## **One Angry Woman:**

## **Emotion Expression and Minority Influence in a Jury Deliberation Context**

### BY

## JESSICA M. SALERNO B.A., Middlebury College, 2002 M.A., University of Illinois at Chicago, 2009

## **THESIS**

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### Defense Committee:

Bette L. Bottoms, Chair and Advisor Linda J. Skitka Mary C. Murphy Shari S. Diamond Samuel R. Sommers I dedicate this dissertation to my family: Joe, Ann, Joey, Jenna, and Mike, for providing me with more support throughout the last six years than I could have ever thought possible.

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## LIST OF ABBREVIATIONS

ANOVA Analysis of Variance

CI Confidence Interval

PIN Participant Identification Numbers

PANAS-X Positive and Negative Affect Scale

PEC Psychology Experience Credits

UIC University of Illinois at Chicago

#### **SUMMARY**

A set of studies was designed to assess gender and racial emotion stereotypes and to investigate the effect of stereotyped holdout jurors expressing emotion on their ability to exert minority influence during deliberation. In a deception paradigm, participants were told that they were engaged in a computer-mediated deliberation with five other mock jurors about a murder case, when in reality they were reading a pre-written fictional deliberation script. After mock jurors reported their initial verdict preference, all participants then saw the same false predetermined feedback in which one holdout juror always argued for the verdict opposite of the participant's original verdict. The holdout expressed either no emotion, anger, or fear; and was either a man or a woman (Study 2), or a White or Black man (Study 3). When holdouts expressed no emotion or fear the participants exhibited no attitude change (Studies 2 and 3). After a man holdout expressed anger, however, participants began to doubt their original opinion more (i.e., the holdout exerted minority influence); whereas after a woman expressed anger, participants became more confident in their original opinion (Study 2). Anger expression did not affect participants' confidence in Study 3—regardless of holdout race. These studies increase understanding of how historically underrepresented jurors might decrease their credibility and potential to exert minority influence through expressing emotion on juries. These studies also have important implications for diversity in persuasion and group decision making, particularly in the jury context.

#### INTRODUCTION

Henry Fonda's character from the iconic film 12 Angry Men captures the prototype for a heroic minority opinion: He systematically convinces 11 other jurors to change their vote by challenging their assumptions, exposing their biases, and broadening their view of the case. The film's classic depiction of a lone holdout juror calmly withstanding an angry majority, however, might contradict reality. Real holdout jurors report deliberation as rife with emotion—sometimes even screaming, crying, and throwing chairs (e.g., Associated Press, 2009). They report experiencing distress and emotion, vomiting (Renaud, 2010), locking themselves in bathrooms (Manganis, 2007), and sending notes to request that the judge excuse them (Associated Press, 2009) and even that police escort them from the courthouse (Renaud, 2010). Emotionally charged jury deliberation might be particularly difficult for holdouts who belong to historically disadvantaged groups (e.g., women). The lone holdout juror in the trial of Illinois governor, Rod Blagojevich, characterized their deliberation as "probably one of the most difficult things I have experienced in life" (Glass, 2010). She described what she believed to be gender dynamics at play: men criticizing the women to tears for being unable to see the facts, and employing persuasion strategies based in dismissal and intimidation (Glass, 2010). What are the consequences of this heightened emotionality for a holdout's ability to influence the majority especially if the holdout belongs to a stereotyped group?

The quality of group decisions can be improved through diversity. For example, racially heterogeneous juries exchange a wider range of information than do racially homogeneous juries (Sommers, 2006). One particular type of beneficial diversity is diversity of opinion. The presence of a person holding a minority opinion (i.e., a group member who holds an opinion that deviates from the opinion held by the majority of the group members) results in better quality

decisions due to greater consideration of alternatives, re-appraisals of opinions on the part of majority members, more divergent discussions (Nemeth, 1986), and the emergence of more critical (versus consensus) norms for discussion (Posthume, Spears, & Cihangir, 2001). Although beneficial, resolving diverse opinions is not necessarily a harmonious and pleasant process. Groups such as juries that must adhere to a unanimity rule (i.e., every group member must agree on one decision so a majority cannot overrule and ignore an opinion minority) versus majority rule report being more satisfied with decisions, but also as more uncomfortable with the process (Kaplan & Miller, 1987; Nemeth, 1977).

Reconciling diverse viewpoints is frustrating—particularly when the opposing viewpoint is held by a minority, whose opinions tend to be perceived as less valid. Being forced to deliberate an issue at great length because one group member is holding out creates hostility (Levine, 1989). Discussions get heated; negative emotion results. Yet, we know little about the impact of expressing negative emotion on group members' assessments of each others' credibility and on their potential for persuasion during group decision-making—particularly in a minority influence situation. Establishing credibility is particularly important for opinion minorities to exert influence on the majority because opinion minorities must overcome the heuristic that their opinions are less valid due to their minority status (Moskowitz & Chaiken, 2001). What is the impact of emotion expressed by the opinion minority on their potential to influence the majority?

Expressing emotion has the potential to enhance credibility in some situations, but detract from credibility in others. The effect of an opinion minority's emotion expression, for example, might depend on whether he or she belongs to a group for which stereotypes about emotionality

exist (e.g., overly emotional women, angry African American men). Emotion stereotypes about an opinion minority might be a unique hurdle *or* a unique advantage in gaining the requisite credibility to exert influence over the majority, depending on whether the emotion is consistent with the stereotype. On the one hand, the majority might be more likely to both perceive the stereotypical emotion in stereotyped groups and to penalize them more for it (e.g., "See women *are* too emotional to make difficult decisions"), which might lead to decreased credibility and ultimately lesser potential for stereotyped groups to exert minority influence. On the other hand, emotion stereotypes might set up expectations that, when violated, could lead to increased credibility (e.g., "Wow, if a woman is angry she must really believe what she's saying") and ultimately greater potential to exert minority influence.

In this research, I focused on the effects of expressing negative (rather than positive) emotions because they are most likely to arise during the frustration of group decision-making. Although the effects I hypothesize might be relevant to many types of negative emotions, I focused primarily on the expression of anger and fear. Although they are similar in their negative valence, they are considered stereotypical for some groups more than others (e.g., anger is more stereotypical for men than women, fear is more stereotypical for women than men; e.g., Fabes & Martin, 1991). Thus fear and anger are two emotions relevant to the context of jury deliberation that provide a convenient comparison to test both the effect of negative emotion expression in general, and the expression of stereotypical versus non-stereotypical emotion.

Across three studies, I focus on two examples of stereotyped groups: women and Black men. These groups have been studied extensively in the stereotyping and discrimination

<sup>&</sup>lt;sup>1</sup> I use the term "opinion minority" to refer to a member of the decision-making group whose opinion deviates from the majority. I use "stereotyped group member" to refer to a member of the decision-making group who belongs to a social group for which emotion stereotypes exists (i.e., women, Black men).

literature, have documented emotion stereotypes, and most research regarding emotion expression and prejudice focuses on gender- and race-based groups. I would expect, however, that the same predictions made for these groups might apply to other historically disadvantaged groups about which negative emotion stereotypes might exist (e.g., gay individuals, other racial groups, occupation-based groups, etc.).

In this introduction, I review minority influence literature to explain ways that opinion minorities can overcome the heuristic that their opinions are less valid because they hold a minority viewpoint (Moskowitz & Chaiken, 2001). I focus on factors that are particularly likely to be affected by expressed emotion and prejudice. Second, I review literature about the effect of expressing emotion to theorize how opinion majorities' perceptions of opinion minorities' credibility might be affected when the opinion minority expresses emotion. Third, I review prejudice literature to theorize that the relation between expressed emotion and minority influence might be moderated by whether the opinion minority belongs to a stereotyped group. Fourth, I describe and apply the hypotheses to a context in which minority influence, emotion, and prejudice is particularly relevant: jury decision-making. Fifth, I present an overview of three studies testing my hypotheses.

## **Minority Influence**

Unless a group is evenly split between two choices, there will be natural majority and minority opinions, which generate different patterns of influence (Wood, Lundgren, Ouellette, Busceme, & Blackstone, 1994). Because opinion majorities represent consensus and status, they have a stronger impact on final decisions than do opinion minorities (for review see Wood et al., 1994). Minority opinions are important, however, to the group decision making process—even if the majority does not end up adopting their viewpoint. Having a minority opinion results in

better quality decisions, due to greater consideration of alternatives, re-appraisals of opinions on the part of majority members, more divergent discussions (Nemeth, 1986), and the emergence of more critical (versus consensus) norms (Posthume et al., 2001). The presence of a minority opinion encourages more creative and divergent thought, even when the minority opinion is incorrect (for review, see Nemeth, 2009). In other words, they force the majority to address an opposing viewpoint, which leads to more thorough and deeper processing of the issue—even if they do not ultimately adopt the opinion minority's position.

Opinion minorities are not always ignored or rejected. Classic work regarding minority influence from Moscovici, Lage, and Nafrechoux (1969) and a series of studies in which participants read jury deliberation transcripts (Clark, 1994, 1998, 1999) demonstrate that it is possible for an opinion minority to exert influence under certain conditions (e.g., adequate time). To have influence on the majority, however, opinion minorities must overcome the heuristic that their opinions are less valid because they are held by fewer people (Moskowitz & Chaiken, 2001).

How do Opinion Minority Jurors Gain Credibility? Because the likelihood of an opinion minority exerting influence on group members depends on perceptions of the opinion minority's credibility, it is important to identify how opinion minorities can establish credibility in the face of the heuristic that their opinions are not valid. Opinion minorities are influential when majorities perceive them as competent and certain (for review, see Maass & Clark, 1984). For example, the "corner stone of minority effectiveness" is consistency over time (Wood et al., 1994, p. 325; for reviews see Maas & Clark, 1984; Nemeth, 2009). Majority members are motivated enough to try and understand the opinion minority's deviant position when they perceive opinion minorities as holding a position that they *truly* believe. A consistent minority

causes the perceiver to engage in more active (Moscovici, 1980) and more broad (Nemeth, 1986) scrutiny of the issue to understand why the minority is so consistent. Consistency leads to the possibility of minority influence because it leads to attributions of certainty and competence (for review see Maass & Clark, 1984). The increase in perceptions of competence and certainty elevate minority opinions above the heuristic that their opinions are not valid and instigate the majority members to systematic processing of their message (Moskowitz & Chaiken, 2001). Thus, it is important to identify other opinion minority behaviors that might be related to perceptions of their certainty and competence.

Moskowitz and Chaiken (2001) found that opinion minorities can also establish validity by disconfirming an expectation about them held by the majority. Violating expectations signals to the majority that the opinion minority's position reflects their true feelings. Majority members who witness an opinion minority disconfirm (versus confirm) an expectation make more positive attributions about the opinion minority, which in turn leads majority members to process the opinion minority's message more deeply. Thus, opinion minorities who express unexpected non-stereotypical emotion, for example, might violate the majority's expectations, and thereby gain enough credibility to instigate deeper processing of their message.

### **Emotion Expression**

Because a minority influence situation will, by definition, always have opposing viewpoints, hostility is a predictable consequence (for review, see Levine, 1989). How does this anger influence the group decision-making process? Despite extensive study of the impact of discrete emotion on *individuals* decision making, the already-small group decision making literature focuses heavily on mood rather than discrete emotion. Rare exceptions include emotion contagion work (i.e., emotions experienced by one group member tend to spread to others; for

review, see Hatfield, Cacioppo, & Rapson, 1993) and some industrial organizational psychology research describing how expressions of emotion (particularly on the part of a leader) can influence group performance (e.g., George, 1995). This literature does not, however, focus on how emotion affects group members' perceptions of each others' credibility and behavioral responses to each other during a consensus task—making its applicability limited for my purposes. Further, this work does not speak to how heightened emotion can influence minority influence, specifically—a situation in which credibility is especially important. I theorize that negative emotion expressed by the opinion minority will affect majority members' perceptions of the opinion minority's credibility, which in turn, will determine their potential to exert minority influence.

Specifically, expressions of emotion inform us about another's beliefs and intentions (Keltner & Haidt, 1999). This social function approach to emotion suggests that emotion expression leads perceivers to make informational inferences about the expresser, which lead the perceiver to certain behaviors (e.g., Van Dijk et al., 2008). For example, if an opinion minority expresses negative emotion, the majority might be more likely to view the opinion to be driven by emotion instead of rational thought (i.e., an informational inference) and be more likely to ignore the opinion minority (i.e., a behavior resulting from the inference). Informational inferences drawn from a target's emotion could detract from *or* enhance the target's credibility. Next, I review research suggesting that expressing negative emotions might detract from credibility and/or make the perceiver more likely to ignore the expresser's opinion. Then, I review literature that suggests expressing negative emotion might *enhance* credibility and/or make the perceiver *less* likely to ignore the expresser's opinion.

Emotion expression detracts from credibility. Majority members might view opinion minorities who express emotion as less credible than those who do not. Expressions of anger (versus other discrete emotions) result in the perceiver (a) exhibiting more avoidance (versus approach) behaviors (i.e., pushing versus pulling a lever) (Marsh, Ambady, & Kleck, 2005), (b) being primed with "approach to overcome" goals (Wilkowski & Meier, 2010), (c) inferring more dominant and less affiliative trait inferences about the expresser (e.g., Knutson, 1996; Montepare & Dobish, 2003), (d) having negative impressions of the expresser and becoming angry themselves in a negotiation context (e.g., Van Kleef, De Dreu, & Manstead, 2004), and (e) rating the expresser as less likeable (Tiedens, 2001). To the extent that source likeability is positively associated with attitude change (e.g., Roskos-Ewoldsen & Fazio, 1992), the negative evaluations of angry opinion minorities might result in less opportunity to exert minority influence. Further, opinion minorities exert significantly more influence when they are seen as flexible and not rigid (e.g., Mugny & Papastamou, 1980; for reviews, see Maass & Clark, 1984; Nemeth, 2009). To the extent that anger comes across as rigidity, it might decrease the possibility for minority influence.

Expressing anger in a group might be particularly detrimental. Most research about emotion expression focuses on individuals' perceptions of an individual expressing emotion or interacting dyads in a negotiation task, rather than in a group. A rare exception demonstrated that the effect of expressing negative emotion might be very different in a group because of the possibility of being excluded from coalitions. Specifically, Van Beest and colleagues (2008) found that expressing anger in multiparty negotiation (versus dyads) is riskier—participants formed negative impressions of players who expressed (versus did not express) anger and were

less likely to include them in coalition groups. All of these outcomes resulting from expressing anger might make the perceiver less open to the expresser's opinion during group discussion.

Emotion expression enhances credibility. Under some circumstances, however, expressing negative emotion might make people *more* credible in a minority influence context. Emotion expression might increase minority influence because of its effect on perceptions of competence and certainty—important determinants of minority influence (Maass & Clark, 1984). Anger leads to increased certainty and confidence about what caused an event (for review, see Lerner & Tiedens, 2006). Majority members might perceive expressions of anger as a proxy for certainty, which would lead to more minority influence. People who express anger are perceived as more competent, dominant, powerful, and threatening, than are people who express sadness, who are perceived as more likable and submissive (for review see Lerner & Tiedens, 2006). Although nobody has tested whether expressing anger leads to decreased minority influence, studies have demonstrated that anger impacts credibility judgments, which in turn influence how participants respond to a target. When targets expressed anger (versus sadness), participants rated the target as more competent, which led them to be more likely to vote for or assign a higher status job to the target (Tiedens, 2001). Participants' perceptions of a customer's anger led them to rate the customer's claims as more credible, which led participants to award higher compensation (Hareli et al., 2009). Thus, expressing anger might have a similar effect as being consistent over time—it might lead majority members to perceive the opinion minority as more competent and certain, which might lead to greater potential for minority influence (even if the opinion minority does not spend time demonstrating consistency).

Emotion expression also has important implications for status (Tiedens, Ellsworth, & Mesquita, 2001). People infer status from emotions that individuals express—people who

express anger tend to be judged as higher status, whereas people who express sadness tend to be judged as lower status (Tiedens, 2001). Opinion minorities in a group who express anger might be afforded more status and thus more influence over the group. All of these outcomes resulting from expressing anger might make the perceiver more open to the expresser's opinion during group discussion.

It is difficult to generalize, however, from this literature to group decision making—not only because it is mixed, but because the effect of expressing emotion has not been investigated in the context of a group consensus task. That is, the prior research just reviewed investigated the effects of expressing emotion on credibility for job and political candidates (Tiedens, 2001), customer complaints (Hareli et al., 2009), court witnesses (Golding, Fryman, Marsil, & Yozwiak, 2003; Rose, Nadler, & Clark, 2006), etc. These are all instances of participants making inferences from emotions about the target's fit for a given role (i.e., a job, politician, credible witness) that comes with a unique set of qualifications. Persuasion in a group consensus task, however, might require different qualifications. Group members are making a different kind of judgment: They are exposed to several potential sources of persuasion and have to choose whom to listen to, which might be influenced differently by emotion expression compared to the other contexts. People draw informational inferences from expressed emotions (Van Dijk et al., 2008), which might differ depending on demands specific to the task. For example, studies conducted in a negotiation context are relatively more similar to a consensus task, in that both contexts involve at least two people trying to reach a consensus. In these competitive negotiation situations, anger expression has an effect because it provides information about the opponent's limit (i.e., the most/least amount of money they are willing to accept; for review see Demoulin, 2008). These limit inferences, however, would not be relevant to a group consensus task in which group

members are trying to reach the "most correct" solution. In another example, group members with high epistemic motivation (i.e., the need to have a thorough understanding of a situation) performed better when group leaders' expressed anger (versus happiness) because they inferred information about the quality of their performance from the leader's anger (Van Kleef, Homan, Beersma, Van Knippenberg, & Damen, 2009). Again, these inferences about being evaluated by a leader would not be relevant to a group consensus task context in which the goal is to arrive at the "best" decision. In a consensus task, group members might draw different inferences from emotion than in previous studies conducted in different contexts. For example, they might infer that the expresser is not viewing the case rationally and therefore should be ignored.

Alternatively, they might infer that the expresser must really believe their opinion and therefore warrant deeper processing of their message, and ultimately more potential for minority influence. Thus, it is important to determine how inferences made about an emotional opinion minority will affect their ability to influence majority members in the context of a consensus task.

## Minority Influence and Expressed Emotion Moderated by Prejudice

An expression of negative emotion might mean different things to a perceiver, depending on the context. Contextual factors can affect the extent to which people view an expression of emotion as appropriate, which might affect whether that expression leads to an increase or decrease in credibility. In support, emotion expression by witnesses or victims while testifying in court detracts from their credibility when the emotional intensity does not match what the jurors consider appropriate or proportionate to the event (Golding et al., 2003; Rose et al., 2006). Thus, whether expressing emotion will detract or enhance the opinion minorities' credibility will depend on how appropriate that emotion is perceived in the given context. Judgments of emotion appropriateness are based on assessments of emotion type, intensity of expression, or lack

thereof (Warner & Shields, 2009). One contextual factor that might be particularly important in determining the appropriateness of emotion expression is the group membership of the target—particularly membership in a group for which an emotion stereotype exists.

Although some of the theory reviewed predicts that expressing emotion might enhance minority influence, this might not be the case for opinion minorities toward whom majority members feel prejudice. Modern conceptions of prejudice suggest that most people avoid appearing prejudiced in public—such as jury deliberations—unless they can justify their behavior as being caused by something unrelated to the target's group membership (Gaertner & Dovidio, 1986). Expressing a minority viewpoint with emotion might give majority members an excuse to reject stereotyped opinion minorities without having to contradict their utilitarian ideals, thereby "regressing" people back to more traditional forms of prejudice (for regression racism theories, see Rogers & Prentice-Dunn, 1981; Wilson & Rogers, 1975). In other words, in an ambiguous situation like a group discussion, people can express prejudice by ignoring stereotyped groups, but maintain their non-prejudiced image by telling themselves (and others) that it is based on the target's emotionality clouding their judgment.

Stereotyped groups and minority influence. Thus, emotion might interact with prejudice in a minority influence situation. To understand this potential effect, first consider stigmatized sources' ability to persuade in general (i.e., without taking into account emotion). Are people motivated to express prejudice by ignoring group members from stereotyped groups? Some research reveals traditional discrimination effects: Participants are *less* motivated to process arguments systematically from an outgroup member than from an ingroup member (Mackie, Gastardo-Conaco, & Skelly, 1992; Mackie, Worth, & Asuncion, 1990; for review see Demoulin, 2008). Other persuasion research, however, demonstrates that people do not reject

persuasive messages based on race. Sometimes people are actually *more* motivated to process (White & Harkins, 1994) and scrutinize (Petty, Fleming, & White, 1999) messages from a stigmatized source (i.e., African Americans, gays and lesbians) than from a non-stigmatized source, to avoid expressing prejudice on the part of themselves or others. At first glance, these findings might appear discrepant. The studies that found traditional discrimination, however, manipulated ingroup/outgroup membership based on a non-socially sensitive category: university membership (i.e., ingroup members were those who attended the same university as the participant; outgroup members were those who attended a different university; Mackie et al., 1992; Mackie et al., 1990). In contrast, the studies that did *not* find traditional discrimination effects manipulated ingroup/outgroup membership based on more socially sensitive categories race or sexual orientation (Petty et al., 1999; White & Harkins, 1994). Differences in these studies' ingroup/outgroup comparisons (i.e., race and sexual orientation versus university membership) might account for the discrepancy and are consistent with the theory of aversive racism (i.e., people are motivated by the egalitarian value to not appear racist, but will discriminate in ways they can justify as not being motivated by racism; Gaertner & Dovidio, 1986). Participants in the university membership studies (versus more socially sensitive race and sexual orientation experiments) might be more comfortable expressing prejudice against outgroups because there is less danger of being accused of prejudice.

These persuasion findings, however, are based on individual participants reading a persuasive message from a source and making private judgments, which might not generalize to a publicly interacting group. Participants might feel more comfortable rejecting a stigmatized source in the complexity and ambiguity of a group discussion (as opposed to a more straightforward rejection in studies involving individuals). For example, a set of mock jury

deliberation studies reveals traditional prejudice against women: Men were perceived as more independent, rational, strong, confident, influential, and more of a leader than were women, even though men and women did not significantly differ in *actual* persuasiveness (Nemeth, Endicott, & Wachtler, 1976). Further, coding of jury deliberation behavior revealed that men interrupt women five times as frequently as women interrupt men, and men interrupt women twice as often as they interrupt other men (McMillan, Clifton, McGrath, & Gale, 1977).

People might be comfortable acting on prejudice toward even a social outgroup based on a controversial category (e.g., race, sexual orientation) if that source holds a minority opinion. Moskowitz and Chaiken (2001) suggest that if an opinion minority is an outgroup member, it is likely that stereotypes about the group will exist, guide attributional processes, and ultimately make minority influence less likely. When the ingroup/outgroup distinction was not socially sensitive (i.e., based on false "imagination type" groups), group members express greater willingness to persuade an ingroup (versus outgroup) opinion minority (Marques, Abrams, & Serodio, 2001). The theory of aversive racism predicts that this effect would also hold for controversial groups, however, if the majority members have justification to discriminate and therefore can be less worried about being accused of prejudice (Gaertner & Dovidio, 1986). For example, when groups of four white participants were insulted by a confederate (i.e., they had a justifiable reason for aggression) and were given a chance to "shock" the confederate, they did so with greater intensity and duration when the confederate was Black compared to when he was White. In contrast, when they were not insulted (i.e., they did *not* have a justifiable reason for aggression) the reverse happened: They "shocked" the confederate with greater intensity and duration when the confederate was White compared to when he was Black, presumably to avoid appearing racist (Rogers & Prentice-Dunn, 1981). Thus, people might act on prejudice if they

can blame the dismissal of an opinion minority from a stereotyped outgroup on their opinion (rather than social) minority status (e.g., "I'm ignoring him because he's the only one who thinks that, not because he's Black").

**Double minority status.** In contrast to the previously reviewed studies that assess only the impact of belonging to a stereotyped group on persuasion, some studies have investigated the impact of belonging to a "double minority" (i.e., being a minority in terms of opinion and social category). Social Categorization Theory predicts that opinion minorities can be influential only if categorized as ingroup (but not outgroup) members because their perception of reality would be viewed as shared and valid (for review, see Wood et al., 1994). Empirical results are mixed. When the double minority advocates an opinion that would benefit their social category (i.e., a gay opinion minority advocating gay rights), double minorities have less influence over the majority than "single minorities" (i.e., being a minority only in terms of opinion), because they are viewed as more self-interested (Clark & Maass, 1988; Maass, Clark, & Haberkorn, 1982; for review see Maas & Clark, 1984). Stereotyped outgroups have potential to exert *more* minority influence than ingroups, however, if they voice an opinion different from others' within their social category (e.g., gay opinion minority arguing against gay rights) (Volpato, Maass, Mucchi-Faina, & Vitti, 1990). This might be an example of Moskowitz and Chaiken's (2001) theory that opinion minorities can gain credibility by violating an expectation. Phillips (2003) utilized a task that was unrelated to the opinion minority's social group (i.e., a group decision-making murder mystery task), and found that ingroup members holding a minority opinion had less influence over the group than did outgroup members holding a minority opinion. Thus, the impact of being a double minority is not clear.

## **Stereotyped Groups, Minority Influence, and Emotion**

I theorize that the effect of being a double minority might depend on the emotionality of the opinion minority. For example, majority members might act on prejudice if they can blame it on the double minority's emotion level, which might happen if the opinion minority belongs to a group for which there is a stereotype about emotionality (e.g., the stereotype that Black men are angry). Next, I review evidence of people (a) holding emotion stereotypes for Blacks and women, (b) exhibiting greater readiness to recognize emotion in stereotyped outgroup (versus ingroup) faces, (c) penalizing outgroups (but not ingroups) for expressing emotion, and (d) the potential benefits of expressing unexpected non-stereotypical emotion.

Emotion stereotypes and emotion recognition. Although there might be many examples of groups associated with emotion stereotypes, two documented examples are that women are excessively emotional overall, sad, and fearful (e.g., Fabes & Martin, 1991, for review see Hess, Adams, & Kleck, 2007) and that Black men are hostile (Devine, 1989; Devine & Elliot, 1995) and angry (Winfield, 2007). Because people process information that is ambiguous in a manner that is consistent with their stereotypes (Darley & Gross, 1983), gender-or race-based emotion stereotypes bias people's interpretation of emotion behaviors in social outgroups (Hess & Philippot, 2007). Emotion stereotypes of a racial outgroup result in greater readiness to attribute those emotions to ambiguous expressions on outgroup versus ingroup faces (Hugenberg & Bodenhausen, 2003) and versus other outgroups for whom the emotion is not stereotypical (Philippot, Yabar, & Bourgeois, 2007). For example, implicit prejudice was associated with a greater readiness to perceive Black (but not White) faces as angry (Hugenberg & Bodenhausen, 2003). Emotion recognition is also influenced by gender-based emotion stereotypes, which are driven by gender differences in perceived dominance and affiliation (for

review, see Hess, Adams, & Kleck, 2007). More specifically, women are perceived as more prone to express happiness, surprise, sadness, and fear—an effect mediated by higher perceived affiliation tendencies and lower dominance; men are perceived as more prone to express anger and disgust—an effect mediated by lower perceived affiliation tendencies and higher dominance (Hess, Adams, & Kleck, 2005). The same angry facial display is rated as less intense if portrayed on a women rather than a man (Hess, Blairy, & Kleck, 1997). Participants viewing androgynous faces with expressions of fear and sadness are more likely to believe the face belongs to a woman, whereas participants viewing expressions of anger are more likely to believe the face belongs to a man (Hess, Adams, Grammer, & Kleck, 2009).

Reliance on gender-based emotion stereotypes to disambiguate behavior is likely to be greater when the perceiver does not have concrete information to go on, such as when the perceiver does not know the target well, which is the case for jurors during deliberation. In one study, people who were asked to rate emotion expression of interacting dyads rated men (versus women) as having displayed more male-stereotypic emotion (i.e., positive self-focused emotion like pride, and negative other-focused emotion like anger), but rated women (versus men) as having displayed more female-stereotypic emotion (i.e., negative self-focused emotion like sadness or guilt, and positive other-focused emotion like empathy). This interaction was stronger, however, when the judgments were (a) hypothetical rather than after observing actual interactions, and (b) about "the average man/woman" rather than when ratings were about one's self (Robinson, Johnson, & Shields, 1998). That is, participants used the gender heuristic more when they had less concrete information to go on. Thus, people might perceive more stereotypical emotion in ambiguous behaviors exhibited by opinion minorities from stereotyped

groups during a group consensus task, compared to opinion minorities who belong to groups for which no emotion stereotypes exist.

Penalizing emotion expression. Not only are stereotyped groups more likely to be perceived as emotional, but they are also penalized for expressing emotion when other groups are not. For example, women leaders were rated as less effective when they expressed anger compared to neutrality, whereas men were rated as equally effective after expressing anger or neutrality (Lewis, 2000). Expressing anger (versus happiness) resulted in more concessions during negotiations when both parties were Belgian (i.e., ingroup condition), but the reverse is true if one of the parties was German (i.e., outgroup condition) (Demoulin, 2008). Thus, opinion minorities who express emotion might be penalized more if they belong (versus do not belong) to a stereotyped group.

