of the prejudiced human character as the focal predictor. The overall model predicting stereotype internalization was significant, $R^2 = .19, F(11, 280) = 5.80, p < .001$. However, moral judgments of the non-prejudiced main character again did not significantly predict stereotype internalization, $b = -0.07, t(280) = -1.56, p = .12$. The overall model predicting screenplay behavior was significant, $R^2 = .14, F(12, 279) = 3.70, p < .001$. Stereotype internalization was a significant predictor of screenplay behavior, such that less internalization was associated with a more positive screenplay, $b = -0.14, t(279) = -4.87, p < .001$. The indirect effect of moral judgments, through stereotype internalization, on screenplay behavior is not significant, $b = 0.01, 95\%\ CI(-0.004, 0.03)$, due to the non-significant effect of judgments on stereotype internalization. The direct effect of the interaction between deliberation and scenario on screenplay behavior is also not significant, $b = 0.03, t(279) = 1.53, p = .13$. 
Table 10. Model 4: Moral judgments of the other human character predicting screenplay behavior through stereotype internalization (Experiment 2).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stereotype Internalization</th>
<th>Screenplay Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>t</td>
</tr>
<tr>
<td>Constant</td>
<td>5.56</td>
<td>4.67***</td>
</tr>
<tr>
<td>Harm</td>
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<td>-0.55</td>
</tr>
<tr>
<td>Fairness</td>
<td>-0.04</td>
<td>-0.40</td>
</tr>
<tr>
<td>Ingroup</td>
<td>-0.02</td>
<td>-0.23</td>
</tr>
<tr>
<td>Purity</td>
<td>0.21</td>
<td>2.74**</td>
</tr>
<tr>
<td>Authority</td>
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<td>0.36</td>
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<tr>
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<td>-1.28</td>
</tr>
<tr>
<td>Non-Prejudiced (D1)</td>
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<td>-0.12</td>
</tr>
<tr>
<td>Prejudiced (D1)</td>
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<td>0.31</td>
</tr>
<tr>
<td>Delib. X D1</td>
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</tr>
<tr>
<td>Delib. X D2</td>
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<td>1.63</td>
</tr>
<tr>
<td>Moral Judgments</td>
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<td>-1.56</td>
</tr>
<tr>
<td>Stereotype Internalization</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: ^p < .10, *p < .05, **p < .01, ***p < .001.

These mediation models suggest that, as in Experiment 1, actual behavior can sometimes be influenced by the processes involved in deliberation about a stereotyping scenario, through the mediators of moral judgments and stereotype internalization. Importantly, the behaviors represented here involve perpetuation of the stereotypes to other people, indicating that the stereotypes and prejudice that have been internalized have become solid enough that people want others to know about them. However, only moral judgments about the main character predicted attitudinal and behavioral outcomes; judgments about the character who directly engages in stereotyping did not significantly predict outcomes. This is an interesting finding, as the pattern of results predicting judgments of both characters from deliberation and scenario exposure are the same.
Experiment 2 Discussion

Experiment 2 replicated Experiment 1, with some crucial changes. First, deliberation was manipulated using distraction within the video clips themselves. This was a more externally valid manipulation of deliberation compared to the instructions given in Experiment 1. In addition the ingroup bolstering condition form Experiment 1 was dropped, but a condition where the main character supports the stereotyping was added. This change allowed for testing whether the main character reaction that was against the stereotyping in the outgroup derogation condition in Experiment 1 was responsible for the positive moral judgments and subsequent decrease in stereotype internalization and perpetuation found in Experiment 1.

Results indicated that the effect of measured deliberation found in Experiment 1, where more deliberation was associated with more positive moral judgments of the characters regardless of scenario condition, was replicated in Experiment 2. It did not matter if the main character supported or argued against the stereotypes, deliberation reported in the clip conditions was associated with more positive moral judgments of both the main character and the character that engaged in the stereotyping. It is possible that the differences in the main characters’ reactions were not obvious enough, as there are only a few places where the character interjects to defend the outgroup. Future research that includes this type of ingroup dissent manipulation should consider varying levels of dissent strength; however, this is beyond the scope of the present experiments.

This increase in positive moral judgments about the main character was then associated with a decrease in stereotype internalization, again replicating Experiment 1.
This effect indicates that deliberation is associated with decreased prejudice and stereotyping, as predicted. However, it is doing so through an unclear and as-yet unexplained mechanism, because its relationship with moral judgments would logically predict the opposite effect. It is possible that this effect is simply an artifact of the experimental methods – something in Experiments 1 and 2 is causing these relationships to occur. However, it is unclear exactly what aspects of the experiments could be causing this effect. Experiment 3 varies some aspects of order and prior mental state based on moral license considerations, and this may help to explain these findings.

Although reported deliberation and scenario exposure interacted to predict moral judgments about the other human character similarly to how they predicted judgments about the main character, judgments of the other human character did not go on to predict stereotype internalization or perpetuation behavior. It is possible that the smaller sample size associated with those tests failed to pick up on the effect, or it could be a true null effect. To help understand this issue, moral judgments about the other human character will be measured again in Experiment 3.

*Limitations and future research.* The major limitation of Experiment 2 is the fact that reported deliberation was associated with increased positivity of moral judgments about the characters in the clips regardless if the stereotyping was supported or argued against by the main character. This reflects what happened in Experiment 1 with the ingroup bolstering and outgroup derogating scenarios. Importantly, the effect is not simply because deliberation always increases positivity, because there was no significant effect of deliberation on moral judgments in the control condition. However, one should
expect that positive moral evaluations of a person who is engaging in stereotyping should be associated with an increase in stereotype internalization and perpetuation, not less. But in Experiment 2 the opposite was true. Participants who reported that they deliberated highly may have approved of the people involved in the stereotyping, but they also rejected that stereotyping later. This is a fairly strange turn of events. It indicates that participant judgments, attitudes, and behavior are inconsistent from one point to the next with deliberation always predicting more positive moral judgments when participants are exposed to any video clip.

One possibility is that participants who are reporting that they are deliberating highly are picking up on social desirability cues without necessarily realizing it. However, an argument against this is that the pattern of results was the same in Experiments 1 and 2 despite qualitatively different manipulations of spontaneous and deliberative processing. As previously discussed with the MODE model (Fazio, 1990), there are two things that influence the extent of deliberation: motivation and opportunity. In experiment 1 deliberation was encouraged mostly through motivation, where participants in the low deliberation condition were asked to please give gut responses but were not otherwise prevented from deliberating. Therefore, although they likely deliberated less than those who were motivated to deliberate highly, they also were probably thinking on some level that was still more deliberative than the low deliberation participants in Experiment 2. This is because the manipulation in Experiment 2 was based in opportunity – meaning that the low deliberation participants who experienced distraction were actually prevented from deliberating rather than simply encouraged. If
spontaneous and deliberative processing is considered to be a continuum (though there is a debate about this – see general discussion), then we could consider the low deliberation condition in Experiment 2 to be the most spontaneous, followed by the low deliberation condition in Experiment 1. The high deliberation conditions would also slightly differ, as in Experiment 1 participants were provided a monetary incentive to deliberate but in Experiment 2 they were simply not distracted. So, high deliberation participants in Experiment 1 should have deliberated more highly than those in Experiment 2, as the Experiment 1 deliberators were more motivated. If deliberation increases social desirability, then we should have expected some differences between Experiments 1 and 2 in how strong the effects were. But this was not the case. The pattern of results was the same despite the different impetuses for deliberative or spontaneous thinking.

This issue of what is going on with people who are deliberating, and why the effects of deliberation are somewhat counterintuitive, will be address by Experiment 3. The third experiment brings the theoretical perspective of moral license (Monin & Miller, 2001) into the processes that have been studied thus far. Moral license is a theory that helps to explain why behavior might reverse from one behavior to the next. Therefore, its application in this context will hopefully help to clarify what is happening when people deliberate and why attitudes seem inconsistent between the moral judgments and stereotype internalization.

Experiment 3: Moral license

One theoretical perspective for predicting moral judgments and behaviors in the context of multiple points of measurement is that of moral license (Merritt, Effron, &
Moral licensing is an effect where prior moral behavior may “license” less moral behavior later – and on the flip side, prior immoral behavior may encourage moral behavior later (Jordan, Mullen, & Murnighan, 2011; Monin & Miller, 2001). In addition, there is some evidence that people may strategically engage in moral action in order to license themselves for expected future actions (Cascio & Plant, 2015; Merritt, Effron, Fein, Savitsky, Tuller, & Monin, 2012). Despite other theories of behavior that would predict behavioral consistency on similar tasks (e.g., self-perception theory; Bem, 1973), moral license predicts more of an averaging effect in that people try to balance selfish desires with a goal to maintain their moral credentials (Jordan et al., 2011; Merritt et al., 2010).

