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Vandello, Joseph A.; Ransom, Sean; Hettinger, Vanessa E.; and Askew, Kevin, "Men's misperceptions about the acceptability and attractiveness of aggression" (2009). *Department of Psychology Faculty Scholarship and Creative Works*. 40.

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## Men's misperceptions about the acceptability and attractiveness of aggression

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### ARTICLE INFO

#### Article history:

Received 27 May 2009

Revised 13 August 2009

Available online 21 August 2009

#### Keywords:

Aggression

Pluralistic ignorance

Gender beliefs

Norm perpetuation

Descriptive norms

Injunctive norms

### ABSTRACT

Male norms about aggression may be perpetuated in part by the belief that aggression is more expected or socially desirable than it really is. This paper explores the accuracy of people's beliefs about the acceptability of aggression by examining men's perceptions of descriptive (what their peers do) and injunctive norms (what their peers approve of or desire). Study 1 found that men (but not women) overestimated the aggressiveness of their peers. Study 2 demonstrated that men (but not women) overestimated peer approval of aggression and disapproval when an affront was not responded to aggressively. Study 3 found that men overestimate how attractive aggression is to women. Study 4 found that greater perceived discrepancies in aggression between self and peers was related to lower self-esteem, a weaker gender identification, and greater feelings of social marginalization, suggesting that men's misperceptions about aggression norms have negative consequences for self-perceptions.

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"His fights are demonstration matches, and they are designed to impress the victim and the audience. The impression left is presumed to govern future interactions with him. He is worried that if he does not follow this course of action he will be mistaken for a weakling or a coward." – Hans Toch, *Violent Men*, 1969.

In Toch's (1969) interviews with prisoners, he noted a strong current of impression management underlying prison violence, in which prisoners engaged in violence with one another in order to impress their peers. As other scholars have noted, this is probably not exclusive to prison populations. A good deal of men's aggression is motivated by self-presentational concerns (Felson, 1978; Tedeschi, Smith, & Brown, 1974). That is, people (particularly men) may resort to aggression in conflict situations because they believe it will earn them social prestige or respect, or because it will be seen as attractive to others. Similarly, men may act aggressively out of fear that non-aggressive, passive, or conciliatory responses to conflicts may mark them as less masculine (Archer, 1994; Cohen & Vandello, 1998). In short, the decision to behave aggressively is influenced by a person's beliefs about what others approve of and expect (*perceived injunctive norms*). Similarly, aggression may also be influenced by what people believe others would do themselves, regardless of whether it is socially approved (*perceived descriptive norms*) (Cialdini, Reno, & Kallgren, 1990; Reno, Cialdini, & Kallgren, 1993).

Aggression-related beliefs are central to several prominent theories of aggression. For example, according to Huesmann's

(Huesmann, 1988; Huesmann & Guerra, 1997) information-processing model of aggression, normative beliefs about aggression (i.e., an individual's beliefs about the social appropriateness or inappropriateness of aggression in a circumstance) can stimulate the use of aggressive scripts. Tedeschi and Felson's (1994) social interaction theory of aggression argues that aggressive behavior is guided by expected rewards, costs, and probabilities of obtaining desired outcomes, and Bandura's (1977) social learning theory talks about outcome efficacy, or beliefs that actions will produce desired outcomes. Similarly, according to Anderson and Bushman's (2002) general aggression model, beliefs about aggression serve as proximate inputs that affect a person's affective state in potentially aggressive encounters. In each case, aggressive behavior is predicated on instrumental beliefs about aggression. Thus, an important question in the advancement of theories of aggression concerns the accuracy of such beliefs. To our knowledge, however, very little research has examined whether people accurately assess aggression norms. Specifically, the accuracy of men's beliefs about the social approval or disapproval of aggression is unclear, as is the accuracy of men's beliefs about the aggressiveness of their peers.

There are reasons to suspect that men's beliefs might be inaccurate. Norms about aggression, particularly for boys, are ambiguous and contradictory. On the one hand, there are clear formal and legal prohibitions against the use of many forms of aggression and, informally, both boys and girls are discouraged from fighting (Fagot & Hagan, 1985; Lytton & Romney, 1991). On the other hand, aggression, toughness, and the willingness to fight and use violence are central, recurring themes in various analyses of the prescriptive components of masculinity and the male gender role

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across diverse cultures<sup>1</sup> (Archer, 1994; Brannon, 1976; Eagly & Steffen, 1986; Gilmore, 1990; Kimmel, 1996; Nisbett & Cohen, 1996; Thompson & Pleck, 1986; Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008; Williams & Best, 1990). Boys can be rewarded for having a reputation for toughness and recklessness, and when a male is insulted and fails to respond, he risks damage to his reputation (Nisbett & Cohen, 1996) and the possibility of being seen as someone who can be taken advantage of (Goffman, 1967). Thus, to the extent that boys and men form their beliefs about aggression based on these social scripts, they probably receive quite mixed messages.

### Past research on beliefs about aggression

Although very little research has examined the accuracy of people's beliefs about collective attitudes toward aggression, there are related bodies of research on aggression-related beliefs. For instance, the sizeable literature on the hostile attribution bias (Crick & Dodge, 1994; Dill, Anderson, Anderson, & Deuser, 1997; Kenny et al., 2007; Orobio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002) suggests that distortions in individuals' chronic attributions about others' perceived hostile intent is a trigger for aggression. Like the present focus, this research suggests that perceptions may be more important than reality in predicting behaviors. However, the present focus is on people's beliefs about aggression norms in general, whereas research in attributional biases has focused on variation in individuals' specific beliefs about others' hostile intentions directed at them.

Huesmann and colleagues (Huesmann, 1988; Huesmann & Guerra, 1997; Huesmann, Guerra, Miller, & Zelli, 1992) have examined what they label "normative beliefs" about aggression, which are defined as self-regulating beliefs about the appropriateness of social behaviors. They find that individuals' normative beliefs predict their aggressive behavior. Note, however, that the focus of this research has been on individuals' own *internal* beliefs about the appropriateness of aggression (e.g. "it's okay to hit others if they hit you first"), rather than their beliefs about aggression *norms* (that is, beliefs about what others would do or would approve).

Other research has looked at gender differences in how men and women understand their own aggression (Archer & Haigh, 1997, 1999; Campbell, 1993; Campbell, Muncer, McManus, & Woodhouse, 1999). This research has generally found that men hold instrumental beliefs about aggression whereas women hold expressive beliefs. That is, men often believe their aggression serves as a means of controlling others' behavior whereas women see their aggression as an expressive outburst reflecting a temporary loss of self-control. As with the normative belief studies reviewed above, this research has focused on individuals' internal beliefs about their own aggression rather than beliefs about others.

In summary, while research has examined beliefs about aggression from a number of angles, very little is known about people's beliefs regarding descriptive and injunctive norms for aggression or about the accuracy of such beliefs.