Benefits of expressing non-stereotypical emotion. Belonging to a stereotyped group might, however, hold an advantage in a minority influence context. The emotion stereotype might provide an opportunity to violate expectations, and thereby gain the necessary credibility to exert minority influence. For example, if a woman who is expected to react with sadness instead displays intense anger, the violation of the majority members' expectations (set up by the emotion stereotype) might lead them to believe that she must have a valid reason for such unexpected and uncharacteristic behavior. In support, men who cry can actually be seen as more credible under some circumstances because their tears communicate "controlled yet deeply felt manly emotion" (Warner & Shields, 2007, p.112). Hutson-Comeaux and Kelly (2002) found that stereotypically gender-inconsistent (versus gender-consistent) emotions were rated as more sincere and valid. They suggest that although gender-consistent emotion might be discounted because it is expected, gender-inconsistent emotion might be legitimized because it is thought to

provide more sincere and valid information. Thus, expressing non-stereotypical emotion might be seen as more sincere and therefore more credible.

Expressing non-stereotypical emotion in a minority influence situation, specifically, might be particularly beneficial because it could provide the violation of expectations that Moskowitz and Chaiken (2001) suggest can establish the credibility that an opinion minority needs to exert influence. Thus, I test competing hypotheses that holdouts who express non-stereotypical emotion will either exert more or less influence over majority members' opinion, compared to holdouts who express stereotypical emotion or no emotion.

## **Emotion and Minority Influence in Context: Jury Deliberation**

The potential for and value of minority influence has always been an important topic for jury scholars. One of the most powerful predictors of final jury verdicts is the distribution of individual jurors' pre-deliberation preferences, suggesting that minority opinions have little impact on the final decision. Majority votes on the first straw poll during deliberation predicted the jury's verdict in 90% of cases in a classic study of actual juries (Kalven & Zeisel, 1966). Experimental jury simulation studies have evinced a Social Decision Scheme, which predicts that if two-thirds of the jurors prefer a verdict before group deliberation, that verdict will be the final group verdict (Davis, Kerr, Atkin, Holt, & Meek, 1975). This "two thirds" rule of thumb might underestimate the power of opinion minorities, however, because these jury simulations (e.g., Davis et al., 1975) operate under severe time constraints that limit not only the opinion minority's time to influence the majority, but also limit the analyses to juries that are able to reach a verdict within a very short amount of time (Salerno & Diamond, 2010). It is clear, however, that opinion minorities have a difficult time influencing majority members because of the belief that opinions held by a minority are less valid (Moskowitz & Chaiken, 2001).

Are majority members right? Do opinion minority jurors stubbornly hold invalid opinions that *should* be ignored? Diamond and colleagues (2005) compared the positions of holdout jurors to the verdicts preferred by the judges in 14 actual cases and found that the judge sided with the majority 8 times (57%), but sided with the holdouts 6 times (42%). Thus, to the extent that the judges are a valid reference point for "accurate" verdict decisions, minority opinions are not always invalid opinions that should be ignored by default.

Jury deliberation presents its own set of circumstances that might make exerting influence particularly difficult for an opinion minority. Minorities are less likely to exert influence (a) on public, as opposed to private, judgments (Maass & Clark, 1984; Wood et al., 1994), and (b) when the opinion minority's message is spoken in person, as opposed to written in private (Wood et al., 1994)—two conditions that characterize public jury deliberations. Exerting influence might be particularly difficult for a double minority, although this has not been investigated in the jury context before the current study. Although racial bias against Black defendants is well-documented (for reviews, see Sommers, 2007; Sommers & Ellsworth, 2001; Sweeney & Haney, 1992), the possibility of prejudice against stereotyped jurors during deliberation is not. The most relevant research demonstrates that racially heterogeneous (versus homogenous) juries deliberated longer and exchanged a wider range of information, but this is not attributable Black jurors' contributions to deliberation (Sommers, 2006). I investigated, instead, whether Black jurors' opinions during deliberation are viewed as less credible or are ignored more than white jurors', which would ultimately lead to decreased potential for minority influence. Despite 40 years of legislative reforms to jury selection, minorities remain underrepresented, with jurors more likely to be White than not (Diamond & Rose, 2005; Fukurai, Butler, & Krooth, 1993, for an example see Liptak, 2007) and ethnic minorities are often

eliminated from juries with peremptory challenges (e.g., Baldus, Woodworth, Zuckerman, Weiner, & Broffitt, 2001; Diamond & Rose, 2005). Thus, the majority will comprise White men on most juries, with Black jurors typically being in the minority. Although there are many efforts to ensure that social minorities are not underrepresented on juries, this effort would be futile if they are systematically ignored during deliberation.

Finally, no one has investigated how minority influence—particularly from stereotyped groups—is affected by emotion during jury deliberation. Despite the legal system's conventional story that the judicial process is devoid of emotion and based on pure reason (Bandes, 1999), the jury room is an emotional place. Interviews with actual jurors in capital cases reveal that high levels of emotion are expressed when majority jurors try to convince holdout jurors to change their minds (Sundby, 2010). Although interest in emotion and individual jurors' legal decision making has begun to materialize (for reviews, see Bornstein & Wiener, 2009; Feigenson & Park, 2006; Salerno & Bottoms, 2009), empirical work in this area is sparse (Kerr, 2009). Psychologists have theorized that deliberation with others might attenuate the biasing effect of jurors' emotions on their judgments by increasing jurors' depth of processing (e.g., Feigenson, 2009) or by exposing them to other viewpoints that might elicit new emotion-driven intuitions that contradict their original intuitions (Haidt & Bjorklund, 2008). Unfortunately, theoretical and empirical work regarding how emotion might influence the *deliberation* process is even sparser, underscoring the importance of the current research in the jury deliberation context.

Although there has been no experimental work addressing the interplay of emotion, minority influence, and prejudice during jury deliberation, a qualitative examination of juror interviews from 37 actual capital juries demonstrates the value of this line of inquiry (Sundby, 2010). Specifically, the importance of investigating how majority members' perceptions of

opinion minorities' emotionality influences majority members' behavior during deliberation becomes clear in a comparison between life holdouts (i.e., one juror arguing for a life sentence), who were perceived as more emotional, versus death holdouts (i.e., one juror arguing for a death sentence), who were not perceived as emotional. Because majorities arguing for death tended to believe a death sentence to be the *only* correct outcome, they viewed life holdouts as clearly mistaken or unwilling to give the death penalty because they were letting emotion cloud their judgment. Jurors commented that life holdouts were "...intelligent, but became emotional when making certain decisions," "... very impressed with the bleeding heart aspect of the defendant's final argument" (p. 24), or "...too emotionally fixated" on the defendant (p. 27). The belief that a death sentence is an absolute truth resulted in majority members perceiving life holdouts as emotional and irrational and, in turn, majority members exhibiting confrontational reactions (e.g., "...everybody started yelling at her and screaming at her... what the hell is it that you don't see?""). This perception of the holdouts led to persuasive techniques aimed at convincing them to "control their feelings" about sentencing someone to death. If holdouts had not lost credibility by being seen as too emotional, majority jurors might have been more open to their arguments and processed their arguments more systematically to try to understand their position.

In contrast, holdouts arguing for a *death* sentence were not seen as irrational or "too emotional." Life majorities tended to be open to the possibility that they were wrong and thus were more open-minded about their position and less coercive. Although only anecdotal, these interviews suggest that the predictions of the present research are important to test: Being seen as "too emotional" might lead to decreased credibility and influence. This account of capital juries sets the stage for testing my hypotheses about emotion expression and minority influence in the context of jury deliberation.

## **Overview and General Hypotheses**

In a set of three studies, I establish gender- and race-based emotion stereotypes and assess how the expression of stereotypical versus non-stereotypical emotion moderates the potential for minority influence during mock jury deliberation. Although I detail study-specific hypotheses in later sections, next I will preview general hypotheses. First, I established what emotion stereotypes exist in our culture for gender- and race-based groups (Study 1). Second, I utilized a computer-mediated paradigm with false feedback that gives participants the impression that they are engaged in an online discussion with five other mock jurors, one of whom is a holdout who disagrees with the participant and the rest of the group (Studies 2 and 3). In Study 2, I tested whether holdouts who express stereotypical emotion (i.e., women expressing fear) were perceived as less credible and, in turn, exerted less influence compared to holdouts who expressed no emotion. I also tested competing hypotheses about whether expressing nonstereotypical emotion (i.e., a woman expressing anger) was perceived as less credible or more credible (because it would violate expectations), compared to holdouts who express no emotion. In Study 3, I ran a similar study with a different stereotyped group for which the reverse emotion stereotype is true: Black (versus White) men. Because anger is stereotypical and fear is nonstereotypical for Black men (as opposed to the opposite being true for women in Study 2), I tested whether the Study 2 results are due to (a) idiosyncratic effects of a historically disadvantaged group expressing fear or anger versus (b) the stereotypical versus nonstereotypical nature of the emotions. If the Study 2 effects are due to a historically disadvantaged group (i.e., women) expressing fear versus anger in general, the pattern should be replicated for the new historically disadvantaged group (i.e., Black men). If the effects are due to expressing stereotypical versus non-stereotypical emotions, the pattern for fear and anger should reverse. In

other words, Black men who express non-stereotypical emotion (now fear, instead of anger) would exhibit the same influence pattern as women who expressed non-stereotypical emotion (anger, instead of fear) in Study 2. I also investigated whether these effects were mediated by perceptions of the holdout across both studies.

#### STUDY 1

Study 1 was designed to address methodological aspects of prior assessments of emotion stereotypes that make them difficult to generalize to the current studies. In addition to genderbased expectations about general emotionality (e.g., Fabes & Martin, 1991; Johnson & Shulman, 1988), previous research has illustrated gender effects on expectations about specific emotion expression. People estimate that women express fear more frequently than do men, and that men express anger more frequently than do women when asked to (a) report knowledge of gender stereotypes of emotion (e.g., Durik, Hyde, Marks, Roy, Anaya, & Schultz, 2006; Fabes & Martin, 1991; Plant, Hyde, Keltner, & Devine, 2000), or (b) to predict what percentage of men and women would react to specific situations (Hess et al., 2000). For example, in an often-cited article, Fabes and Martin (1991) found that participants estimated that women express sadness and fear with greater frequency than do men, and that men express anger with greater frequency than do women, concluding that stereotypes about sadness and fear exist about women and stereotypes about anger exist about men. Although this provides information about stereotypes regarding the relative differences in these emotions for men and women, it is not clear from this methodology that people spontaneously associate men and women with expressing certain emotions. An examination of Fabes and Martin's (1991) means on a seven-point scale (Anger: men = 5.51, men = 5.09; Sadness: men = 3.99, men = 4.84; Fear: men = 4.06, men = 4.064.96), for example, reveals that women were actually estimated to express anger more (or at least equally—significance tests for these comparisons were not reported) than sadness and fear, calling into question whether it is really valid to say that sadness and fear are "stereotypical" for women, but anger is not. That is, although when forced to rate men and women, people might expect comparative gender differences (e.g., women are more likely to express fear compared to men), this doesn't necessarily mean that fear is part of their stereotype about women. Further, these relative difference measures with no baseline do not capture whether differences are due to expecting more of the given emotion from one group or expecting less of that emotion from the other group. In other words, the gender sadness effect could be due to the assumption that women are especially likely to express sadness, that men are especially unlikely to express sadness, or both. Third, the participants are forced to make frequency estimates—even if they do not have an opinion about the likelihood of a given emotion for a given gender. If they do not have an opinion but are forced to make these ratings, they might rely on the general emotionality stereotype that women are more emotional and rate them higher on all emotions, even those that they are not sure about. In all of the reviewed studies, participants are not asked if they think the emotion is part of the stereotype in the first place, nor do they have the option to opt out and say that the emotion is irrelevant to the stereotype.

Results from other studies that ask participants to identify either the gender or emotion expressed in pictures of facial expressions also suggest the existence of gender-based emotion stereotypes. These studies reveal that gender can drive participants' interpretation of emotion expression (e.g., Plant et al., 2000; Plant, Kling, & Smith, 2004) and conversely, that emotional expression can drive participants' interpretation of the gender of androgynous faces (e.g., Hess et al., 2009). Although emotion stereotypes provide a plausible explanation for these effects, Zebrowitz, Kikuchi, and Fellous (2010) found evidence for the association between anger and

gender that was based solely on facial structure. Specifically, computer program trained to recognize angry faces based only on facial structure identified neutral male faces as angry more often than female faces—obviously without having knowledge of cultural stereotypes. Again, these studies suggest that emotion stereotypes might exist for certain groups, but do not provide conclusive evidence that these findings are based on spontaneous cultural stereotypes as opposed to overlap between emotional facial expressions and group-based differences in facial structures.

In Study 1, I assessed (a) whether the comparative emotion expectations from 20 years ago (Fabes & Martin, 1991) replicate now, (b) the content of people's emotion stereotypes when they are given an option to say that the emotions are not relevant to the stereotype, and (c) stereotypes held by samples of undergraduates versus online adults. I modified classic methodology utilized by Devine and Elliott (1995) to determine the content of people's emotion stereotypes. I asked participants to focus on a group (e.g., White women) and indicate whether the expression of each of a list of emotions is (a) not part of the stereotype, (b) especially likely, or (c) especially unlikely of the group in question. Because previous research has determined that emotion stereotypes seem to be about perceptions of men's and women's expressed, not experienced, emotion (e.g., Fabes & Martin, 1991; Johnson & Schulman, 1988), I asked about emotion expression. I asked people to complete this exercise twice: once in reference to their awareness of the cultural stereotype and then again in reference to their own personal beliefs. I assessed knowledge of cultural stereotypes because mere awareness could have an effect even if the stereotypes are not explicitly endorsed. I included personal belief measures, however, to make it clear that reporting knowledge about the stereotype does not suggest that the participants personally endorse the stereotype, thereby encouraging participants to be candid.

In addition to gender-based stereotypes, I also assessed the content of emotion stereotypes for racial groups. Much less work has been done to investigate racial stereotypes about emotion, despite media representations of race-based emotion stereotypes, such as depictions of the "angry Black man" stereotype (e.g., Blake, 2010). Prior research has found indirect evidence that race-based emotion stereotypes, but has not assessed the content of the stereotypes directly. For example, explicit prejudice is positively related to a greater readiness to perceive anger in ambiguous expressions on Black (but not White) faces (Hugenberg & Bodenhausen, 2003). Zebrowitz et al. (2010) found indirect evidence that racial stereotypes might moderate trait inferences from emotion expression. Specifically, faces that naturally resemble (versus do not resemble) angry expressions were judged as more dangerous and less competent and likeable when the faces were White or Korean—but not when Black. The authors explained that the anger expression did not affect ratings of Black faces because they were already rated so low on competence and likeability and so high on dangerousness, as a result of cultural stereotypes. Thus, prior research tentatively suggests the existence of race-based emotion stereotypes, but has not assessed the spontaneous content of these stereotypes.

# **Hypotheses**

Stereotype awareness. I predicted that participants would report awareness that (a) fear is more likely to be part of the stereotype about women (versus men) targets, (b) anger is more likely to be part of the stereotype about men (versus women) targets, and (c) anger is more likely to be part of the stereotype about Black men compared to White men. In a more exploratory manner, I also tested whether stereotypes about Black men would generalize to Black women.

**Emotion frequency scales.** I expected to replicate Fabes and Martin's (1991) findings that participants would report expecting women to express fear more often than men, and

expecting men to express anger more often than women. Further, I expected participants to report expecting Black to express anger more often than White men.

In a more exploratory manner, I also tested whether expected emotion frequency about Black men would generalize to Black women.

# **Participants**

Participants were 289 adults recruited from a Psychology 100 course at the University of Illinois at Chicago (n = 88, 30%) and online via Mechanical Turk (www.mturk.com;

Buhrmester, Kwang & Gosling, 2010) (n = 201, 70%). The overall sample was 62% women;

41% Asian, 40% White, 10% Hispanic, 3% African American, 5% other; with an age range from 18-78 years (M = 28 years, SD = 10 years). The undergraduate sample was 71% women; 39% White, 30% Asian, 24% Hispanic, 6% African American, and 1% other; with an age range of 18-29 years (M = 19 years, SD = 2 years). The Mechanical Turk sample was 57% women; 47% Asian, 41% White, 8% Other, 3% Hispanic, 1% African American; with an age range of 18-78 (M = 32 years, SD = 11 years). Undergraduates completed these measures online for Psychology Experience Credit. Adults from Mechanical Turk were compensated for completing these measures in the form of Mechanical Turk credits. I tested both samples because I ran Study 2 with undergraduates and Study 3 with adults from Mechanical Turk.

#### Measures

All Study 1 measures are presented in Appendix A as given to participants and in the order discussed below.

Stereotype awareness. The stereotype awareness measure presents participants with a subset of emotions from the Positive and Negative Affect Scale (PANAS-X; Watson & Clark, 1994) with the following additions: rage, being hysterical, sympathy, empathy, excessive

emotion, oversensitive, cold, unemotional, temperamental, fiery, and hot-blooded). It asks participants to indicate whether each of the emotions (presented in a randomized order) are either (a) Part of the stereotype: [group name] are especially likely to express the given emotion, (b) Part of the stereotype: [group name] are especially UN-likely to express the given emotion, or (c) NOT part of the stereotype about [group name].

Stereotype beliefs. A stereotype beliefs measure asks participants to check each of the emotions that they selected as characteristic of the stereotype that they personally believe to be true. This measure was included to reinforce to participants that the stereotype awareness measure was not meant to measure their actual beliefs.

Estimated emotion frequency scales. Estimated emotion frequency scales ask participants to rate the frequency with which each of the listed emotions are expressed by a typical member of the target group on a scale from 1 (*Almost Never*) to 7 (*Very Often*). These measures were modified from previous studies (e.g., Durik et al., 2006; Fabes & Martin, 1991; Plant et al., 2000) to assess race-based estimates, as well as gender-based estimates.

<u>Manipulation checks</u>. At the end of each target group block, one item asks participants to report what group they just finished answering questions about from the choices: White Women, White Men, Black Women, and Black Men.

### **Procedure**

After providing consent and reading instructions, participants completed the stereotype awareness and stereotype beliefs measures (modified from Devine & Elliott, 1995), and estimated emotion frequency scales (modified from Durik et al., 2006; Fabes & Martin, 1991) for each target group separately and in a randomized order (i.e., White men, White women, Black men, Black women). Participants completed all measures as shown in Appendix A. I

asked participants about several additional emotions, but discuss only anger and fear because they are relevant to Studies 2 and 3.

# **Results**

Because participants completed 4 blocks of measures, with each block focusing on a different target group (i.e., White Women, White Men, Black Women, Black Men) and including its own manipulation check, I excluded failed blocks (rather than deleting all of a participant's data if they missed one block's manipulation check but got the other three correct). I excluded 21 blocks (2%) overall, which included 18 participants who had at least one block excluded and no participants who failed all 4 blocks. The target group manipulation check failure rate did not differ by target group,  $\chi^2$  (df = 3, N = 1072) = .91, p = .82; White Women: 6 blocks (2%), White men: 6 blocks (2%), Black Men: 5 blocks (2%), Black Women: 4 blocks (1%).

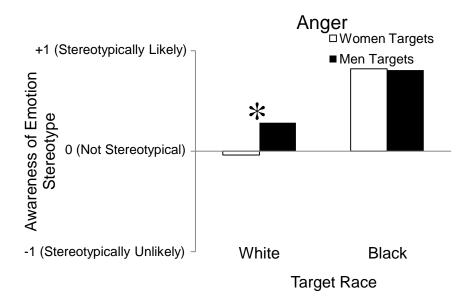
**Preliminary analyses.** When participants' gender and racial minority status (White versus non-White) and all possible interactions were added to the main analyses of emotion stereotype awareness and estimated emotion frequency scales reported below, the results reported below did not change. There were also no significant effects of or interactions with participant gender or participant racial minority status,  $Bs \le |.66|$ ,  $ts \le |1.84|$ ,  $ps \ge .07$ , with two exceptions: There were target race by participant racial minority status effects on knowledge of anger stereotypes, B = -.28, t(929) = -2.18, p = .03, and expected fear frequencies, B = .65, t(927) = 2.47, p = .01. Both White and Black participants were more likely to report anger as more stereotypical for Black targets compared to White targets, but the effect was stronger for White participants, B = 1.05, t(929) = 7.98, p < .001, than for Black participants, B = .76, t(929) = 5.73, p < .001. Both White and Black participants also expected fear from Black targets less than from White targets, but this effect was again stronger for White participants, B = -1.98, t(927) = -7.01,

p < .001, than for Black participants, B = -1.98, t(927) = -7.01, p < .001. (I did not have enough participants of each race to include more specific race comparisons.)

Emotion stereotype awareness. The measures of fear- and anger-stereotype awareness were treated as continuous measures ranging from -1 (Stereotypically unlikely for the target group) to 0 (Not stereotypical for the target group) to +1 (Stereotypically likely for the target group). Thus, higher numbers reflect a given emotion being considered more stereotypically likely.<sup>2</sup> Because I had repeated measures (i.e., target group) nested within individuals, I ran multilevel models. For both measures of fear and anger stereotype awareness, two models were run: (a) a main-effects-only multilevel linear regression model with target group gender (woman = 0, men = 1) and target group race (White = 0, Black = 1) as level 1 predictors, and sample (undergraduates = 0, online community members = 1) as a level 2 predictor, and (b) a similar model that also included all same- and cross-level interactions.

Anger. The main-effects-only model revealed that participants were (a) more likely to report anger as stereotypical for Black (versus White) targets, B = .48, t(941) = 9.45, p < .001; and (b) less likely to report anger as stereotypical overall if they were community members (versus undergraduates), B = -.14, t(238) = -2.47, p = .01. The main effect of target gender was not significant, B = .03, t(941) = .76, p = .45. The model that included interactions revealed, however, that the target race main effect was qualified by a two-way interaction between target gender and target race, B = -.33, t(937) = -2.25, p = .02. (See Figure 1.) To determine whether the hypothesis that anger would be more stereotypical for men versus women would be supported for Black and White targets, I tested the simple slope of gender at each level of race.

<sup>&</sup>lt;sup>2</sup> My results do not change if I treat this variable as ordinal and run the analysis with ordinal HLM regression, or as dichotomous (collapsed into stereotypically likely versus not) and run the analysis with logistic HLM regression. Thus, for ease of presentation and analysis, I am reporting the results from analyses treating it as a continuous outcome.



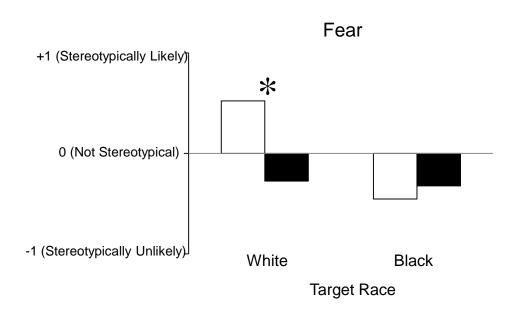


Figure 1. Study 1: Mean awareness of anger and fear stereotypes as a function of target group gender and race.

For White target groups, participants were more likely to report anger as more stereotypical for men than for women, B = .32, t(937) = 2.45, p = .01. For Black target groups, however, participants reported anger to be equally stereotypical for men and women, B = -.01, t(937) = -.17, p = .86. To confirm that anger would be more stereotypical for Black versus White men, I broke down the interaction in the alternative pattern to look at the simple slope of race at each level of gender. For both men and women target groups, participants reported anger as more stereotypical for Black (versus White) groups, although this effect was stronger for women groups, B = .86, t(937) = 8.06, p < .001, than for men groups, B = .52, t(937) = 4.76, p = < .001.

The target race main effect was also qualified by a target race by sample interaction, B = -40, t(937) = -2.92, p < .01. In an analysis of simple slopes, I tested the effect of target race for each sample. Both samples were more likely to report anger as stereotypical for Black (versus White) targets, but this effect was stronger for undergraduates, B = .86, t(937) = 8.06, p < .001, than for online participants, B = .46, t(937) = 5.42, p < .001. Neither the gender by sample interaction, B = -.26, t(937) = -1.63, p = .10, nor the three-way interaction was significant, B = .14, t(937) = .76, p = .45.

**Fear.** The main-effects-only model revealed that participants were less likely to report fear as stereotypical for Black (versus White) targets, B = -.24, t(940) = -4.01, p < .001; and (b) for men (versus women) targets, B = -.27, t(940) = -4.01, p < .001. The main effect of sample was not significant, B = .05, t(238) = .81, p = .42. The model that included interactions revealed, however, that the target race and gender main effects were again qualified by a two-way interaction between target gender and target race, B = .93, t(936) = 5.82, p < .0001. (See Figure 1.) To determine whether the hypothesis that fears would be less stereotypical for men than for women would hold for Black and White targets, I looked at the simple slope of gender at

each level of race. For White target groups, participants reported fear as less stereotypical for men (versus women), B = -.80, t(936) = -7.19, p < .0001. For Black target groups, however, participants reported fear to be equally non-stereotypical for Black women and Black men, B = .13, t(936) = 1.20, p = .23.

To test whether the hypothesis that fear would be less stereotypical for Black versus. White targets would hold for both men and women, I broke down the interaction in the alternative pattern to look at the simple slope of race at each level of gender. For women groups, participants reported fear to be less stereotypical for Black (versus White) women, B = -.98, t(936) = -8.64, p < .001. For men groups, however, participants reported fear to be equally non-stereotypical for Black and White men, B = -.05, t(936) = -.34, p = .73.

The main effect of target race was again qualified by a target race by sample interaction, B = .57, t(936) = 3.79, p < .001. In an analysis of simple slopes, I tested the effect of target race for each sample. Both samples were less likely to report fear as stereotypical for Black (versus White) targets, but this effect was stronger for undergraduates, B = -.98, t(936) = -8.64, p < .001, than for online community members, B = -.40, t(936) = -4.02, p < .001. Neither the target gender by sample interaction, B = .24, t(936) = 5.82, p = .08, nor the three-way interaction was significant, B = -.29, t(936) = -1.46, p = .14.

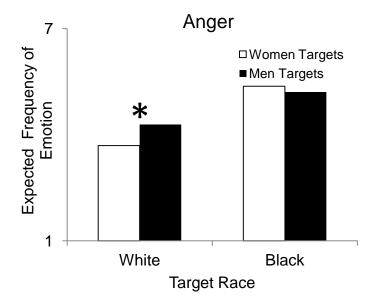
Fabes and Martin (1991) Replication: Estimated Emotion Frequency Scales For both measures of estimated anger and fear frequency scales, two models were run: (a) a main-effects-only multilevel linear regression model with target group gender (woman = 0, men = 1), target group race (White = 0, Black = 1) as level 1 predictors, and sample (undergraduates = 0, online community members = 1) as a level 2 predictor, and (b) a similar model that also included all same- and cross-level interactions. The pattern of results for this measure was the same as for the

stereotype awareness measures reported above, with two exceptions: the (a) main effect of sample was significant for anger ratings, and (b) the sample by target gender interaction was not significant for fear ratings, as detailed below.

Anger. The main-effects-only model revealed that participants reported expecting anger more often from Black (versus White) targets, B = .62, t(939) = 6.04, p < .001. The main effects of sample and target gender were not significant,  $Bs \le -.18$ ,  $ts \le -1.50$ ,  $ps \ge .13$ . The model that included interactions revealed, however, that the target race main effect was qualified by a two-way interaction between target gender and target race, B = -.76, t(935) = 1.05, p < .01. (See Figure 2.) For white target groups, participants reported expecting anger more often from White men (versus White women), B = .59, t(935) = 3.25, p < .01. For Black target groups, participants' anger expectations were equally high for Black women and Black men, B = -.17, t(935) = -1.18, p = .23.

The target race by sample, B = -1.20, t(935) = -4.57, p < .001, and target gender by sample, B = -.50, t(935) = -2.29, p = .02, interactions were significant. Both samples expected more anger from Black (versus White) targets, but the effect was stronger for undergraduates, B = 1.68, t(935) = 7.76, p < .001, than for community members, B = .47, t(935) = 3.13, p = .002. Undergraduates expected more anger from men (versus women) targets, B = .59, t(935) = 3.25, p = .002, but community members did not, B = .09, t(935) = .75, p = .45. The three-way interaction was not significant, B = .32, t(935) = -3.18, p = .29.

**Fear.** The main-effects-only model revealed that participants reported expecting fear less often from Black (versus White) targets, B = -.38, t(939) = -3.63, p = .001, and less often from men (versus women), B = -.42, t(939) = -5.45, p < .001. The main effect of sample



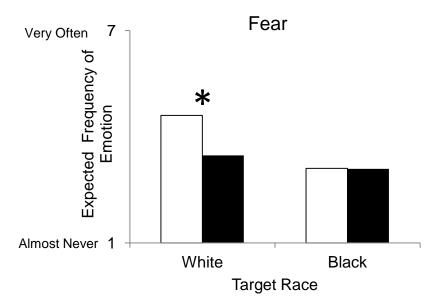


Figure 2. Study 1: Mean expected frequency of anger and fear as a function of target group gender and race.

was not significant, B = .12, t(237) = .90, p = .37. The model that included interactions revealed, however, that the target race main effect was again qualified by a two-way interaction between target gender and target race, B = 1.12, t(935) = 4.06, p < .0001. (See Figure 2.) For white target groups, participants reported expecting fear less often from White men (versus White women), B = -1.13, t(935) = -5.15, p < .0001. For Black target groups, however, participants report equally low fear expectations for Black women and Black men, B = -.01, t(935) = -.08, p = .93.