Moral license effects have been studied in the realm of prejudice and stereotyping in the past. Findings suggest that allowing people to act in a non-prejudiced manner in a first decision task predicts a higher likelihood of them taking more prejudiced actions in a second task (Monin & Miller, 2001). In addition, previous research using media has found some evidence that exposure to a moral media event can also make people feel more licensed to act in an aggressive manner on a subsequent task under certain circumstances (Ellithorpe, Ewoldsen, & Oliver, in press; Ellithorpe, Cruz, Velez, Ewoldsen, & Bogert, under review). However, there is still a lot that is unknown about how and when moral licensing works.

In particular, moral license has been tested very little in a media narrative context. If people are able to use media messages to help balance their moral credentials, it indicates that media are perhaps even more powerful than we give them credit for. Moral
license research is often done in the form of actual moral behavior (e.g., equality in hiring
decisions, purchasing of green products, helping behaviors, etc.; Jordan et al., 2011;
Kouchaki & Smith, 2014; Mazar & Zhong, 2010; Monin & Miller, 2001). These kinds of
behaviors are presumably fairly effortful; in fact, recent research has shown that
depletion is partially responsible for decreases in helping behaviors as the day goes on
(Kouchaki & Smith, 2014). If actual, effortful behavior is the only way that moral
credentials can be influenced, then it may be unlikely that people cycle through moral
and immoral behaviors many times per day.

But, what if exposure to morality in the media can act as a type of credentials-by-
proxy? If judgments of morality in media can serve to establish or restore moral
credentials, then it indicates that moral license processes may be occurring much more
frequently and easily than once thought. In addition, it opens up the possibility that
people may strategically seek out media messages which they believe will help them to
establish or restore their moral credentials. For example, if a woman crossed the street on
the way to a movie theater to avoid a Black man, she may feel like her moral credentials
as a non-prejudiced person are lacking. If media can restore her credentials, then when
her friends ask what movie she wants to see she may be more likely to suggest Twelve
Years a Slave as a way to affirm her non-prejudice. Importantly, this self-selected media
exposure may then negate the need to affirm her non-prejudice in a more direct and
productive way. There is some previous evidence that media can act as moral-license-by-
proxy in this way (Ellithorpe, Cruz, Velez, Ewoldsen, & Bogert, under review;
Ellithorpe, Ewoldsen, & Oliver, in press).
One possible explanation for the results of Experiments 1 and 2, where positive moral judgments of people involved in stereotyping were then associated with a decrease in stereotype internalization and perpetuation, is that moral license processes were taking place. Even if participants did not believe the study was about stereotyping and prejudice, they still could have picked up on the moral implications of the judgments and stereotypes that they were dealing with, even implicitly. If this is the case, it means that moral license could be one explanation for the negative relationship between moral judgments of the characters involved in stereotyping and the internalization and perpetuation of those stereotypes. Specifically, participants who deliberated highly could have felt that they had acted immorally by judging the characters positively, and so made up for that by rejecting the stereotypes. However, participants also exhibited the same pattern of results when the person they were judging was a positive exemplar (i.e., argued against the stereotyping). Therefore, although moral license may explain some of the results in the present experiments, it may not explain them all.

Importantly, there is no definitive agreement about whether moral license processes are driven by more spontaneous or deliberative thinking. If moral license effects are what are driving the results of Experiments 1 and 2, it would indicate that it is a deliberative process because the movement is occurring with participants who are deliberating highly. Some previous studies and reviews of the literature would support the assertion that moral license is a deliberative process (Jordan et al., 2011; Merritt et al., 2010; Monin & Miller, 2001). However, other research points to moral license as a more implicit and automatic process (Kouchaki & Smith, 2014; Mazar & Zhong, 2010).
Because of the competing arguments and evidence for the nature of processing involved in moral licensing effects, I offer a hypothesis about the general effects of moral license, followed by a research question regarding the influence of deliberation:

**H1**: Participants given the opportunity to affirm their credentials as non-prejudiced in a prior task will judge a media event involving derogation of an outgroup member more positively than participants not given the opportunity to affirm their credentials.

**RQ1**: Will the extent that participants are encouraged or discouraged to deliberate moderate the moral license effect predicted in H1?

Another way to test moral license as an explanation for the reversal between the moral judgments and stereotype internalization is a simple test of order effects. Moral license would predict that participants who act less morally on the first task should act more morally on the second. In Experiments 1 and 2 participants always made the moral judgments first and answered the stereotype questions second. However, that order can be reversed for some participants. If participants who answer the stereotype internalization questions first are more likely to internalize the stereotypes the more they deliberate, but then show more negative moral judgments of the characters involved in the stereotyping, it would be even stronger evidence for moral license as a process mechanism. I therefore offer a research question:

**RQ2**: Will there be any order effects of the questionnaires, such that participants who answer the stereotype internalization questions before the moral judgment questions will indicate opposite attitudes and judgments from those who answer the moral judgment questions first?
And finally, it will be important to consider how moral license and order influence stereotype internalization, and the relationship between stereotype internalization, perpetuation, and the moral judgments of the characters. However, it is unknown how these variables may interact with deliberation to affect stereotype internalization. Thus, I offer a final research question:

**RQ3:** Will moral license, deliberation, and order influence stereotype internalization and perpetuation and/or their relationships with moral judgments?

*Experiment 3 Method*

The following are the methods by which the hypotheses and research questions were tested.

*Design.* The design of this experiment was a 2(moral license: low vs. high) by 2(deliberation: low vs. high) by 2(order: judgments first vs. stereotypes first) between-subjects experimental design employing random assignment. Deliberation was manipulated in the same way as in Experiment 2, using distraction in the media message. Moral license was manipulated based on the manipulation used by Monin and Miller (2001). In that manipulation, participants were given the opportunity to affirm themselves as less prejudiced (or not) before a later decision scenario. Participants in the present experiment were presented with a scenario where they were acting as the hiring decision-maker for a job, under the guise of the cover story of testing memory. The job in question was an entry-level financial consulting position with a large company. Participants were given the files of five candidates for the position, and these were all White men in the low moral license condition. In the high moral license condition the group included one
African American. Importantly, in the high moral license condition the African American was clearly the best candidate. This allowed participants in this condition to affirm their non-prejudice by choosing to hire the African American candidate, but participants in the low moral license condition were not given that chance. This manipulation of moral license allows for comparison of process as a way to test mechanisms of effects (Spencer, Zanna, & Fong, 2005). Moderation can be just as good as mediation in explaining processes. This is especially the case when a variable is easy to manipulate but difficult to measure, as moral license is (Spencer et al., 2005).

Participants. Participants were 322 adults recruited from the general population through a Qualtrics panel. The median age group was 46-52 years (range 18 to 80 years), and 192 (59.6%) were female. In actuality 430 participants completed some part of the study (59% female); however, participants were screened out of the final sample of 322 using the same techniques used in Experiments 1 and 2. Participants who failed the embedded attention check were automatically ejected from the survey (N = 21). Participants who disclosed non-participation at the end of the study were also excluded from analysis (N = 15). And finally, if a participant had been exposed to any of the Dragon Age games he or she was not eligible for the study (n = 72).

Procedure. Procedure was similar to Experiments 1 and 2, except that participants were presented with the moral license manipulation before scenario exposure. All participants were exposed to the scenario where the main character agreed with the stereotyping. This allows for pinpointing the effects of the moral license manipulation without the added variance of scenario type and character reaction. In addition, it allows
for exploration of the scenario from Experiment 2 that had the most counterintuitive effects; specifically, that participants rated the human characters involved in unambiguous stereotyping more morally positive the less they were distracted, but were then more likely to reject the stereotypes later.

**Measures.** The same measures used in experiment 2 were used in Experiment 3.

The two judgments of the main character were again highly correlated, Pearson’s $r = .90, p < .001$, and so were used as a scale ($M = 6.81, SD = 2.18$), as were the two judgments of the other human character, Pearson’s $r = .87, p < .001$ ($M = 6.27, SD = 2.18$).

The Moral Foundations Questionnaire was used again in Experiment 3, and the sample statistics for each subscale were as follows: Harm ($M = 7.57, SD = 1.71$, Cronbach $\alpha = .80$), Fairness ($M = 7.19, SD = 1.58$, Cronbach $\alpha = .77$), Ingroup ($M = 6.59, SD = 1.58$, Cronbach $\alpha = .75$), Authority ($M = 6.99, SD = 1.59$, Cronbach $\alpha = .74$), and Purity ($M = 6.72, SD = 1.96$, Cronbach $\alpha = .82$). The five scales were again used as covariates in analyses.

The filler memory measure of global self-rating for memory ($M = 6.46, SD = 1.78$, Cronbach $\alpha = .84$) was again used in order to protect the cover story and decrease participant suspicion. Participants were also given the same four questions asking them to recall details from the scenario, to continue the cover story that the study was about memory.