### What forms can misperceptions take?

Misperceptions can be defined as the difference between one's *beliefs* about others' attitudes and others' *actual* self-reported attitudes. To the extent that misperceptions exist about aggression norms, these misperceptions can take several forms. One can have misperceptions about one's same-sex peers or misperceptions about the other sex. Furthermore, one can be mistaken either in the injunctive or descriptive components of these beliefs.

<sup>1</sup> There are of course, cultural differences in male attitudes and norms regarding the use of aggression, a point on which we elaborate shortly.

### Misperceptions about same-sex peers

Research on social norms suggests that people often have misperceptions about the views of the collective (Miller & McFarland, 1987; Miller & Prentice, 1994). College students believe they are more inhibited than their peers (Vorauer & Ratner, 1996), which can lead them to believe that their peers are more comfortable than they are taking health and social risks (Hines, Saris, & Throckmorton-Belzer, 2002; Lambert, Kahn, & Apple, 2003; Prentice & Miller, 1993; Suls & Green, 2003). People similarly overestimate how harshly they would be judged after social blunders (Savitsky, Epley, & Gilovich, 2001) and mistakenly assume that they are more concerned with appearing foolish or naïve than others are (McFarland & Miller, 1990).

Often, this miscalibration between self and others can lead to *pluralistic ignorance*, when people falsely believe that their private opinions are deviant from opinions held by most others (Miller & McFarland, 1987). At the collective level, this type of miscalibration can have the effect of perpetuating unpopular social norms, because although people privately do not endorse the norm, they assume nearly everyone else does (Miller & Prentice, 1994; Prentice & Miller, 1996). If men overestimate peer approval of aggression, aggression norms may be perpetuated despite not being privately endorsed by most individuals (Vandello & Cohen, 2004).

### Cross-sex miscalibrations

Another type of misperception between self and others is the tendency for members of one sex to have misperceptions about the beliefs and attitudes of members of the other sex. It should come as no surprise to any casual observer of the sexes that men and women sometimes have gross misperceptions about the attitudes and preferences of the other sex. For instance, men tend to overestimate women's sexual intent, and women tend to underestimate men's commitment to relationships (Haselton & Buss, 2000). In sexual encounters, men mistakenly believe that proposing condom use will diminish the chance of sexual intercourse (Bryan, Aiken, & West, 1999). Concerning ideal body types, women believe their boyfriends want them to be much thinner than boyfriends actually prefer (Fallon & Rozin, 1985), and men mistakenly believe women prefer much more muscular body types than women actually prefer (Pope et al., 2000). Men's beliefs about aggression may be similarly misguided in that they may overestimate women's approval of or attraction to aggressive men.

### Misperceptions about conflict and aggression

Partly because people's intentions in conflicts are not always clear, aggressive behavior may be ripe for misperception (Vandello & Cohen, 2004). Ambiguous signals are often sent in conflict situations and such situations often leave substantial room for subjective interpretations by participants and bystanders. For example, when bystanders to a dispute are silent, does this signal approval or disapproval of escalating the conflict? What if an antagonist laughs? Is this an insult, or merely an attempt to diffuse tension?

Another reason why aggression may be an area in which men are particularly prone to misperceptions is that aggression is tied to beliefs about gender. Because aggression is a core dimension of the traditional masculine gender role (Gilmore, 1990; Thompson & Pleck, 1986), men may feel pressure to live up to this prescriptive component. This could mean displaying an outward veneer that is more approving of aggression than one's privately held attitudes would suggest.

The cultural context of aggression may also play a role in perpetuating mistaken beliefs about aggression. A reputation for

aggression is more central to men's identity in certain cultures and subcultures than in others. For instance, gangs and inner city street cultures often socialize boys through violent rituals (Anderson, 1994; Horowitz & Schwartz, 1974). Similarly, in cultures of honor, boys are taught to uphold their reputation with aggression if necessary (Nisbett & Cohen, 1996).

It may be that in cultures that socialize boys to favor aggression as a dominant behavioral script, misperceptions about aggression will be larger than in cultures with less bellicose socialization. If males are uncomfortable or hesitant to use aggression (and given the risks aggression entails, men in most situations probably are), all but the most hardcore adherents will likely believe that they fall short of cultural norms. Alternatively, the degree to which men overestimate the acceptability and attractiveness of aggression may be similar across cultures despite cultural differences in aggressive socialization. While males might believe that aggression is more common and socially expected in certain cultures, personal attitudes about aggression may also be more positive in these cultures, and thus the size of the misperceptions might not be necessarily any larger than in more peaceful cultures.

We collected data recently that addressed this issue by comparing men in honor cultures (the US South) and non-honor cultures (the US North; Vandello, Cohen, & Ransom, 2008). In this study, men from college campuses in the southern (Kentucky, Florida) and northern US (Illinois) completed questionnaires describing several scenarios in which a person is insulted. We asked participants to estimate the likelihood that they would punch the antagonist in these situations, and also the likelihood for other men at their university. Although *all* groups overestimated the aggressiveness of their peers, in fact southern men *did* overestimate to a greater extent than northern men. Thus, cultural attitudes and norms about aggression may indeed influence the size of men's misperceptions, but the results also suggest that mistaken beliefs about aggression are widespread and robust across cultural contexts.

## Overview of current studies

The present series of studies sought to extend our initial research in several ways. To compare people's private beliefs about aggression with their beliefs about social norms regarding aggression, we examined the miscalibrations people might have between their own attitudes and those of their same-sex peers. We also explored cross-sex miscalibrations by comparing women's actual attitudes about aggression with men's beliefs about women's attitudes. We predicted that men would believe that other men are more aggressive, more approving of aggression, and more disapproving of non-aggression, than they themselves are. We also predicted that men would misperceive women's views on aggression by estimating that women would find aggression more attractive than women actually do. We were also interested in examining the implications of these misperceptions for the self. To the extent that men overestimate descriptive and injunctive norms for aggression, they may see themselves as not measuring up to standards of masculinity. If this is the case, we should expect an association between the degree to which men perceive a discrepancy in their own versus their peers' endorsement of aggression and measures of self-esteem and masculine identification.

In Study 1, we asked people to predict how aggressively they would act in a conflict scenario, and we compared these estimates to estimates participants made for their same-sex peers. We sought to replicate Vandello, Cohen and Ransom (2008b) finding that men overestimate the aggressiveness of their peers, and we also wanted to extend this finding to see if it was specific to males or whether females would show the same overestimation. In Studies 2A and 2B, participants read a scenario in which a character is

affronted. Men and women were asked to predict how much their same-sex peers would disapprove of non-aggression (Study 2A) and how much they would approve of aggression (Study 2B) in response to the affronts, and we compared these predictions to people's own self-reported approval and disapproval. Study 3 turns to men's misperceptions about women. Men predicted how attractive women would find aggressive responses and we compared these predictions to women's own responses. Finally, in Study 4 we examined the implications of misperceptions about aggression, by testing whether misperceptions were correlated with measures of self-esteem, gender identification, and social marginalization.