There were significant target race by sample, B = 1.17, t(935) = 4.23, p < .001, and target gender by sample, B = .54, t(935) = 2.06, p = .04, interactions. Both samples expected less fear from Black (versus White) targets, but the effect was stronger for undergraduates, B = -1.50, t(935) = -6.76, p < .001, than for community members, B = -.32, t(935) = -1.94, p = .05. Both samples also expected less fear from men (versus women), but the effect was stronger for undergraduates, B = -1.13, t(935) = -5.15, p < .001, than for community members, B = -.59, t(935) = -4.18, p < .001. The three-way interaction was not significant, B = -.59, t(935) = -1.75, p = .08.

# **Discussion**

The results from Study 1 confirmed the predicted pattern of emotion stereotypes.

Specifically, participants demonstrated awareness of an emotion stereotype that (a) anger is less stereotypical for White women than White men, (b) fear is more stereotypical for White women than White men, and (c) anger is more stereotypical for Black men than for White men. This pattern was evident in relative emotion expectancies based on measures like those used by Fabes and Martin (1991), but also in new measures modified from Devine and Elliott (1995) to capture participants' awareness of cultural stereotypes. Thus, these results are consistent with prior research, but confirm that these stereotypes are still contemporary and replicate with measures

that explicitly ask participants about the content of cultural stereotypes and allow participants to deem the emotion irrelevant to the cultural stereotype.

Across both measures, I discovered novel information stereotypes about Black women (rather than focusing only on Black men). Specifically, I found that emotion stereotypes about Black men also applied to Black women—there were no differences between participants' stereotypes about anger or fear for Black men versus Black women. Further, these emotion stereotypes (i.e., the target gender by target race interactions) generalized across the undergraduate and online adult samples. It is important to note, however, that the main effects of target race were—although present in both samples—stronger in the undergraduate sample compared to the online community sample.

The results from Study 1 confirm that a comparison between anger and fear expression is ideal to test the effect of stereotypical versus non-stereotypical emotion expression for White men holdouts verses holdouts from 2 different historically disadvantaged groups: women, and Black men. Specifically, these results confirm that (a) fear is stereotypical and anger is non-stereotypical for women (i.e., the historically disadvantage holdout in Study 2); and (b) fear is non-stereotypical and anger is stereotypical for Black men (i.e., the historically disadvantaged holdout in Study 3). This helps me—across Studies 2 and 3—to tease apart the effect of a historically disadvantaged group member expressing anger and fear, and the effect of a historically disadvantaged group member expressing more versus less stereotypical emotion.

#### STUDY 2

Having identified emotion stereotypes about men and women in Study 1, in Study 2 I investigated the implications of expressing stereotypical versus non-stereotypical emotion on minority influence in group decision making. To test how the potential for minority influence is

moderated by stereotypical versus non-stereotypical emotion expression, the Study 2 method includes what the participants believed to be a computer-mediated interaction with 5 other mock jurors. As detailed in the procedures section below, after viewing murder trial evidence the mock jurors ostensibly began an online chat "interaction." In reality, to control the independent variables, all mock jurors in the room viewed the same pre-determined online chat deliberation script. More specifically, they completed 8 rounds of "deliberation" by submitting their verdict choice and comments and reading pre-determined fake verdicts and comments made by people whom believe to be other participants in the room. Those verdict statements and comments were part of a pre-written script in which all the fictional jurors agree with the participant, except one (i.e., the fictional holdout). That holdout character (a) was either a man or a woman, and (b) expressed either no emotion, anger, or fear in his or her comments. Participants' change in their confidence in their original verdict choice over the course of deliberation is the measure of minority influence. I assessed change in participants' confidence in their verdict between three time points: (a) pre-deliberation, (b) after the first round of deliberation when they became aware that they are in the majority and of the gender of the holdout (but no emotion has been expressed by the holdout), and (c) at the end of deliberation after the holdout has expressed emotion (depending on condition). Thus, Study 2 conforms to a 3 (Holdout Emotion: none, anger, fear) X 2 (Holdout Gender: man, woman) X 3 (Deliberation Time Point: pre-deliberation, after first noemotion round, post-deliberation) mixed repeated-measures design with holdout gender and holdout emotion varying between subjects and deliberation time point varying within subjects.

### **Hypotheses**

I tested competing hypotheses about whether expressing non-stereotypical emotion would lead to more or less minority influence, relative to when stereotypical or no emotion is

expressed. On the one hand, when a target expresses non-stereotypical emotion, participants might penalize the target (e.g., Lewis, 2000). On the other hand, gender-inconsistent (vs. gender-consistent) emotion is perceived as more sincere and valid information (Hutson-Comeaux & Kelly, 2002) and opinion minorities can gain credibility by violating expectations (Moskowitz & Chaiken, 2001). Thus, violating expectations by expressing non-stereotypical emotion (i.e., emotion that the perceiver does not expect) might actually *enhance* an opinion minority's credibility and lead to more influence. I predicted a significant three-way interaction between deliberation time point, holdout emotion expression, and holdout gender on minority influence (i.e., participant verdict confidence change). Because in Study 2 *anger* is the non-stereotypical emotion for the historically disadvantaged group (women), I hypothesized that there would be a holdout gender by deliberation time point simple interaction when the holdout expresses anger—but not when the holdout expresses fear or no emotion. I tested two competing hypotheses, however, about the pattern of this simple two-way interaction, as described next.

Penalization of Non-Stereotypical Emotion Hypothesis. I hypothesized that, in the anger condition, participants' confidence in their original verdict would exhibit different patterns when the holdout is a man versus a woman. Previous research has demonstrated that one can gain credibility by expressing anger (e.g., Tiedens, 2001). These studies, however, typically involve man targets. Thus, I hypothesized that participants' confidence in their original verdict choice will drop significantly after a man holdout expresses anger (i.e., from after the first no-emotion round to the end of deliberation). In contrast, I hypothesized that participants' confidence in their original verdict would *increase* after a woman expressed anger. In contrast to the anger condition, participants' confidence in their own verdict would not change over the

course of deliberation in response to holdouts who express fear or no emotion—regardless of holdout gender.

Violation of Expectations Hypothesis. I again hypothesized that, in the anger condition, participants' confidence in their original verdict would exhibit different patterns when the holdout is a man versus a woman. The pattern, however, would be different from the Penalization of Non-Stereotypical Emotion Hypothesis. Consistent with the Penalization Hypothesis, participants' confidence in their original verdict choice would still drop significantly after a man holdout expresses anger. In contrast to the Penalization Hypothesis, however, I also hypothesized that participants' confidence would drop significantly after a woman holdout expresses anger—but for a different reason. Because violating expectations can enhance opinion minority credibility and minority influence, I expected, in fact, that the effect would be stronger for women (versus men) holdouts. Again, I predicted that participants' confidence in their own verdict would not change over the course of deliberation in response to holdouts who express fear or no emotion—regardless of holdout gender.

Proposed mediation model. I also predicted a moderated mediation model to explain the effect of my manipulations on minority influence (see Figure 3). I predicted that in only the anger condition (i.e., the only condition in which I expected holdout gender to make a difference), there would be a significant indirect effect of holdout gender on verdict confidence at the end of deliberation through perceptions of the holdout. Specifically, I expected that participant would perceive a woman (versus man) holdout expressing anger as less credible, persuasive, competent, and certain, which in turn, would lead the participants to be more confident in their own opinion (i.e., exhibit less minority influence).

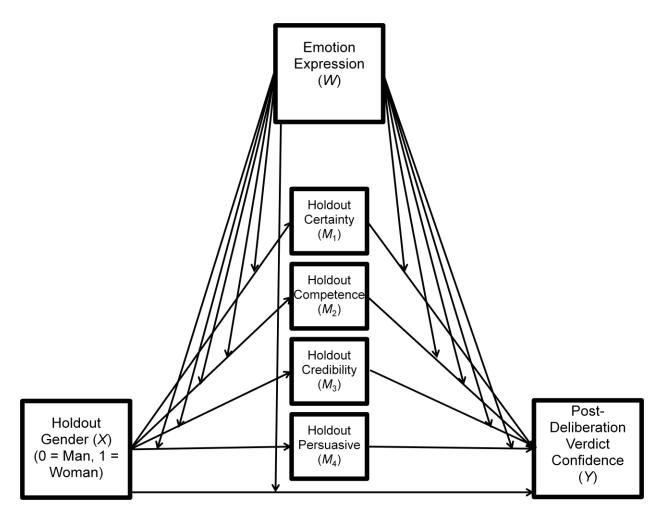


Figure 3. Study 2: Proposed moderated mediation model.

## Method

Participants. Participants were 245 undergraduates from the University of Illinois at Chicago. Thirty five participants were excluded for failing suspicion checks (n = 16, 7%), the holdout gender manipulation check (n = 14, 6%), or both (n = 5, 7%). The remaining 210 participants were 65% women; M age = 19 years (SD = 3 years) and 31% Asian, 28% Hispanic, 27% White, 8% African American, 6% Other. All of the participants were over the age of 18 and U.S. citizens and therefore jury-eligible. Because I established that women hold similar gendered emotion stereotypes as do men (Study 1), I included both men and women in my sample. Participants were awarded 1.5 Psychology Experience Credits (PEC) for their participation, which took roughly 1 hour and 20 minutes, on average, to complete. The average amount of time that participants spent on each round (i.e., completing verdict, confidence, reason for verdict, and perceptions measures) was roughly 4 minutes (SD = 1 minute).

# Materials.

Trial stimulus (Appendix B). The trial stimulus was modified from a real case (R. v. Valevski, 2000) in which a man is tried for murdering his wife. In this case the prosecution claims that the man murdered his wife by slitting her throat; the defense claims that the victim killed herself. Written descriptions of the opening and closing statements, witness testimonies, and photographs from the case were presented on a computer screen using Qualtrics software (a program designed for the creation and distributing online surveys). The presentation includes two photographs from the actual case (provided by other researchers who have used this case in their research, Bright & Goodman-Delahunty, 2006), and several photographs that were taken from the internet (i.e., photographs ostensibly of the defendant, victim, and the murder weapon). The evidence presentation takes a total of 17 minutes to view. Each slide advances on its own

after a pre-determined amount of time to ensure that participants cannot skip through without reading the slides. Each slide has a different time (ranging from 10-90 seconds), depending on how much information is contained on the slide. In extensive pilot testing and several prior studies, participants who saw this presentation were always asked whether they needed more time to read the slides. No participants reported needing more time and several of the participants reported that they were given too much time on each slide. In a prior study that utilized a very similar evidence presentation, there was a 62% conviction rate, which allows for enough variance in verdicts to detect effects of my independent variables without ceiling or floor effects.

Jury instructions (Appendix C). The jury instructions were modified from actual Illinois pattern jury instructions for a criminal murder trial of this type (Haegerich & Bottoms, 2000; Stevenson & Bottoms, 2009).

Deliberation script (Appendix D). The pre-written script simulates a deliberation interaction. Specifically, after reporting their pre-deliberation verdicts and comments, jurors see a screen in which five other fictional jurors' verdicts and comments appear. The "canned" (i.e., pre-written) comments were taken from a prior study in which mock jurors were asked to report the reasons for their verdicts for the same case. Some spelling and grammatical errors were left in the comments intentionally to make it more believable that they were just typed by the other participants in the room. Thus, the canned reasons are representative of real college students' reasons for their verdicts and the tone in which college students express these reasons. Further, for realism, the deliberation rounds were programmed to have the holdout refer directly to other fictional jurors and the participant (by name) during the interaction.

I presented the participants with one of two versions of the deliberation rounds, depending on their initial verdict preference—although I collapsed across this manipulation for all analyses. Specifically, because the fictional holdout needed to always be in opposition to the participants' verdict choices, participants voting guilty read a script in which 4 jurors agree with these participants' verdict (i.e., vote guilty) and one juror disagrees (i.e., votes not guilty). In contrast, participants voting not guilty read a script in which 4 jurors agree with these participants' verdict (i.e., vote not guilty) and one juror disagrees (i.e., votes guilty).<sup>3</sup>

In addition, I manipulated the two independent variables within this deliberation script, resulting in 12 versions of the deliberation script. I have included the following versions in Appendix D: (a) Holdout voting guilty/no emotion expression ("Deliberation Script #1"), (b) Holdout voting not guilty/no emotion expression ("Deliberation Script #2"), (c) Holdout voting guilty/anger expression ("Deliberation Script #3"), (d) Holdout voting not guilty/anger expression ("Deliberation Script #4"), (e) Holdout voting guilty/fear expression ("Deliberation Script #6").

First, the holdout gender was manipulated by having either a man's or woman's first name as the username (i.e., JasonS versus AliciaS). The other four usernames are gender neutral, including either nicknames, last names, or other words that do not give away gender (e.g.,

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<sup>&</sup>lt;sup>3</sup> One might expect different results when the holdout is arguing for a guilty versus not guilty verdict. For example, there is a well-documented leniency bias in criminal trials. Jurors tend to become more lenient after deliberating together because, due to the legal system's presumption of innocence and the burden of proof beyond a reasonable doubt, it is much easier to convince people to change their vote from guilty to not guilty (rather than vice versa) (MacCoun & Kerr, 1988). Thus, it might be the case that people are more persuaded by a holdout juror arguing for a not guilty verdict, than by a holdout juror arguing for a guilty verdict. Although this effect is interesting, it is not central to the hypotheses being tested. Even so, in both Studies 2 and 3 I tested whether any of the effects on my main dependent variable (confidence in original verdict) were moderated by the participants' initial verdict preference (not guilty versus not guilty). Neither including this as a moderator nor covariate changed my results.

"UIC2011," "JJohnson," "syoun96"). To maintain realism, the usernames that are ostensibly chosen by the other participants in the room vary in content, use of capital letters, etc.

Second, holdout emotion was manipulated by inserting statements indicating that the holdout is experiencing emotion into the holdout's comments. Participants read the same holdout juror comment with either no emotion expressed, with statements reflecting that he or she is angry inserted—a manipulation similar to successful manipulations in prior studies (Demoulin, Leyens, Paladino, Rodriguez-Torres, Rodriguez-Perez, & Dovidio, 2004)—or with statements reflecting that he or she is fearful inserted. There were no emotion statements inserted during the first round of deliberation to provide a baseline measure in which the participant is aware he or she is in the majority with one holdout and the gender of the holdout, but has not yet witnessed the holdout expressing emotion. Emotion statements were inserted into the holdout's comments about the case throughout every round of deliberation (e.g., "Seriously, this just makes me angry..." "...ug this whole thing really creeps me out..." etc.) after the first no-emotion round. In the anger conditions, I also converted some of the words to capital letters to strengthen the manipulation without changing the content.

<u>Measures.</u> All Study 2 measures are presented in Appendix E as given to participants and in the order discussed below.

**Verdict.** Using a well-established mock jury paradigm, a verdict measure asks participants to decide between a not guilty or guilty verdict, the same choice a real juror would be asked to make.

<u>Confidence in original verdict</u>. A verdict confidence item assesses jurors' confidence in their verdict from 0% (*Not at all Confident*) to 100% (*Completely Confident*). The participants were instructed that their co-jurors would see only their verdict choice and not their

confidence level. For analyses, verdict and confidence measures were re-coded and combined to yield "confidence in original verdict" ranging from -11 (100% Confident in Original Verdict) to +11 (100% Confident in Original Verdict). Thus, lower scores reflect decreased confidence in their original pre-deliberation opinion (i.e., more minority influence); higher numbers reflected greater confidence in their original pre-deliberation opinion (i.e., less minority influence).

**Reasons for verdict.** An open-ended item asks participants to "Please explain your reason(s) for your verdict and any other comments that you want your co-jurors to read. Feel free to state your reasons for the entire group, or to address individual co-jurors in your comments (This is a public answer that your co-jurors will see)."

Perceptions of the holdout during deliberation. A set of 5-point scales ranging from *Not at all* to *Extremely*, assesses how certain, competent, credible, and persuasive participants believe each fictional juror to be. They were instructed that these were private ratings that their co-jurors would not see.

Post-deliberation perceptions of the holdout. A set of 5-point scales assesses how rational, emotional, trustworthy, sincere, convinced, influential, and likeable each of the jurors were (ranging from *Not at all* to *Very*), and how high in quality each of the juror's arguments were (ranging from *Very low quality* to *Very high quality*). The participants were instructed that these were private ratings that their co-jurors could not see.

**Emotion manipulation check.** A manipulation check item asks jurors to report the extent to which [AliciaS/JasonS] was angry and fearful on a 5-pt scale ranging from *Not at all* to *Very*.

<u>Suspicion check</u>. A yes/no question assesses whether the participants noticed anything strange about the study. If they respond in the affirmative they are asked what exactly they were thinking of and asked to be specific in an open-ended format.

Holdout gender manipulation check. Another manipulation check item asks jurors to report what gender they believe [AliciaS/JasonS] to be.

Ambivalent Sexism Scale (Glick & Fiske, 1996). The 22-item Ambivalent Sexism Scale measures hostile and benevolent sexism toward women (e.g., "Women seek power by gaining control over men") on a 5-point scale ranging from *Strongly Disagree* to *Strongly Agree*.

**Demographics form.** A demographics form assesses participants' gender, age, and race/ethnicity.

Procedure. Participants arrived in groups of 2 to 18 to a computer laboratory to participate in a computer-mediated mock jury simulation. The participants each sat at an individual computer station, separated by dividers so that they could not see one another during the task. They were told that all of the participants in the room would be randomly assigned to virtual chat rooms in groups of six-person juries. They were told that they were in one of two computer labs on campus participating at the same time to enable me to run groups smaller than six. I took several steps to ensure the realism of this detail: (a) when the participants arrived at the lab, they saw a sign on the door indicating which Participant Identification Numbers (PINs) should be in the real study room (i.e., the real participants' PINs) or in the fictional additional study room (i.e., a list of fake PINs), (b) the experimenter checked all of the participants PINs as they came in explicitly to "make sure they are in the correct study room" and (c) the experimenter set alarms on her cell phone to stage several incoming fake phone calls with the

"other lab," ostensibly to make sure that participants in both rooms started at the same time.

Thus, although the participants thought that they would be interacting with five other jurors in one of the labs, they should not have drawn inferences about *which* five participants were in their group or been suspicious when there were less than six participants.

The cover story for the purpose of the computer mediation was that I wanted to limit the influence of individual differences in appearance and manner of speaking on their interactions. They all viewed the murder trial evidence presentation and read jury instructions on their individual computer screens. They were instructed that each group must reach a unanimous decision. Next, they were asked to enter a username. After seeing a screen with a progress wheel telling the participant that the groups are being randomly formed, a list of six "usernames" (including the participant's) appeared. They then ostensibly begin an online chat "interaction" with the five other fictional mock jurors. Participants completed pre-deliberation verdict, confidence, and reasons-for-verdict measures. Then the screen displayed the six usernames (i.e., the username that the participant entered, along with five fictional usernames), each with a verdict choice displayed, along with a brief comment supposedly written by each co-juror explaining the reasons for their verdict—including the verdict and reason that the participant just entered. After reading the other fictional jurors' comments, the participant again completed measures of verdict confidence and the reason for his or her verdict. This went on for a total of 8 rounds. Thus, the verdict and reasons for verdict constituted what the participant believed to be his or her contribution to an actual group discussion. Each time the jurors were asked for their reasons for their verdict, they were reminded that they could address the entire group or, if they wished, they could address specific jurors in their group. In addition, after reading each round of comments, the participant completed private measures assessing their perceptions of their

fictional co-jurors. The other jurors' verdicts and reasons for verdict were still displayed on the screen as the participants completed these measures to ensure that the participants could remember each co-juror's verdict and comments while making these ratings. They read instructions that stressed that their co-jurors would not see these ratings.

All participants read four rounds of deliberation in which four fictional jurors agree with their verdict, and one holdout juror disagrees. After four rounds, one of the false jurors changes verdict to side with the holdout, which has been found to increase a minority's ability to convince the majority (Wood et al., 1994). This was included to increase the likelihood that the participant would consider changing his or her opinion and to also increase realism (i.e., it would be more representative of a dynamic and live interaction). Note that the fictional juror who changes to the opinion minority did not contribute any novel arguments—this fictional juror only expressed agreement with the holdout and made neutral statements that were the same across all versions (e.g., "we have to make sure we do what the law says.").

Although participants were instructed that they would continue with these rounds until they reached agreement, after 8 rounds of deliberation a screen appeared telling them that the deliberation period had finished. They then completed final private post-deliberation verdict confidence, reason-for-verdict, and perceptions of their co-juror ratings measures. Finally, they completed additional post-deliberation perceptions of the holdout, suspicion and manipulation checks, demographic information, and Ambivalent Sexism Scales. Finally, they were debriefed and excused.

### **Results**

**Emotion Expression Manipulation Check.** Two 2 (Holdout Gender: woman, man) X 3 (Holdout Emotion: no emotion, anger, fear) between-subjects ANOVAs revealed that the

emotion manipulation had the intended effect on participants' perceptions of the holdout's anger, F(2, 196) = 119.35, p < .001, and fear, F(2, 196) = 54.39, p < .0001. I used planned comparisons to probe these main effects.

Anger. As intended: (a) holdouts in the anger condition were perceived as more angry (M = 4.50, SD = .12) than participants in the control (M = 2.19, SD = .11), F(1, 196) = 333.09, p < .001, and fear (M = 1.83, SD = .19), F(1, 196) = 301.22, p < .001, conditions; and (b) holdouts in the fear condition were perceived as less angry (M = 1.75, SD = 1.17) than in the control condition (M = 2.18, SD = 1.16), F(1, 196) = 7.82, p < .01. Neither the gender manipulation, nor the interaction were significant, Fs < 1.

**Fear.** As intended: (a) holdouts in the fear condition were perceived as more fearful (M = 3.63, SD = .19) than participants in the control (M = 1.39, SD = .12, F(1, 196) = 112.11, p < .001, and anger (M = 1.53, SD = .13), F(1, 196) = 88.60, p < .001, conditions; and (b) holdouts in the control and anger conditions were perceived as equally fearful, F(1, 196) = 1.08, p = .30. Neither the gender manipulation, nor the interaction were significant, Fs < 1.

**Preliminary Analyses.** When participants' gender and all possible interactions were added to the main analysis reported below, the four-way interaction was not significant, F(4, 380) = 1.23, p = .29. Further, although men (M = 9.45, SD = 4.35) were more confident in their original verdict compared to women (M = 7.91, SD = 3.33) overall, F(2, 380) = 16.70, p < .001, none of interactions with participant gender were significant,  $Fs \le 1.11$ ,  $ps \ge .29$ . When I ran the model reported below controlling for participant gender, the predicted three-way interaction reported below dropped from significant to marginal significance, F(4, 390) = 13.79, p = .07.

When participants' hostile and benevolent ambivalent sexism scores were included as covariates in the main analysis reported below, the results did not change. There were not

enough participants to test for four-way interactions. Further, neither participants' hostile nor benevolent sexism scores were significant covariates,  $Fs \le .38$ ,  $ps \ge .59$ .

Main Analyses: Confidence in Initial Verdict. Overall, 43% of participants voted guilty pre-deliberation. The rate of guilt judgments did not differ depending on holdout emotion nor gender condition,  $\chi^2(1, N = 209) = .74$ , p = .23. To test my hypotheses about the effects on confidence in original verdict, I conducted a 2 (Holdout Gender: woman, man) X 3 (Holdout Emotion: none, anger, fear) X 3 (Deliberation Time Point: pre-deliberation, after first noemotion round, post-deliberation) repeated-measures ANOVA on confidence in original verdict with holdout gender and emotion varying between-subjects and deliberation time point varying within subjects. ⁴ No main effects nor two-way interactions were significant, all  $Fs \le 2.76$ ,  $ps \ge .07$ . The predicted three-way interaction was significant, F(4, 396) = 2.54, p = .04 (see Figure 4). As predicted, the simple holdout gender by deliberation interaction was not significant in the control and fear conditions, Fs < 1. In contrast—as predicted by both competing hypotheses—the holdout gender by deliberation simple interaction was significant in the anger condition, F(4, 96) = .04.

<sup>&</sup>lt;sup>4</sup> The dependent measure has a restricted range at the first time point. Pre-Deliberation, the confident scale is an 11-point scale ranging from 0% confident in their verdict through 100% confident in their original verdict. At the following two time points, however, my confidence scale is a 22-point scale ranging from 100% confident in the opposite of their original verdict (e.g., if the participant began deliberation being 50% confident in a guilty verdict, after deliberation they could technically drop—not only to 0% confidence in a guilty verdict—but all the way to 100% confident in a not guilty verdict) through 100% confident in their original verdict. To be clear, the participants always completed the same exact two measures at all time points (i.e., their verdict choice and how confident they were in that verdict from 0% to 100%). This difference arose only in the recoding process to create the main dependent variable. The statistical issue that this raises, however, is that having a dependent measure with a restricted range violates the ANOVA assumption of heteroskedasticity (i.e., the assumption that error variance is constant across time points). Of note, jurors changing their verdicts was rare: 15 (7%) in Study 2 and 4 (1%) in Study 3. To make sure that my results were not an artifact of this issue, I ran all analyses with HLM in which the repeated measures (i.e., the 3 deliberation time points) are nested within jurors, which does not have an assumption of heteroskedasticity—in multilevel (HLM) modeling error variances are free to vary across time points. The pattern and significance of the results did not differ from the repeated-measures ANOVA in Studies 2 and 3. Thus, for ease of presentation, I have presented only the ANOVA results.

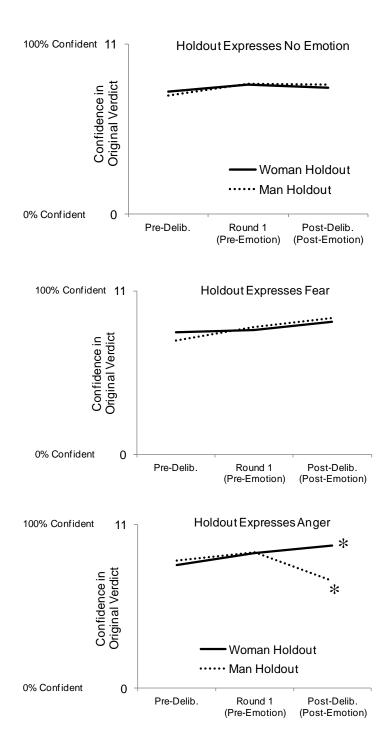


Figure 4. Study 2: Mean confidence in original verdict as a function of deliberation, holdout emotion expression, and holdout gender. The confidence in original verdict scale ranged from -11 (100% confident in holdout verdict) through +11 (100% confident in original verdict). Because only 15 participants switched to the holdout verdict, for ease of presentation I am presenting only the top half of the scale.

396) = 6.00, p < .001. Simple effects analyses revealed that when a man holdout express anger, the quadratic effect across deliberation time points on participants' verdict confidence was significant, F(1, 396) = 8.61, p < .05. (The linear effect of deliberation was not significant, F[1, 396] = .49.) After realizing they were in the majority, participants became more confident in their verdict choice—the increase from pre-deliberation to after the first no-emotion round was significant, F(1, 396) = 2.15, p = .14. After a man holdout expresses anger, participants became less confident in their verdict choice—the drop from after the first no-emotion round to post-deliberation was significant, F(1, 396) = 5.52, p < .05. In contrast, when a *woman* holdout expressed anger, there was a significant *positive* linear effect across deliberation time points, F(1, 396) = 10.86, p < .05. (The quadratic effect was not significant, F[1, 396] = .71.) In other words, when a woman holdout expressed anger, participants become significantly *more* confident in their verdict choice from pre- to post-deliberation.

Perceptions of the Holdout during Deliberation. A series of 2 (Holdout Gender: woman, man) X 3 (Emotion Expression: none, fear, anger) X 2 (Deliberation Time Point: after first no-emotion round, post-deliberation) repeated-measures ANOVAs with holdout emotion and gender varying between subjects and deliberation time point varying within subjects were conducted on perceptions of the holdout that were assessed after each round of deliberation (certainty, competence, credibility, persuasiveness). Effects not reported below are not significant,  $Fs \le 2.30$ ,  $ps \ge .11$ .

Main effects of deliberation. Perceptions of the holdout's certainty, competence, credibility and persuasiveness all increased significantly after deliberation,  $Fs \ge 6.89$ ,  $ps \le .009$  (see Table I).

TABLE I
MEAN RATINGS AND STANDARD DEVIATIONS OF PERCEPTIONS OF HOLDOUT AS
A FUNCTION OF DELIBERATION TIME POINT

	After the 1 <sup>st</sup> Round of Deliberation	After the Last Round of Deliberation
Perceptions of Holdout		
Certainty	2.40(.98) <sub>a</sub>	$3.30(1.31)_{b}$
•	, , , , , , , , , , , , , , , , , , ,	` /-
Competence	$2.70(.91)_a$	$3.06(1.27)_{b}$
Credibility	2.48(.89) <sub>a</sub>	$2.73(1.24)_{b}$
		(/0
Persuasiveness	$1.67(.85)_{a}$	$2.02(1.18)_{b}$

*Note*. Subscripts that differ within a row signify a significant mean difference at p < .05.