Participants were also asked to answer the same scale measuring their deliberation during the clips (clip conditions) or during the questions (control conditions) as a
manipulation check for deliberation (3 items, $M = 6.56$, $SD = 2.21$, Cronbach $\alpha = .89$; Barden & Petty, 2008). Additionally, as in Experiment 2, participants were asked “During the video clip we asked you to count Xs on the screen. How distracting was this task?” ($M = 5.70$, $SD = 2.95$). And participants answered a single item assessing enjoyment (“How much did you enjoy watching the clip?” Green, Brock, & Kaufman, 2004; $M = 5.79$, $SD = 2.94$), as well as the scale assessing their levels of transportation (Green & Brock, 2001; $M = 4.11$, $SD = 1.81$, Cronbach $\alpha = .84$).

Participants were then asked post-test questions after the scenario judgments regarding the non-human group presented in the clip they watched. They indicated agreement with the same list of stereotypes about the target group used in Experiment 2, and the 12 item scale was again highly reliable as a single scale ($M = 5.32$, $SD = 1.91$, Cronbach $\alpha = .90$).

Additionally, the same two questions assessing actual behavior were asked, the first being the selection of a clip for the next participant to watch, coded as -1 for the negative clip, 0 for the neutral clip, and 1 for the positive clip ($M = -0.11$, $SD = 0.84$). The other behavioral measure was the open-ended response asking participants to describe a screenplay they would write about Mage-Human relations. Of the final 268 participants, 197 (74%) filled in something fitting the topic. Participants were excluded if they left the item blank or wrote something indicating they were passing on the item (e.g., “I am not a writer” and “I wouldn’t know what to say”). The qualifying responses were again coded as negative one if they were negative toward the outgroup, as zero if neutral, and as positive one if positive toward the outgroup ($M = -0.14$, $SD = 0.77$). Finally,
participants were asked for demographics information and the disclosure check, and were probed for suspicion, before being debriefed.

Experiment 3 Results

Results were obtained using a combination of univariate ANOVA, OLS regression, and the PROCESS macro for SPSS (Hayes, 2013). Predictors involved in interactions were mean-centered in order to allow for simultaneous interpretation of main effects and interaction effects.

Probe for suspicion. The probe for suspicion was again coded by a research assistant who was blind to condition, such that key words associated with the true focus of the study (e.g., “prejudice”, “race relations”) were coded as “suspicious”. Of the 322 participants, 21 (6.5%) exhibited suspicion that the true purpose of the study had to do with prejudice, stereotyping, and/or race relations. There were no differences by condition in how suspicious a participant was according to a 2(deliberation: high vs low) by 2(moral license: high vs. low) by 2(order: judgments first vs. stereotypes first) interaction using logistical OLS regression, Nagelkerke’s $R^2 = .10$, $b = 3.49$, $p = .12$. This time there was not a significant effect of suspicion on stereotype internalization according to an independent samples t-test, $t(320) = 0.69$, $p = .49$. There was also not a significant difference on moral judgments of the main character, $t(320) = -0.16$, $p = .87$, nor in moral judgments of the other human character, $t(320) = 0.13$, $p = .90$. However, in order to remain consistent with Experiments 1 and 2 the 21 participants who exhibited suspicion were removed from the analyses, leaving 301 participants (58.8% female).
**Moral license check.** It was important that those participants in the high moral license condition actually chose the African American candidate for the job; otherwise their non-prejudice would not be affirmed. Therefore, 33 participants in the high moral license condition who did not choose the African American candidate were removed from analysis, leaving 268 participants as the final sample (59.3% female).

**Deliberation manipulation check.** The manipulation check for the deliberation instructions using an independent samples t-test revealed a marginally significant difference in deliberation amount when comparing the low deliberation condition ($M = 6.36, SD = 2.19$) to the high deliberation condition ($M = 6.78, SD = 2.21$), $t(320) = -1.74, p < .09$. In addition, the question asking participants in the clip conditions how distracting they found the X-finding task to be was significantly different between the low deliberation ($M = 6.56, SD = 2.73$) and high deliberation ($M = 4.86, SD = 2.92$) conditions, $t(320) = 5.40, p < .001$. Based on both of these checks, the media-based deliberation manipulation using distraction was mostly successful. However, as previously discussed in Experiment 1, the replacement of a coded condition variable with a continuous manipulation check variable has been argued to be a stronger and more reliable way of dealing with a predictor (O’Keefe, 2003). Therefore, consistent with Experiments 1 and 2, measured deliberation will be used as a predictor in place of the manipulation conditions. As with Experiments 1 and 2, the correlational nature of this measure means that causal conclusions are more difficult to make. Outcomes associated with the manipulation check for deliberation should thus be taken with this limitation in mind.
Hypothesis testing: Influences on moral judgments. Hypothesis 1 predicted that moral license would influence moral judgments of the characters, and research questions 1 and 2 asked whether this effect would be moderated by deliberation and order. To test the hypothesis and the first two research questions, a three-way interaction between measured deliberation, moral license, and question order was tested as a predictor of judgments, first about the main character and then about the other human character. The five moral intuitions were included as covariates, as was stereotype internalization (due to the potential two-way influence between it and judgments, depending on order condition). OLS regression and the Hayes (2013) PROCESS macro for SPSS was used to test and probe the interactions. When predicting moral judgments of the main character the overall model is significant, $R^2 = .20$, $F(13, 253) = 4.88$, $p < .001$ [Table 11].

Deliberation has a significant and positive main effect on moral judgments, $b = 0.27$, $t(253) = 4.73$, $p < .001$. Moral license does not have a significant main effect, $b = -0.36$, $t(253) = -1.42$, $p = .16$, nor does order, $b = -0.21$, $t(253) = -0.82$, $p = .42$. The three-way interaction is significant, $b = -0.61$, $t(253) = -2.66$, $p < .01$. Probing the interaction [Figure 4] indicates that reported deliberation has a significant positive effect on moral judgments of the main character when moral judgments are made first and when participants were given a chance to affirm their non-prejudice, $b = 0.36$, $t(253) = 2.84$, $p < .01$. Reported deliberation also has a significant positive effect on moral judgments of the main character when moral judgments are made second and participants were not given a chance to affirm their non-prejudice, $b = 0.48$, $t(253) = 4.42$, $p < .001$.

Deliberation does not, however, have a significant effect on moral judgments of the main
character when judgments are made first and participants were not given a chance to affirm their non-prejudice, $b = 0.12$, $t(253) = 1.14$, $p = .26$, nor when judgments are made second and participants were given a chance to affirm their non-prejudice, $b = .11$, $t(253) = 1.02$, $p = .31$.

Figure 4. Three-way interaction between deliberation, moral license, and question order predicting moral judgments of the main character (Experiment 3).
Table 11. Three-way interaction between deliberation, moral license, and question order on moral judgments of the main character (Experiment 3).

<table>
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<tbody>
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<td>ML X Order</td>
<td>4.47</td>
<td>2.48*</td>
</tr>
<tr>
<td>Delib. X ML X Order</td>
<td>-0.61</td>
<td>-2.66**</td>
</tr>
</tbody>
</table>

Note: ^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

When predicting moral judgments of the other human character the overall model is significant, $R^2 = .21$, $F(13, 253) = 5.14$, $p < .001$ [Table 12]. Reported deliberation has a significant and positive main effect on moral judgments, $b = 0.31$, $t(253) = 5.31$, $p < .001$. Moral license does not have a significant main effect, $b = -0.40$, $t(253) = -1.59$, $p = .11$, nor does order, $b = -0.01$, $t(253) = -0.02$, $p = .98$. The three-way interaction is significant, $b = -0.55$, $t(253) = -2.41$, $p < .05$. Probing the interaction [Figure 5] indicates that reported deliberation has a significant positive effect on moral judgments of the other
human character when moral judgments are made first and when participants were given a chance to affirm their non-prejudice, $b = 0.52$, $t(253) = 4.05$, $p < .001$. Deliberation also has a significant positive effect on moral judgments of the other human character when moral judgments are made second and participants were not given a chance to affirm their non-prejudice, $b = 0.38$, $t(253) = 3.51$, $p < .001$. And, deliberation has a positive and significant (though smaller) effect on moral judgments of the other human character when judgments came second and participants were given a chance to affirm their non-prejudice, $b = 0.23$, $t(253) = 2.10$, $p < .05$. Deliberation does not, however, have a significant effect on moral judgments of the other human character when judgments are made first and participants were not given a chance to affirm their non-prejudice, $b = 0.11$, $t(253) = 1.05$, $p = .29$. The results indicate some support for H1, and answer research questions 1 and 2.
Figure 5. Three-way interaction between deliberation, moral license, and question order predicting moral judgments of the main character (Experiment 3).
Table 12. Three-way interaction between deliberation, moral license, and question order on moral judgments of the other human character (Experiment 3).