## Study 1: overestimating peer aggressiveness

Our first study explored men's and women's perceptions of descriptive norms about aggression. That is, we asked whether people believe that their peers are more aggressive than they themselves are. Because aggression is more central to male than female gender roles, men in particular might believe that their peers see aggression as a socially valued characteristic, and thus, they may falsely believe that their peers would not share their own hesitancy to behave aggressively. Thus, we predicted that men would be especially likely to overestimate the aggressiveness of their same-sex peers.

### Methods

#### Participants

Sixty undergraduates (30 men and 30 women) from the University of South Florida completed the study in classroom settings.

#### Procedure

Participants read a vignette titled "Public Conflict Scenario," in which the central character is at a local campus restaurant with some friends following a home football game. In the vignette, another college student (participants were told that this person was the same-sex as them) bumps the main character and spills his or her soda down the front of the main character's shirt. Rather than apologize, the offender "notices your [the victim's] USF t-shirt, laughs, and says, 'Oh, it's just a USF fan, I don't feel bad.'" Participants were then told that a curious crowd has turned to watch the event. The main character asks the offender to apologize but the person just smiles and says, "Yeah, right." Embarrassed and taken aback, the main character says nothing and walks away. All respondents were asked to imagine themselves as the main character and to imagine the individual who spilled a drink on them as someone of the same-sex. Following the scenario, participants were asked to estimate the probability that they would punch the offending party (0–100%). Next, they were asked to imagine 100 same-sex students on their campus and to estimate the number of students who would punch the offender, essentially creating a 1 out of 100 probability that any given peer would punch the offender. Thus, the difference between self and peer estimates was the main dependent variable.

### Results

In general, respondents believed themselves less likely to use aggression than their peers. Individuals estimated themselves as having a 29% (SD = 30.8%) chance of punching the antagonist, compared to a 40.6% (SD = 25.2%) chance for their peers,  $F(1, 58) = 10.40, p < .01, d = .59$ . However, this perceived self-other difference was driven largely by men. As revealed by simple effects tests, male respondents believed themselves to be significantly less likely than their peers to punch the antagonist (28.3% [29.8] to 45.5% [27.6]),  $F(1, 58) = 11.32, p < .01, \eta_p^2 = .16$ . For female



respondents the self-other difference was small and not significant (29.7% [32.2] to 35.8% [22.1]),  $F(1, 58) = 1.43, p > .20, \eta_p^2 = .02$ . The sex by 'self versus other' interaction was not significant, however,  $F(1, 58) = 2.35, p = .13, \eta_p^2 = .04$ .

As another way to consider the data, we examined the number of people who considered themselves more likely to use aggression than their peers. Only 5 of 30 (16.7%) men rated themselves more aggressive than their peers, compared to 12 of 30 (40%) women,  $\chi^2(60) = 4.02, p < .05, r = .26$ .

## Discussion

This study revealed a form of pluralistic ignorance (Miller & Prentice, 1994) in which individuals mistakenly assume their willingness to aggress differs from the willingness of their peers to do so. The findings are consistent with earlier research (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008a; Vandello et al., 2008b) in which we found that men underestimated their aggressiveness relative to their peers. In the present study, men were more likely to overestimate their peers' likelihood to aggress than were women. In fact, the perceived self-other disparity for men (17.2%) was nearly three times as large as the perceived disparity for women (6.1%), and very few men believed they were more likely to aggress than their peers.

An alternative explanation for the findings is that this is simply another example of a more general tendency for people to believe they are falsely unique or above average (Alicke & Govorun, 2005; Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Chambers, 2008; Suls & Wan, 1987). Rather than seeing aggression as a socially valued trait, men may see aggression negatively, and thus validate their moral superiority by rating themselves as less aggressive than their peers. However, if this interpretation is correct, we would expect women to also show the effect, given that women are at least as likely as men to see aggression in a negative light. We return to this alternative interpretation in Study 4.

## Study 2A: overestimating the negative consequences of non-aggression

Having established that men (but not women) overestimate descriptive norms for aggression, we next turn to an examination of injunctive norms about aggression. Specifically, we explored whether men might misperceive the costs of not using aggression in conflict situations. Because of the link between aggression and the masculine gender role, men may think that if they do not answer a public insult with a decidedly aggressive response their peers may think less of them and see them as less masculine. However, such a concern may be misplaced or overblown to the extent that men overestimate their peers' disapproval (see Savitsky et al., 2001, for evidence of people's overblown fears of embarrassment). To test this possibility, male and female participants responded to a vignette in which an individual responds to a public insult non-aggressively, by walking away from the conflict. We made two predictions: First, participants would believe their peers were more likely than themselves to view a person negatively for a non-aggressive response. Secondly, this self-other difference would be exclusive to or larger for men (compared to women), for whom the perceived social costs of appearing "wimpy" are greater.

## Methods

### Participants

Seventy-nine undergraduates (38 men and 41 women) from the University of South Florida completed the study as part of a larger

packet of unrelated questionnaires. Respondents received extra course credit for their participation.

### Procedure

Participants read the same campus restaurant scenario as in Study 1. Half the participants were randomly assigned to a condition in which they were asked to imagine themselves as the main character (the "victim") and half were asked to imagine themselves as a bystander to the events. Following the scenario, participants answered three questions intended to measure perceptions of the negative consequences of a non-aggressive response. Those in the victim condition were asked the following questions: (1) "How likely are observers who saw this incident to think you were a wimp?" (2) "How likely are observers to form a negative impression of you as a result of the incident?" (3) "How likely are observers who saw this incident to think you were honorable?" Participants in the observer condition were asked similarly worded questions about their judgment of the victim (e.g., "How likely are you to think the individual who had the drink spilled on him/her was a wimp?"). All responses were given on Likert scales from 1 ("Not at all likely") to 11 ("Virtually certain"). The three responses were averaged (reverse scoring the third question) to form an index measuring overall perceived negative evaluations ( $\alpha = .66$ ).

### Results

As expected, participants believed that others would think more negatively of them for not responding aggressively ( $M = 6.43, SD = 2.07$ ) than they actually thought of others who responded the same way ( $M = 5.24, SD = 1.97$ ),  $F(1, 75) = 7.46, p < .01, d = .59$ . Also as predicted, the extent to which participants overestimated negative reactions by their peers was moderated by gender (interaction between sex and questionnaire version:  $F(1, 144) = 4.19, p < .05, \eta^2 = .05$ ). Men's evaluation of others, 5.45 (2.21), was significantly less negative than the evaluations they predicted others would have of themselves, 7.50 (1.60),  $F(1, 75) = 11.06, p < .001, d = 1.06$ . For women, this self-other discrepancy in negative evaluations was not significant (5.06 [1.78] versus 5.35 [1.95],  $F < 1$ ; see Fig. 1).