**Deliberation by Holdout Gender by Holdout Emotion Interaction.** The three-way interaction effect on perceptions of the holdout's competence was significant, F(2, 194) = 15.90, p = .04. (See Figure 5.) The simple holdout gender by deliberation time point interactions were not significant in the control or fear conditions, F(3, 194) = 10.00 from the simple holdout gender by deliberation time point interaction was significant, F(1, 194) = 10.00 from the simple effects revealed that when the holdout was a man, participants perceived him as more competent after he expressed anger compared to before he expressed anger, F(1, 194) = 13.23, F(1, 19

Mediation Analyses. To determine whether participants doubted their opinion more after men (versus women) expressed anger because they had more positive perceptions of the man (versus woman) holdout, I conducted a test of moderated mediation. To do so, I used Hayes (2012) PROCESS macro for SPSS, which is a computation tool to test moderated mediation models with multiple mediators using bootstrapping techniques. I tested whether the conditional indirect effect of holdout gender on participants' post-deliberation confidence in their original verdict through multiple mediators (perceptions of the holdout's credibility, certainty, persuasiveness, and competence) was significant in the anger—but not control or fear—condition. More specifically, I tested a conceptual model in which emotion condition moderates the path from the (a) predictor (holdout gender) to the mediators (perceptions of the holdout), (b) the mediators to the outcome (verdict confidence), and (c) the predictor to the outcome. See Figure 3 for the conceptual model being tested (i.e., Model 59 in Hayes, 2012). As expected, none of the conditional indirect effects of gender on original verdict confidence through the four potential mediators were significant (as indicated by confidence intervals that include zero) for

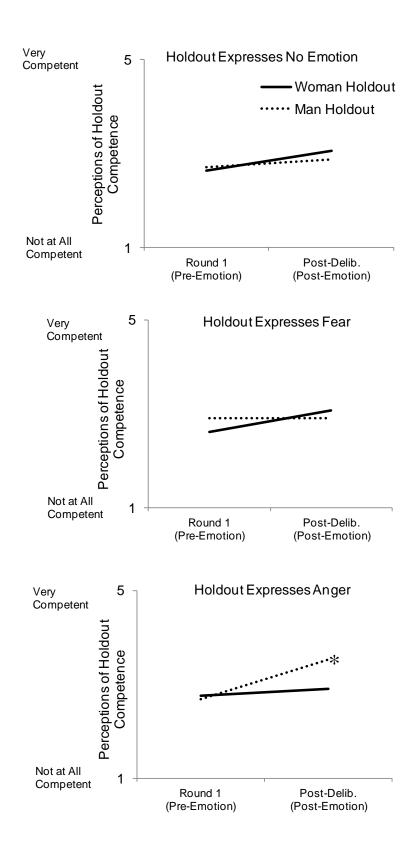


Figure 5. Study 2: Mean perceptions of the holdout's competence as a function of deliberation, holdout emotion expression, and holdout gender.

the control condition (Competence CI: lower = -.16, upper = .34; Credibility CI: lower = -1.22, upper = .18; Persuasiveness CI: lower = -.61, upper = 1.86; Certainty CI: lower = -.10, upper = .20) and the fear condition (Competence CI: lower = -1.16, upper = .19; Credibility CI: lower = -.40, upper = .59; Persuasiveness CI: lower = -.61, upper = 1.40; Certainty CI: lower = -1.08, upper = .23). Contrary to predictions, all of the condition indirect effects were also non-significant in the anger condition (Competence CI: lower = -.18, upper = .12; Credibility CI: lower = -.41, upper = .07; Persuasiveness CI: lower = -.07, upper = 1.06; Certainty CI: lower = -.42, upper = .03). Thus, the gender gap in influence at the end of deliberation in the anger condition was not mediated by the perceptions of the holdout that were measured during deliberation.

Post-Deliberation Perceptions of the Holdout. A series of 2 (Holdout Gender: woman, man) X 3 (Emotion Expression: none, fear, anger) between-subjects ANOVAs were conducted on perceptions of the holdout that were assessed only post-deliberation: rationality, emotionality, trust, sincerity, convinced, quality of arguments, and likeability. The manipulations had no effects on perceptions of the holdout's rationality, trustworthiness, sincerity, or influence, or the quality of their arguments,  $Fs \le 3.51$ ,  $ps \ge .06$ .

Emotionality. As would be expected, there was a main effect of emotion expression on perceptions of the holdout's general emotionality, F(2, 196) = 32.91, p < .001, such that holdouts in the no-emotion condition (M = 2.91, SD = 1.74) were perceived as significantly less emotional than holdouts who expressed anger (M = 4.31, SD = 2.03), F(1, 196) = 20.00, p = .0001, and fear (M = 4.09, SD = 2.91), F(1, 196) = 13.99, p < .001, which did not differ from each other, F(1, 196) = 1.12, p = .29. No other effects were significant,  $Fs \le 3.06$ ,  $ps \ge .08$ .

**Likeability.** There was a significant main effect of emotion expression on perceptions of the holdout's likeability, F(2, 196) = 6.50, p = .002, such that holdouts who expressed fear were more likeable than holdouts who expressed anger, F(1, 196) = 12.21, p < .001. Holdouts in the control condition (M = 2.64, SD = .12) did not differ from than the holdouts in the anger condition (M = 2.24, SD = 1.89), F(1, 196) = 1.91, p = .17, or the fear condition (M = 3.07, SD = 2.61), F(1, 196) = 3.47, p = .06. Women were less likeable (M = 2.47, SD = .10) than were man holdouts (M = 2.47, SD = 1.45), F(1, 196) = 4.09, p = .04. The interaction was not significant, F(2, 196) = 2.37, p = .10.

# **Discussion**

Minority influence literature reveals that it is very difficult for an opinion minority to influence a group. Study 2 reveals a rare factor that can help an opinion minority exert influence over group members' opinions: expressing anger. Whether it enhances or detracts from minority influence depends, however, on the opinion minority's stereotyped group status. When participants believed they were interacting with 4 others who agreed with them and one holdout juror who disagreed without emotion, they were never swayed by the holdout. Their confidence in their original verdict did not change during 8 rounds of deliberation—regardless of whether the holdout was a man or a woman. When participants read about a holdout who expressed the same arguments with fear they were similarly resistant to the holdout's arguments. Yet, when participants read about a holdout who made the same arguments, but expressed them with anger, their confidence in their own opinion was affected.

The direction of this anger effect depended, however, on the gender of the holdout.

Participants exhibited a significant drop in confidence after a man holdout expressed anger. In stark contrast, participants actually became significantly *more* confident in their own initial

opinion after a woman holdout expressed anger. Despite being bombarded with 20 minutes of trial information, 5 different group members' opinions about the case after each of 8 rounds of deliberation, a subtle, one-word manipulation that led them to believe they were arguing with someone named "Alicia" versus "Jason" caused them to have very different reactions to expressions of anger. Further, this effect cannot be explained by gender differences in how the emotion was communicated, how emotion "looks" when expressed, nonverbal cues, etc., because all argument and emotional statement content were held constant across holdout genders, and participants could not see the individual. Thus, this effect is driven completely by how the participants interpret and react to an emotion when they believe it is coming from a man versus a woman. It is important to note that it is not the case that a woman expressing anger was merely ineffective, but that it actually backfired and made the participant *more* confident in his or her original opinion. Contrary to predictions, this effect was not mediated by perceptions of the holdout's certainty, competence, credibility, nor persuasiveness.

Thus, these findings lend support to the Penalization of Non-Stereotypical Emotion

Hypothesis that historically disadvantaged group members are penalized for expressing nonstereotypical emotion. This study did not lend any support to the Violation of Expectations

Hypothesis that expressing counter-stereotypical emotion would violate expectations and result in more minority influence.

Implications for Emotion and Minority Influence. The finding that women holdouts were penalized for expressing anger (i.e., a non-stereotypical emotion), resulting in less minority influence, is consistent with prior findings of the deleterious effects of expressing non-stereotypical emotion in other contexts, such as leaders in business contexts (Lewis, 2001) or witnesses testifying in court (Golding et al., 2003; Rose et al., 2006). At first blush, this finding

might appear to be inconsistent with studies that demonstrate the advantageous effects of expressing anger on credibility for political candidates, for example—until, that is, one takes into account the gender of the speaker. Anger was identified as one of the rare factors that can help opinion minorities' prospect of influencing the group—for men holdouts. Thus, had Tiedens et al. (2001), for example, investigated the effect of a *woman* candidate expressing anger, the woman might have been perceived as less credible than if she did not express anger.

Implications for Gender and Minority Influence. Men, who predominantly hold roles associated with higher status and power, have greater potential for influence over women in many situations that involve group interaction (Eagly, 1983). In the current study's control condition, however, men holdouts did not exert more influence than women holdouts. One explanation could be that the current study's focus on minority opinions might have eliminated gender differences in influence because the baseline influence for holdouts is so low. Another explanation could be that eliminating gender differences in how men and women communicate during group discussion (by holding the discussion script constant), I eliminated gender differences in influence. This would lend support to the conclusion that gender differences in influence during group discussion are—at least in part—due to gender differences in actual communication styles. We did, however, find gender differences when the holdouts were expressing anger—and these clearly cannot be explained by gender differences in communication styles. Perhaps people need to feel either threatened by women (i.e., when they express a dominant emotion like anger or exhibit non-stereotypically feminine traits), or have an excuse to justify their discrimination as not being motivated by sexism (i.e., her emotionality, rather than her gender) to penalize them, as theories of modern prejudice would predict (Gaertner & Dovidio, 1986).

Emotion Stereotypes. It is unclear from this single study whether the penalization effect of women expressing anger was driven by emotion stereotypes. It is possible that the effects are not driven by the stereotypical nature of the emotions being expressed, but instead by a historically disadvantaged group expressing a dominant emotion: anger. A historically disadvantaged group member expressing a dominant emotion associated with higher status (Tiedens, 2001) might motivate other group members to reject his or her opinion to maintain the social hierarchy—regardless of how stereotypical anger is for the group. Study 3 was designed to address these alternative explanations, by investigating another historically disadvantaged group with a reversed stereotype: Black men.

#### STUDY 3

In Study 3, I investigated whether the penalizing effect of women expressing anger on their minority influence (Study 2) was due to the stereotypical nature of the emotion or the effects of a historically disadvantaged group (i.e., women, Black men) expressing anger specifically. In other words, did women (i.e., the stereotyped group in Study 1) exert less minority influence because (a) *any* historically disadvantaged group would be penalized for expressing anger (e.g., because it communicates dominance, status, and power, Lerner & Tiedens, 2006), or (b) because it violated the specific stereotypical nature of women expressing anger? To address this question I utilized a different stereotyped group manipulation, for which the stereotypicality of anger and fear would be reversed: Black men. That is, if it is the stereotypicality that explains why women were penalized, in this study, fear (rather than anger) should be the emotion that leads participants to penalize Black holdouts. If, however, the effect of any historically disadvantaged group expressing a dominant emotion like anger (versus fear) explains the effects, then I should replicate the effects found in Study 1.

#### **Hypotheses**

Anger-Specific Replication Hypothesis. I again tested two competing hypotheses. If women being penalized in Study 2 was driven by the effect of a historically disadvantaged group expressing anger (versus fear), the pattern of Study 2 effects would replicate for Black men. Specifically, participants would become less confident in their own opinion after a White man expresses anger, but more confident in their own opinion after a Black man expresses anger (i.e., similar to women in Study 2). Similar to Study 2, this effect would not replicate in the fear or no-emotion-control condition. Support for this Replication Hypothesis would suggest that Study 2 results might be driven by a historically disadvantaged group expressing a dominant emotion (i.e., anger) versus a submissive emotion (i.e., fear), rather than the effects being due to whether the emotion was stereotypical or non-stereotypical.

Stereotype-Specific Hypothesis. Alternatively, if women being penalized for expressing anger was due to a historically disadvantaged group expressing non-stereotypical emotion, then I predicted Black men to be penalized for expressing fear. For Black men, fear (rather than anger) is non-stereotypical (Study 1). Thus, in contrast to women in Study 2, I predicted that participants would be more confident in their original verdict after Black men express fear (rather than anger) because fear is now the non-stereotypical emotion. Support for this hypothesis would suggest that Study 2 results might be driven by anger being non-stereotypical for women, rather than the effects being due to *any* historically disadvantaged group expressing a dominant emotion (i.e., anger) versus a submissive emotion (i.e., fear).

#### **Method**

<u>Participants.</u> Participants were 416 adults recruited from Amazon's Mechanical Turk.

Mechanical Turk is a website operated by amazon.com that provides a large participant pool and

a very easy to use recruitment, data collection, and compensation system. Mechanical Turk is an open marketplace for "requesters" to create tasks for "workers" to complete for typically small monetary compensation (e.g., typically 5-10 cents for 5-10 minute tasks; Buhrmester et al., 2010). Requesters (e.g., researchers, marketers) can create any task (e.g., surveys, experiments) for workers to browse and choose to complete voluntarily. Investigations of this sample have concluded that the Mechanical Turk participant pool, compared to standard internet samples, is at least as representative of the U.S. population (Paolacci, Chandler, & Ipeirotis, 2010) and perhaps slightly more diverse (Buhrmester et al., 2010). These investigators also concluded that the data were reliable, as reflected by "good to excellent" alpha values and high test-retest reliability on personality scales (Buhrmester et al., 2010). Further, I conducted a pilot study (*n* = 30) with my paradigm before beginning data collection and found that only 10% of the participants failed the suspicion check.

A total of 119 of the 416 participants were excluded from the sample for being under 18 (n = 1), failing the suspicion check (n = 51, 12%), the holdout race manipulation check (n = 57, 14%), or both (n = 10, 2%). The remaining 297 participants were 61% women; M age = 30 years (SD = 10 years); and 80% White, 7% African American; 5% Hispanic, 4% Asian, 4% other. The majority of participants completed high school (61%), but a minority completed a bachelor's degree (36%), a master's degree (12%), a doctoral degree (2%), a law degree (2%), or a medical degree (1%). All of the participants were over the age of 18 and U.S. citizens and therefore jury-eligible. Because I established that racial minorities hold similar racial emotion stereotypes as do White participants (Study 1), although they are not as strong, I did not limit my sample to White participants. Participants were paid \$2 for their participation, which took roughly 45 minutes, on average, to complete. The average amount of time that participants spent on each round (i.e., 12%)

completing verdict, confidence, reason for verdict, and perceptions measures) was roughly 4 minutes (SD = 1.5 minutes).

Procedure and Materials. This study conformed to a 3 (Holdout Emotion: none, anger, fear) X 2 (Holdout race: White, Black) X 3 (Deliberation Time Point: pre-deliberation, after no-emotion first round, post-deliberation) mixed-repeated-measures design with holdout emotion and race varying between subjects and deliberation time point varying within subjects. All participants, measures, and procedures were identical to Study 2 with three exceptions. First, I manipulated the race rather than the gender of the holdout name. The White defendant had the username "Logan" and the defendant had the username "Jamal"—a name manipulation utilized in previous studies in our laboratory (Stevenson & Bottoms, 2009). Second, participants completed 5 rounds of deliberation (as opposed to 8 in Study 2). Third, I assessed (a) individual differences in prejudice toward Blacks, rather than toward women with the 10-item Internal and External Motivation to Respond without Prejudice Scale (Plant & Devine, 1998; Appendix F), and (b) a holdout race (rather than gender) manipulation check.

#### **Results**

Emotion Expression Manipulation Check. Two 2 (Holdout Race: White, Black) X 3 (Holdout Emotion: no emotion, anger, fear) between-subjects ANOVAs revealed that the emotion manipulation had the intended effect on participants' perceptions of the holdout's anger, F(2, 286) = 70.30, p < .001, and fear, F(2, 286) = 111.77, p < .001. I used planned comparisons to probe these main effects.

Anger. As intended, (a) holdouts in the anger condition were perceived as more angry (M = 3.70, SD = 1.23) than participants in the control (M = 1.73, SD = 1.08), F(1, 286) = 130.16, p < .001, and fear (M = 2.01, SD = 1.30), F(1, 286) = 88.18, p < .001, conditions, and (b)

the control and fear conditions did not differ, F(1, 286) = 2.60, p = .11. Neither the race main effect, nor the interaction were significant, Fs < 1.

**Fear.** As intended: (a) holdouts in the fear condition were perceived as more fearful (M = 3.22, SD = 1.55) than participants in the control (M = 1.22, SD = .63), F(1, 286) = 189.85, p < .001, and anger (M = 1.28, SD = .65), F(1, 286) = 166.80, p < .001, conditions and (b) the control and anger conditions did not differ, F(1, 286) < 1, p = .69. Neither the race main effect, nor the interaction were significant, Fs < 1.

**Preliminary Analyses.** When participants' racial minority status was added to the main analysis reported below, the results reported below did not change. Neither the main effect of participant racial minority status nor any interactions were significant,  $Fs \le 1.45$ ,  $ps \ge .23$ . Further, when I ran the main analysis with participant minority status as a covariate, the results reported below did not change. There were not enough Black participants (n = 20) to include them as a separate group in the analysis. Excluding the Black participants did not, however, change any of the results. Nor did results change when I limited the analysis to only White participants.

When participants' internal motivation to control prejudice was included in the main analysis reported below, the results did not change. Neither the main effect of participant internal motivation to control prejudice, nor any interactions were significant,  $Fs \le 2.07$ ,  $ps \ge .13$ . Similarly, when participants' external motivation to control prejudice was included in the main analysis reported below, the results did not change. Neither the main effect of participant external motivation to control prejudice, nor any interactions were significant,  $Fs \le 1.91$ ,  $ps \ge .17$ , with one exception. There was one unexpected interaction between external motivation to control prejudice, deliberation time point, and holdout emotion, F(4, 536) = 2.41, p = .05. I did

not probe the interaction further because it did not include the holdout race manipulation and therefore was not theoretically relevant to the scope of this study.

Main Analyses: Confidence in Original Verdict. Overall, 30% of participants voted guilty before deliberation. The rate of guilt judgments did not differ depending on holdout emotion and race condition,  $\chi^2(1, N = 297) = .005$ , p = .53. To test my hypotheses, I ran a 2 (Holdout Race: White, Black) X 3 (Holdout Emotion: none, anger, fear) X 3 (Deliberation Time Point: pre-deliberation, after first no-emotion round, post-deliberation) repeated-measures ANOVA with holdout race and emotion varying between subjects and deliberation time point varying within subjects. The main effect of deliberation was significant, F(2, 572) = 17.89, p < .001. The participants all became significantly more confident in their original verdict from predeliberation (M = 8.69, SD = 1.94) to after Round 1 (M = 9.11, SD = 2.49), F(1, 572) = 11.05, p < .001, and from after Round 1 to the end of deliberation (M = 9.48, SD = 2.75; F(1, 572) = 8.21, p = .004). No other main effects nor interactions were significant,  $F \le 1.16$ ,  $p \le 33$ .

Perceptions of the Holdout during Deliberation. A series of 2 (Holdout Race: White, Black) X 3 (Emotion Expression: none, fear, anger) X 2 (Deliberation Time Point: after first noemotion round, post-deliberation) repeated-measures ANOVAs with holdout emotion and race varying between subjects and deliberation time point varying within subjects were conducted on perceptions of the holdout that were assessed throughout deliberation (i.e., certainty, competence, credibility, persuasiveness).

<u>Certainty.</u> This model revealed a main effect of deliberation, such that participants perceived holdouts as more certain from after the first no-emotion deliberation round (M = 2.69, SD = 1.18) to the end of deliberation (M = 3.23, SD = 1.31), F(1, 286) = 44.59, p < .001. Participants also perceived a White holdout as significantly more certain in his opinion (M = 3.02, SD = 1.02)

= 3.11, SD = 1.58) than a Black holdout (M = 2.74, SD = 1.36), F(1, 286) = 9.45, p = .002. No other effects were significant, Fs  $\leq$  1.68, ps  $\geq$  .18.

Competence. This model revealed that the main effect of emotion was significant, F(1, 286) = 4.81, p = .009, such that a holdout was perceived as more competent when he expressed no emotion (M = 2.91, SD = 1.69) compared to a holdout who expressed fear (M = 2.49, SD = 1.81), F(1, 286) = 9.66, p = .002, but not anger (M = 2.74, SD = 1.79), F(1, 286) = 1.40, p = .24. Holdouts who expressed fear and anger were perceived as equally competent, F(1, 286) = 3.35, p = .07. This main effect was qualified, however, by a significant interaction with deliberation, F(1, 286) = 3.53, p = .03. Participants perceived the holdout as less competent from after the first round to post-deliberation when the holdout expressed fear, F(1, 286) = 3.73, p = .05, but not when the holdout expressed no emotion or anger,  $Fs \le 3.15$ ,  $ps \ge .08$  (Round 1 versus post-deliberation means for fear, no emotion, and anger conditions respectively: 2.61 vs. 2.37, 2.81 vs. 3.02, 2.75 vs. 2.73). No other effects were significant, Fs < 1,  $ps \ge .43$ .

**Persuasiveness.** This model revealed a main effect of deliberation, such that participants perceived holdouts as more persuasive from after the first no-emotion deliberation round (M = 1.68, SD = .07) to the end of deliberation (M = 2.08, SD = .09), F(1, 286) = 7.88, p = .005. There was also a significant interaction between holdout race and emotion, F(1, 286) = 3.29, p = .04. When the holdout was Black, the emotion manipulation had no effect, F(2, 286) < 1, p = .43. In contrast, when the holdout was White, the emotion manipulation had an effect, F(2, 286) = 3.75, p = .02: He was seen as less persuasive when he expressed fear (M = 1.25, SD = 1.89) compared to the control condition (M = 1.64, SD = 1.55), F(1, 286) = 7.50, p = .006, no other pair-wise comparisons were significant,  $Fs \le 2.38$ ,  $ps \ge .12$ . No other effects were significant,  $Fs \le 2.62$ ,  $ps \ge .08$ .

Credibility. This model revealed that the main effect of emotion was significant, F(1, 286) = 5.35, p = .005, such that that a holdout was perceived as more credible when he expressed no emotion (M = 2.86, SD = .097) compared to a holdout who expressed fear (M = 2.44, SD = 1.81), F(1, 286) = 9.74, p = .002, but not anger (M = 2.53, SD = 1.77), F(1, 286) = 2.76, p = .24. Holdouts who expressed anger and fear were perceived as equally credible, F(1, 286) = 3.37, p = .07. This main effect was qualified, however, by a significant interaction with deliberation time point, F(1, 286) = 5.89, p = .003. Participants perceived the holdout as more credible from after the first no-emotion round to post-deliberation when the holdout did not express emotion, F(1, 286) = 4.81, p = .03, but not when the holdout expressed fear or anger, F(1, 286) = 4.81, F(1, 286) = 4.8

Post-Deliberation Perceptions of the Holdout. A series of 2 (Holdout Race: White, Black) X 3 (Emotion Expression: none, fear, anger) between-subjects ANOVAs were conducted on perceptions of the holdout that were assessed only post-deliberation: rationality, emotionality, trust, sincerity, convinced, quality of arguments, likeability. There was an emotion expression main effect on all measures,  $Fs \ge 4.98$ ,  $ps \le .007$ —except for sincerity, F(2, 292) = 2.46, p = .09 (see Table III). Specifically, when holdouts (a) expressed fear (versus control), they were perceived as more emotional, but less rational, trustworthy, convinced, influential, likeable, and offering lesser quality arguments, (b) expressed anger (versus control), they were perceived as more emotional, but less rational, influential, and likeable, and (c) expressed anger (versus fear), they were perceived as more emotional and more convinced. The race manipulation and race by emotion interaction had no significant effects on any of these measures,  $Fs \le 2.72$ ,  $ps \ge .07$ .

TABLE II
STUDY 3 MEAN RATINGS AND STANDARD DEVIATIONS OF PERCEPTIONS OF HOLDOUT CREDIBILITY AS A FUNCTION OF DELIBERATION TIME POINT AND HOLDOUT EMOTION EXPRESSION CONDITION

	After the 1 <sup>st</sup> Round of Deliberation	After the Last Round of Deliberation		
Emotion Expression				
No Emotion	2.74(1.81) <sub>a</sub>	2.98(2.02) <sub>b</sub>		
Anger	2.58(1.91) <sub>a</sub>	2.29(2.15) <sub>a</sub>		
Fear	2.55(1.95) <sub>a</sub>	2.50(2.19) <sub>a</sub>		

*Note*. Subscripts that differ within a row signify a significant mean difference at p < .05.

TABLE III
STUDY 3 MEAN RATINGS AND STANDARD DEVIATIONS OF POST-DELIBERATION
PERCEPTIONS OF HOLDOUT AFTER DELIBERATION AS A FUNCTION OF EMOTION
CONDITION

	Anger Fear		Control
Perceptions of the Holdout			
Rationality	2.24(1.15) <sub>a</sub>	2.15(1.11) <sub>a</sub>	2.85(1.28) <sub>b</sub>
Emotionality	4.14(1.16) <sub>a</sub>	3.75(1.22) <sub>b</sub>	2.90(1.34) <sub>c</sub>
Trustworthiness	2.68(1.18) <sub>ab</sub>	2.43(1.09) <sub>a</sub>	2.97(1.12) <sub>b</sub>
Convinced	3.73(1.43) <sub>a</sub>	3.11(1.30) <sub>b</sub>	3.67(1.18) <sub>a</sub>
Argument Quality	3.01(1.39) <sub>ab</sub>	2.65(1.31) <sub>a</sub>	3.27(1.34) <sub>b</sub>
Influential	2.10(1.23) <sub>a</sub>	1.99(1.12) <sub>a</sub>	2.56(1.33) <sub>b</sub>
Likeability	2.39(1.27) <sub>a</sub>	2.54(1.09) <sub>a</sub>	3.05(1.06) <sub>b</sub>

Note. Subscripts that differ within a row signify a significant mean difference at p < .05.

#### **Discussion**

Consistent with Study 2 and prior minority influence literature, participants became more confident in their original pre-deliberation verdict after learning that they were in the majority (i.e., after Round 1), and again after the last round of deliberation (i.e., after the holdouts expressed emotion, depending on condition). Further, consistent with minority influence literature that finds holdouts have more potential to exert influence the more time they have (and consistent with Study 2), participants perceived the holdout as more certain and persuasive over the course of deliberation (but not on competence and credibility as was the case in Study 2). Further, consistent with Study 2, there was no evidence that expressing negative emotion can help stereotyped groups gain credibility and influence. In fact, when expressing emotion had an effect on perceptions of the holdout in Study 3, they were always negative.

In contrast to Study 2, however, minority influence was not affected by the holdout's emotion expression or group membership. Participants' confidence in their original verdict was unaffected by the holdout's race, emotion expression, or the interaction. Thus, this study did not lend support to either of the competing hypotheses that predicted these variables would affect verdict confidence.

The holdout's race and emotion did, however, affect participants' perceptions of the holdout. The only race effect was that White holdouts were perceived as more certain than were Black holdouts. Fear appeared to have more pervasive effects on perceptions of the holdout in Study 3 (as opposed to more pervasive anger effects in Study 2). When holdouts expressed fear or anger (versus no emotion) they were perceived as less rational, influential, and likeable. In addition, when holdouts expressed fear they were also perceived as less competent, sincere, and

as contributing lower quality arguments. Fear also decreased perceptions of the holdout's persuasiveness—but only if the holdout was White.

#### **GENERAL DISCUSSION**

The results from 3 studies demonstrate that there are clear gender- and race-related emotion stereotypes in our society and suggests that these stereotypes lead to men gaining minority influence, but women losing minority influence—for expressing the same emotion. The results of Study 3 were less definitive, but suggest that race-related emotion stereotypes might not produce similar effects. These studies represent a novel contribution to minority influence and jury decision making literature by demonstrating that expressing emotion has the potential to be one of few factors that can actually help holdouts from some groups exert minority influence (i.e., men expressing anger), but can also make it more *difficult* for other groups to exert minority influence (i.e., women expressing anger).

#### **Theoretical Contributions**

Broadly, these studies contribute to knowledge about how emotion affects group decision making, whether emotionality moderates minority influence, and whether emotion exacerbates biases against stereotyped sources of persuasion. Minority influence is typically investigated in sterile experimental contexts free from emotional expression, even though minority influence situations would rarely be devoid of frustration and emotion.

Several consistent findings across Studies 2 and 3 make theoretical contributions to the minority influence literature. First, my results corroborate the theory that opinion minorities are perceived as more certain and persuasive as time goes on during the group discussion (Maass & Clark, 1984). There was also some indication that they are perceived as more credible and competent over time (Study 2 only). These findings provide a potential explanation for why

previous research has demonstrated that opinion minorities need time to exert influence (Maass & Clark, 1984). The longer an opinion minority holds out, the more persuasive they are.

Second, across Studies 2 and 3, expressing emotion affected perceptions of the holdout's competence, an important predictor of minority influence (Maass & Clark, 1984). In Study 2, expressing anger made holdouts seem more competent—but only men, not women. Several studies have demonstrated that expressing anger can make participants perceive the speaker as more credible (e.g., Tiedens, 2001), but these studies often include only a man target. The current study suggests that the positive effect of expressing anger on credibility might be limited to men and not women, perhaps because women are being penalized for expressing either a dominant or a non-stereotypical emotion.