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</tr>
<tr>
<td>ML X Order</td>
<td>4.64</td>
<td>2.59*</td>
</tr>
<tr>
<td>Delib. X ML X Order</td>
<td>-0.55</td>
<td>-2.41*</td>
</tr>
</tbody>
</table>

Note: ^p < .10, *p < .05, **p < .01, ***p < .001.

*Hypothesis testing: Influences on stereotype internalization.* In the first two experiments stereotype internalization was always measured after the moral judgments, allowing for mediational analysis. However, in Experiment 3 the order of moral judgments and stereotype questions was randomized, meaning that mediational analysis is not appropriate. Therefore, the same three-way interaction was tested directly on stereotype internalization, controlling for moral judgments of the main character and the other human character [Table 13]. The overall model predicting stereotype internalization was significant, $R^2 = .14$, $F(14, 252) = 3.00$, $p < .001$. Deliberation does not have a significant main effect on stereotype internalization, $b = 0.02$, $t(252) = 0.33$, $p = .74$, nor does moral license, $b = -0.11$, $t(252) = -0.46$, $p = .64$, nor does order, $b = 0.04$, $t(252) = 0.19$, $p = .85$. The three-way interaction between deliberation, moral license, and order
was also not significant, $b = 0.28$, $t(252) = 1.36$, $p = .17$. This indicates that the influence of these variables tends to be on moral judgments, and not directly on stereotype internalization.

Table 13. Three-way interaction between deliberation, moral license, and question order on stereotype internalization (Experiment 3).

<table>
<thead>
<tr>
<th>Variable</th>
<th>$b$</th>
<th>$T$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.82</td>
<td>3.73***</td>
</tr>
<tr>
<td>Harm</td>
<td>-0.14</td>
<td>-1.21</td>
</tr>
<tr>
<td>Fairness</td>
<td>0.12</td>
<td>0.97</td>
</tr>
<tr>
<td>Ingroup</td>
<td>-0.10</td>
<td>-0.87</td>
</tr>
<tr>
<td>Purity</td>
<td>0.13</td>
<td>1.43</td>
</tr>
<tr>
<td>Authority</td>
<td>0.25</td>
<td>2.01*</td>
</tr>
<tr>
<td>Main Ch. Judg.</td>
<td>0.09</td>
<td>1.36</td>
</tr>
<tr>
<td>Other Ch. Judg.</td>
<td>0.11</td>
<td>1.80^</td>
</tr>
<tr>
<td>Deliberation</td>
<td>0.02</td>
<td>0.33</td>
</tr>
<tr>
<td>Moral License</td>
<td>-0.11</td>
<td>-0.46</td>
</tr>
<tr>
<td>Question Order</td>
<td>0.04</td>
<td>0.19</td>
</tr>
<tr>
<td>Delib. X ML</td>
<td>-0.22</td>
<td>-2.08*</td>
</tr>
<tr>
<td>Delib. X Order</td>
<td>-0.01</td>
<td>-0.13</td>
</tr>
<tr>
<td>ML X Order</td>
<td>-0.11</td>
<td>-0.24</td>
</tr>
<tr>
<td>Delib. X ML X Order</td>
<td>0.28</td>
<td>1.36</td>
</tr>
</tbody>
</table>

Note: ^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

**Hypothesis testing: Relationships between moral judgments and stereotype internalization.** Although causal influence cannot be established between moral judgments and stereotype internalization, a conceptually bidirectional relationship can be tested using OLS regression and looking to the partial correlation coefficient as the correlation between the two variables when the influences of all other variables in the regression has been accounted for in both the predictor and outcome variables. Two
regressions were set up so that deliberation, moral license, order, and the two-way and three-way interactions between them, as well as the five moral intuitions, were included as covariates. In the first regression moral judgments of the main character was entered as the outcome and stereotype internalization as the predictor, $R^2 = .20$, $F(13, 253) = 4.88$, $b = 0.17$, $t(253) = 2.43$, $p < .05$, partial $r = .15$. In the second regression moral judgments of the other human character was entered as the outcome and stereotype internalization was retained as the predictor, $R^2 = .21$, $F(13, 253) = 5.14$, $b = 0.19$, $t(253) = 2.71$, $p < .01$, partial $r = .17$. The results for these two regressions are the same as in Tables 11 and 12, respectively. In both cases, moral judgments of the human character were positively associated with stereotype internalization, accounting for the influences of deliberation, moral license, and order. The direction of this effect is the opposite of the first two experiments, when positive moral judgments were associated with less stereotype internalization. This indicates that the effect has been reversed overall, perhaps due to the inclusion of the moral license and order manipulations. These results, together with the results predicting stereotype internalization directly from deliberation, moral license, and order, provide an answer for research question 3.

*Relationship between stereotype internalization and perpetuation behavior.*

Stereotype internalization continued to be a significant predictor of the behavioral outcomes. As in experiments 1 and 2, only those participants who successfully answered the behavioral measures were included in these tests. A hierarchical OLS regression [Table 14] predicting movie selection behavior included deliberation, moral license, order, and the two-way and three-way interactions between them, the five moral
intuitions, and the moral judgments of both human characters in the first step, $R^2 = .05$, $F(14, 181) = 0.67, p = .80$. The second step contained stereotype internalization and comprised a significant increase in variance explained, $\Delta R^2 = .09, F(1, 180) = 19.58, b = -0.14, t(180) = -4.42, p < .001$. The more participants had internalized the stereotypes from the clips, the more likely they were to choose the negative movie for a future participant to watch.

### Table 14. Predicting movie selection behavior (Experiment 3).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$B$</td>
<td>$t$</td>
<td>$b$</td>
<td>$t$</td>
</tr>
<tr>
<td>Constant</td>
<td>0.25</td>
<td>0.72</td>
<td>0.62</td>
<td>1.79*</td>
<td></td>
</tr>
<tr>
<td>Harm</td>
<td>0.01</td>
<td>0.12</td>
<td>-0.02</td>
<td>-0.86</td>
<td></td>
</tr>
<tr>
<td>Fairness</td>
<td>-0.09</td>
<td>-1.47</td>
<td>-0.07</td>
<td>-1.15</td>
<td></td>
</tr>
<tr>
<td>Ingroup</td>
<td>0.07</td>
<td>1.27</td>
<td>0.05</td>
<td>1.11</td>
<td></td>
</tr>
<tr>
<td>Purity</td>
<td>-0.02</td>
<td>-0.41</td>
<td>0.00</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>Authority</td>
<td>0.01</td>
<td>0.16</td>
<td>0.04</td>
<td>0.73</td>
<td></td>
</tr>
<tr>
<td>Deliberation</td>
<td>-0.02</td>
<td>-0.85</td>
<td>-0.02</td>
<td>-0.86</td>
<td></td>
</tr>
<tr>
<td>Moral License</td>
<td>0.12</td>
<td>0.32</td>
<td>0.33</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>Order</td>
<td>0.60</td>
<td>1.58</td>
<td>0.60</td>
<td>1.63</td>
<td></td>
</tr>
<tr>
<td>Delib. X ML</td>
<td>-0.00</td>
<td>-0.08</td>
<td>-0.03</td>
<td>-0.70</td>
<td></td>
</tr>
<tr>
<td>Delib. X Order</td>
<td>-0.06</td>
<td>-1.21</td>
<td>-0.06</td>
<td>-1.24</td>
<td></td>
</tr>
<tr>
<td>ML X Order</td>
<td>0.32</td>
<td>0.41</td>
<td>0.01</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>Delib. X ML X Order</td>
<td>-0.45</td>
<td>-0.46</td>
<td>-0.01</td>
<td>-0.60</td>
<td></td>
</tr>
<tr>
<td>Main Ch. Judgment</td>
<td>0.02</td>
<td>-0.70</td>
<td>0.03</td>
<td>1.16</td>
<td></td>
</tr>
<tr>
<td>Other Ch. Judgment</td>
<td>-0.02</td>
<td>0.71</td>
<td>-0.01</td>
<td>-0.18</td>
<td></td>
</tr>
<tr>
<td>Stereotype Internalization</td>
<td>--</td>
<td>--</td>
<td>-0.14</td>
<td>-4.91***</td>
<td></td>
</tr>
</tbody>
</table>

Note: *$p < .10$, **$p < .05$, ***$p < .01$, ****$p < .001$.

A hierarchical OLS regression [Table 15] predicting screenplay behavior again included deliberation, moral license, order, and the two-way and three-way interactions.
between them, the five moral intuitions, and the moral judgments of both human characters in the first step, $R^2 = .11$, $F(14, 181) = 1.61$, $p = .08$. The second step contained stereotype internalization and comprised a significant increase in variance explained, $\Delta R^2 = .13$, $F(1, 180) = 30.29$, $b = -0.15$, $t(180) = -5.50$, $p < .001$. The more participants had internalized the stereotypes presented in the clips, the more likely they were to write a negative screenplay synopsis.