### Discussion

This study provided evidence that men may misperceive injunctive norms regarding the use (or non-use) of aggression in conflict situations. Participants who were asked to imagine themselves in conflict situations thought that other people would stigmatize them for responding non-aggressively, even though participants themselves viewed another's non-aggression less harshly. As

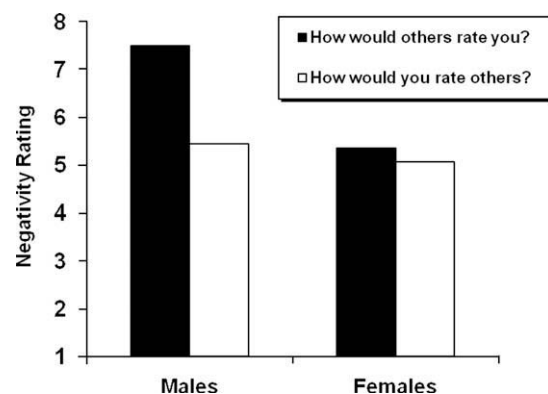


Fig. 1. Negative evaluations of someone who did not respond aggressively to an affront, Study 2A.

predicted, this was only true for male participants, for whom masculine identity concerns may have been primed by the scenario.

One implication of men's inflated belief that others will perceive them as weak or wimpy for not using aggression is that they might resort to violence even when they do not privately internalize pro-aggression norms. In this way, male norms about violence might be perpetuated despite not being strongly endorsed by most men. This would be especially likely when coupled with the mistaken belief that most other men are more aggressive than men actually are (Study 1). In our next study, we extended Study 2A by examining perceptions of another side of injunctive norms about aggression: perceived approval of aggressive behavior.

### Study 2B: overestimating peer approval of aggression

As in Study 2A, participants read a hypothetical conflict scenario and we compared self-responses to beliefs about peers. We predicted that participants would believe their peers were more likely than themselves to approve of an aggressive response, and that the self-other difference would be larger for men than for women.

For this study, we also made an improvement in the referent group for which participants provided estimates. Rather than referring simply to perceptions of "observers" as in Study 2A, we asked people to imagine their (same-sex) friends. This ensured that people compared themselves to their same-sex peers. In addition, it allowed us to test a possible concern raised by Study 2A, that people see themselves as different from other, dissimilar individuals, but not their immediate peers (i.e. friends).

#### Methods

##### Participants

One hundred-three undergraduates (52 men and 51 women) from the University of South Florida completed the study in classroom settings.

##### Procedure

Participants read the same "Public Conflict Scenario" as in Study 2A, but in this version, the central character responds to the insult by punching the offending person in the face. Half of the participants were asked to imagine themselves as the main character (the "victim") who throws the punch and half were asked to imagine themselves as a bystander who witnesses their friend throw the punch. In both versions, participants were asked to imagine that all the characters were the same sex as themselves.

Following the scenario, participants answered three questions about approval of an aggressive response. Those in the victim condition were asked the following questions: (1) "How much would your friends approve of your behavior?" (2) "How likely would your friends be to have a positive impression of you as a result of the incident?" (3) "How likely is it that your friends would be upset with you for your actions?" Participants in the observer condition were asked similarly worded questions about their judgment of the victim (e.g., "How much would you approve of your friend's behavior?"). All responses were given on Likert scales from 1 ("Not at all" or "Not at all likely") to 11 ("A great deal" or "Virtually certain"). The three responses were averaged (reverse scoring the third question) to form an index measuring overall perceived approval ( $\alpha = .86$ ).

#### Results

As predicted, participants believed that their friends would be more approving of them for responding aggressively ( $M = 7.82$ ,  $SD = 2.12$ ) than they would be of their friends ( $M = 6.33$ ,

$SD = 2.43$ ),  $F(1, 99) = 11.22$ ,  $p < .01$ ,  $d = .65$ . Also, as predicted, this self-other difference in perception was driven by the male participants. Men's predicted approval by their peers (8.37 [2.07]) was significantly greater than their own approval for the aggressive response (6.00 [2.31]),  $F(1, 99) = 14.35$ ,  $p < .001$ ,  $d = 1.08$ . However, women's prediction of their peers' approval (7.30 [2.08]) did not differ from their own approval (6.69 [2.54]),  $F < 1$ ; see Fig. 2; interaction between sex and questionnaire version:  $F(1, 99) = 3.93$ ,  $p = .05$ , ( $\eta_p^2 = .04$ ).

#### Discussion

As in Study 2A, male participants misperceived injunctive peer norms about aggression, in this case by overestimating peer approval of aggressive responses, whereas women showed no tendency to overestimate their female peers' approval of aggression. This study rules out some alternative explanations for the findings from Study 2A. For example, it could be the case in Study 2A that participants from a relatively peaceable, educated, middle-class background compare their own aggressive tendencies to a referent group that includes the brawling, working-class "other." If so, it is possible that participants could actually be correct in reporting that these 'others' are more in favor of aggression than they themselves are. In the present study, however, the perceived self-other difference was also found when participants were asked to consider their own immediate peer group, which suggests that misperception of norms is a more likely explanation of the findings.

### Study 3: cross-sex misperceptions about the attractiveness of aggression

Having documented men's misperceptions about their male peers with respect to norms about aggression, we next examined the accuracy of men's beliefs about women's attitudes on aggression. To the extent that men overestimate how attractive aggression is to women, this would represent another type of misperception that could independently perpetuate and reinforce aggression norms above and beyond men's misperceptions about their male peers. In Study 3, we presented men and women with various conflict scenarios and asked men how they would likely respond, and what they thought women would believe to be the ideal response. Women were asked to indicate what response they actually thought would be ideal. We anticipated that men would overestimate how attractive women would find aggressive behavior in men. In addition, we also asked participants about their own past experiences with physical aggression in order to examine whether men's beliefs about women's expectations correlated with their own self-reported aggressive behavior.

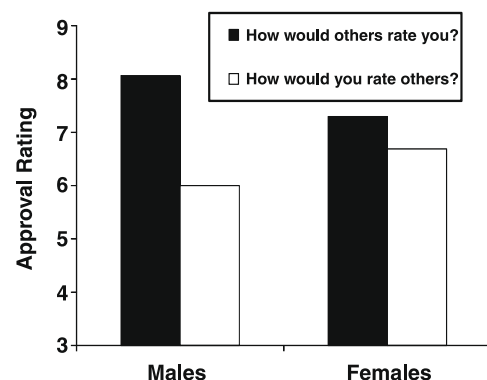


Fig. 2. Positive evaluations of someone who punched an antagonist in response to an affront, Study 2B.