Third, both Studies 2 and 3 evinced that expressing emotion can affect an opinion minority's potential for influencing majority members and that this effect is conditional upon whether the holdout belonged to a stereotyped group. Study 2 highlighted the role of anger by demonstrating the penalizing effects for women expressing anger (a non-stereotypical emotion) compared to the advantageous effects for men expressing anger. When men expressed anger, they were perceived as more competent and led participants to doubt their own opinion; whereas when women expressed anger, they were not perceived as more competent, and led participants to become *more* confident in their own opinion. Yet, these interactive effects of expressing emotion and stereotyped group status did not generalize to race in Study 3—a discussion of potential explanations follows below.

Finally, another important consistency across Studies 2 and 3 is that none of the results were moderated or changed by controlling for participants' stereotyped-group status (gender in Study 2, race in Study 3), initial verdict preference, or prejudice toward the stereotyped group

(Benevolent and Hostile Sexism in Study 2; External and Internal Motivation to Control Prejudice in Study 3). Thus, my results did not depend on factors that should theoretically affect participants' belief in (as opposed to their awareness of) gender- and race-related stereotypes. This is consistent with prior research demonstrating that people can be aware of stereotypes even if they do not endorse them (Devine, 1989), and that these stereotypes can drive their behavior (e.g., Payne, Lambert, & Jacoby, 2002). It is also consistent with prior research demonstrating that people can hold stereotypes about and demonstrate bias against their own group (e.g., Correll, Park, Judd, & Wittenbrink, 2002).

## **Expressing Non-Stereotypical Emotion Hypotheses: Violation of Expectations or Penalization?**

I originally posed the competing hypotheses that a disadvantaged opinion minority who expressed non-stereotypical emotion (i.e., women expressing anger in Study 2, Black men expressing fear in Study 3) would lead to: (a) decreased minority influence (see the "Penalization Hypothesis"), or (b) increased minority influence (see the Violation of "Expectations Hypothesis"). The Penalization Hypothesis was supported by the finding that women expressing anger (i.e., a non-stereotypical emotion) led to decreased minority influence, but men expressing anger led to increased minority influence. This effect did not replicate, however, for a Black holdout expressing fear (i.e., a non-stereotypical emotion) in Study 3. There was no evidence, however, for any hidden advantage for stereotyped groups expressing non-stereotypical emotion—or any emotion at all. Thus, these studies provided partial support for the Penalization Hypothesis, and no evidence for the Violation of Expectations Hypothesis.

The null effects for the race-based Study 3 makes it difficult to draw conclusions about the theoretical explanation for the gender-based Study 2 results. Although, there was partial

support for the Penalization Hypothesis, I cannot conclude whether this effect is driven by expressing *non-stereotypical* emotion or by a historically disadvantaged group expressing anger, specifically. In other words, the results might have had nothing to do with the fact that women were expressing a non-stereotypical emotion, but instead because women were expressing a dominant emotion. To be able to draw conclusions about the theoretical explanation, I would have needed to demonstrate either that (a) Black men are penalized for expressing fear (non-stereotypical emotion) rather than anger (stereotypical emotion) to conclude that it is the stereotypicality of the emotion, or (b) Black men are also penalized for expressing anger rather than fear to conclude that it is due to a disadvantaged group expressing a dominant emotion.

It is also difficult, at this point, to interpret *why* the effects of emotion expression and stereotyped group status on minority influence was significant in Study 2, but not significant in Study 3. Several potential explanations exist. First, the most salient difference between Studies 2 and 3 is the different stereotyped group membership manipulation that Study 3 was designed to test (i.e., comparing the effect of expressing anger for holdouts from different races, rather than genders). Thus, one potential explanation is that the effect of expressing anger on minority influence might depend on some stereotyped group membership characteristics (i.e., gender), but not others (i.e., race). Perhaps the dynamics of prejudice against women might operate differently than against Black men. For example, although I found evidence of both gender- and race-based emotion stereotypes in Study 1, the salience of race-based versus gender-based emotion stereotypes, or concern about appearing prejudiced as a result of acting upon them, might differ. People might be more concerned about appearing prejudiced if they ignore an angry Black man, than if they ignore an angry woman. If this were the case, however, one would have predicted that the effect would be moderated by internal and external motivation to avoid

prejudice, which it was not. Another argument against this explanation is that it does not explain why I was also unable to replicate the anger effect in my control conditions. In other words, I found that participants who heard a man holdout express anger they doubted their opinion in Study 2 (i.e., when the holdout was named Jason), but not Study 3 (i.e., when the holdout was named Logan or Jamal).

Second, the null effects in Study 3 might not have anything to do with the theoretical differences between gender- versus race-based prejudice and stereotyping, but might instead be due to methodological differences between the two studies. For example, this difference might be due different samples (i.e., undergraduates in Study 2 versus Mechanical Turk adults in Study 3). Sample differences in demographics like racial diversity (undergraduates 27% White, Mechanical Turk 80% White,  $\chi^2[1, N = 648] = 171.98$ , p < .001) might have influenced the results—even though the percentage of Black participants did not differ across samples (7% for both samples). For example, a more racially diverse sample might hold less salient race-related emotion stereotypes. Although in Study 1 I did not find that the interaction effect of target gender and target race on emotion stereotypes depended on sample, I did find that the main effect of race was actually statistically stronger for the more diverse undergraduates compared to the Mechanical Turk sample. In other words, although both samples believed anger was more stereotypically likely for Black targets, compared to White targets, this effect was not as strong in the Mechanical Turk sample. Perhaps the White majority of Mechanical Turk participants were less willing to report race-related emotion stereotypes because they feared appearing racist, which might have been less of a concern for the racially diverse majority in the undergraduate sample. Thus, perhaps the Mechanical Turk sample is either less aware of or less willing to endorse emotion stereotypes than undergraduates, which might account for why the

manipulations did not have an effect in the Mechanical Turk sample. Contrary to this theory, however, I found that controlling for racial minority status in Study 3 did not change any results.

In addition to sample differences, procedural differences might account for the null findings in Study 3. First, online participants might have been more suspicious of the paradigm. In support, the suspicion rate was significantly larger in the online Mechanical Turk Sample (15%) compared to the undergraduate sample in the laboratory (9%),  $\chi^2(1, N = 661) = 5.27$ , p = .03. Because the paradigm was less believable to Mechanical Turk participants, perhaps they did not take the task as seriously as laboratory participants, who could physically see other participants.

Second, participants who came into the laboratory (Study 2) might have been more focused and engaged in the task, compared to participants completing the task online. Although the open-ended deliberation comments suggest a high level of engagement in both studies, participants failed the manipulation checks at a significantly higher rate in the Mechanical Turk sample (16%) compared to the undergraduates (8%),  $\chi^2(1, N = 661) = 9.50$ , p < .01—suggesting the Mechanical Turk sample might have been paying less attention. Alternatively, this difference in manipulation check failures could reflect that being asked to guess race might be more uncomfortable than being asked to guess gender, based on someone's name alone. People might be more concerned about appearing racist than appearing sexist. Further, an analysis testing sample differences in the time that participants spent completing measures for each round of deliberation revealed that undergraduates and Mechanical Turk adults spent similar amounts of time on the first three rounds of deliberation, F(1, 447)s  $\leq 1.13$  ps  $\geq .29$ , but marginally less time on Round 4, F(1, 447) = 3.19, p = .07, and significantly less time on Round 5, F(1, 447) = 12.88, p < .001, F(4, 1788) = 10.98, p < .001. This suggests that the online Mechanical Turk sample

might have become less engaged over the course of the study at a more extreme rate, than did undergraduates in the laboratory. The few studies that have been published about Mechanical Turk samples have concluded that they are as reliable as other internet samples (Buhrmester et al., 2010; Paolacci et al., 2010), and have replicated classic behavioral studies traditionally conducted in laboratory settings (for review, see Mason & Suri, 2012). The current study is more effortful than the previous studies reported to show no sample differences, however, and thus might be an exception.

Third, participants' reactions to the holdout might be different in Study 2 because they deliberated longer (8 rounds in Study 2 versus 5 rounds in Study 3). Perhaps the participants do not start being affected by the holdout until later rounds, which would be consistent with prior literature that shows opinion minorities need time to exert influence. In fact, when I ran Study 2 analyses with the  $5^{th}$  round as the final time point instead of the  $8^{th}$  round, the manipulations had no significant effects (consistent with Study 3 that included only 5 rounds). Although the means were trending in the same pattern as the original analysis that included the  $8^{th}$  round, the interaction was not yet approaching significance (F < 1). Thus, I might have found significant effects of my manipulations in Study 3 if I had allowed the participants to continue through 8 rounds of deliberation. This is consistent with previous research that demonstrates opinion minorities need sufficient time to exert influence—perhaps participants need more than 5 rounds of deliberation to reach this threshold to become open to the influence of an angry-man holdout. Similarly, perhaps participants need more than 5 rounds of deliberation to reach a frustration threshold that leads them to penalize an angry-woman holdout.

To rule out these alternative methodological explanations I am currently collecting a laboratory study that is identical to Study 2 (i.e., using UIC undergraduates in the laboratory, and

including the same number of deliberation rounds) with the race (rather than gender) of the holdout manipulation being the only exception.

#### **Mediating Processes**

Holdout emotion and stereotyped-group status affected perceptions of the holdout that were related to minority influence in previous studies (e.g., competence, Maas & Clark, 1984). Yet, none of these perceptions mediated the effect of my manipulations on minority influence. This null finding could be driven by theoretical, methodological, and/or statistical issues. People might be less influenced by women (versus men) holdouts who express anger through more implicit processes, as opposed to explicit perceptions about the holdout. For example, the effects might be driven by cognitive mediators, such as how deeply majority members process an angry woman's arguments. Opinion minorities who have overcome the heuristic that their opinion is invalid can cause majority members' certainty in their own opinions to drop below the point of uncertainty that initiates majority members to process the message more deeply (i.e., systematic processing), which leads to successful persuasion of majority members (i.e., successful minority influence; Moskowitz & Chaiken, 2001). Perhaps an angry man (versus woman) instigates greater motivation to process his arguments more deeply, which in turn might lead to greater minority influence.

The reported effects might be also driven by behavioral mediators, such as how majority members respond behaviorally to an angry woman. Majority members can respond behaviorally to an opinion minority who expresses an opposing viewpoint in many different ways. Majority members could choose to ignore the comment, voice agreement, attempt informational influence (i.e., attempt to get the opinion minority to accept their information as evidence about reality, Deutsch & Gerard, 1955), or (d) attempt normative influence (i.e., attempt to get the opinion

minority to conform to their expectations, Deutsch & Gerard, 1955). These potential behavioral responses represent a wide range of openness (or lack thereof) to an opinion minority, which might result in a wide range of potential for minority influence. The more open the behavioral responses to an opinion minority, the more potential for that opinion minority to exert influence. Perhaps an angry man (versus woman) provokes more open behavioral responses, which in turn might lead to greater minority influence.

It is also possible that my measures did not capture mediating processes because of participant fatigue. In hopes of establishing causality in meditational processes, I included several potential mediators throughout the deliberation process. To avoid cuing the participant into my focus on the holdout, however, participants were asked to rate all five of their group members after each of the 8 rounds of deliberation—in addition to making arguments for their verdict. An analysis testing the effect of deliberation round on participants' word count in Study 2 indicated that participants' word count decreased significantly over the course of deliberation (Means: Round 1: 73.66, Round 2: 30.24, Round 3: 48.83, Round 4: 42.03, Round 5: 43.32, Round 6: 47.24, Round 7: 37.11, Round 8: 28.06; F[7, 413] = 14.74, p < .001). This effect was not moderated by the manipulations,  $Fs \le 1.01$ ,  $ps \ge .45$ . To the extent that participants' word count is indicative of fatigue and engagement, this suggests that the task might have been too repetitive to keep participants engaged enough to report their perceptions of the holdout accurately.

Further, existing macros to test moderated mediation with multiple mediators (e.g., Hayes, 2012) do not accommodate the longitudinal, nested nature of my data. Thus, I conducted mediation analyses only on post-deliberation measures. This analysis does not take into account participants' earlier baseline measures of the mediators or outcome variable, whereas my main

analyses that revealed the interactive effect in Study 2 did. I am currently learning more sophisticated software and analysis techniques to be able to assess longitudinal moderated mediation to test more directly meditational processes in my data before submitting a manuscript for publication. Learning these new techniques will also allow me to capitalize on assessing patterns across all of the data points, rather than collapsing into three time points.

#### **Future Research**

In addition to addressing the methodological issues just raised, in future studies, I will address another limitation of my study: the computer-mediated, deceptive nature of my "interactions." Specifically, I will test my hypotheses within live interactions, which will also allow me to explore the interaction between emotion expressed by the opinion minority and emotion experienced by the majority members perceiving the holdout. Although I found that expressing negative emotion might exacerbate biases against stereotyped opinion minorities, previous research suggests that majority members might be persuaded by messages that exhibit emotion consistent with their own. Affect-congruent (versus affect-incongruent) dyads exhibit more information transfer – regardless of whether they are both induced to feel happy/elated or angry/frustrated (Levin, Kurtzberg, Phillips, & Lount, 2010). This finding has also been demonstrated with specific discrete emotions (DeSteno, Petty, Rucker, Wegener, & Braverman, 2004). If the emotional tone of a persuasive message matches the perceiver's emotional state (i.e., an angry message with an angry perceiver, a sad message with a sad perceiver) greater persuasion resulted than from any other combination. Thus, the effect of holdout's emotion expression might depend on the extent to which the perceiver is experiencing the same emotion.

Another limitation I want to address is that my conclusions are limited to clear and explicit expressions of emotion, which might not generalize to more everyday group decision

making contexts in which the opinion minority's emotion level is more subtle and ambiguous. I would argue that the effects of stereotyped group status and emotion are likely to be even stronger in more ambiguous contexts, which make people more likely to discriminate (Dovidio & Gaertner, 2004) and more likely to rely on gender-based emotion stereotypes to disambiguate behavior (Robinson et al., 1998). By using real interacting groups, I can also investigate who is labeled as emotional and whether these emotional labels are accurate or driven by the perceiver's emotion stereotypes. In other words, are participants able to accurately judge each others' emotions during group decision making, or do they judge each other based on emotion stereotypes? Finally, I will investigate the downstream implications of being labeled as "too emotional" on the kinds of persuasion strategies people use to convince the opinion minority and their potential for influence. For example, are participants less likely to employ information influence (e.g., addressing the holdout's concerns with information and arguments) when they perceive the holdout as too emotional to be rational—instead relying on more normative influence (e.g., pressure to conform to the majority)?

#### **Conclusion**

This research increases our understanding about the effect that historically disadvantaged groups' emotion expression has on their credibility and potential to exert influence in emotionally charged settings (e.g., juries, collaborator meetings, hiring committees, workplace groups). It also increases our understanding of how historically disadvantaged jurors can affect perceptions of their credibility and their influence by expressing emotion on juries. The efforts to ensure diversity on juries would be futile if diverse viewpoints are ignored during deliberation. Through understanding this process, we arrive at potential remedies for this potential inequality.

#### REFERENCES

- Associated Press. (2009, September 11). Mistrial called after jurors argue, throw chairs. *New York Post.* Retrieved on December 9, 2009 from http://www.nypost.com.
- Baldus, D. C., Woodworth, G., Zuckerman, D., Weiner, N.A., & Broffit, B. (2001). The use of peremptory challenges in capital murder trials: A legal and empirical analysis. University of *Pennsylvania Journal of Constitutional Law*, 3, 3-170.
- Bandes, S. (1999). Passions of law. New York: New York University Press.
- Blake, J. (June 8, 2010). Why Obama doesn't dare become the 'angry black man.' *CNN*. Retrieved on December 23, 2010 from: <a href="http://articles.cnn.com/2010-06-08/politics/rage.obama\_1\_president-obama-barack-obama-race-relations?\_s=PM:POLITICS">http://articles.cnn.com/2010-06-08/politics/rage.obama\_1\_president-obama-barack-obama-race-relations?\_s=PM:POLITICS</a>
- Bornstein, B. H., & Weiner, R. L. (2009). *Emotion and the law: Psychological perspectives*. New York: Springer.
- Bright, D. A., & Goodman-Delahunty, J. (2006). Gruesome evidence and emotion: Anger, blame, and jury decision-making. *Law and Human Behavior*, *30*, 183-202.
- Burhmester, M., Kwang, T., & Gosling, S. D. (2010). Amazon's Mechanical Turk: A nw source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6, 3-5.
- Correll, J., Park, B., Judd, C. M., & Wittenbrink, B. (2002). The police officer's dilemma: Using ethnicity to disambiguate potentially threatening individuals. *Journal of Personality and Social Psychology*, 83, 1314-1329.
- Clark, R. (1994). The role of censorship in minority influence. *European Journal of Social Psychology*, 24, 331-338.
- Clark, R. (1998). Minority influence: The role of the rate of majority defection and persuasive arguments. *European Journal of Social Psychology*, 28, 787-796.
- Clark, R. (1999). Effect of number of majority defectors on minority influence. *Group dynamics: Theory, Research, and Practice, 3,* 305-312.
- Clark, R. D., & Maass, A. (1988). Social categorization in minority influence: The case of homosexuality. *European Journal of Social Psychology*, 18, 347-364.
- Darley, J. M., & Gross, P. H. (1983). A hypothesis-confirming bias in labeling effects. *Journal of Personality and Social Psychology*, 44, 20-33.
- Davis, J. H., Kerr, N. L., Atkin, R. S., Holt, R., & Meek, D. (1975). The decision processes of 6- and 12-person mock juries assigned unanimous and two-thirds majority rules. *Journal of Personality & Social Psychology*, 32, 1-14.

- Demoulin, S., Leyens, J., Paladino, M., Rodriguez-Torres, R., Rodriguez-Perez, A., & Dovidio, J. (2004). Dimensions of "uniquely" and "non-uniquely" human emotions. *Cognition & Emotion*, *18*, 71-96.
- Demoulin, S. (2008). Emotional misunderstandings in intergroup negotiations. In S. Demoulin, J. Leyens, & J. F. Dovidio (Eds.) *Intergroup misunderstandings: Impact of divergent social realities* (pp. 331-344). New York: Psychology Press.
- Desteno, D., Petty, R. E., Rucker, D. D., Wegener, T., & Braverman, J. (2004). Discrete emotions and persuasion: The role of emotion-induced expectancies. *Journal of Personality and Social Psychology*, 86, 43-56.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, *56*, 5-18.
- Devine, P. G., & Elliot, A. J. (1995). Are racial stereotypes really fading? The Princeton trilogy revisited. *Personality and Social Psychology Bulletin*, 21, 1139-1150.
- Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. *Journal of Abnormal and Social Psychology*, 51, 629-636.
- Diamond, S.S., & M.R. Rose (2005). Real juries. In J. Hagan (Ed.) *Annual Review of Law & Social Science* (pp. 255-284). Palo Alto, CA: Annual Reviews.
- Diamond, S. S., Rose, M. R., & Murphy, B. (2005). Revisiting the unanimity requirement: The behavior of the non-unanimous civil jury. *Northwestern University Law Review*, 100, 201-230.
- Dovidio, J. F., & Gaertner, S. L. (2004). Aversive racism. *Advances in Experimental Social Psychology*, *36*, 1-52.
- Durik, A. M., Hyde, J. S., Marks, A. C., Roy, A. L., Anaya, D., & Schultz, G. (2006). Ethnicity and gender stereotypes of emotion. *Sex Roles*, *54*, 429-445.
- Eagly, A. H. (1983). Gender and social influence: A social psychological analysis. *American Psychologist*, *38*, 971-981.
- Fabes, R. A., & Martin, C. L. (1991). Gender and age stereotypes of emotionality. *Personality and Social Psychology Bulletin*, 17, 532-540.
- Feigenson, N. (2009). Emotional influences on judgments of legal blame: How they happen, whether they should, and what to do about it. *Emotion and the law:* psychological perspectives. Nebraska symposium on motivation (pp. 45-96). New York, NY: Springer.

- Feigenson, N. R., & Park, J. (2006). Emotions and attributions of legal responsibility and blame: A research review. *Law and Human Behavior*, *30*, 143-161.
- Fukurai, H., Butler, E. W., & Krooth, R. (1993). Race and the jury: Racial disenfranchisement and the search for justice. New York: Plenum Press.
- Gaertner, S. L., & Dovidio, J. F. (1986). The aversive form of racism. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 61-89). Orlando, FL: Academic Press.
- George, J. M. (1995). Leader positive mood and group performance: The case of customer service. *Journal of Applied Social Psychology*, 25, 778-794.
- Glass, I. (2010). Last man standing. *National Public Radio: This American Life* [Radio broadcast]. http://www.npr.org/
- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70, 491-512.
- Golding, J. M., Fryman, H. M., Marsil, D. F., & Yozwiak, J. A. (2003). Big girls don't cry: The effect of child witness demeanor on jurors' decisions in a child sexual abuse trial. *Child Abuse & Neglect*, 27, 1311-1321.
- Haegerich, T. M., & Bottoms, B. L. (2000). Empathy and jurors' decision in patricide trials involving child sexual assault allegations. *Law and Human Behavior*, 24, 421-448.
- Haidt, J., & Bjorklund, F. (2008). Social intuitionists reason, in conversation. In W. Sinnott-Armstrong (Ed.), *Moral Psychology, Vol. 2: The cognitive science of morality: Intuition and diversity* (pp. 181-219). Cambridge, MA: MIT Press.
- Hareli, S., Harush, R., Suleiman, R., Cossette, M., Bergeron, S., Lavoie, V., Dugay, G. & Hess, U. (2009). When scowling may be a good thing: The influence of anger expressions on credibility. *European Journal of Social Psychology*, *39*, 631-638.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). Emotional contagion. *Current Directions in Psychological Science*, 2, 96-99.
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf
- Hess, U., Adams, R. B., Grammer, K., & Kleck, R. E. (2009). Face gender and emotion expression: Are angry women more like men? *Journal of Vision*, 9, 1-8.
- Hess, U., Adams, R. B., & Kleck, R. E. (2005). Who may frown and who should smile?

- Dominance, affiliation, and the display of happiness and anger. *Cognition and Emotion*, 19, 515-536.
- Hess. U., Adams, R. B., & Kleck, R. E. (2007). When two do the same, it might not mean the same: The perceptions of emotional expression shown by men and women. In U. Hess & P. Philippot (Eds.) *Group dynamics and emotional expression* (pp. 33-50). New York, NY: Cambridge University Press.
- Hess, U., Blairy, S., & Kleck, R. E. (1997). The intensity of emotional facial expressions and decoding accuracy. *Journal of Nonverbal Behavior*, 21, 241-257.
- Hess, U., & Philippot, P. (2007). *Group dynamics and emotional expression*. New York, NY: Cambridge University Press.
- Hess, U., Senécal, S., Kirouac, G., Herrera, P., Philippot, P., & Kleck, R. E. (2000). Emotional expressivity in men and women: Stereotypes and self-perceptions. *Cognition & Emotion*, 14, 609-642.
- Hugenberg, K., & Bodenhausen, G. V. (2003). Facing prejudice: Implicit prejudice and the perception of facial threat. *Psychological Science*, *14*, 640-642.
- Hugenberg, K., Miller, J., & Claypool, H. M. (2007). Categorization and individuation in the cross-race recognition deficit: Toward a solution to an insidious problem. *Journal of Experimental Social Psychology*, *43*, 334-340.
- Hutson-Comeaux, S. L., & Kelly, J. R. (2002). Gender stereotypes of emotional reactions: How we judge an emotion as valid. *Sex Roles*, 47, 1-10.
- Johnson, R. A., & Shulman, G. I. (1988). Gender-role composition and role entrapment in decision-making groups. *Gender & Society, 3*, 355-372.
- Kalven, H. J., & Zeisel, H. (1966). *The American jury*. Chicago, IL: University of Chicago Press.
- Kaplan, M., & Miller, C. (1987). Group decision making and normative versus informational influence: Effects of type of issue and assigned decision rule. *Journal of Personality and Social Psychology*, *53*, 306-313.
- Keltner, D., & Haidt, J. (1999). Social functions of emotions at four levels of analysis. *Cognition & Emotion*, 13, 505-521.
- Kerr, N. L. (2009). Explorations in juror emotion and juror judgment. In B. H. Borstein & R. L. Wiener (Eds.) *Emotion and the law: Psychological perspectives* (pp. 97-132). New York: Springer.
- Knutson, B. (1996). Facial expressions of emotion influence interpersonal trait

- inferences. Journal of Nonverbal Behavior, 20, 165-182.
- Lerner, J. S., & Tiedens, L. Z. (2006). Portrait of the angry decision maker: How appraisal tendencies shape anger's influence on cognition. *Journal of Behavioral Decision Making*, 19, 115-137.
- Levin, D. Z., Kurtzberg, T. R., Phillips, K. W., & Lount, R. B. (2010). The role of affect in knowledge transfer. *Group Dynamics: Theory, Research, and Practice, 14*, 123-142.
- Levine, J. M. (1989). Reaction to opinion deviance in small groups. In P. B. Paulus (Ed.) *Psychology of group influence* (2<sup>nd</sup> ed., pp. 187-231). Hillsdale, NJ: Erlbaum.
- Lewis, K. M. (2000). When leaders display emotion: How followers respond to negative emotional expression of male and female leaders. *Journal of Organizational Behavior*, 21, 221-234.
- Liptak, A. (2007, June 4). Oddity in picking jurors opens door to racial bias. *New York Times (New York, NY)*, p. A12. Retrieved November 18, 2010 from ProQuest Historical Newspapers Database.
- McMillan, J. R., Clifton, A. K., McGrath, D., & Gale, W. S. (1977). Women's language: Uncertainty or interpersonal sensitivity and emotionality? *Sex Roles*, *3*, 545-559.
- Maass, A., Clark III, R. D., & Haberkorn, G. (1982). The effects of differential ascribed category membership and norms on minority influence. *European Journal of Social Psychology*, 12, 89-104.
- Maass, A., & Clark III, R. D. (1984). Hidden impact of minorities: Fifteen years of minority influence research. *Psychological Bulletin*, *95*, 428-450.
- Mackie, D. M., Gastardo-Conaco, M. C., & Skelly, J. J. (1992). Knowledge of the advocated position and the processing of in-group and out-group persuasive messages. *Personality and Social Psychology Bulletin*, 18, 145-151.
- Mackie, D. M., Worth, L. T., & Asuncion, A. G. (1990). Processing of persuasive ingroup messages. *Journal of Personality and Social Psychology*, 58, 812-822.
- Manganis, J. (October 19, 2007). Mistrial declared after juror locks himself in the bathroom. The *Eagle-Tribune Online*. Retrieved on December 9, 2009 from http://www.eagletribune.com/punews/local\_story\_292095352.
- Marques, J. M., Abrams, D., & Serodio, R. G. (2001). Being better by being right: Subjective group dynamics and derogation of in-group deviants when generic norms are undermined. *Journal of Personality and Social Psychology*, 81, 436-447.
- Marsh, A. A., Ambady, N., & Kleck, R. E. (2005). The effects of fear and anger facial

- expressions on approach- and avoidance-related behaviors. *Emotion*, *5*, 119-124.
- Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavioral Research*, 44, 1-12.
- Montepare, J. M., & Dobish, H. (2003). The contribution of emotion perceptions and their overgeneralizations to trait impressions. *Journal of Nonverbal Behavior*, 27, 237-254.
- Moscovici, S. (1980). Toward a theory of conversion behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 13, pp. 209-239). New York: Academic Press.
- Moscovici, S., Lage, E., & Nafrechoux, M. (1969). Influence of a consistent minority on the responses of a majority in a color perception task. *Sociometry*, *32*, 365-380.
- Moskowitz, G. B., & Chaiken, S. (2001). Mediators of minority social influence: Cognitive processing mechanisms revealed through a persuasion paradigm. In C. K. W. De Dreu, & N. K., De Vries (Eds.), *Group consensus and minority influence: Implications for innovation* (pp. 60-90). Malden, MA: Oxford Press.
- Mugny, G., & Papastamou, S. (1980). When rigidity does not fail: Individualization and psychologization as resistances to diffusion of minority innovations. *European Journal of Social Psychology*, 10, 43-62.
- Nemeth, C. (1977). Interactions between jurors as a function of majority vs. unanimity decision rules. *Journal of Applied Social Psychology*, 7, 38-56.
- Nemeth, C. (1986). Differential contributions of majority and minority influence. *Psychological Review*, *93*, 23-32.
- Nemeth, C. J. (2009). Minority influence theory. In P. Van Lange, A. Kruglanski, & T. Higgins (Eds.), *Handbook of Theories of Social Psychology*. New York: Sage.
- Nemeth, C. J., Endicott, J., & Wachtler, J. (1976). From the '50s to the '70s: Women in jury deliberations. *Sociometry*, *39*, 293-304.
- Payne, B. K., Lambert, A. J., & Jacoby, L. L. (2002). Best laid plans: Effects of goals on accessibility bias and cognitive control in race-based misperceptions of weapons. *Journal of Experimental Social Psychology*, *38*, 384-396.
- Payne v. Tennessee, 501 U.S. 808 (1991).
- Petty, R. E., Fleming, M. A., & White, P. H. (1999). Stigmatized sources and

- persuasion: Prejudice as a determinant of argument scrutiny. *Journal of Personality and Social Psychology*, 76, 19-34.
- Phillips, K. W. (2003). The effects of categorically based expectations on minority influence: The importance of congruence. *Personality and Social Psychology Bulletin*, 29, 3-13.
- Philippot, P., Yabar, Y., & Bourgeois, P. (2007). Beauty is in the eye of the perceiver: The impact of affective stereotyping on the perception of outgroup members' facial expressions. In U. Hess & P. Philippot (Eds.), *Group dynamics and emotional expression* (pp. 69-74). New York, NY: Cambridge University Press.
- Plant, E. A., & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75, 811-832.
- Plant, E. A., Hyde, J. S., Keltner, D., & Devine, P. G. (2000). The gender stereotyping of emotions. *Psychology of Women Quarterly*, 24, 81-92.
- Plant, E. A., Kling, K. C., & Smith, G. L (2004). The influence of gender and social role on the interpretation of facial expressions. *Sex Roles*, *51*, 187-196.
- Paolacci, G., Chandler, J., & Ipeirotis, P. (2010). Running experiments on Amazon Mechanical Turk. *Judgment and Decision Making*, *5*, 411-419.
- Posthume, T., Spears, R., & Cihangir, S. (2001). Quality of decision making and group norms. *Journal of Personality and Social Psychology*, 80, 918-930.
- R v. Valevski. (2000). NSWCCA 445.
- Renaud, T. (2010). The biggest bully in the room. The Jury Expert, 22, 23-26.
- Robinson, M. D., Johnson, J. T., & Shields, S. A. (1998). The gender heuristic and the database: Factors affecting the perception of gender-related differences in the experience and display of emotions. *Basic and Applied Social Psychology*, 20, 206-219.
- Rogers, R. W., & Prentice-Dunn, S. (1981). Deindividuation and anger-mediated interracial aggression: Unmasking regressive racism. *Journal of Personality and Social Psychology*, 41, 63-73.
- Rose, M. R., Nadler, J., & Clark, J. (2006). Appropriately upset? Emotion norms and perceptions of crime victims. *Law and Human Behavior*, *30*, 203-219.
- Roskos-Ewoldsen, D. R., & Fazio, R. H. (1992). The accessibility of source likability as a determinant of persuasion. *Personality and Social Psychology Bulletin*, 18, 19-25.