Table 15. Predicting screenplay behavior (Experiment 3).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 1</th>
<th>Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B</strong></td>
<td><strong>T</strong></td>
<td><strong>b</strong></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.41</td>
<td>-0.97</td>
</tr>
<tr>
<td>Harm</td>
<td>0.16</td>
<td>2.84**</td>
</tr>
<tr>
<td>Fairness</td>
<td>-0.09</td>
<td>-1.61</td>
</tr>
<tr>
<td>Ingroup</td>
<td>-0.05</td>
<td>-0.86</td>
</tr>
<tr>
<td>Purity</td>
<td>-0.01</td>
<td>-0.34</td>
</tr>
<tr>
<td>Authority</td>
<td>0.10</td>
<td>1.58</td>
</tr>
<tr>
<td>Deliberation</td>
<td>-0.02</td>
<td>-0.73</td>
</tr>
<tr>
<td>Moral License</td>
<td>0.30</td>
<td>0.65</td>
</tr>
<tr>
<td>Order</td>
<td>-0.15</td>
<td>-0.33</td>
</tr>
<tr>
<td>Delib. X ML</td>
<td>-0.04</td>
<td>-0.72</td>
</tr>
<tr>
<td>Delib. X Order</td>
<td>0.01</td>
<td>0.24</td>
</tr>
<tr>
<td>ML X Order</td>
<td>-0.74</td>
<td>-0.80</td>
</tr>
<tr>
<td>Delib. X ML X Order</td>
<td>0.04</td>
<td>0.35</td>
</tr>
<tr>
<td>Main Ch. Judgment</td>
<td>-0.03</td>
<td>-0.89</td>
</tr>
<tr>
<td>Other Ch. Judgment</td>
<td>-0.04</td>
<td>-1.19</td>
</tr>
<tr>
<td>Stereotype Internalization</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: ^$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$. 94
**Experiment 3 Discussion**

Experiment 3 expanded on experiments 1 and 2 by testing moral license as a possible explanation for the effects found in the first two experiments, where positive moral judgments of people involved in stereotyping actually predicted decreased stereotype internalization. Participants who were given a chance to affirm their non-prejudice did have more positive moral judgments of stereotypers the more they reported deliberating, as long as they provided their moral judgments first. When moral judgments were provided second the effect of prior affirmation remained for judgments of the human character who was more directly engaging in the stereotyping, but not for the main character (who did not create the stereotypes but did agree with them). This difference may simply be an issue of the strength of conviction of the stereotyper, but more research may be needed to test this further. The important thing, however, is that participants who were able to affirm themselves as not prejudiced were more likely to judge stereotypers positively the more the participants deliberated. Presumably, this is because those who had affirmed their non-prejudice then felt licensed to act in a more prejudiced manner later. This influence of reported deliberation on moral judgments found in Experiment 3 for those in the high moral license condition mirrors that of Experiments 1 and 2, where more deliberation had also been associated with more positive moral judgments.

The moral judgments made by participants who did not have a chance to affirm their non-prejudice was more directly dependent on question order. Those who answered the moral judgments first did not show an influence of deliberation on their judgments.
On the other hand, those who answered moral judgments after the stereotype internalization questions showed the same positive influence of reported deliberation on judgments as those who did affirm. The hypothesized possibility was that these participants found another way to affirm their non-prejudice before answering the moral judgment questions, most likely by decreasing how much they agreed with the stereotyping questions. However, this was not borne out by the three-way interaction predicting stereotype internalization. Future research should also delve into the reason for this effect.

Deliberation, moral license, and order did not interact to predict stereotype internalization, nor did any of them predict it directly as a main effect. It is possible, therefore, that a cognitive reaction such as moral judgments needs to occur in order to predict internalization. Indeed, moral judgments and stereotype internalization were significantly correlated in experiment 3, but with the direction reversed from experiments 1 and 2. In the first two experiments more positive moral judgments of the human characters were associated with lower likelihood of internalizing the stereotypes they espoused. In experiment 3 it was the opposite, where more positive moral judgments were associated with more stereotype internalization. One possibility is that the moral license and order condition accounted for this change in the relationship between judgments and stereotype internalization, as those were the only changes to Experiment 3. And, as in the previous experiments, stereotype internalization predicted stereotype perpetuation behavior, both in terms of the movie participants selected for future participants to watch and in the tone of the screenplay synopsis participants wrote.
The nature of moral license and deliberation is difficult to parse out among the other issues involved in this experiment. As previously mentioned, there is little agreement among moral license studies regarding the spontaneous or deliberative nature of moral license processes. Some studies indicate that moral license is a more deliberative process, one requiring effort and possibility conscious thought (Jordan et al., 2011; Merritt et al., 2010; Monin & Miller, 2001). However, other research points to moral license as a more implicit and automatic process (Kouchaki & Smith, 2014; Mazar & Zhong, 2010). The overall pattern observed in the results of Experiment 3 is that participants who affirmed their moral credentials and therefore were licensed to act less morally were more likely to act in a prejudiced manner the more they reported that they deliberated. Thus, the expected moral license effect only occurred for participants who reported deliberating highly. This would indicate that moral license may be a more deliberative process. However, this is just one experiment and testing moral license as spontaneous or deliberative was only of secondary concern. Therefore, subsequent work is needed to more directly and purposefully test this process.

Importantly, Experiment 3 emphasizes the complexity associated with cognitive reactions to stereotyping in the media. A great deal of circumstances – whether integral to the media message itself, the person consuming it, or the context they are in – have the power to influence how people will judge ingroup members who are involved in stereotyping an outgroup. And this, in turn, is associated with internalization of those stereotypes, even to the point of perpetuating the stereotypes and prejudice by sharing them with other people.
General Discussion

Stereotypical and prejudicial media messages are everywhere, and the general consensus in previous research is that they have negative influences on society (Busselle & Crandall, 2002; Coltrane & Messineo, 2000; Dixon, 2007; Mastro, 2009a; Mastro, 2009b; Oliver et al., 2007; Shanahan & Morgan, 1999). The present three experiments present a preliminary examination of the complexities surrounding morality, stereotyping, cognitive processing, and media effects. The findings across these three experiments offer some circumstances and contexts for when and how internalization of mediated stereotypes may be more likely to occur. Specifically, deliberative processing and moral judgments play important and complicated roles in acquisition of stereotypes from media and their eventual perpetuation.

Stereotypes and prejudice are not often expressly discussed as morally-relevant judgments, though some researchers have made that connection (e.g., Haidt & Kesebir, 2010; Schnall et al., 2008). The present experiments ask participants to make moral judgments about ingroup members who engage in stereotyping and prejudice against outgroup members, directly testing the role of moral judgments in stereotype processes. The results of all three studies indicate that people do make moral judgments about stereotypes and prejudice in the media, and that these judgments can have fairly powerful effects on the likelihood that those stereotypes and prejudiced will be internalized and then perpetuated through future behavior.

These moral judgments are dependent, however, on how much people report deliberating about the media content. In all three experiments, higher reported
deliberation was associated with more positive moral judgments of the ingroup characters when participants were presented with a stereotyping scenario. This would seem to paint a negative picture of deliberation, given that it appears to encourage positive moral reactions to mediated stereotyping and prejudice. Logic would dictate that more positive moral judgments about stereotypers would be associated with higher agreement with the stereotypes. However, in Experiments 1 and 2 these positive moral reactions actually predicted the opposite effect – more positive moral judgments of the stereotypers were associated with less stereotype internalization, not more. The results of Experiment 3 indicate that moral license (Monin & Miller, 2001) possibly accounts for this counterintuitive result. Specifically, participants in the first two experiments may have felt that by judging stereotypers positively they were negating their credentials as moral and non-prejudiced people. So, they attempted to regain their moral credentials by claiming they did not agree with the stereotypes presented. If this is the case, it also indicates that moral license processes may be more likely to occur the more people are deliberating. These findings are consistent with previous work that concluded that moral license may require effort and careful thought (e.g., Jordan et al., 2011; Merritt et al., 2010; Monin & Miller, 2001).