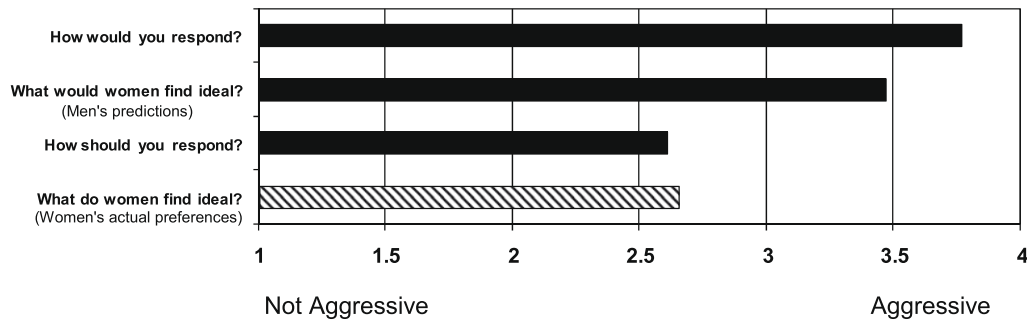


Fig. 3. Men's responses to a hypothetical affront, Study 3.

## Methods

### Participants

Eighty students (40 women and 40 men, pre-screened for heterosexual orientation) from the University of South Florida enrolled in undergraduate psychology courses participated in the study for partial course credit.

### Measures and procedure

Participants completed questionnaires alone or in small groups. The first part of this questionnaire asked participants to read three scenarios involving interpersonal conflicts between men, intended to present a variety of conflicts. In the version of the questionnaire given to men, participants were asked to imagine themselves as the victims in the confrontations. In the female version, women were asked to imagine themselves as observers of the altercations between the men. This allowed us to compare how men thought women would react to male aggression with women's actual reactions. In the first scenario, a man gets bumped at a party and the man who bumps him calls him an "asshole." In the second scenario a man and his girlfriend are repeatedly harassed while attending a football game (female respondents were asked to imagine themselves as the girlfriend in this scenario). The third scenario described a couple at a mall food court whose seats are stolen, who then get insulted when they try to reclaim them (women were again asked to imagine themselves as the girlfriend).

Following each scenario, men were asked what (1) they would likely do in response to the conflict, (2) ideally, what they should do, and (3) what a woman would think the ideal man should do. For each question, respondents chose one of six behavioral responses that ranged from non-aggressive to progressively more aggressive: 1 = *Walk away without responding/ignore it*, 2 = *Laugh it off*, 3 = *Make a verbal retort*, 4 = *Get in the guy's face without making physical contact*, 5 = *Push the guy*, 6 = *Punch the guy*. Because the 6-item behavioral rating scale is an ordinal scale, we needed to convert scale responses to interval values. We asked an independent sample of twenty-eight students to rate each item label of the aggression scale (presented in random order) in terms of how aggressive or confrontational the response was. The average ratings produced by our volunteers closely matched the original scale values (1.21 = *Walk away without responding/ignore it*, 1.79 = *Laugh it off*, 3.79 = *Make a verbal retort*, 4.43 = *Get in the guy's face without making physical contact*, 5.04 = *Push the guy*, 6.00 = *Punch the guy*). We converted raw scale values to these converted scale values for all analyses (though results look the same if using unconverted scores).

Next, after each scenario men answered two questions in which they predicted how attractive women would find an aggressive response (punching the offender) and non-aggressive response (walking away) using five-point (1 = *not at all* to 5 = *very much*) Likert-type scales.

After each scenario, female participants were asked what the ideal male should do (from walking away to punching the offender). They also rated how attractive they would find an aggressive response (punching the offender) and a non-aggressive response (walking away).

Following the scenario portion, participants were provided a list of twenty-five personality traits and asked about the attractiveness of each. Female participants rated how attractive they found these traits in a man using a 1 to 7 scale (*not at all* to *extremely*), whereas male participants were asked to predict how attractive women found these traits in men. The list of traits was developed for the purpose of this study. Embedded within the list were four traits that pertained to the aggressive male role: *tough*, *aggressive*, *masculine*, *macho*. The remaining 21 traits were unrelated to aggression and were used to disguise the nature of the study: *caring*, *handsome*, *funny*, *talkative*, *smart*, *obedient*, *religious*, *wealthy*, *considerate*, *reliable*, *prompt*, *hard-working*, *self-motivated*, *protective*, *sweet*, *patient*, *confident*, *impulsive*, *sensitive*, *courageous*, *mature*.

The questionnaire also included a self-report measure of aggression. Both male and female respondents reported how many physical fights they had been in since 7th grade, and how many fights they believed the "average male" had been in. Finally, participants answered a few demographic questions, were thanked, and dismissed.

## Results

### Conflict scenarios

Across the three scenarios, we were interested in four main responses: (1) what actions men said they would take, (2) what actions men said they should take, (3) what actions men believed women would find ideal, and (4) what actions women actually reported finding ideal. The pattern of responses was very similar across each of the three conflict scenarios, so for ease of presentation we aggregated responses for each question across the scenarios to create four composite ratings (average  $\alpha$  for the 3-item aggregates = .57).<sup>2</sup>

As shown in Fig. 3, men reported that they would on average respond moderately aggressively to the insults ( $M = 3.77$  [1.15] on the six-point aggression scale). This number did not differ significantly from men's predictions about the level of aggression women would find ideal ( $M = 3.47$  [1.01], paired  $t[39] = 1.46$ ,  $p > .15$ ). However, as expected, men predicted that women would like more aggressive responses than women themselves reported preferring (men's guesses about women = 3.47 [1.01]; women's own responses = 2.65 [.68]),  $t(78) = 4.21$ ,  $p < .001$ ,  $d = .95$ . Furthermore, men's reports of what they 'would' do in the scenarios were signif-

<sup>2</sup> Because we were concerned that our reliabilities were somewhat low for the three item aggregates, we also ran all analyses reported in the Results for each scenario separately. All significant effects remained significant ( $p < .05$ ) with the exception of one effect ( $p = .11$ ) and all nonsignificant effects remained nonsignificant ( $p > .05$ ).

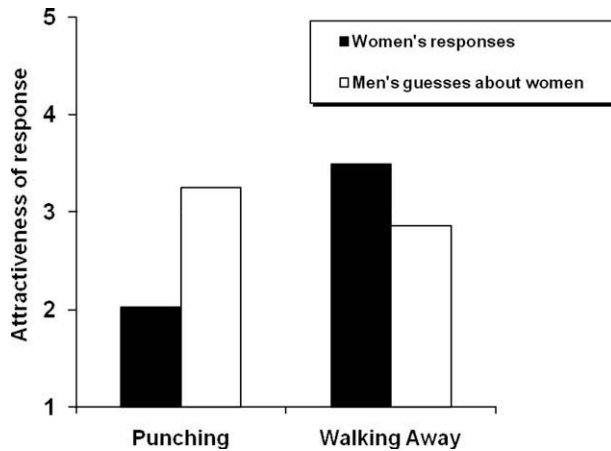


Fig. 4. Ratings of how attractive a woman would find a man who responds to an insult by using violence or nonviolence, Study 3.

icantly more aggressive than what they said they 'should' do in these circumstances (2.61 [.92]), paired  $t(39) = 5.70$ ,  $p < .001$ ,  $d = 1.11$ . In short, men's predicted behavior mirrored what they believed women found ideal, and not what women actually preferred or what men thought they *should* do.