- Salerno, J. M., & Bottoms, B. L. (2009). Emotional evidence and jurors' judgments: The promise of neuroscience for informing psychology and law. *Behavioral Sciences and the Law: Special Issue: The Neuroscience of Decision Making and Law, 27, 273-296.*
- Salerno, J. M., & Diamond, S. S. (2010). The promise of a cognitive perspective on jury decision-making. *Psychonomic Bulletin & Review*, 17, 174-179.
- Sommers, S. R. (2006). On racial diversity and group decision-making: Identifying multiple effects of racial composition on jury deliberations. *Journal of Personality and Social Psychology*, 90, 597-612.
- Sommers, S. R. (2007). Race and the decision making of juries. *Legal and Criminological Psychology*, 12, 171-187.
- Sommers, S. R., & Ellsworth, P. (2001). White juror bias: An investigation of prejudice against Black defendants in the American courtroom. *Psychology, Public Policy, and Law, 7*, 201-229.
- Sundby, S. (2010). War and peace in the jury room: How capital juries reach unanimity. *Hastings Law Journal*, 62.
- Stevenson, M. C., & Bottoms, B. L. (2009). Race shapes perceptions of juvenile offenders in criminal court. *Journal of Applied Social Psychology*, *39*, 1660-1689.
- Sweeney, L. T., & Haney, C. (1992). The influence of race on sentencing: A metaanalytic review of experimental studies. *Behavioral Sciences and the Law*, 10, 179-195.
- Tiedens, L. A. (2001). Anger and advancement versus sadness and subjugation: The effect of negative emotion expressions on social status conferral. *Journal of Personality and Social Psychology*, 80, 86-94.
- Tiedens, L. Z., Ellsworth, P. C., & Mesquita, B. (2001). Sentimental stereotypes: Emotional expectations for high- and low-status group members. *Personality and Social Psychology Bulletin*, 26, 560-575.
- Van Beest, I., Van Kleef, G. A., & Van Dijk, E. (2008). Get angry, get out: The interpersonal effects of anger communication in multiparty negotiation. *Journal of Experimental Social Psychology*, 44, 993-1003.
- Van Dijk, E., Van Kleef, G. A., Steinel, W., & Van Beest, I. (2008). A social functional approach to emotions in bargaining: When communicating anger pays and when it backfires. *Journal of Personality and Social Psychology*, 94, 600-614.
- Van Kleef, G. A., De Dreu, C. K. W., & Manstead, A. S. R. (2004). The interpersonal effects of anger and happiness in negotiations. *Journal of Personality and Social Psychology*, 86, 57-76.

- Van Kleef, G. A., Homan, A. C., Beersma, B., Van Knippenberg, D., & Damen, F. (2009). Searing sentiment or cold calculation? The effects of leader emotional displays on team performance depend on follower epistemic motivation. *Academy of Management Journal*, 52, 562-580.
- Volpato, C., Maass, A., Mucchi-Faina, A., & Vitti, E. (1990). Minority influence and social categorization. *European Journal of Social Psychology*, 20, 199-132.
- Warner, L. R., & Shields, S. A. (2007). The perception of crying in women and men: Angry tears, sad tears, and the "right way" to cry. In U. Hess & P. Philippot (Eds.), *Group dynamics and emotional expression* (pp. 7-32). New York, NY: Cambridge University Press.
- Watson, D., & Clark, L. A. (1994). The PANAS-X: Manual for the Positive and Negative Affect Schedule. Expanded Form. Retrieved on December 23, 2010 from http://www.psychology.uiowa.edu/faculty/clark/panas-x.pdf
- White, P. H., & Harkins, S. G. (1994). Race of source effects in the elaboration likelihood model. *Journal of Personality and Social Psychology*, 67, 790-807.
- Wilkowski, B. M., & Meier, B. P. (2010). Bring it on: Angry facial expressions potentiate approach-motivated motor behavior. *Journal of Personality and Social Psychology*, 98, 201-210.
- Wilson, L., & Rogers, R. W. (1975). The fire this time: Effects of race of target, insult, and potential retaliation on Black aggression. *Journal of Personality and Social Psychology*, 32, 857-864.
- Winfield, A. H. (2007). The modern mammy and the angry Black man: African American professionals' experiences with gendered racism in the workplace. *Race, Gender, & Class, 14*, 196-213.
- Wood, W., Lundgren, S., Ouellette, J. A., Busceme, S., & Blackstone, T. (1994).

  Minority influence: A meta-analytic review of social influence processes. *Psychological Bulletin*, 115, 323-345.
- Zebrowitz, L. A., Kikuchi, M., & Fellous, J. (2010). Facial resemblance to emotion: Group differences, impression effects, and race stereotypes. *Journal of Personality and Social Psychology*, *98*, 175-189.

#### **APPENDIX A**

#### Study 1 Measures

The purpose of this study is to understand people's knowledge of and reactions to various social groups. Emotion stereotypes exist in our culture. Some groups are thought to be especially likely or unlikely to express certain emotions. You will be asked to indicate what emotions make up cultural emotion stereotypes for different social groups in our culture -- regardless of whether you believe them to be true. Next, you will be asked whether you personally believe that those emotions really are expressed more or less often by those social groups. All of your responses are completely confidential. Please do not write your name or any other identifying information in this questionnaire. You will be asked to answer each set questions for a number of social groups.

For the next portion of this survey please think about whether there is a cultural stereotype about WHITE WOMEN and the emotions they express. Please answer the following questions about what stereotypes you think exist, even if you do not believe they are true. Later, you will be asked about what stereotypes you personally believe are true.

Please read through this list of emotions carefully and for each emotion please check whether each emotion is (according to the cultural stereotype) either:

- (a) especially LIKELY,
- (b) especially UN-likely, or
- (c) NOT part of the WHITE WOMEN stereotype.

So, for each emotion, ask yourself whether you think it is part of the cultural stereotype that WHITE WOMEN are especially LIKELY to express fear (for example), especially UN-likely to express fear, or whether fear is just NOT part of the stereotype about WHITE WOMEN. Remember, this is not about what you personally believe, but about stereotypes that you believe exist even if you do not believe them. That is, this is not about what YOU believe, but what you think OTHERS believe to be true about WHITE WOMEN.

Think of WHITE WOMEN and check one column for each emotion.

	Part of the stereotype: WHITE WOMEN are especially LIKELY to:	Part of the stereotype: WHITE WOMEN are especially <u>UN</u> LIKELY to:	NOT part of the stereotype about WHITE WOMEN.
express FEAR	O	O	O
express ANGER	O	O	O

Below are the emotions that you chose as being part of the cultural stereotype about WHITE WOMEN. Please check all emotions that you PERSONALLY BELIEVE are truly especially likely or unlikely to be expressed by WHITE WOMEN. In other words, check all emotions for

which you believe the stereotype is true. [NOTE: only emotions that participants chose were
displayed.]
□ FEAR
□ ANGER

Please rate the frequency with which each of the listed emotions are experienced by a typical WHITE WOMAN.

	Almost Never						Very Often
FEAR	0	O	0	0	0	0	O
ANGER	O	O	O	O	0	0	O

About which group did you just answer questions about?

- O White Men
- **O** White Women
- O African American Men
- O African American Women

#### **APPENDIX B**

**Trial Stimulus** 

Murder Case: R v. Stevens, 2000

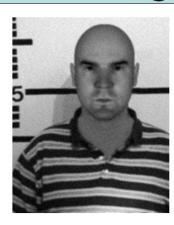
VICTIM: Stacy Stevens

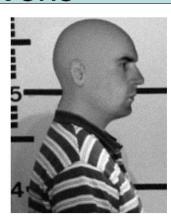
Age: 25

> Found dead in her bedroom on June 19, 1994.



# The Defendant: Michael Stevens





- ➤ Accused of killing his wife, Stacy Stevens.
- If he is found guilty the jury will decide if he should get the death penalty.

### Trial Evidence: Coroner's Report

- Cause of death: A major wound across the victim's throat, caused by two separate cuts.
- The wound spans from the left side of the neck all the way to the right side.
- The wound is gaping and has a half-moon shape.
- The edges of the wound appear smooth everywhere.
- The wound is roughly 2 inches wide at the front of the throat.
- Because the skin was pulled back, the larynx is exposed. It is visible that one
  of the cuts was deep enough to go through the larynx.
- The internal jugular vein and the common carotid artery on each side of the throat were cut.
- There are superficial parallel cuts along the edge of the wound.
- There are some blood smudges on the victim's face and chest.

### Trial Evidence: Crime Scene Photos

The bedroom where the victim's body was found:





### Trial Evidence: Murder Weapon

The knife found underneath the victim's body:





### **Prosecution Opening Statement**

Opening statements are arguments made by the prosecution and defense based on their interpretation of the facts. They are not evidence.

- Prosecution argued that Michael killed Stacy based on their argument that:
- ...eyewitness testimony would show that Michael and Stacy had an intense fight, during which she said she was going to take their children and leave him.
- ... Michael's behavior during the morning following their fight was suspicious.
- ...there was no evidence of anyone else having had access to the victim.
- ...the crime scene and pathology evidence indicated that Stacy was murdered.

### **Defense Opening Statement**

Opening statements are arguments made by the prosecution and defense based on their interpretation of the facts. They are not evidence.

### Defense argued that Stacy committed suicide based on their argument that:

- ... Michael was trying to resolve their conflict by seeking help and advice from counselors, relatives and neighbors the day following the fight.
- ...Stacy had a history of depression and made a comment that could be interpreted as a suicide threat.
- ... crime scene and pathology evidence indicated that Stacy committed suicide by slitting her own throat.

## **Prosecution Witnesses**

# **Prosecution Witness: Timeline (DAY 1)**

 Testimony from (a) the defendant's father, (b) police officers, and (c) a counseling center employee revealed the following timeline:

the following timeline:			
SUNDAY, JUNE 18, 1994			
7:15pm	Michael and Stacy had an intense argument, witnessed by Michael's parents, who also lived in the house. Stacy said that she was going to move out with their three children.		
8:00pm	Stacy locked herself in the master bedroom. The defendant spoke to his parents for about two more hours.		
10:00pm	Michael went to sleep in a guest bedroom next to the main bedroom.		
Maste bedro	1.3		

## **Prosecution Witness: Timeline (DAY 2)**

	MONDAY, JUNE 19, 1994
6:00am	Michael tried to open the master bedroom door but found it locked from the inside. He drove his parents (who lived with them) to his sister's house.
10:30am	On his way back home, Michael stopped at the local counseling center. He told a social worker that he had "family and marriage problems" and asked her for marital advice.
1:00pm	Michael called Stacy's aunt to see if his wife was there, and told the aunt he was worried because he could not find his wife.
3:30pm	The police received a call from Michael's neighbor, who was with Michael. The police came to Michael and Stacy's house. They broke open the bedroom door and found Stacy's body collapsed by the bed in a pool of blood.

Time of death was estimated between Sunday night and Monday morning.

### Prosecution Expert Witness: Locksmith

- ➤ The police found the bedroom door locked from the inside.
- ➤ The locksmith expert testified that the lock could be maneuvered from the outside to make it look locked from the inside.

#### However,

➤ Defense attorney's cross examination pointed out that there was no evidence to indicate Michael would know how to maneuver the lock in that way.

### Prosecution Expert Witness: Pathologist

Name: Dr. Oettle

Profession: Pathologist

Pathologists are doctors who determine causes of disease or death by examining bodily organs, tissue, and fluids.

#### TESTIMONY: Stacy was murdered because:

- The crime scene and bodily evidence indicated that Stacy was killed and that she could not have committed suicide.
- ➤The angle and depth of the wounds were more consistent with homicide than with suicide by a right handed person.
- ➤ Stacy was found face down, but she had blood on her back which means the body was turned after much of the bleeding took place. The suicide scenario would require her to be conscious enough to get up and change her position after cutting her throat the first time, which is unlikely.

# Prosecution Expert Witness: Pathologist (continued)

Name: Dr. Oettle

**Profession: Pathologist** 

Pathologists are doctors who determine causes of disease or death by examining bodily organs, tissue, and fluids.

#### **TESTIMONY: Stacy was murdered because:**

- ➤ Blood smears (which might have been finger marks, but evidence was not conclusive) on Stacy's left leg and the position of her nightgown suggested her body might have been dragged.
- Stacy was wearing several necklaces, which is uncommon because people usually remove "obstacles" such as jewelry before they commit suicide.

### **Defense Witnesses**

### **Defense Witnesses**

# NAME: Michael Stevens (the defendant) TESTIMONY:

- ➤ During their argument, Stacy was very upset and said, "You will be sorry when I'm gone," which Michael at the time had interpreted as a threat that Stacy was leaving him.
- After the argument with his wife, he locked himself in the guest bedroom and slept until the next morning.
- After seeing the bedroom door was locked, he thought Stacy was still upset, so he took his parents away so he could talk to her alone.
- ➤ To prepare to talk to his wife, Michael spoke with a marriage counselor at the counseling center.
- ➤ When he returned, he again couldn't open the bedroom door, so he asked relatives and neighbors if they had seen his wife. He grew more and more worried because he knew she had been suffering from deep depression and began to think that her comment was a threat of suicide. He asked a neighbor to call the police on his behalf.

### **Defense Witnesses**

# NAME: William Morgan (Michael's neighbor) TESTIMONY:

- ➤ At about 3:30, the defendant asked him and other neighbors if they had seen his wife.
- Michael seemed really distressed and told William that he was worried Stacy "had done something to herself," so the neighbor called the police because Michael was too upset to talk.
- ➤ William also testified that Stacy had confided in him and his wife that she often suffered from severe depression.

# **Defense Expert Witness: Forensics**

Name: Dr. Lawrence

**Profession: Forensic Scientist** 

Forensic scientists work for police departments and are responsible for the collection and testing of physical evidence, such as fiber, tissue, hair, body fluids and glass, that may be used to solve a crime.

#### **TESTIMONY**: Stacy was not murdered because:

- If Stacy had been murdered, the murderer would almost certainly have had a large amount of blood on his clothing and shoes.
- Except for the carpet and wall near Stacy's body, there was no trace of blood in any other part of the bedroom, house, or on any of Michael's clothing, or in the drainage system.
- There was no sign of any attempt to remove blood stains.



### Defense Expert Witness: Pathologist

Name: Dr. Bradhurst Profession: Pathologist

Pathologists are doctors who determine causes of disease or death by examining bodily organs, tissue, and fluids.

#### **TESTIMONY:** Stacy committed suicide, because:

- The knife was found under Stacy's body, in a position consistent with her falling while holding it in her right hand.
- ➤ The pattern of bloodstains on the wall indicated that the victim was coughing blood for a period of time after the first cut, which means that the two cuts were not made at the same time. This is inconsistent with a homicide scenario, where the perpetrator would make both cuts at once.
- There was no evidence of struggle or typical defense injuries to the victim's arms and hands.
- There were superficial parallel cuts along the edges of the main wound. These are consistent with the wounds being self-inflicted (rather than with being inflicted by someone else), because people who commit suicide often make tentative, superficial cuts clustered around the fatal wound.

# Defense Expert Witness: Pathologist (continued...)

TESTIMONY: Dr. Bradhurst responded to the testimony from the prosecution's expert pathologist, Dr. Oettle

- ➤The blood stain on Stacy's back does not necessarily indicate homicide. The level of the blood stains on the wall indicate that the victim's throat was cut while she was lying down. Stacy may have cut her own throat while she was lying with her back on the floor, which is common in this type of suicide.
- Although there was considerable bleeding, the victim did not die right away. Blood from the first cut would have gotten into her airways, prompting her to get up and have a second attempt.
- Recorded cases of witnessed suicide show that there seems to be an extra reserve of strength that people have in such extreme situations, which makes it possible for them to stand up and complete the suicide attempt.

### Closing Statement Summaries

- **Prosecution:** The prosecution argued that the defendant was proven guilty of murder, based on their arguments that:
  - ...Stacy had threatened to leave him, which gave him motive.
  - ...his behavior during the time surrounding the incident was suspicious, and nobody else had access to the victim.
  - ... crime scene and pathology evidence indicate that Stacy was murdered.
- Defense: The defense argued that the defendant was not proven guilty beyond reasonable doubt, based on their arguments that:
  - ...his behavior indicated that he wanted to resolve the conflict with his wife and that he was worried about her.
  - ...Stacy had a history of depression and made a comment that could be interpreted as a suicide threat.
  - ... crime scene and pathology evidence indicate that Stacy committed suicide.

#### APPENDIX C

#### Jury Instructions

**<u>DIRECTIONS</u>**: The following are the jury instructions that are used in the state of Illinois. Please read **<u>every word</u>** and pay close attention as these instructions are very complex. You should follow them when delivering your verdict. It is very important that you read through these **<u>very carefully</u>** and understand them before delivering a verdict.

#### THE JUDGE'S INSTRUCTIONS TO YOU, THE JURY

Members of the jury, the evidence and arguments in this case have been completed, and I now will instruct you as to the law. The law that applies to this case is stated in these instructions, and it is your duty to follow all of them. You must not single out certain instructions and disregard others. It is your duty to determine the facts and to determine them only from the evidence in this case. You are to apply the law to the facts and in this way decide the case. Neither sympathy nor prejudice should influence you. The evidence which you should consider consists only of the testimony of the witnesses – all of the information saw or heard in the case summary presentation. You should consider all the evidence in the light of your own observations and experience in life. By these instructions I do not mean to indicate any opinion as to the facts or as to what your verdict should be. Faithful performance by you of your duties as jurors is vital to the administration of justice.

The defendant is presumed to be innocent of the charge against him of first degree murder. This presumption remains with him throughout every stage of the trial and during your deliberations on the verdict. This presumption is not overcome unless, from all the evidence in this case, you are convinced beyond a reasonable doubt that the defendant is guilty. The State has the burden of proving that the defendant is guilty of first degree murder, and this burden remains on the State throughout the case. The defendant is not required to prove his innocence.

Only you are the judges of the believability of the witnesses and of the weight to be given to the testimony of each of them. In considering the testimony of any witness, you may take into account his or her ability and opportunity to observe, age, memory, manner while testifying, any interest, bias, or prejudice he or she may have, and the reasonableness of his or her testimony considered in the light of all the evidence in the case. You should judge the testimony of the defendant in the same manner as you judge the testimony of any other witness.

#### PLEASE TURN OVER AND CONTINUE READING

#### YOU HAVE TWO VERDICT OPTIONS IN THIS CASE:

- FIND THE DEFENDANT, MICHAEL STEVENS, GUILTY OF FIRST-DEGREE MURDER.
- FIND THE DEFENDANT, MICHAEL STEVENS, NOT GUILTY.

To sustain the charge of first degree murder, the State (the Prosecution) must prove the following Propositions:

1. *First Proposition*: That the defendant, Michael Stevens, performed the acts which caused the death of Stacy Stevens.

#### **AND**

- 2. Second Proposition: That when the defendant, Michael Stevens, did so
  - [1] he intended to kill or do great bodily harm to Stacy Stevens.

[or]

[2] he knew that such acts would cause death to Stacy Stevens.

[or]

[3] he knew that such acts created a strong probability of death or great bodily harm to Stacy Stevens.

If you find from your consideration of all the evidence that <u>any one</u> of these propositions has <u>not</u> been proved beyond a reasonable doubt, you should return a verdict of **not guilty.** 

If you find from your consideration of all the evidence that <u>each one</u> of these *propositions* has been proved beyond a reasonable doubt, you should return a verdict of **guilty.** 

#### APPENDIX D

#### **Deliberation Rounds Scripts**

#### **Deliberation Script #1:**

Holdout vote: Guilty (i.e., the script for participants who vote Not Guilty) Holdout emotion expression condition: No Emotion

Round 1 (5 Jurors voting not guilty, holdout for guilty):

JJohnson	NOT	The defentant's timeline on the date and evening in question
	GUILTY	marks no holes even though he had significant time alone
[AliciaS/JasonS]	GUILTY	because of the intent and ruthlessness and the fact the victim
		had two wounds, across both vein and artery.
Uic2011	NOT	Stacy was known to have been having lots of depression, and
	GUILTY	depression leads to serious acts like this one.
syoun96	NOT	the witnesses behind michael such as the neighbors, show
	GUILTY	favor in michael's case. seeing as he went to marriage
		counseling and sounding terribly worried about his wife, the
		evidence of her suicide seem probable.
Jfitzg5	NOT	the fact that the parents were in the house with Michael and
	GUILTY	Stacy that Sunday night and Monday morning, and did not
		hear any acts of murder.

Round 2 (5 Jurors voting not guilty, holdout for guilty):

Nound 2 (3 Jurors voting not gunty, noudout for gunty).			
JJohnson	NOT	[AliciaS/JasonS]: yeah, she had two wounds, but there was no	
	GUILTY	sign of blood on clothes, draining system or any of his	
		clothes, it is very difficult not to get any blood on yourself	
[AliciaS/JasonS]	GUILTY	michael's story doesn't make sense. for example, if he was too	
[]		distressed, would he still call the police? he wasn't distressed	
		enough to visit a counselor but he was too distressed to call	
		the police? doesn't add up.	
Uic2011	NOT	even if stacy stevens was murdered, there is no empirical	
	GUILTY	evidence pointing to michael stevens (dna evidence)	
syoun96	NOT	it was mentioned that there was not a lot of blood in the scene	
	GUILTY	like if it were a murder	
Jfitzg5	NOT	there was no fingerprints taken of the murder weapon to link	
	GUILTY	Michael directly to the crime so therefore I have a resonable	
		doubt.	

Round 3 (5 Jurors voting not guilty, holdout for guilty):

JJohnson	NOT	yeah, but there was no traces of blood in the sewage
	GUILTY	system, so micheal stevens did not wash off any blood
[AliciaS/JasonS]	GUILTY	sure, forensic stuff would be nice, but why would a mean

		"leave" the house in search for his wife, when he claims to be worried about her. he should have tried to open the door himself to see how she was doing
Uic2011	NOT GUILTY	[AlicaS/JasonS]: I hear what you are saying, but that's all circumstantial there is no solid evidence that michael stevens did the act. the pathologists disagreed whether it was a suicide or murder
syoun96	NOT GUILTY	no blood found on michael stevens' clothes or in drainagebut [AliciaS/JasonS] does kind of have a point
Jfitzg5	NOT GUILTY	there was not any hard evidence showing mr. stevens committed the murder (ie, fingerprints, shoe prints, bloody cloths or eyewitnesses)

Round 4 (5 Jurors voting not guilty, holdout for guilty):

JJohnson	NOT	The defendant provided more adequate and plausible
	GUILTY	evidence
[AliciaS/JasonS]	GUILTY	Upon finding the bedroom door locked, michael stevens
		made no attempt to access the bedroom, and claims that he
		belived she was behind the locked door, yet called family and
		neighbors to attempt to locate him why wouldn't he have
		tried to get in? There is no hard evidence it was suicide either
Uic2011	NOT	there is no evidence that he committed a murder
	GUILTY	
syoun96	NOT	not sure
	GUILTY	
Jfitzg5	NOT	forensic and crime scene evidence had shown that both
	GUILTY	scenarios were possible

Round 5 (4 Jurors voting not guilty, 2 Jurors for guilty):

Round 5 (4 Jurois voting not guinty, 2 Jurois for guinty).			
JJohnson	NOT	Plus timeline indicates these wouldn't have been much time	
	GUILTY	between michael talking to his neighbors and the police	
		finding the body	
[AliciaS/JasonS]	GUILTY	I just don't think any of that is as important as the fact that i	
		find it hard to believe that she would be able to cut her neck twice and be able to move. also michael was the last person to	
		be in contact w/ her. no one else could have been around her.	
		he was just smart enough about what moves to make, in order	
		to seem like he didn't do anything.	
Uic2011	NOT	michael went to marriage counseling and seemed concerned	
	GUILTY	about his wife	
syoun96	GUILTY	I think I'm changing to guilty	
Jfitzg5	NOT	there were "superficial" cuts by the 2 main wounds which is	
	GUILTY	common amongst suicidesshows doubt	

Round 6 (4 Jurors voting not guilty, 2 Jurors for guilty):

JJohnson	NOT	stacy stevens suffered from depression and made a threat of
	GUILTY	suicide to her husband the night before during an argument
[AliciaS/JasonS]	GUILTY	Michael stevens side of the story is very questionable. It seems that he planned the entire murder by locking the door from the inside sending off his parents and talking to a mentor to make it look like he was working on fixing his marriage.
Uic2011	NOT GUILTY	Not enough evidence to prove he intended to hurt/kill his wife stacy
syoun96	GUILTY	I think [AliciaS/JasonS] is right
Jfitzg5	NOT GUILTY	The guy said that the way the cuts looked like a suicide because of the superficial cuts

Round 7 (4 Jurors voting not guilty, 2 Jurors for guilty):

Ttouna / (Tourons	House 7 (1 surous voting not gainty, 2 surous for gainty).		
JJohnson	NOT	Based on the information that there had been two cuts along	
	GUILTY	her throat. In most homicide cases, it is usually seen that it	
		only takes them a single incision to kill the victim	
[AliciaS/JasonS]	GUILTY	he had suspicious activity before they found her and he took	
		his parents to his sister's house, i don't understand why he did	
		that if he was just going to talk to her.	
Uic2011	NOT	I just still really don't think there's enough evidence	
	GUILTY		
syoun96	GUILTY	we have to make sure we do what the law says	
Jfitzg5	NOT	No forensic evidence was found linking defendent to murder.	
_	GUILTY		

#### **Deliberation Script #2:**

Holdout vote: Not Guilty (i.e., the script for participants who vote Guilty) Holdout emotion expression condition: No Emotion

Round 1 (5 Jurors voting guilty, holdout for not guilty):

	<del>, , , , , , , , , , , , , , , , , , , </del>	notable for not gainty).
JJohnson	GUILTY	He was scared that she was going to leave him and take away
		his kids and family
[AliciaS/JasonS]	NOT	first of all, there hasn't been a sure evidence that he murdered
	GUILTY	her. we need to have more evidence before we decide he is
		guilty or not (yet)
Uic2011	GUILTY	the motive that his wife was going to leave him can drive a
		man to kill
syoun96	GUILTY	She threatened to leave him and take their children
Jfitzg5	GUILTY	Michael doesn't have any record of where he was between
		6am and 10am, when he dropped his parents off and when he
		went to see the counselor (which he could have just done to
		provide himself an alibi)

Round 2 (5 Jurors voting guilty, holdout for not guilty):

JJohnson	GUILTY	if michael was truly worried about his wife, he would have

		immediately called the police instead of going to his neighbors. by michael going to his neighbors, it made me think that he was just trying to make his story sound believable.
[AliciaS/JasonS]	NOT GUILTY	the wound itself due to the cut was made if you were suicidal and right handed you would start the cut from hte left also how they are parallel and the blood was only found on her room and nowhere else
Uic2011	GUILTY	the cuts on her throat would be to deep for her to cut it herself (it also might have been clever for him to cut it several times to cover up the evidence and make it look like she was trying to suicide)
syoun96	GUILTY	defendent was the only person that had access to the victim and there was a motive to cause harm
Jfitzg5	GUILTY	No one knows exactly if he was sleeping from the night until day.