The results of the present experiments also provide yet another perspective to the debate about whether spontaneous or deliberative processes are more important for moral judgments, and in particular, for prejudice and stereotyping processes (e.g., Haidt, 2001; Kohlberg, 1976; Gibbs, 2013). Although the present studies cannot (and do not) conclude that spontaneous processing is unimportant, they do provide evidence that deliberation is
important and must not be overlooked in studies on these topics. In actuality, the results of the present experiments provide some evidence that deliberation may be the default processing state, and not spontaneous processing. Specifically, this is in the fact that participants who were encouraged to process spontaneously (Experiment 1) or prevented from processing deliberatively (Experiments 2 and 3) gave the same answers as participants in the control condition. Normally, similarity to a control condition would indicate that something is the default. However, in these experiments the control condition did not even see the video clips, but made judgments from photographs. This is not the same as seeing a video clip, and yet those who saw the video but did not deliberate highly responded as if they had never seen the clip at all. This indicates that spontaneous processing may have been the more artificial and constrained condition, compared to the deliberative processing condition. If this is the case, then more deliberative processing could actually be the default state, in contrast to the assumptions of the MIME (Tamborini, 2011) and MFT (Haidt, 2001), and in agreement with many of the arguments made by Bilandzic (2011).

Regardless of which type of processing is the default, the moral intuitions could still be important predictors of moral judgments and their associated outcomes, as argued by intuition-based theories like Moral Foundations Theory (Haidt, 2001) and the MIME (Tamborini, 2011). Across the three current experiments, the five moral intuitions (Haidt, 2001) were sometimes significant covariates. However, there was not an entirely clear pattern in terms of what intuition would be a significant covariate in predicting any given outcome in any given sample. In Experiment 1 the only significant effect involving an
intuition was the effect of ingroup loyalty on stereotype internalization, such that higher ingroup loyalty adherence was associated with higher stereotype internalization. In Experiment 2 fairness adherence predicted more positive judgments of the main character, ingroup loyalty adherence predicted more positive judgments of the other human character, and purity adherence predicted increased stereotype internalization. And in Experiment 3 harm and fairness adherence both predicted judgments of the main character, but in opposite directions. Harm was associated with more negative judgments and fairness with more positive. Authority adherence was associated with higher stereotype internalization but also with more positive screenplay behavior. And harm adherence was also associated with more positive screenplay behavior. Some of these relationships make sense, but others are curious. For example, harm and fairness tend to be highly associated with one another (Graham et al., 2007), but they had opposite effects in experiment 3. Also, fairness and ingroup loyalty tend to be less associated with each other (Graham et al., 2007), but they both increased positivity of character judgments in Experiment 2. And, in Experiment 3 authority adherence was associated with higher stereotyping on the internalization questions but less stereotyping on the screenplay behavior measure. This lack of consistency across studies is potentially problematic for the intuition-based judgment models, as they should predict consistency in the effects of each intuition. The lack of consistency is possibly explained by the presence of deliberation, but this explanation is also troublesome for theories that assert that deliberation only serves to justify intuitive responses (Haidt, 2001; Tamborini, 2011). In the present experiments the influence of deliberation was highly consistent in consistent
circumstances, but the influences of the intuitions were not. If it were really the intuitions driving the effects, then those should have been consistent as well. However, there may be an important pattern for the intuitions to be found in future research on the topic of moral judgments about stereotyping and prejudice in the media.

Limitations and Future Research

There are some limitations to the present experiments that may limit their conclusions. First, the studies were completed online. Although this provided an opportunity to collect an adult sample with nationally representative characteristics for the United States (and avoid the “science of the sophomore”, Gordon, Slade, & Schmitt, 1986; McNemar, 1946), there are issues inherent in online data collection. One of the major issues is quality control – people are less likely to give quality answers when taking a study online, usually due to carelessness and satisficing (Peifer & Garrett, 2014). One way to deal with this issue is to identify and remove participants who gave careless responses, something that was done in all three experiments. However, although these techniques should have removed any problematic participants, it also drastically reduced sample size and therefore statistical power. Taking the suggestion that research should test relationships with multiple samples and in multiple contexts (Gordon et al., 1986; McNemar, 1946), future research should replicate the effects of the present experiments in a more controlled laboratory environment.

Another limitation is that none of the experiments included implicit measures. Implicit measures, as contrasted with explicit ones, are meant to capture more spontaneous attitudes and reactions (DeHouwer, 2006; Goodall, 2011; Olson & Fazio,
2004). The measures used in the present experiment were all explicit in nature, meaning they were potentially subject to some participant biases in motivation (Fazio, 1990). The assumption of dual process models like the MODE model, and therefore the assumption made as the basis of the present work, is that spontaneously measured attitudes are true attitudes, and deliberatively measured attitudes are true attitudes plus the effect of motivation (Fazio, 1990; Fazio, Jackson, Dunton, & Williams, 1995). Under this view, when there is not much motivation to change an attitude answer, implicit and explicit attitude measures should be highly correlated. But when motivation is high, they should not be correlated. Issues such as prejudice and stereotyping tend to come with motivational problems that make implicit measures necessary to get at a true attitude (Fazio et al., 1995). There were many safeguards in the present studies that attempted to decrease the effect of motivation, such as the probe for suspicion weeding out people who guessed the true purpose and using novel groups that participants should have no prior attitudes for (and therefore they should have little motivation to respond in a specific way). If this was successful and motivation was indeed very low for most participants, then the attitudes measured by the explicit measures in the experiments should be highly correlated with implicitly measured attitudes. But, if these were not successful, or if one takes the view that implicit and explicit measures of attitudes operate with completely separate systems (Rydell et al., 2006), then the lack of implicit measures in these experiments is a problem. Implicit measures, in this case, would have captured influences that the explicit measures did not, meaning that the present experiments give
an incomplete view of the processes involved. Future research and replications should include implicit measures to examine these possibilities.

One possible third variable that could influence the effect of deliberation is need for cognition (Cacioppo & Petty, 1982). Need for cognition encompasses how much an individual enjoys and seeks out deep thinking. It is possible that need for cognition influenced how likely participants were to deliberate, meaning that this may have played a role in the effects of deliberation found across these three studies. In addition, previous work on need for cognition and morality has found that people high in need for cognition also have higher moral sensitivity than people who are low in need for cognition (Sparks, 2015). Unfortunately, need for cognition was not measured in the present experiments. Therefore, it remains a possibility that need for cognition did influence deliberation and its effects on moral judgments in the present study. Future research may wish to consider need for cognition as a potentially important covariate or moderator.

And finally, the fact remains that the processes involved with real world groups may be very different than those outlined in the present experiments, precisely because of the messy motivational and normative issues involved that the use of novel groups helped to avoid. The decision to use novel groups was purposeful and based in previous research (Hoffman & Hurst, 1990). But it also leaves behind a necessity to test these issues in a more externally valid way with real groups. Future research should examine how using real world groups changes outcomes, as well as keep an eye out for other possible
moderators (e.g., motivation, prior contact, stereotype valence, etc.) and alternative mechanisms.

Theoretical Contributions

The results of the present study have a number of implications for theory. In particular, the results speak to issues surrounding deliberation in moral judgments and in moral license. The Model of Intuitive Moral Exemplars (MIME; Tamborini, 2011) was provided as a dual process model predicting moral judgments from media, but one that is much more favorable to the spontaneous processes than the deliberative ones (Bilandzic, 2011). The present experiments did not test the specific tenets of the MIME, but instead focused on the role of deliberation and whether deliberative moral judgments might be more impactful than previously expected. This was indeed the case. It was not difficult to encourage participants to deliberate; only a bit of motivation was necessary. In fact, previous work suggests that it can actually be difficult to get people to process media messages entirely spontaneously (Eno & Ewoldsen, 2010). As previously outlined, there are many ways that context and narrative could also encourage deliberation in a more externally valid way (Bilandzic, 2011). And when participants deliberated it impacted not only their moral judgments about the people involved in the situation, but also their likelihood of internalizing and perpetuating negative stereotypes about another group. Thus, the results of the present experiments suggest that heavily intuition-based models like MFT and the MIME should reconsider their stance on deliberation as unlikely and unimportant.
However, the finding that deliberation is important for moral judgments about stereotyping in the media does not negate the potential importance of the moral intuitions. Although their effects were varied and inconsistent across the three experiments, they did play some role in predicting the outcomes. They were relegated to covariates in the present experiments because deliberation, above and beyond the content of those intuitions, was the focus. The goal was to show that deliberative thought does occur and is important in predicting the effects of exposure to stereotyping in the media. In the future, however, the moral intuitions should perhaps take more of a central role.

**Practical Implications**

There are some practical conclusions that can be drawn from the present work regarding the creation of stereotypical and prejudicial media content. One major takeaway should be that there is likely no single message that can be universally positive or negative for stereotyping and prejudice outcomes. Everything in the present experiments, from moral judgments to stereotype internalization and perpetuation behavior, was dependent on factors that are for the most part not controllable by the message. Specifically, the amount participants deliberated, and whether they felt their moral credentials to be affirmed or not before engaging with the media content, both had large influences on later attitudes and behaviors. Although the message can include factors that encourage or discourage deliberation (Bilandzic, 2011), there are contextual and environmental factors that also may play a role. For example, multitasking, an increasingly prevalent activity (Foehr, 2006; Jeong & Fishbein, 2007), may distract consumers from attending to a message and therefore from deliberating about it.
Moral license and moral affirmation are even more difficult for the message to control. There is some evidence that moral licensing can happen as a result of a media experience (Ellithorpe et al., under review; Ellithorpe et al., in press), but for the most part this process will be due to actions that occurred before engagement with the media content, as it did in Experiment 3. In addition, other factors such as time of day and self-control depletion can also influence moral license processes (Kouchaki & Smith, 2014). This means that a message that is otherwise set up to elicit one response to a stereotypical or prejudicial message could conceivably backfire depending on whether an individual has been recently morally affirmed or not, and whether his or her self-control has been previously depleted.