Two items asked women (or asked men to predict women's responses) how attractive they would find a man who responded by walking away from the conflicts and how attractive they would find a man who punched his antagonist. Men overestimated how attractive women would find the aggressive response (men's guess about women = 3.25 [.86]; women's response = 2.03 [.73]),  $t(78) = 6.86$ ,  $p < .001$ ,  $d = 1.55$ . Conversely, men underestimated how attractive women would find the non-aggressive response (men's guess about women = 2.86 [.84]; women's response = 3.49 [.97]),  $t(78) = 3.13$ ,  $p < .01$ ,  $d = .71$  (see Fig. 4). Stated differently, though women greatly preferred a non-aggressive response to an aggressive one,  $t(39) = 6.20$ ,  $p < .001$ ,  $d = 2.01$ , men thought that women would prefer an aggressive response,  $t(39) = 1.80$ ,  $p = .08$ ,  $d = .58$ . Again, there was a dramatic gap between men's guesses about the views of women and women's actual views.

#### Trait ratings

Men rated twenty-five traits with respect to how attractive they thought women found each trait while women rated the traits with respect to how attractive they themselves found them. We created a composite "aggression" trait rating by aggregating the scores of four traits (*tough, aggressive, masculine, and macho*,  $\alpha = .74$ ). Men believed that women found this aggressive trait more attractive than women themselves reported (men's guesses about women = 4.28 [.90]; women's own responses = 3.73 [.99]),  $t(78) = 2.63$ ,  $p = .01$ ,  $d = .59$ .

To test the possibility that women simply rated *all* the traits lower, perhaps because they were more selective than men's predictions anticipated, we took the aggregate of the ratings for the remaining 21 traits not related to aggression and found that women in fact rated these traits higher (5.73 [.41]) than men guessed they would (5.38 [.63]),  $t(78) = 2.91$ ,  $p < .01$ ,  $d = .66$ .

#### Self-reports of aggression

Men reported being in 2.68 (3.59) fights since the 7th grade, and women reported .65 (1.19) fights,  $t(78) = 3.39$ ,  $p < .01$ ,  $d = .77$ . Replicating the finding from Study 1 that men see themselves as less aggressive than their peers, men reported being in significantly fewer fights than they thought the average male had been in (2.68 [3.59] versus 4.38 [2.43]),  $t(39) = 3.59$ ,  $p < .01$ ,  $d = .56$ . We

examined whether men's self-reported aggressive behavior correlated with their views about women's preference for aggressive responses. We predicted that men who believed women supported aggressive responses would be more likely themselves to report having been in fights. Indeed, correlational analysis indicated that men's estimates of how much women would like aggression across the three conflict situations was correlated with number of reported past fights,  $r(40) = .43$ ,  $p < .01$ .

#### Discussion

Adding to men's misperceptions, men appeared to have mistaken beliefs about how attracted women are to aggression. Compared to women's own responses, men overestimated how much aggression women would like to see in response to the conflict scenarios. In addition, the aggressiveness of men's own predicted responses more closely matched their beliefs about what they thought women wanted than what women actually wanted or what men thought they should do.

Men also overestimated women's ratings of the attractiveness of a man who would punch an antagonist, and the attractiveness of aggressive traits in a mate. Furthermore, men underestimated how attractive women would rate the act of walking away from a conflict without using aggression. Effect sizes suggest that the preferences men believe women have concerning aggression and non-aggression are often remarkably different than women's actual preferences. Since aggression is often initiated by males in order to win the favorable attention of females, these findings suggest that, in contrast to popular wisdom gleaned from fictional representations, such strategies may be largely unsuccessful.

Interestingly, men's beliefs about what they *should* do were much less aggressive than what they believed they would do. Despite recognizing that aggression may not be the proper or moral response, men's predicted behaviors closely mirror what they think women would like. This suggests that perceived norms trump personal attitudes about aggression, even when those perceived norms are inaccurate.

We also found some correlational evidence that men's beliefs about women's support for aggression were associated with their own self-reports of past aggression. The usual caveats about causal ambiguity with correlational data apply, but one interpretation of this finding is that men who believe that women support aggression are more likely to behave aggressively, which suggests a real, behavioral consequence of this miscalibration. Self-reports of aggression must be taken with a grain of salt, as people may either lack a clear memory of their past or adjust their reports to conform to expectations and present the self in the best possible light. However, if men who are most likely to over-report their past aggression are the same men who overestimate women's attraction to aggression, this confirms the importance of perceived social norms in influencing men's public (as opposed to private) stance toward aggression. At the very least, the correlation suggests that men may feel pressure to conform to perceived norms.

Together, results of Studies 1–3 suggest that men have misperceptions about both the injunctive and descriptive components of aggression norms. These misperceptions may perpetuate and reinforce male norms for aggression by increasing the likelihood that men will act aggressively, even if they do not internalize the norms as fully as they believe others do.

#### Study 4: misperceptions, self-esteem, and social marginalization

A central argument of our thesis is that if men overestimate the extent to which others expect and approve of aggression, this could



drive them to behave more aggressively than they are comfortable doing because of pressure to conform to perceived norms. The implication is that men's perceptions that they are less aggressive and less approving of aggression than their peers results in feelings of discomfort, lower identification with men, and social marginalization. However, an alternative interpretation of the perceived self-other discrepancies from the first three studies is that this is an example of the robust tendency for people to believe that they are falsely unique and above average (Alicke et al., 1995; Chambers, 2008; Suls & Wan, 1987). That is, rather than feeling marginalized and embarrassed by their perceived lower aggression, men feel quite positive about it.

The fact that overestimation of peer aggression was specific to men but not women in Studies 1 and 2 provides some indirect evidence against a general false uniqueness interpretation, however, we sought more direct evidence of the correlates of aggression norm misperceptions. In our next study, men were again asked to indicate their likely response and the likely response of their male peers to hypothetical conflict scenarios. We then correlated perceived self-other discrepancies with measures of self-esteem, gender identification, and social marginalization. We predicted that larger discrepancies (i.e. believing that one is less aggressive than one's peers) would correlate with lower self-esteem, weaker identification with men, and greater feelings of social marginalization from peers.

## Methods

### Participants

Sixty-two undergraduate men from the University of South Florida completed the questionnaire in return for \$5. We excluded data from one participant who identified his sexual orientation as gay, because several questions pertained specifically to relationships with women.