Round 3 (5 Jurors voting guilty, holdout for not guilty):

JJohnson	GUILTY	threatened to have children taken from him by stacy
[AliciaS/JasonS]	NOT GUILTY	I hear what you guys are saying, but michael did not know how to make it "look" like the door was locked on the inside, if the wife was murdered the parents in the house probably would've heard, and the argument was not a great enough reason for murder.
Uic2011	GUILTY	he tried very hard on Monday morning to get many people to see him be worried and upset
syoun96	GUILTY	His morning and night activities were suspiciousbut [AliciaS/JasonS] does kind of have a point
Jfitzg5	GUILTY	no one else had access to her

Round 4 (5 Jurors voting guilty, holdout for not guilty):

JJohnson	GUILTY	Nobody knew where husband was monday morning
[AliciaS/JasonS]	NOT	he would have to be a really smart to plan his day like he did.
	GUILTY	
Uic2011	GUILTY	William took his parents away just before the incident. Since
		their marriage they probably have had similar encounters
		which does not explain why they had to be taken away.
syoun96	GUILTY	not sure
Jfitzg5	GUILTY	he left her alone in a room knowing of her problems

Round 5 (4 Jurors voting guilty, 2 Jurors for not guilty):

todia b ( Todiois Toting gainty).		
JJohnson	GUILTY	suspicious behavior of asking relatives even though he left the
		house knowing wife was locked inside her room
[AliciaS/JasonS]	NOT GUILTY	I just don't think any of that is as important as the fact that a guilty verdict would seemingly be made not on hard evidence
		but by assumptions based on behavior and environmental actions
Uic2011	GUILTY	the defendent tried to enter the room in the morning and went

		to the counseling in order to cover up his actions of murdering his wife.
syoun96	NOT GUILTY	I think I'm changing to not guilty
Jfitzg5	GUILTY	He could have heard noise from his wife's room next door if she was committing suicide

Round 6 (4 Jurors voting guilty, 2 Jurors for not guilty):

Ttouna o (Traions	, tourne surrey,	2 Juiois for not guilty).
JJohnson	GUILTY	the time slot between when he had dropped his parents off to
		the marriage counselors and then asking his neighbor to call
		the police was a huge time difference
[AliciaS/JasonS]	NOT	there were no reported signs of a struggle, an individual would
	GUILTY	not be likely to just allow someone to kill them. there was also
		two cuts which means that first did not kill so victim would
		have had time to fight back even if she was caught by surprise
Uic2011	GUILTY	seems as if he tried to cover up by asking for help
syoun96	NOT	I think [AliciaS/JasonS] is right
	GUILTY	-
Jfitzg5	GUILTY	William claims that she had been locked in the room all night.
		If that was his claim then why would he have called her aunt
		looking for Stacey? It is clear that his motive behind that was
		he wanted Stacy's relative to think he had no clue where she
		was or what she could be doing.

Round 7 (4 Jurors voting guilty, 2 Jurors for not guilty):

JJohnson	GUILTY	why did he not call the police himself if he was so concerned
[AliciaS/JasonS]	NOT	he didn't want her to leave, which she mentioned in her
	GUILTY	argument, so why would he kill her, and take away his
		children's mother, which would most likely have a huge
		influence on them
Uic2011	GUILTY	Pathologist proved cuts weren't suicidal cuts, they were
		perpetuated by someone else
syoun96	NOT	we have to make sure we do what the law says
	GUILTY	
Jfitzg5	GUILTY	the crime scene pathologists find that she was murdered -
		michael tried to hide the knife under her

#### **Deliberation Script #3:**

Holdout vote: Guilty (i.e., the script for participants who vote Not Guilty) Holdout emotion expression condition: Anger

Round 1 (5 Jurors voting not guilty, holdout for guilty):

JJohnson	NOT	The defentant's timeline on the date and evening in question
	GUILTY	marks no holes even though he had significant time alone
[AliciaS/JasonS]	GUILTY	because of the intent and ruthlessness and the fact the victim
		had two wounds, across both vein and artery.

Uic2011	NOT GUILTY	Stacy was known to have been having lots of depression, and depression leads to serious acts like this one.
syoun96	NOT GUILTY	the witnesses behind michael such as the neighbors, show favor in michael's case. seeing as he went to marriage counseling and sounding terribly worried about his wife, the evidence of her suicide seem probable.
Jfitzg5	NOT GUILTY	the fact that the parents were in the house with Michael and Stacy that Sunday night and Monday morning, and did not hear any acts of murder.

Round 2 (5 Jurors voting not guilty, holdout for guilty):

		ty, notwork for gameyy.
JJohnson	NOT	[AliciaS/JasonS]: yeah, she had two wounds, but there was no
	GUILTY	sign of blood on clothes, draining system or any of his clothes,
		it is very difficult not to get any blood on yourself
[AliciaS/JasonS]	GUILTY	Seriously, this just makes me angrymichael's story
		DOESN'T MAKE SENSE! for example, if he was too
		distressed, would he still call the police???? he wasn't
		distressed enough to visit a counselor but he was too
		distressed to call the police? DOESN'T ADD UP!
Uic2011	NOT	even if stacy stevens was murdered, there is no empirical
	GUILTY	evidence pointing to michael stevens (dna evidence)
syoun96	NOT	it was mentioned that there was not a lot of blood in the scene
	GUILTY	like if it were a murder
Jfitzg5	NOT	there was no fingerprints taken of the murder weapon to link
_	GUILTY	Michael directly to the crime so therefore I have a resonable
		doubt.

Round 3 (5 Jurors voting not guilty, holdout for guilty):

JJohnson	NOT GUILTY	yeah, but there was no traces of blood in the sewage system, so micheal stevens did not wash off any blood
[AliciaS/JasonS]	GUILTY	sure, forensic stuff would be nice, but WHY would a mean "leave" the house in search for his wife, when he CLAIMS to be worried about her. he should have tried to open the door himself to see how she was doing!! It's pretty aggravating I'm the only one who sees that!!!!
Uic2011	NOT GUILTY	[AlicaS/JasonS]: I hear what you are saying, but that's all circumstantial there is no solid evidence that michael stevens did the act. the pathologists disagreed whether it was a suicide or murder
syoun96	NOT GUILTY	no blood found on michael stevens' clothes or in drainagebut [AliciaS/JasonS] does kind of have a point

Jfitzg5	NOT	there was not any hard evidence showing mr. stevens
	GUILTY	committed the murder (ie, fingerprints, shoe prints, bloody
		cloths or eyewitnesses)

Round 4 (5 Jurors voting not guilty, holdout for guilty):

Round + (5 Jurois voting not gunty, noticent for gunty).		
JJohnson	NOT	The defendant provided more adequate and plausible evidence
	GUILTY	
[AliciaS/JasonS]	GUILTY	Ok, COME ON!Upon finding the bedroom door locked,
		michael stevens made NO attempt to access the bedroom, and
		claims that he belived she was behind the locked door, yet
		called family and neighbors to attempt to locate him
		<b>Seriously?!</b> why wouldn't he have tried to get in? There is no
		hard evidence it was suicide either This is SO
		FRUSTRATING
Uic2011	NOT	there is no evidence that he committed a murder
	GUILTY	
syoun96	NOT	not sure
	GUILTY	
Jfitzg5	NOT	forensic and crime scene evidence had shown that both
	GUILTY	scenarios were possible
		_

Round 5 (4 Jurors voting not guilty, 2 Jurors for guilty):

JJohnson	NOT	Plus timeline indicates these wouldn't have been much time
	GUILTY	between michael talking to his neighbors and the police
		finding the body
[AliciaS/JasonS]	GUILTY	I just don't think any of that is as important as the fact that i
		find it <b>SERIOUSLY</b> hard to believe that she would be able to
		cut her neck twice and be able to move. also michael was the
		last person to be in contact w/ her. NO ONE ELSE COULD
		HAVE BEEN AROUND HER. he was just smart enough
		about what moves to make, in order to seem like he didn't do
		anything. It pisses me off that nobody is seeing through this
Uic2011	NOT	michael went to marriage counseling and seemed concerned
	GUILTY	about his wife
syoun96	GUILTY	I think I'm changing to guilty
Jfitzg5	NOT	there were "superficial" cuts by the 2 main wounds which is
	GUILTY	common amongst suicidesshows doubt

Round 6 (4 Jurors voting not guilty, 2 Jurors for guilty):

JJohnson	NOT	stacy stevens suffered from depression and made a threat of
	GUILTY	suicide to her husband the night before during an argument
[AliciaS/JasonS]	GUILTY	Ok, this is getting pretty fn frustrating. Michael stevens
		side of the story is VERY QUESTIONABLE. It seems that he
		planned the entire murder by locking the door from the inside
		sending off his parents and talking to a mentor to make it look
		like he was working on fixing his marriage.

Uic2011	NOT	Not enough evidence to prove he intended to hurt/kill his wife
	GUILTY	stacy
syoun96	GUILTY	I think [AliciaS/JasonS] is right
Jfitzg5	NOT	The guy said that the way the cuts looked like a suicide
	GUILTY	because of the superficial cuts

Round 7 (4 Jurors voting not guilty, 2 Jurors for guilty):

Round 7 (1 Julio15 Voting not guilty).		
JJohnson	NOT	Based on the information that there had been two cuts along
	GUILTY	her throat. In most homicide cases, it is usually seen that it
		only takes them a single incision to kill the victim
[AliciaS/JasonS]	GUILTY	he had suspicious activity before they found her and he TOOK
		HIS PARENTS TO HIS SISTER'S HOUSE! i don't
		understand why he did that if he was just going to talk to
		her??? This is infuriating
Uic2011	NOT	I just still really don't think there's enough evidence
	GUILTY	
syoun96	GUILTY	we have to make sure we do what the law says
Jfitzg5	NOT	No forensic evidence was found linking defendent to murder.
	GUILTY	

#### **Deliberation Script #4:**

Holdout vote: Not Guilty (i.e., the script for participants who vote Guilty) Holdout emotion expression condition: Anger

Round 1 (5 Jurors voting guilty, holdout for not guilty):

Round 1 (3 Julois	voing guilty,	noldout for not guitty).
JJohnson	GUILTY	He was scared that she was going to leave him and take away
		his kids and family
[AliciaS/JasonS]	NOT	first of all, there hasn't been a sure evidence that he murdered
	GUILTY	her. we need to have more evidence before we decide he is
		guilty or not (yet)
Uic2011	GUILTY	the motive that his wife was going to leave him can drive a
		man to kill
syoun96	GUILTY	She threatened to leave him and take their children
Jfitzg5	GUILTY	Michael doesn't have any record of where he was between
		6am and 10am, when he dropped his parents off and when he
		went to see the counselor (which he could have just done to
		provide himself an alibi)

Round 2 (5 Jurors voting guilty, holdout for not guilty):

JJohnson	GUILTY	if michael was truly worried about his wife, he would have
		immediately called the police instead of going to his
		neighbors. by michael going to his neighbors, it made me
		think that he was just trying to make his story sound
		believable.
[AliciaS/JasonS]	NOT	Seriously, this just makes me angrythe wound itself
	GUILTY	due to the cut was made if you were suicidal and right

		handed you would START THE CUT FROM THE LEFT also how they are parallel and the blood was ONLY FOUND ON HER ROOM and nowhere else!!
Uic2011	GUILTY	the cuts on her throat would be to deep for her to cut it herself (it also might have been clever for him to cut it several times to cover up the evidence and make it look like she was trying to suicide)
syoun96	GUILTY	defendent was the only person that had access to the victim and there was a motive to cause harm
Jfitzg5	GUILTY	No one knows exactly if he was sleeping from the night until day.

Round 3 (5 Jurors voting guilty, holdout for not guilty):

JJohnson	GUILTY	threatened to have children taken from him by stacy
[AliciaS/JasonS]	NOT	I hear what you guys are saying, but michael DID NOT
	GUILTY	KNOW HOW to make it "look" like the door was locked on
		the inside, if the wife was murdered the parents in the house
		probably would've heard, and the argument was not a great
		enough reason for murder!! It's pretty aggravating I'm the
		only one who sees that!!!!
Uic2011	GUILTY	he tried very hard on Monday morning to get many people to
		see him be worried and upset
syoun96	GUILTY	His morning and night activities were suspiciousbut
		[AliciaS/JasonS] does kind of have a point
Jfitzg5	GUILTY	no one else had access to her

Round 4 (5 Jurors voting guilty, holdout for not guilty):

JJohnson	GUILTY	Nobody knew where husband was monday morning
[AliciaS/JasonS]	NOT GUILTY	Ok, COME ON! he would have to be a really smart to plan
771 0011		his day like he did. Seriously?! This is SO FRUSTRATING
Uic2011	GUILTY	William took his parents away just before the incident. Since
		their marriage they probably have had similar encounters
		which does not explain why they had to be taken away.
syoun96	GUILTY	not sure
Jfitzg5	GUILTY	he left her alone in a room knowing of her problems

Round 5 (4 Jurors voting guilty, 2 Jurors for not guilty):

JJohnson	GUILTY	suspicious behavior of asking relatives even though he left the
		house knowing wife was locked inside her room
[AliciaS/JasonS]	NOT	I just <b>SERIOUSLY</b> don't think any of that is as important as
	GUILTY	the fact that a guilty verdict would seemingly be made NOT
		ON HARD EVIDENCE but by ASSUMPTIONS based on
		behavior and environmental actions It PISSES me off that
		nobody is seeing through this
Uic2011	GUILTY	the defendent tried to enter the room in the morning and went
		to the counseling in order to cover up his actions of murdering
		his wife.

syoun96	NOT	I think I'm changing to not guilty
	GUILTY	
Jfitzg5	GUILTY	He could have heard noise from his wife's room next door if
		she was committing suicide

Round 6 (4 Jurors voting guilty, 2 Jurors for not guilty):

rtouna o ( : turors		2 Juiois for not guilty).
JJohnson	GUILTY	the time slot between when he had dropped his parents off to
		the marriage counselors and then asking his neighbor to call
		the police was a huge time difference
[AliciaS/JasonS]	NOT	Ok, this is getting pretty fn frustrating. there were no
	GUILTY	reported signs of a struggle, an individual would not be likely
		to just ALLOW SOMEONE TO KILL THEM. there was also
		two cuts which means that first did not kill so victim would
		have had time to fight back even if she was caught by surprise
Uic2011	GUILTY	seems as if he tried to cover up by asking for help
syoun96	NOT	I think [AliciaS/JasonS] is right
	GUILTY	
Jfitzg5	GUILTY	William claims that she had been locked in the room all night.
_		If that was his claim then why would he have called her aunt
		looking for Stacey? It is clear that his motive behind that was
		he wanted Stacy's relative to think he had no clue where she
		was or what she could be doing.

Round 7 (4 Jurors voting guilty, 2 Jurors for not guilty):

JJohnson	GUILTY	why did he not call the police himself if he was so concerned
[AliciaS/JasonS]	NOT	he didn't want her to leave, which she mentioned in her
	GUILTY	argument, so why would he kill her, and TAKE AWAY HIS CHILDREN'S MOTHER, which would most likely have a
		huge influence on them??? This is infuriating
Uic2011	GUILTY	Pathologist proved cuts weren't suicidal cuts, they were
		perpetuated by someone else
syoun96	NOT	we have to make sure we do what the law says
	GUILTY	
Jfitzg5	GUILTY	the crime scene pathologists find that she was murdered -
		michael tried to hide the knife under her

#### **Deliberation Script #5:**

Holdout vote: Guilty (i.e., the script for participants who vote Not Guilty) Holdout emotion expression condition: Fear

Round 1 (5 Jurors voting not guilty, holdout for guilty):

	tround I (b tarons voting not gainty, notabat for gainty).		
JJohnson	NOT	The defentant's timeline on the date and evening in question	
	GUILTY	marks no holes even though he had significant time alone	
[AliciaS/JasonS]	GUILTY	because of the intent and ruthlessness and the fact the victim	
		had two wounds, across both vein and artery.	
Uic2011	NOT	Stacy was known to have been having lots of depression, and	
	GUILTY	depression leads to serious acts like this one.	

syoun96	NOT	the witnesses behind michael such as the neighbors, show
	GUILTY	favor in michael's case. seeing as he went to marriage
		counseling and sounding terribly worried about his wife, the
		evidence of her suicide seem probable.
Jfitzg5	NOT	the fact that the parents were in the house with Michael and
	GUILTY	Stacy that Sunday night and Monday morning, and did not
		hear any acts of murder.

Round 2 (5 Jurors voting not guilty, holdout for guilty):

JJohnson	NOT GUILTY	[AliciaS/JasonS]: yeah, she had two wounds, but there was no sign of blood on clothes, draining system or any of his clothes, it is very difficult not to get any blood on yourself
[AliciaS/JasonS]	GUILTY	michael's story doesn't make sense. for example, if he was too distressed, would he still call the police? he wasn't distressed enough to visit a counselor but he was too distressed to call the police? doesn't add up. It scares the shit out of me that this kind of thing happens
Uic2011	NOT GUILTY	even if stacy stevens was murdered, there is no empirical evidence pointing to michael stevens (dna evidence)
syoun96	NOT GUILTY	it was mentioned that there was not a lot of blood in the scene like if it were a murder
Jfitzg5	NOT GUILTY	there was no fingerprints taken of the murder weapon to link Michael directly to the crime so therefore I have a resonable doubt.

Round 3 (5 Jurors voting not guilty, holdout for guilty):

JJohnson	NOT	yeah, but there was no traces of blood in the sewage system,
	GUILTY	so micheal stevens did not wash off any blood
[AliciaS/JasonS]	GUILTY	this story freaks me out I'm going to have
		nightmaresanyway sure, forensic stuff would be nice,
		but why would a mean "leave" the house in search for his
		wife, when he claims to be worried about her. he should have
		tried to open the door himself to see how she was doing
Uic2011	NOT	[AlicaS/JasonS]: I hear what you are saying, but that's all
	GUILTY	circumstantial there is no solid evidence that michael stevens
		did the act. the pathologists disagreed whether it was a suicide
		or murder
syoun96	NOT	no blood found on michael stevens' clothes or in
	GUILTY	drainagebut [AliciaS/JasonS] does kind of have a point
Jfitzg5	NOT	there was not any hard evidence showing mr. stevens
	GUILTY	committed the murder (ie, fingerprints, shoe prints, bloody
		cloths or eyewitnesses)

Round 4 (5 Jurors voting not guilty, holdout for guilty):

JJohnson	NOT	The defendant provided more adequate and plausible
	GUILTY	evidence
[AliciaS/JasonS]	GUILTY	Upon finding the bedroom door locked, michael stevens made no attempt to access the bedroom, and claims that he belived she was behind the locked door, yet called family and neighbors to attempt to locate him why wouldn't he have tried to get in? There is no hard evidence it was suicide either <b>the whole thing is creepy.</b>
Uic2011	NOT GUILTY	there is no evidence that he committed a murder
syoun96	NOT GUILTY	not sure
Jfitzg5	NOT GUILTY	forensic and crime scene evidence had shown that both scenarios were possible

Round 5 (4 Jurors voting not guilty, 2 Jurors for guilty):

JJohnson	NOT	Plus timeline indicates these wouldn't have been much time
	GUILTY	between michael talking to his neighbors and the police
		finding the body
[AliciaS/JasonS]	GUILTY	I just don't think any of that is as important as the fact that i
		find it hard to believe that she would be able to cut her neck
		twice and be able to move. also michael was the last person to
		be in contact w/ her. no one else could have been around her.
		he was just smart enough about what moves to make, in order
		to seem like he didn't do anything. That's pretty scary
Uic2011	NOT	michael went to marriage counseling and seemed concerned
	GUILTY	about his wife
syoun96	GUILTY	I think I'm changing to guilty
Jfitzg5	NOT	there were "superficial" cuts by the 2 main wounds which is
	GUILTY	common amongst suicidesshows doubt

Round 6 (4 Jurors voting not guilty, 2 Jurors for guilty):

	round of training not gainty, 2 sarons for gainty).		
JJohnson	NOT	stacy stevens suffered from depression and made a threat of	
	GUILTY	suicide to her husband the night before during an argument	
[AliciaS/JasonS]	GUILTY	Michael stevens side of the story is very questionable. It	
		seems that he planned the entire murder by locking the door	
		from the inside sending off his parents and talking to a	
		mentorto make it look like he was working on fixing his	
		marriageug this whole thing really creeps me out	
Uic2011	NOT	Not enough evidence to prove he intended to hurt/kill his wife	
	GUILTY	stacy	
syoun96	GUILTY	I think [AliciaS/JasonS] is right	
Jfitzg5	NOT	The guy said that the way the cuts looked like a suicide	
	GUILTY	because of the superficial cuts	

Round 7 (4 Jurors voting not guilty, 2 Jurors for guilty):

JJohnson	NOT	Based on the information that there had been two cuts along
	GUILTY	her throat. In most homicide cases, it is usually seen that it
		only takes them a single incision to kill the victim
[AliciaS/JasonS]	GUILTY	It scares me to think about his suspicious activity before
		they found her and he took his parents to his sister's house, i
		don't understand why he did that if he was just going to talk to
		her.
Uic2011	NOT	I just still really don't think there's enough evidence
	GUILTY	
syoun96	GUILTY	we have to make sure we do what the law says
Jfitzg5	NOT	No forensic evidence was found linking defendent to murder.
_	GUILTY	

#### **Deliberation Script #8:**

Holdout vote: Not Guilty (i.e., the script for participants who vote Guilty) Holdout emotion expression condition: Fear

Round 1 (5 Jurors voting guilty, holdout for not guilty):

	Notified 1 (3 Juliots voting guilty, noticout for not guilty).		
JJohnson	GUILTY	He was scared that she was going to leave him and take away	
		his kids and family	
[AliciaS/JasonS]	NOT	first of all, there hasn't been a sure evidence that he murdered	
	GUILTY	her. we need to have more evidence before we decide he is	
		guilty or not (yet)	
Uic2011	GUILTY	the motive that his wife was going to leave him can drive a	
		man to kill	
syoun96	GUILTY	She threatened to leave him and take their children	
Jfitzg5	GUILTY	Michael doesn't have any record of where he was between	
		6am and 10am, when he dropped his parents off and when he	
		went to see the counselor (which he could have just done to	
		provide himself an alibi)	

Round 2 (5 Jurors voting guilty, holdout for not guilty):

JJohnson	GUILTY	if michael was truly worried about his wife, he would have
		immediately called the police instead of going to his neighbors. by michael going to his neighbors, it made me think that he was just trying to make his story sound believable.
[AliciaS/JasonS]	NOT GUILTY	the wound itself due to the cut was made if you were suicidal and right handed you would start the cut from hte left also how they are parallel and the blood was only found

		on her room and nowhere else It scares the shit out of me that this kind of thing happens
Uic2011	GUILTY	the cuts on her throat would be to deep for her to cut it herself (it also might have been clever for him to cut it several times to cover up the evidence and make it look like she was trying to suicide)
syoun96	GUILTY	defendent was the only person that had access to the victim and there was a motive to cause harm
Jfitzg5	GUILTY	No one knows exactly if he was sleeping from the night until day.

Round 3 (5 Jurors voting guilty, holdout for not guilty):

JJohnson	GUILTY	threatened to have children taken from him by stacy			
[AliciaS/JasonS]	NOT	wow, this case really freaks me out I'm going to have			
	GUILTY	<b>nightmaresanyway</b> I hear what you guys are saying, but			
		michael did not know how to make it "look" like the door was			
		locked on the inside, if the wife was murdered the parents in			
		the house probably would've heard, and the argument was not			
		a great enough reason for murder.			
Uic2011	GUILTY	he tried very hard on Monday morning to get many people to			
		see him be worried and upset			
syoun96	GUILTY	His morning and night activities were suspiciousbut			
		[AliciaS/JasonS] does kind of have a point			
Jfitzg5	GUILTY	no one else had access to her			

Round 4 (5 Jurors voting guilty, holdout for not guilty):

	<del> </del>	mora out for mot guilty):			
JJohnson	GUILTY	Nobody knew where husband was monday morning			
[AliciaS/JasonS]	NOT	he would have to be a really smart to plan his day like he did.			
	GUILTY	the whole thing is creepy			
Uic2011	GUILTY	William took his parents away just before the incident. Since			
		their marriage they probably have had similar encounters			
		which does not explain why they had to be taken away.			
syoun96	GUILTY	not sure			
Jfitzg5	GUILTY	he left her alone in a room knowing of her problems			

Round 5 (4 Jurors voting guilty, 2 Jurors for not guilty):

Round 5 (13thors	voting gunty,	2 Juliois for not guilty).			
JJohnson	GUILTY	suspicious behavior of asking relatives even though he left the			
		house knowing wife was locked inside her room			
[AliciaS/JasonS]	NOT	I just don't think any of that is as important as the fact that a			
	GUILTY	guilty verdict would seemingly be made not on hard evidence			
		but by assumptions based on behavior and environmental			
		actionsThat's pretty scary			
Uic2011	GUILTY	the defendent tried to enter the room in the morning and went			
		to the counseling in order to cover up his actions of			
		murdering his wife.			
syoun96	NOT	I think I'm changing to not guilty			
	GUILTY				

Jfitzg5	GUILTY	He could have heard noise from his wife's room next door if
		she was committing suicide

Round 6 (4 Jurors voting guilty, 2 Jurors for not guilty):

JJohnson	GUILTY	the time slot between when he had dropped his parents off to			
		the marriage counselors and then asking his neighbor to call			
		the police was a huge time difference			
[AliciaS/JasonS]	NOT	there were no reported signs of a struggle, an individual			
	GUILTY	would not be likely to just allow someone to kill them. there			
		was also two cuts which means that first did not kill so victim			
		would have had time to fight back even if she was caught by			
		surpriseug this whole thing really creeps me out			
Uic2011	GUILTY	seems as if he tried to cover up by asking for help			
syoun96	NOT	I think [AliciaS/JasonS] is right			
	GUILTY				
Jfitzg5	GUILTY	William claims that she had been locked in the room all night.			
		If that was his claim then why would he have called her aunt			
		looking for Stacey? It is clear that his motive behind that was			
		he wanted Stacy's relative to think he had no clue where she			
		was or what she could be doing.			

Round 7 (4 Jurors voting guilty, 2 Jurors for not guilty):

JJohnson	GUILTY	why did he not call the police himself if he was so concerned			
[AliciaS/JasonS]	NOT	he didn't want her to leave, which she mentioned in her			
	GUILTY	argument, so why would he kill her? It scares me to think			
		about how he would take away his children's mother, which			
		would most likely have a huge influence on them			
Uic2011	GUILTY	Pathologist proved cuts weren't suicidal cuts, they were			
		perpetuated by someone else			
syoun96	NOT	we have to make sure we do what the law says			
	GUILTY				
Jfitzg5	GUILTY	the crime scene pathologists find that she was murdered -			
		michael tried to hide the knife under her			

#### **APPENDIX E**

#### **Study 2 Measures**

#### [Pre-Deliberation Measures:]

Next you will be voting about the case and sending your group a message. Your responses to some of the questions below will be shared with the jury.

Is the defendant "not guilty" or "guilty"? Please select ONE: (This is a public answer that your

O NOT GUILTY O GUILTY
How confident are you in your verdict? Please select ONE: (This is a private rating that your co- jurors will NOT see.)  Not at all Confident 0%  10%  20%  30%  40%  50%  60%  70%  80%  90%  Completely Confident 100%
Please explain your reason(s) for your verdict and any other comments that you want your co-jurors to read. Feel free to state your reasons for the entire group, or to address individual co-jurors in your comments. (This is a public answer that your co-jurors will see.)
[Rounds 1-8 Measures:]
Your opinion may or may not have changed after hearing your co-jurors' verdicts and opinions. Please answer the following questions again about how you feel about the case now.
Is the defendant "not guilty" or "guilty"? Please select ONE: (This is a public answer that your co-jurors will see.)  O NOT GUILTY O GUILTY
How confident are you in your verdict? Please select ONE: (This is a private rating that your cojurors will NOT see.)  O Not at all Confident 0%  O 10%  O 20%  O 30%  O 40%

0	60%
$\mathbf{O}$	70%
$\mathbf{O}$	80%
$\mathbf{O}$	90%
0	Completely Confident 100%

Please explain your reason(s) for your verdict and any other comments that you want your cojurors to read. Feel free to state your reasons for the entire group, or to address individual cojurors in your comments. (This is a public answer that your co-jurors will see.)

Please rate your co-jurors on the following scales. These are private ratings that your co-jurors will NOT see. Feel free to scroll up and review their comments again when making these ratings.

How certain is each juror?

	Not at all Certain	Somewhat Certain	Certain	Very Certain	Extremely Certain
JJohnson	O	0	O	O	0
[Jason/Alicia]	•	O	•	•	•
Uic2011	•	O	•	•	•
syoun96	•	O	•	<b>O</b>	•
Jfitzg5	O	O	O	O	O

How competent is each juror?