Despite these complications, some recommendations can be made about the types of messages and contexts that may be more or less likely to elicit stereotyping as compared to rejection of stereotyping. In a scenario where message recipients are expected to be deliberating highly about the content, and assuming they have not recently had their morality affirmed, a message depicting ingroup members outright derogating outgroup members should have the end result of a rejection of prejudice. An example of such a scenario might be people who have just paid to watch a film in the theater. These people should be motivated to pay attention due to the costs – in both money and effort – of going to the theater, and there are few distractions in such an environment. However, the same film watched in the home amidst the common multitasking distractions such as other media, cooking dinner, and housework (Jeong & Fishbein, 2007) could have the opposite effect. On the other hand, when people do feel licensed to act less morally (or it
is late at night and their self-control is depleted; Kouchaki & Smith, 2014), this pattern of effects should reverse. Without more knowledge of how often moral affirmations occur in daily life, it is difficult to predict how important this scenario may be.

Conclusion

The inclusion of stereotypes and prejudice in media is a problematic issue, one that has the power to influence real attitudes and behaviors. Previous work on media and moral judgments has focused largely on intuition-based judgments as being most important for predicting outcomes (e.g., Haidt, 2001; Tamborini, 2011). The present work argues that deliberation has a larger role to play that previously expected, and tests the influence of deliberation on moral outcomes. Three experiments created stereotypes and prejudice about novel outgroups, and asked participants to make moral judgments about the characters involved. Participants were also asked to indicate how much they internalized the stereotypes, and were given opportunities to perpetuate the stereotypes to other people through their behavior. And in Experiment 3, the role of moral license was tested as a possible explanation. The results across all three experiments indicate that deliberation does play an important and complicated role in moral judgments about stereotyping and prejudice in media, and that moral judgments are associated with stereotype internalization and perpetuation.
References


Appendix of Measures

Moral Foundations Questionnaire (Graham et al., 2009)

When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using a scale from 0 (not at all relevant) to 10 (extremely relevant).

MATH - Whether or not someone was good at math [This item is not scored; it is included both to force people to use the bottom end of the scale, and to catch and cut participants who respond with last 3 response options]

Harm:

Whether or not someone suffered emotionally

Whether or not someone cared for someone weak or vulnerable

Whether or not someone was cruel

Fairness:

Whether or not some people were treated differently than others

Whether or not someone acted unfairly

Whether or not someone was denied his or her rights
**Ingroup:**

Whether or not someone’s action showed love for his or her country

Whether or not someone did something to betray his or her group

Whether or not someone showed a lack of loyalty

**Authority:**

Whether or not someone showed a lack of respect for authority

Whether or not someone conformed to the traditions of society

Whether or not an action caused chaos or disorder

**Purity:**

Whether or not someone violated standards of purity and decency

Whether or not someone did something disgusting

Whether or not someone acted in a way that God would approve of

**PART 2 ITEMS**

Please read the following sentences and indicate your agreement or disagreement on a scale from 0 (strongly disagree) to 10 (strongly agree)
GOOD – It is better to do good than to do bad. [Not scored, included to force use of top of the scale, and to catch and cut people who respond with first 3 response options]

Harm:
Compassion for those who are suffering is the most crucial virtue.
One of the worst things a person could do is hurt a defenseless animal.
It can never be right to kill a human being.

Fairness:
When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.
Justice is the most important requirement for a society.
I think it’s morally wrong that rich children inherit a lot of money while poor children inherit nothing.

Ingroup:
I am proud of my country’s history.
People should be loyal to their family members, even when they have done something wrong.
It is more important to be a team player than to express oneself.

Authority:
Respect for authority is something all children need to learn.

Men and women each have different roles to play in society.

If I were a soldier and disagreed with my commanding officer’s orders, I would obey anyway because that is my duty.

**Purity:**

People should not do things that are disgusting, even if no one is harmed.

I would call some acts wrong on the grounds that they are unnatural.

Chastity is an important and valuable virtue.

*Familiarity with video games*

Have you ever been exposed to the *Mass Effect* video game series?

Yes, I have played at least one *Mass Effect* game

Yes, I have watched someone else play at least one *Mass Effect* game

No, I have never played or watched someone else play any *Mass Effect* games

I’m not sure if I have ever played or watched someone else play a *Mass Effect* game

Have you ever been exposed to the *Dragon Age* video game series?

Yes, I have played at least one *Dragon Age* game

Yes, I have watched someone else play at least one *Dragon Age* game

No, I have never played or watched someone else play any *Dragon Age* games
I’m not sure if I have ever played or watched someone else play a *Dragon Age* game

How familiar are you with the following types of video games? Please use a scale from 0 (not at all familiar) to 10 (extremely familiar).

- Role Playing Games (RPG)
- Science Fiction Games
- Fantasy Games
- Games made by Bioware

*Memory* (*Crook & Larrabee, 1990*)

In general, as compared to the average individual, how would you describe your memory?

[-5 Very Poor to +5 Very Good]

How would you describe your memory, on the whole, as compared to the best it has ever been? [-5 Very Poor to +5 Very Good]

Compared to the best your memory has ever been, how would you describe the speed with which you remember things?

[-5 Very Slow to +5 Very Fast]

How much concern or distress do you feel about your memory at this time?

[-5 Extremely unconcerned to +5 Extremely concerned]

*Moral Judgments* (*Schnall et al., 2008*), plus single item of prejudiced-not
Please rate the action you just witnessed on the following dimensions (-5 to +5 scale):
(specific to each clip – the actions of the character with photo provided: C-Sec officer, Illusive Man, Batarian, Arishok, Cullen, Sister Petrice)
Extremely wrong – Perfectly Okay
Strongly Disapprove – Strongly Approve
Extremely Prejudiced – Extremely Unprejudiced (Experiment 1 only)

*Perceived Deliberation (Barden & Petty, 2008)*

Please answer the following questions on a scale from 0 to 10, with 0 meaning “not at all” and 10 meaning “A lot”.
To what extent did you think a lot about the story?
To what extent did you pay attention to the story?
To what extent did you take the time you needed to carefully view the story?

*Enjoyment (Green et al., 2004)*

How much did you enjoy watching the video clip? [0 = Did not enjoy at all, 10 = Enjoyed very much]

*Probe for suspicion:*
In your own words, can you tell us what this study was about?

*Demographics*
You’re almost finished with the survey. All we need to ask you now are some questions about who you are.

What is your biological sex?

Male
Female
Other/Prefer not to respond

What is your age?

What is your race?

White/Caucasian
Black/African American
American Indian or Alaskan Native
Asian or Pacific Islander
Arabic or Middle Eastern
Other (please specify)

What political orientation to you identify with?

Very Liberal
Liberal
Somewhat Liberal
Neither Liberal nor Conservative
Somewhat Conservative

Conservative

Very Conservative

Are you a native English speaker?

What kind of device are you taking this survey on?

Desktop computer

Laptop computer

Tablet

Mobile phone

Other (please specify)

You are about to create a code that will be the only way to link you to your data. In the case that you wish to withdraw your answers from the study after being debriefed this would be the only way to identify your answers, as we are not collecting direct identifying information. The code is designed so that nobody could figure out who you are just from your answers, but that when you provide the answers we can find you in the data set. In order to create the code please answer the following questions.

What is the two-digit month of your birthday? (e.g., “May” would be “05”).

What are the last two letters of your last name? (e.g., “Smith” would be “th”).

How many siblings do you have? (If you are an only child put “0”).
How many bedrooms are in your current residence?

Questions specific to the clips:

Outgroup Derogating:

Mass Effect 2 – Quarian and stolen credit chit

Detail Recall:

What color was the datapad the C-Sec officer held? (yellow, red, blue, green)

What was the Quarian accused of stealing? (a credit chit, a ship, food, an air mask)

What was the name of the character that came over to ask about the situation?

(Commander Shepard, Captain Shepard, Commander Smith, Captain Smith)

How many characters spoke in the conversation with the C-Sec officer? (four, three, two, one)

Attitudes and beliefs about Quarians:

“This is a Quarian (photo), a character in the clip you just watched. Please answer the following questions about Quarians on a scale from 0 (strongly disagree) to 10 (strongly agree).”