### Procedure

Participants read the same three conflict scenarios described in Study 3. After each scenario, participants were asked to indicate the likelihood that they would start a physical fight with the antagonist, and then they were asked to predict the likelihood that the "average male student at this university" would start a fight. To create self-other perceived discrepancy scores, we subtracted each participant's own fighting likelihood from their predicted 'average male' fighting likelihood (with positive scores indicating a belief that one's peers would be more aggressive than oneself).

Next, participants indicated how much they would approve of a person in the same situation punching the antagonist (from 1 = "not at all" to 5 = "very much"), and then they predicted how much the average male student at their university would approve. We again created discrepancy scores on the approval variable by subtracting participants' own approval ratings from their estimated 'average male' approval ratings.

Following the three conflict scenarios, participants completed a number of individual difference measures. First, they completed a

nine-item gender identification scale ( $\alpha = .82$ ), using items adapted from Luhtanen and Crocker (1992) and Schmitt and Branscombe (2001). The scale measures the extent to which men identify with men as a social group and the importance of this membership to their self-concept (e.g. "Being a man is an important part of my self-image." "I value being a man"). Next, they completed the single-item self-esteem measure ("I have high self-esteem"; Robins, Hendin, & Trzesniewski, 2001), which has been demonstrated to be as reliable and valid as longer measures. Finally they completed a thirteen-item scale that was developed for the purposes of this study, intended to measure the degree to which men felt marginalized by their male peers and rejected by women. Agreement was indicated using a seven-point (1 = *strongly disagree* to 7 = *strongly agree*) Likert-type scale. The items were: "I often feel like other men don't 'get' me," "I often feel like an outsider among my peers," "I don't really fit in with most male groups," "My interests are typical 'guy' interests" (reverse scored), "At times, I feel like I've been rejected from male groups," "I'm generally most comfortable when I'm hanging out with other guys" (reverse scored), "I don't feel very confident when I'm with a group of guys," "I feel like I have to hide my true self to fit in with my male peers," "My male peers are better at getting girls than I am," "I feel like I would do better with women if I were more like 'typical guys' on campus," "Girls tend to think of me as a friend and ignore me as a man," "Other guys seem better than me at taking the lead with girls they are interested in," "I feel inadequate when guys I hang out with start talking about their sexual conquests." Scale items were averaged to form an overall index of social marginalization ( $\alpha = .90$ ).

Finally, participants completed a few brief demographics questions, were thanked and dismissed.

## Results

### Misperceptions about peers

Replicating the findings from Studies 1 and 2, men overestimated both descriptive and injunctive aggression norms. Averaging responses across the three scenarios, men believed that the average male on their campus would be more likely to punch an antagonist (50.77% [18.80%]) than they themselves would be (40.93% [24.98%]),  $t(60) = 3.46$ ,  $p < .001$ . They also believed that the average male student would be more approving of aggression (3.61 [.82]) than they themselves were (3.16 [1.10]),  $t(60) = 3.67$ ,  $p < .001$ .

### Perceived discrepancies, identification, marginalization, and esteem

The main focus of this study concerned how perceived differences between the self and one's peers is related to gender identification, marginalization from peers, and self-esteem. We predicted that men who believe they are less aggressive than their peers would feel less closely identified with men, more socially marginalized, and have lower esteem (and conversely, those men who feel more aggressive than their peers would identify more strongly with men, would feel more socially integrated, and would have higher esteem). As can be seen in Table 1, results were

**Table 1**

Correlations between various social outcomes and the degree to which one believes other men are more aggressive or approving of aggression than oneself.

	Perceived discrepancy in	
	Likelihood of aggression	Approval of aggression
Gender identification scale	$r = -.31^*$	$r = -.32^*$
13 Item social marginalization scale	$r = .32^*$	$r = .18$
Single-item self-esteem scale	$r = -.24^{**}$	$r = -.28^*$

\*  $p < .05$ .

\*\*  $p < .10$ .

generally consistent with these predictions. Specifically, greater perceived discrepancies in fighting likelihood between self and others (i.e. believing that one is less aggressive than one's peers) were associated with weaker identification with men ( $p < .05$ ), greater feelings of social marginalization ( $p < .05$ ), and marginally lower self-esteem ( $p < .07$ ). Using perceived discrepancies in approval of aggression, greater discrepancies were associated with weaker identification with men ( $p < .05$ ) and lower self-esteem ( $p < .05$ ). The association between perceived discrepancies and social marginalization was in the predicted direction, but was not statistically significant ( $p = .16$ ).

### Discussion

People are most likely to see themselves as unique from others when considering desirable attributes or successful behaviors (Monin & Norton, 2003; Suls & Wan, 1987). If the tendency to overestimate peers' aggressiveness and approval of aggression are part of a general tendency to see oneself as above average or falsely unique, we might expect these misperceptions to be associated with positive views of the self. Instead, this study demonstrates that men's overestimations of descriptive and injunctive aggression norms correlate with lower self-esteem, a weaker identification with men, and feelings of marginalization and/or rejection from their male and female peers.

These findings are important for two reasons. First, the negative self-views associated with these misperceptions are likely to be widespread, as most men (more than two-thirds of the sample in this study) believe they are less aggressive than their peers. Second, these negative self-views can be expected to put pressure on men to conform to perceived norms (by acting more aggressively than they might be privately comfortable with acting) or risk social isolation. Because the findings are correlational, we must caution against assuming that overestimations about aggression play a direct causal role in self-esteem, gender identification, and social marginalization, but the associations are at least suggestive of a link between beliefs about social norms and beliefs about the self.

### General discussion

Sociologist Erving Goffman (1967) described violent transactions as "character contests" in which antagonists attempt to establish dominance or save face at the other's expense. Participants in these interactions come to a consensus that violence is an appropriate or even required means for settling the contest. Daly and Wilson (1988, p. 176) similarly refer to violence as "escalated showing off contests." Implied, but not stated, is that the audience for which one is showing off approves of the aggression. Indeed, bystanders can play a significant role in influencing the course of conflicts. For instance, analyses of homicides have noted the importance of bystanders in increasing the likelihood that conflicts escalate into lethal violence (Luckenbill, 1977). Felson (1982) notes that "the perceived values of the audience are important: actors are more likely to retaliate when the audience is perceived to be favorable to aggression, and they are least likely to retaliate when the audience is perceived to be unfavorable" (p. 245).

But how does one know if the audience is favorable? The present studies suggest that people can be quite mistaken about the preferences of their peers. Collectively, the studies suggest that men overestimate peer aggressiveness, peer social approval for aggression (as well as disapproval for non-aggression), and the attractiveness of aggression to women. Thus, men may be miscalibrated with respect to both descriptive and injunctive norms regarding aggression. Furthermore, men who believe they fall short of these norms (and, as the first three studies demonstrate, most

men do) feel socially marginalized among male and female peer groups, identify less strongly with men in general, and have lower self-esteem. Aggression may thus be seen (inaccurately) as a tool to gain or recover social standing, and aggression may escalate needlessly because of impression management concerns resting on inaccurate premises.