	Not at all Competent	Somewhat Competent	Competent	Very Competent	Extremely Competent
JJohnson	O	0	O	0	0
[Jason/Alicia]	<b>O</b>	O	<b>O</b>	O .	O
Uic2011	•	O	•	O	O
syoun96	<b>O</b>	O	<b>O</b>	O .	O
Jfitzg5	0	0	0	0	<b>O</b>

How credible (i.e., worthy of belief or confidence) is each juror?

	Not at all Credible	Somewhat Credible	Credible	Very Credible	Extremely Credible
JJohnson	0	O	0	O	0
[Jason/Alicia]	O	O	O	O	O
Uic2011	O	O	O	O	O
syoun96	O	O	O	O	O
Jfitzg5	O	O	O	O	O

How persuaded are you by each juror's comments?

	Not at all Persuaded	Somewhat Persuaded	Persuaded	Very Persuaded	Extremely Persuaded
JJohnson	O	0	0	0	O
[Jason/Alicia]	•	O	O	O	O
Uic2011	•	O	O	O	O
syoun96	•	O	O	O	O
Jfitzg5	0	O	0	O	O

#### [Post-Deliberation Measures:]

Please rate your co-jurors on the following scales. These are private ratings that your co-jurors will NOT see.

How rational was this juror?

	Not at all Rational	Somewhat Rational	Rational	Very Rational	Extremely Rational
JJohnson	O	0	O	0	0
[Jason/Alicia]	<b>O</b>	O .	<b>O</b>	O .	<b>O</b>
Uic2011	•	O	•	O	•
syoun96	<b>O</b>	O .	<b>O</b>	O .	<b>O</b>
Jfitzg5	0	O	0	O .	<b>O</b>
	•	•	•	O .	O

How emotional was this juror?

	Not at all Emotional	Somewhat Emotional	Emotional	Very Emotional	Extremely Emotional
JJohnson	O	O	O	O	O
[Jason/Alicia]	O	O	O	•	<b>O</b>
Uic2011	O	O	O	•	<b>O</b>
syoun96	O	O	O	•	O
Jfitzg5	O	O	O	•	O

How trustworthy was this juror?

	Not at all Trustworthy	Somewhat Trustworthy	Trustworthy	Very Trustworthy	Extremely Trustworthy
JJohnson	0	0	0	O	0
[Jason/Alicia]	O	O	O	•	•
Uic2011	O	O	O	•	<b>O</b>
syoun96	O	O	O	•	<b>O</b>
Jfitzg5	<b>O</b>	<b>O</b>	<b>O</b>	•	<b>O</b>

How sincere was this juror?

	Not at all Sincere	Somewhat Sincere	Sincere	Very Sincere	Extremely Sincere
JJohnson	0	0	O	O	0
[Jason/Alicia]	O	O	<b>O</b>	<b>O</b>	<b>O</b>
Uic2011	O	O	•	•	•
syoun96	O	O	•	•	•
Jfitzg5	O	O	O	O	O

How convinced was this juror?

	Not at all Convinced	Somewhat Convinced	Convinced	Very Convinced	Extremely Convinced
JJohnson	O	O	0	O	0
[Jason/Alicia]	O	O	O	O	O
Uic2011	O	O	O	O	O
syoun96	O	O	O	O	O
Jfitzg5	O	O	O	O	O

How high in quality were this juror's arguments?

	Very Low Quality	Somewhat Low Quality	Neither Low nor High Quality	Somewhat High Quality	Very High Quality
JJohnson	O	O	0	O	0
[Jason/Alicia]	•	•	O	O	<b>O</b>
Uic2011	0	0	O	O	O
syoun96	0	0	O	O	O
Jfitzg5	0	•	O	O	O

How influential was this juror?

	Not at all Influential	Somewhat Influential	Influential	Very Influential	Extremely Influential
JJohnson	0	0	0	0	0
[Jason/Alicia]	O	O	O	O .	O
Uic2011	O	O	O	O .	O
syoun96	O	O	O	O .	O
Jfitzg5	O .	O .	<b>O</b>	O .	O

How likeable was this juror?

	Not at all Likeable	Somewhat Likeable	Likeable	Very Likeable	Extremely Likeable
JJohnson	O	0	O	0	0
[Jason/Alicia]	<b>O</b>	O .	<b>O</b>	O	O
Uic2011	•	O	•	O	O
syoun96	•	O	•	O	O
Jfitzg5	•	•	•	O	O

How angry was this juror?

	Not at all Angry	Somewhat Angry	Angry	Very Angry	Extremely Angry
JJohnson	0	0	O	O	0
[Jason/Alicia]	O	O	<b>O</b>	<b>O</b>	<b>O</b>
Uic2011	O	O	•	•	•
syoun96	O	O	•	•	•
Jfitzg5	O	O	<b>O</b>	<b>O</b>	<b>O</b>

How fearful was this juror?

	Not at all Fearful	Somewhat Fearful	Fearful	Very Fearful	Extremely Fearful
JJohnson	0	0	0	0	0
[Jason/Alicia]	O	O	•	•	<b>O</b>
Uic2011	O	O	•	•	<b>O</b>
syoun96	O	O	•	•	<b>O</b>
Jfitzg5	<b>O</b>	<b>O</b>	•	•	O

Dio	d you notice anything strange about the study?
$\mathbf{C}$	Yes
$\bigcirc$	NT

O No

What exactly are you thinking of? Please be specific.

What gender do you believe [Jason/Alicia] is?

O Male

O Female

Please indicate your level of agreement with the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.	O	O	O	O	O
Every man ought to have whom he adores.	O	•	•	•	•
Men are complete without women.	O	O	O	O	•
Women exaggerate	O	O	0	0	0

problems they have at work.					
Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.	0	0	0	0	•
When women lose to men in a fair competition, they typically complain about being discriminated against.	•	•	•	•	0

ΥO	our gender:
$\mathbf{O}$	Male
O	Female
Yo	our age (in years):
X X 71	
WI	nat ethnicity are you?
	nat ethnicity are you? White
O	•
<b>O</b>	White
O O	White Black

If you chose other, please specify:

#### **APPENDIX F**

#### Internal and External Motivation to Control Prejudice Scale

The following questions concern various reasons or motivations people might have for trying to respond in non-prejudiced ways toward African American people. Some of the reasons reflect internal-personal motivations whereas others reflect more external-social motivations. Of course, people may be motivated for both internal and external reasons; we want to emphasize that neither type of motivation is by definition better than the other. In addition, we want to be clear that we are not evaluating you or your individual responses. All your responses will be completely confidential. We are simply trying to get an idea of the types of motivations that students in general have for responding in non-prejudiced ways. If we are to learn anything useful, it is important that you respond to each of the questions openly and honestly. Please give your response according to the scale below. Please mark ONE answer for each item.

	1 (Strongly Disagree)	2	3	4	5 (Neither Agree nor Disagree)	6	7	8	9 (Strongly Agree)
Because of today's PC (politically correct) standards I try to appear non-prejudiced toward Black people	O	0	O	O	0	O	O	O	0
I attempt to act in non-prejudiced ways toward Black people because it is personally important to me	0	0	O	0	0	O	O	O	0
If I act	•	O	O	0	0	O	0	0	O

prejudiced toward Black people, I would be concerned that others would be angry with me									
I try to hide any negative thoughts about Black people in order to avoid negative reactions from others	0	O	O	O	O	O	0	0	•
Because of my personal values, I believe that using stereotypes about Black people is wrong	O	O	O	O	O	O	0	0	0
According to my personal values, using stereotypes about Black people is OK.	0	O	O	O	0	0	O	O	0
	•	0	<b>O</b>	0	0	0	0	0	O

I try to act non- prejudiced toward Black people because of pressure from others									
I am personally motivated by my beliefs to be non- prejudiced toward Black people	O	0	O	O	O	O	O	O	0
I attempt to appear non-prejudiced toward Black people in order to avoid disapproval from others	O	<b>O</b>	0	O	•	O	O	O	•
Being non- prejudiced toward Black people is important to my self- concept	0	0	O	O	0	O	O	O	•

#### APPENDIX G

#### **IRB** Documentation

# UNIVERSITY OF ILLINOIS AT CHICAGO

Office for the Protection of Research Subjects (OPRS) Office of the Vice Chancellor for Research (MC 672) 203 Administrative Office Building 1737 West Polk Street Chicago, Illinois 60612-7227

> **Approval Notice Continuing Review**

January 27, 2011

Bette Bottoms, PhD Psychology 1007 W. Harrison St., 1046B B.S.B. M/C 285 Chicago, IL 60612

Phone: (312) 996-2635 / Fax: (312) 413-4122

**RE:** Protocol # 2010-0001

"Evidence and Jurors' Judgements"

Dear Dr. Bottoms:

Your Continuing Review was reviewed and approved by the Expedited review process on January 14, 2011. You may now continue your research.

Please note the following information about your approved research protocol:

Protocol Approval Period: January 25, 2011 - January 24, 2012

**Approved Subject Enrollment #:** 2100 (728 subjects enrolled)

Additional Determinations for Research Involving Minors: These determinations have not been made

for this study since it has not been approved for enrollment of minors.

Performance Sites: UIC Sponsor: None

#### **Research Protocol(s):**

a) Evidence and Jurors' Judgments (Protocol #2010-0001) Protocol 212/02/2010

#### **Recruitment Material(s):**

- a) Internet Posting; Version 1; 12/15/2009
- b) UIC Psychology Student Subject Pool recruitment procedures will be followed

#### **Informed Consent(s):**

- a) UIC NONDEL; Version 2; 01/19/2010
- b) UIC DEL; Version 2; 01/19/2010

- c) UIC Evidence and Jurors' Judgments, Subject Information Sheet; Version 30; 11/05/2010
- d) CM Evidence and Jurors' Judgments, Subject Information Sheet; Version 30; 11/05/2010
- e) A waiver of documentation has been granted under 45 CFR 46.117 for the pilot test phase of this research
- f) Debriefing Information (no footer)

Your research meets the criteria for expedited review as defined in 45 CFR 46.110(b)(1) under the following specific categories:

(6) Collection of data from voice, video, digital, or image recordings made for research purposes., (7) Research on individual or group characteristics or behavior (including but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
12/20/2010	Continuing	Expedited	01/14/2011	Approved
	Review			

#### Please remember to:

- → Use your <u>research protocol number</u> (2010-0001) on any documents or correspondence with the IRB concerning your research protocol.
- → Review and comply with all requirements on the enclosure,

"UIC Investigator Responsibilities, Protection of Human Research Subjects"

Please note that the UIC IRB has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact OPRS at (312) 996-1711 or me at (312) 996-0548. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Brandi L. Drumgole, B.S. IRB Coordinator, IRB # 2

#### Office for the Protection of Research Subjects

#### Enclosure(s):

#### 1. UIC Investigator Responsibilities, Protection of Human Research Subjects

#### 2. Informed Consent Document(s):

- a) UIC NONDEL; Version 2; 01/19/2010
- b) UIC DEL; Version 2; 01/19/2010
- UIC Evidence and Jurors' Judgments, Subject Information Sheet; Version 30; 11/05/2010
- d) CM Evidence and Jurors' Judgments, Subject Information Sheet; Version 30; 11/05/2010
- e) Debriefing Information (no footer)

#### 3. Recruiting Material(s):

- a) Internet Posting; Version 1; 12/15/2009
- b) UIC Psychology Student Subject Pool recruitment procedures will be followed

cc: Gary E. Raney, Psychology, M/C 285

#### **VITA**

#### JESSICA M. SALERNO

JSALER4@UIC.EDU, 802-989-8658

#### **EDUCATION**

#### **Doctor of Philosophy (Expected July 2012)**

University of Illinois at Chicago, Chicago, IL

Major: Social Psychology

Minors: Psychology and Law; Statistics, Method, and Measurement

Dissertation: The Emotional Minority Model: Testing a theoretical model of minority influence,

emotion stereotypes, and prejudice in a jury deliberation context

#### Master of Arts (2009)

University of Illinois at Chicago, Chicago, IL

Thesis: Can jurors identify junk science? Effects of a central cross-examination, deliberation, and

need for cognition on jurors' decisions

Bachelor of Arts (2003), Magna Cum Laude and Highest Departmental Honors

Middlebury College, Middlebury, VT

Majors: Psychology; Film & Media Studies; Minor: Italian

#### **EMPLOYMENT**

#### 2012-Present

#### **Assistant Professor of Psychology**

School of Social and Behavioral Sciences

New College of Interdisciplinary Arts and Sciences

Arizona State University

#### STATEMENT OF RESEARCH INTERESTS

My research explores basic individual and group decision-making processes in legal contexts. Specifically, I am interested in how (a) negative emotion affects intergroup relations during individual and group decision making, (b) moral outrage drives biases against stigmatized groups in ambiguous legal contexts, and (c) different persuasion routes can lead individuals versus groups to reach accurate evaluations of expert witness credibility.

#### SELECTED SCHOLARSHIPS, AWARDS, AND RESEARCH GRANTS

#### **Research Grants**

- NSF Doctoral Dissertation Improvement Grant (\$12,878), 2011
- Psi Chi Graduate Research Grant (\$1500), 2011
- Society for the Psychological Study of Social Issues Grant-in-Aid (\$1000), 2010
- American Psychology-Law Society Grant-in-Aid (\$480), 2010
- UIC Provost Award for Graduate Research (\$1775), 2010
- UIC Chancellor's Committee on the Status of LGBT Issues Graduate Student Grant (\$554), 2008
- American Psychology-Law Society Grant-in-Aid (\$460), 2008
- Psi Chi Graduate Research Grant (\$804), 2008

#### **Awards and Honors**

- Society for Personality and Social Psychology (SPSP) Poster Award, 2012
- SPSP Graduate Student Committee Outstanding Research Award Honorable Mention, 2012

- SPSP Travel Award, 2012 (\$500)
- UIC Dean's Scholar Award, stipend plus tuition waiver (valued at over \$40,000), 2011
- Summer Institute in Social Psychology 2011, SPSP program funded by NSF, Princeton University
- SPSP sponsorship to the European Association of Social Psychology Summer School 2010, Aegina, Greece (\$750)
- Christopher B. Keys Award for Early Outstanding Research Achievement (\$500), 2009
- UIC College of Liberal Arts and Sciences Scholarship (\$1000), Spring 2008
- NSF Research Experience for Undergraduates Fellow, Department of Psychology, Middlebury College, Summer 2003

#### **PUBLICATIONS**

- \*Indicates student coauthors
- Diamond, S. S., & **Salerno, J. M.** (in press). Empirical analysis of juries. Invited chapter to appear in J. Arlen (Ed.) *Research handbook on the economics of torts*.
- **Salerno, J. M.,** & \*Peter-Hagene, C. L. (reject & resubmit). Disgust: A neglected component of moral outrage. Psychological Science.
- Haegerich, T. M., **Salerno, J. M.**, & Bottoms, B. L. (in press). Stereotypes of juvenile offenders: Jury deliberation can minimize the effect of jurors' pre-existing stereotypes, but maximize the effect of stereotypes activated during trial. *Psychology, Public Policy, & Law.*
- Nysse-Carris, K. L., Bottoms, B. L., & **Salerno, J. M.** (2011). Experts' and novices' abilities to detect deception in children. *Psychology, Public Policy & Law, 17*, 76-98.
- **Salerno, J. M.,** & Diamond, S. S. (2010). The promise of a cognitive perspective on jury decision-making. *Psychonomic Bulletin & Review, 17*, 174-179.
- Salerno, J. M., Stevenson, M. C., Bottoms, B. L., Nadjowski, C. J., Wiley, T. R. A., & \* Doran, R. (2010). Public perception of juvenile sex offender registration. In J. M. Lampinen, & K. Sexton-Radek (Eds.) Protecting children from violence: Evidence based interventions. New York: Psychology Press.
- \*Reynolds, C. E., Najdowski, C. J., **Salerno, J. M.**, Stevenson, M. C., Wiley, T. R A., & Bottoms, B. L. (2010). Public perceptions of registry laws for juvenile sex offenders. In F. Columbus (Ed.), *Youth violence: Causes, warning signs and prevention*. Hauppauge, NY: Nova Science Publishers, Inc.
- **Salerno, J. M.**, & Bottoms, B. L. (2010). Unintended consequences of toying with jurors' emotions: The impact of disturbing emotional evidence on jurors' verdicts. *The Jury Expert*, 22, 16-25.
- **Salerno, J. M.**, Najdwoski, C. N., Stevenson, M. C., Wiley, T. R. A., Bottoms, B. L., \* *Pimentel*, *P. S.*, & \* *Vaca*, *R*. (2010). Psychological mechanisms underlying support for juvenile sex offender registry laws: Prototypes, moral outrage, and perceived threat. *Behavioral Sciences and the Law*, 28, 58-83.
- \* Hernandez, G., Salerno, J. M., & Bottoms, B. L. (2010). Attachment to God, religious coping, and alcohol-related coping. The International Journal for the Psychology of Religion, 20, 97-108.

- **Salerno, J. M.**, & McCauley, M. (2009). Mock jurors' judgments about scientific experts: Do cross-examination, deliberation, and need for cognition matter? *American Journal of Forensic Psychology*, 27, 1-24.
- **Salerno, J. M.**, & Bottoms, B. L. (2009). Emotional evidence and jurors' judgments: The promise of neuroscience for informing psychology and law. *Behavioral Sciences and the Law: Special Issue: The Neuroscience of Decision Making and Law, 27*, 273-296.
- \* Ducker, J. N., Salerno, J. M., Nadjowski, C. J., Bottoms, B. L., & Goodman, G. S. (2009). Child victims, child offenders: An introduction through legal cases. In B. L. Bottoms, C. J. Nadjowski, & G. S. Goodman (Eds.) Child victims, child offenders. New York: Guildford Press.
- Dumas, J. A., **Salerno**, **J. M.**, & Newhouse, P. (2006). Estrogen for the treatment of cognitive impairment and dementia. *Psychiatric Times*, *23*, 34-44.

#### **WORK IN PROGRESS**

- **Salerno, J. M.**, Stevenson, M. C., Najdowski, C. J., Bottoms, B. L., Wiley, T. R. A., & \*Peter-Hagene, L. The application of sex offender registry laws to juvenile offenders: Biases against stigmatized adolescents. Invited chapter to appear in M. Miller & J. Chamberlain (Eds.). Psychology, law, and the wellbeing of children. Oxford Press.
- **Salerno, J. M.**, Murphy, M. C., & Bottoms, B. L. Give the kid a break—But only if he's straight: Moral outrage drives biases in juvenile sex offender punishment decisions. Manuscript in preparation.
- **Salerno, J. M.**, & Bottoms, B. L. Sensitizing mock jurors to flawed scientific evidence:

  Legal safeguards are effective in combating a flawed defense—but not plaintiff—expert witness.

  Manuscript in preparation.
- Stevenson, M. C., Najdwoski, C. N., **Salerno, J. M.**, Wiley, T. R. A., Bottoms, B. L., \**Sorenson, K. M.* (under review). Does a juvenile's history of sexual abuse enhance or diminish support for juvenile sex offender registration? *Psychology, Public Policy, & Law.*
- **Salerno, J. M**. The Emotional Minority Model: Minority influence, emotion expression, and prejudice. Manuscript in preparation.
- **Salerno, J. M.**, Bottoms, B. L., & \* *Peter-Hagene, L.* Mock jury deliberations about opposing expert witnesses: The effects of central and peripheral arguments on individual versus group decision making accuracy. Manuscript in preparation.
- Bottoms, B. L., **Salerno, J. M**., & Epstein, M. Gender differences in conformity during deliberation: Group gender dynamics or differences in initial opinion? Manuscript in preparation.
- **Salerno, J. M.**, & \* *Peter-Hagene, L.* Probative or Prejudicial? The effect of probative versus non-probative photographs and defendant race on jurors' verdicts. Manuscript in preparation.
- Bottoms, B. L., **Salerno, J. M.**, Najdowski, C. J., *Kemner, G.\**, & *Dave, R.\** Jurors' acceptance of the "gay panic" defense: Effects of political orientation and moral outrage. Manuscript in preparation.

#### **INVITED PRESENTATIONS**

**Salerno, J. M.**, (November, 2011). Discussant, Sixth Annual Conference on Empirical Legal Studies, Northwestern University, Chicago, IL.

- **Salerno, J. M.** & Bottoms, B. L. (September, 2011). *Juror versus Jury Decision Making: Implications for Group Process*. Social Psychology Seminar Series, Indiana University, Bloomington.
- Carter, E., Mayer, N., **Salerno, J. M.**, & Morgan, G. S. (February, 2011). *Social psychology & jury decision making*. Invited panel presentation of graduate student research to visiting graduate applicants. University of Illinois at Chicago: Chicago, IL.
- Emerson, K., Wisneski, D., **Salerno J. M**., & Aramavich, N. (February, 2010). *Jury decision making*. Invited panel presentation of graduate student research to visiting graduate applicants. University of Illinois at Chicago: Chicago, IL.
- Aramavich, N., Tripathi, R., **Salerno, J. M**., Wisneski, D. (February, 2009). *Can jurors identify junk science? Effects of need for cognition and legal safeguards on jurors' decisions*. Invited panel presentation of graduate student research to visiting graduate applicants. University of Illinois at Chicago: Chicago, IL.
- **Salerno, J. M.**, Stevenson, M. C., Najdowski, C. J., Wiley, T. R. A., Bottoms, B. L. (May, 2008). *Public perception of the application of sex offender registration laws to juvenile sex offenders*. Invited paper presented at Association for Psychological Science: Annual Convention pre-conference meeting for Preventing Child Maltreatment, May 2008, Chicago, IL.
- Harmon, V., Tripathi, R., Morgan, G. S., & **Salerno, J. M.** (February, 2007). *Jurors' understanding of scientific expert testimony*. Invited panel presentation of graduate student research to visiting graduate applicants. University of Illinois at Chicago: Chicago, IL.
- **Salerno, J. M.** (February, 2005). *Effects of cross-examination, deliberation and need for cognition on jurors' ability to evaluate the quality of scientific testimony*. Invited talk sponsored by Psychology Club: Middlebury College: Middlebury, VT.

#### **CONFERENCE PRESENTATIONS**

- **Salerno, J. M.,** Lytle, B., & \* Cunningham, J. (June, 2012). Emotion and jury deliberation: Does expressing emotion make stereotyped holdout jurors more or less persuasive? Paper presented at the annual meeting of Law and Society, Honolulu, HI.
- **Salerno, J. M.,** Bottoms, B. L., & Peter-Hagene, C. L. (March, 2012). *Peripheral arguments can sometimes help juries evaluate expert witness quality*. Paper presented at the annual meeting of the American Psychology-Law Society, San Juan, Puerto Rico.
- Peter-Hagene, C. L. & **Salerno, J. M.** (March, 2012). *The interactive effect of anger and disgust on moral outrage and jurors' verdicts*. Poster presented at the annual meeting of the American Psychology-Law Society, San Juan, Puerto Rico.
- Salerno, J. M., Murphy, M. C., & Bottoms, B. L. (January, 2012). Give the kid a break—But only if he's straight: Moral outrage drives biases in juvenile sex offender punishment decisions. Poster presented at the Meeting of Society for Personality and Social Psychology, San Diego, CA. (Received SPSP Student Poster Award.)
- **Salerno, J. M.**, Bottoms, B. L., & Epstein, M. (May, 2011). *Gender differences in conformity: Explained by group gender dynamics or by differences in initial opinion?* Paper presented at the Meeting of the Association for Psychological Society, Washington D.C.

- **Salerno, J. M.,** & Bottoms, B. L. (March, 2011). *Give the kid a break -- but only if he's straight: Public support for sex offender registration is biased against adolescent gay sex*. Paper presented at the Meeting of the American Psychology & Law Society, Miami, FL.
- **Salerno, J. M.**, & \* Peter-Hagene, L. (March, 2011). Gruesome evidence: Probative or prejudicial? The effect of probative versus non-probative photographs and defendant race on jurors' verdicts. Paper presented at the Meeting of the American Psychology & Law Society, Miami, FL.
- \* Peter-Hagene, L. C., Salerno, J. M., & Bottoms, B. L. (March, 2011). Defendant race and juror gender effects on verdicts in a murder case. Poster presented at the Meeting of the American Psychology-Law Society, Miami, FL.
- **Salerno, J. M.**, Bottoms, B. L., \* *Vaca, R., & \* Larkin*, A. (March, 2010). *Cross-examination and jury deliberation protect against flawed expert witnesses only when they testify for the defense*. Paper presented at the Meeting of the American Psychology-Law Society, Vancouver, Canada.
- Salerno, J. M., Bottoms, B. L., \* Peter-Hagene, C. L., \* Roy, K., & \* Vargas, M. (March, 2010). Jurors' reliance on peripheral versus central processing of expert testimony during deliberation. Paper presented at the Meeting of the American Psychology & Law Society, Vancouver, Canada.
- Najdowksi, C. N., Stevenson, M. C., **Salerno, J. M.**, Wiley, T. R. A., Bottoms, B. L., & \* *Sorenson, K. M.* (March, 2010). *Perceptions of abuse history as a cause of juvenile sex offending*. Poster presented at the Meeting of the American Psychology & Law Society, Vancouver, Canada.
- **Salerno**, **J. M.**, Bottoms, B. L., \* *Larkin*, A., & \* *Vaca*, R. (March 2009). *Can cross-examination and deliberation improve jurors' evaluation of scientific expert testimony?* Poster presented at the Meeting of the American Psychology & Law Society, San Antonio, TX.
- **Salerno**, **J. M.**, \* *Vargas*, M., & Bottoms, B. L. (March 2009). *Do women participate less than men in jury deliberation for a case involving scientific evidence?* Poster presented at the Meeting of the American Psychology & Law Society, San Antonio, TX.
- Salerno, J. M., Stevenson, M. C., Bottoms, B. L., Wiley, T. R. A., Najdowski, C. N., \* *Pimentel, P.,* \* *Vaca, R.* (March 2009). *Public support for juvenile sex offender registry laws: Reaction to threat or moral outrage* Paper presented at the Meeting of the American Psychology & Law Society, San Antonio, TX.
- **Salerno**, **J. M.**, Stevenson, M. C., Bottoms, B. L., Najdowski, C. J., Wiley, T. R. A., \* *Vaca Jr.*, *R.*, & \* *Schmillen*, *R*. (February, 2009). *Are juvenile sex offender registry laws motivated by perceptions of threat or punishment motives?* Poster presented at the Meeting of the Society for Personality and Social Psychology, Tampa, FL.
- **Salerno**, **J. M.**, Veilleux, J., & Bottoms, B.L. (March, 2008). *How do jurors reason about science?*Poster presented at the Meeting of the American Psychology & Law Society, Jacksonville, FL.
- **Salerno**, **J. M.**, & McCauley, M. (March, 2006). *Effects of cross-examination and need for cognition on juror participation during deliberations*. Poster presented at the Meeting of the American Psychology & Law Society, St. Petersburg, FL.
- Newhouse, P., Dumas, J., Naylor, M., **Salerno, J. M.**, Hancur, K., & Johnson, J. (November, 2005). Estrogen agonist and antagonist effects on anticholinergic-induced cognitive dysfunction in postmenopausal women. Poster presented at the Meeting of the Society for Neuroscience, Washington, D.C.

**Salerno**, **J. M.** & McCauley, M. (March, 2005). Effects of cross-examination, deliberation & need for cognition on jurors' ability to evaluate the quality of scientific testimony. Paper presented at the Meeting of the Eastern Psychological Association, Boston, MA.

#### LEADERSHIP AND SERVICE

Committee of Graduate Studies, Elected Student Representative, 2009 –2011 Psychology Representative on the Graduate Student Council, 2009 – 2011 American Psychology Law Society Campus Representative, 2008-2010 Ad hoc Reviewer for:

Psychological Science Journal of Personality and Social Psychology Journal of Experimental Social Psychology Journal of Applied Social Psychology Basic and Applied Social Psychology Psychology, Public Policy & Law Law & Human Behavior Psychology, Crime, & Law Child Maltreatment

Ad hoc grant proposal reviewer for the National Science Foundation

#### TEACHING EXPERIENCE

#### Instructor

• Statistical Methods in Behavioral Sciences, Spring 2012

#### **Discussion Section Instructor**

- Laboratory in Social Psychology (Fall 2008)
- Research Methods in Psychology (Fall 2006, Spring 2007, Summer 2007, Fall 2007, Spring 2008)

#### Coordinator

 Psychology 100 Subject Pool (Fall 2008, Spring 2008, Summer 2008, Fall 2009, Spring 2009, Summer 2009, Fall 2010)

#### **Guest Lecturer**

- Psychology 242, Introduction to Research Methods (Fall 2011)
- Psychology 417, Psychology & Law (Spring 2010)

#### **TEACHING INTERESTS**

- Introduction to Psychology
- Research Methods
- Statistics
- Social Psychology
- Psychology & Law
- Group Processes and Intergroup Relations
- Prejudice, Stereotyping, and Racism
- Emotion and Decision Making

#### PROFESSIONAL AFFILIATIONS

- Society for Empirical Legal Studies
- Law and Society Association
- Society for Personality and Social Psychology
- American Psychology-Law Society
- Association for Psychological Science
- The Society for the Psychological Study of Social Issues
- Psi Chi