Specific stereotypes:

Quarians are vagrants

Quarians are more likely to steal than other groups are

Quarians cannot be trusted

General Stereotypes: (from Devine 1989)
Quarians are violent
Quarians are dirty
Quarians are uneducated

**Affective/Prejudice:**
I dislike Quarians
Quarians are harmful to society
Quarians make me feel uneasy

**Behavioral Intentions:**
If I met a Quarian I would be friendly to him or her (R)
I would not let a Quarian near my family
I would tell my friends to stay away from Quarians

**Filler items from Kim & Rosenberg 1980:**
Quarians are unattractive
Quarians are confident
Quarians are non-conforming
Quarians are arrogant

**Behavior Measures:**
The next participant who fills out our survey after you will also have to watch a video clip. Of the following clip titles, please choose the one that the next participant will watch.

The trouble caused by Quarians
All about the Quarians

The wisdom of the Quarians

Picture a scenario in which you have been chosen to write a screenplay about Quarian-Human relations. Please describe in a few sentences a summary of your screenplay.

**Dragon Age 2 – Cullen and mages as abominations**

*Detail Recall:*

What color was the Mage leader’s dress? (purple, white, green, red)

What was the problem being dealt with? (possessed Templars, Templar salaries, city conditions, mage unions)

What was the name of the character the Mages and Templar Commander had the conversations with? (Hawke, Varrick, Merrill, Isabela)

How many characters spoke in the conversation with the Templar commander? (one, two, three, four)

*Attitudes and beliefs about mages:*

“This is a mage (photo), a character in the clip you just watched. Please answer the following questions about mages on a scale from 0 (strongly disagree) to 10 (strongly agree).”

*Specific stereotypes:*

Mages are dangerous

Mages are more likely to deal with demons than other groups are

Mages cannot be trusted
General Stereotypes:
Mages are vagrants
Mages are dirty
Mages are uneducated

Affective/Prejudice:
I dislike Mages
Mages are harmful to society
Mages make me feel uneasy

Behavioral Intentions:
If I met a Mage I would be friendly to him or her (R)
I would not let a Mage near my family
I would tell my friends to stay away from Mages

Filler items from Kim & Rosenberg 1980:
Mages are unattractive
Mages are confident
Mages are non-conforming
Mages are arrogant

Behavior Measures:
The next participant who fills out our survey after you will also have to watch a video clip. Of the following clip titles, please choose the one that the next participant will watch.

The trouble caused by Mages
All about the Mages

The wisdom of the Mages

Picture a scenario in which you have been chosen to write a screenplay about Mage-Human relations. Please describe in a few sentences a summary of your screenplay.

Mass Effect 2 – Batarian and mistrust of humans

Detail Recall:

What color was the Batarian wearing? (red, blue, green, black)

What was the Batarian worried about? (a plague, an attack, his friends, finding food)

What was the name of the character in armor that the Batarian discussed the situation with? (Commander Shepard, Captain Shepard, Commander Smith, Captain Smith)

How many characters spoke in the conversation with the Batarian? (four, three, two, one)

Attitudes and beliefs about Batarians:

“This is a Batarian (photo), a character in the clip you just watched. Please answer the following questions about the Batarian and his opinion of humans on a scale from 0 (strongly disagree) to 10 (strongly agree).”

Specific stereotypes:

Batarians are dangerous

It’s likely that Batarians released the plague on the aliens

Batarians cannot be trusted

General Stereotypes: (from Devine 1989)

Batarians are violent

Batarians are dirty

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Batarians are uneducated

Affective/Prejudice:
I dislike Batarians
Batarians are harmful to society
Batarians make me feel uneasy

Behavioral Intentions:
If I met a Batarian I would be friendly to him or her (R)
I would not let a Batarian near my family
I would tell my friends to stay away from Batarians

Filler items from Kim & Rosenberg 1980:
Batarians are unattractive
Batarians are confident
Batarians are non-conforming
Batarians are arrogant

Behavior Measures:
The next participant who fills out our survey after you will also have to watch a video clip. Of the following clip titles, please choose the one that the next participant will watch.

The trouble caused by Batarians
All about the Batarians
The wisdom of the Batarians
Picture a scenario in which you have been chosen to write a screenplay about Batarian-Human relations. Please describe in a few sentences a summary of your screenplay.

**Dragon Age 2 – Qunari Arishok and disdain for humans**

*Detail Recall:*

What color was the Arishok’s hair? (white, brown, red, blonde)

What religion did the Arishok say the city’s people should follow? (The Qun, Buddhism, Humanism, Christianity)

What was the name of the character the Arishok had the conversation with? (Hawke, Varrick, Merrill, Isabela)

How many characters spoke in the conversation with the Arishok? (two, three, four, one)

**Attitudes and beliefs about Qunari:**

“This is a Qunari (photo), a character in the clip you just watched. Please answer the following questions about qunari.”

Qunari are different

Qunari are more likely to harm society than other groups are

Qunari are dangerous zealots

*General Stereotypes:*

Qunari are vagrants

Qunari are dirty

Qunari are uneducated

*Affective/Prejudice:*

I dislike Qunari
Qunari are harmful to society
Qunari make me feel uneasy

Behavioral Intentions:
If I met a Qunari I would be friendly to him or her (R)
I would not let a Qunari near my family
I would tell my friends to stay away from Qunari

Filler items from Kim & Rosenberg 1980:
Qunari are unattractive
Qunari are confident
Qunari are non-conforming
Qunari are arrogant

Behavior Measures:
The next participant who fills out our survey after you will also have to watch a video clip. Of the following clip titles, please choose the one that the next participant will watch.

The trouble caused by Qunari
All about the Qunari
The wisdom of the Qunari

Picture a scenario in which you have been chosen to write a screenplay about Qunari-Human relations. Please describe in a few sentences a summary of your screenplay.
Deliberation manipulation from Experiment 1

Low deliberation: We are about to ask you to watch a short video. We are interested in your gut reaction to the video, so you should try not to think too much about the events as you are watching them. Simply let the information flow over you. When you answer questions about the video please give us the very first response you come up with.

High Deliberation: We are about to ask you to watch a short video. We are interested in your reasoned and thoughtful reaction to the video, so you should try to think deeply about the events as you are watching them. Picture the scenario and what you would do if you were in the place of the main character. When you answer questions about the video please give us a response after you have thought about it thoroughly. The highest scorers on our questions about the clip will be entered to win a $50 gift card to Amazon.

Deliberation manipulation from Experiments 2 and 3

Distraction task instructions:

While you watch the video, we would like you to do a second task. As the video plays, an “X” will sometimes pop up in one of the corners of the screen.

Low distraction: We want you to count the number of times the “X” appears during the clip. [For these participants the X will only appear a few times and always in the same corner of the screen] Participants who get the number of Xs correct will be entered to win a $25 gift card from Amazon.
High distraction: We want you to count the number of times the “X” appears during the clip, AND we want you to keep track of how many times the “X” appears in each corner of the screen (upper left, upper right, lower left, lower right). [For these participants the X will appear many times and in a different corner of the screen each time] Participants who get the number of Xs correct will be entered to win a $25 gift card from Amazon.

Distraction task check: (will be consistent across videos within in condition so we can check actual accuracy)

Low distraction: how many times did you see the “X” on the screen?

High distraction: how many times did you see the “X” in each corner of the screen?

Upper left corner ____
Upper right corner ____
Lower left corner ____
Lower right corner ____

Moral license manipulation from Experiment 3

Picture yourself as a recruiter for a large financial consulting firm. You are tasked with hiring someone for an entry-level position, and are given the following five resumés as the top candidates. You must pick one for the position – which would you hire? [Each has a headshot of the person, in which all are White men other than Tyrone Williams]

Connor/Tyrone Williams - B.A. Economics, Harvard University, GPA 3.92
Cody Smith – B. A. Computer Science, SUNY Cobleskill, GPA 3.45
Jake Abernathy – B. A. Art History, Iowa State, GPA 3.72
Andrew Jones – B. A. Anthropology, UC San Bernardino, GPA 3.38
Tom Johnson – B. A. Biology, North Dakota University, GPA 3.64

Pilot Test (answered for each clip)

To what extent do you feel this clip established prejudice against [insert group name]? (0 – not at all, 10 – extremely)

To what extent do you feel this clip established at least one stereotype about [insert group name]? (0 – not at all, 10 – extremely)

To what extent did this clip make you want to defend humans as a positive group? (0 – not at all, 10 – extremely)

How much did you enjoy watching the video clip? (0 = Did not enjoy at all, 10 = Enjoyed very much)

How much did you identify with the HUMAN character? (0 – not at all, 10 – very much)

How transported did you feel during the clip? (0 – not at all, 10 – very much)

What was your overall emotional reaction to the clip? (-5 – very negative emotions, +5 – very positive emotions)