More generally, whether or not conflicts escalate into aggression or get resolved peacefully probably depends to some extent on the parties' expectations about how others will view their choices. Various observers have noted that participants often act aggressively because of self-presentational or face-saving concerns and often must be goaded into action (e.g. Anderson, 1994; Felson, 1982; Miller, 1990; Toch, 1969). This suggests both that men recognize that aggression may be normative and expected, and also that internalization of these perceived norms is not required.

Note that conformity pressure can be subtle and indirect rather than explicit. People sometimes smoke, drink, have unprotected sex, or fight, not because of explicit pressures to do so, but because of the belief that they will be rewarded for doing so, or rejected for not doing so. In some instances these beliefs may be correct, but they need not necessarily be correct in order to powerfully influence behavior. The belief that aggression is valued or expected may be enough to persuade men to behave aggressively, regardless of the accuracy of this belief.

An implication of the present findings is that men who may be privately reluctant to escalate conflict to the point of aggression may set aside these misgivings in order to conform to erroneously perceived social norms. At the collective level, norms for male aggression may be perpetuated and reinforced at least partially because of misunderstandings about how accepted, expected, or attractive aggression is.

### Pluralistic ignorance or false uniqueness?

We argue that men's beliefs that they are less aggressive or less approving of aggression than their peers constitutes a form of pluralistic ignorance, such that they mistakenly believe that their beliefs or attitudes differ from the collective (Miller & Prentice, 1994). This implies that men generally feel an uncomfortable deviance from their peers, believing themselves to fall below perceived masculine standards. An alternative interpretation of at least some of the present findings is that men's discrepant self-reports are an example of 'false uniqueness' (Alicke et al., 1995; Chambers, 2008; Suls & Wan, 1987). That is, in judging that they are less aggressive or less approving of aggression than their peers, men may be self-enhancing, making a social comparison that reflects upon their perceived moral superiority or refinement. Note that these two perspectives are not necessarily contradictory – one could simultaneously believe that he is morally superior but also that he fails the masculinity test. However, only the latter belief would drive men to alter their behaviors to fit perceived norms of masculinity (by acting more aggressively than they might feel comfortable acting).

Collectively the evidence is more consistent with a male pluralistic ignorance account than a false uniqueness account. Men's beliefs that their peers are more aggressive and more approving of aggression (or disapproving of non-aggression) than they themselves are could be driven by feelings of moral superiority, but the fact that women do not show this discrepancy suggests that the effects are driven by more than a general tendency to elevate the self. Also, in Study 2A, men overestimated how much their peers would see them in a negative light for not using aggression, suggesting negative feelings of deviance, or at the very least foreshadowing the sense of social marginalization found in Study 4 (see also Savitsky et al., 2001). In addition, Study 3 found that men overestimated the extent to which women preferred

aggressive men. Study 4 showed that men who believed themselves to be less aggressive than their peers felt socially marginalized and less closely identified with men, and had somewhat lower self-esteem, an outcome that would not be predicted by a self-enhancing motivation to see oneself as unique.

Taken collectively, the studies suggest that men believe that they would be socially rewarded for being more aggressive than they are. Thus, men may feel pressure to act upon misperceived aggressive norms to accrue social approval or avoid social disapproval. This seems to be supported by studies of boys and men in real-world violent subcultures. For example, prisoners (Toch, 1969) and members of juvenile delinquent gangs (Matza, 1964) express more private discomfort with aggression than the outwardly apparent norms of these groups would suggest.

#### Cultural and methodological limitations

When considering the results, it is again important to emphasize the limitations of the study samples. The men in these studies were young, educated college students from the southern United States. We suspect that the results of the present studies would replicate across diverse samples, but until further data are collected, this remains speculative.

In some ways, this is a population that might be ripe for the types of misperceptions documented here. Young adult men make up a disproportionate percentage of those involved in violence (Wilson & Daly, 1985), and this is also a time when status anxieties are high and dating is common and competitive (see Vandello et al., 2008b). Aggression tends to be more frequent (and pro-aggression norms more common) in the US South than in the North, as well (Nisbett & Cohen, 1996). This might suggest that overestimations about descriptive and injunctive norms favoring aggression would be heightened among this population. On the other hand, compared to less educated and lower SES groups, college student populations tend to be less violent, suggesting personal attitudes about aggression may also differ across these groups.

Our recent research (Vandello et al., 2008b) suggests that misperceptions may be robust across regional culture, but also that culture matters. The culture of honor may be an acute example of a more general male preoccupation with manly status and a concern that one does not measure up to the expectations of one's peers (see also Bosson, Vandello, Burnaford, Weaver, & Wasti, 2009; Gilmore, 1990). In short, future work would benefit from examining men's aggression-related beliefs across diverse cultural groups, particularly non-student samples.

Another limitation of the current studies is our reliance on self-reports of prospective estimates of aggression in hypothetical scenarios and retrospective reports of past aggression. The strength of our results rests on the assumption that people respond truthfully when reporting past aggression, and that they have some accurate sense of their own likelihood of aggressing in hypothetical scenarios. Biases in memory and tendencies to self-inflate can make self-reports suspect. However, if anything, our results suggest that men may be motivated to increase past reports of aggression, which would lessen the likelihood of overestimating peer past aggression.

The possibility that people simply are not able to accurately predict how they would respond in hypothetical situations is more of a concern. However, there is no reason to suspect that predictive difficulties would systematically lead to the pattern of self-other discrepancy observed in these studies, in which peers are consistently imagined as more likely to aggress and to approve of aggression. Nonetheless, while research on people's beliefs will necessarily rely on some degree of self-report, in future research, it will be valuable to supplement this methodology with behavioral measures of aggression to see if what men say matches what they do.

#### Correcting misperceptions

One might ask why misperceptions about others' attitudes about aggression are not self-correcting. Why don't men quickly figure out that other men are not as endorsing of aggression as might be first assumed, or that women are not as attracted to aggression as men think? One reason is that norms about aggression are ambiguous. In conflict situations, males might fear speaking out about their discomfort with aggression for fear of looking foolish or wimpy. They may goad others into aggression because they believe their peers will approve, and their peers might use the same faulty logic (Vandello & Cohen, 2004; Vandello et al., 2008b). They may also take other men's silence with respect to aggression as tacit approval, as opposed to discomfort. To the extent that men adjust their behaviors to conform to perceived norms, exaggerated aggression may become a type of self-fulfilling prophecy.

If women are not attracted to aggression, why don't they effectively communicate this to men? Perhaps women, like men, respond ambiguously to men's aggression, sending mixed signals that can perpetuate inaccurate norms. Women may not speak up against violence out of fear, for instance. Alternatively, maybe women do communicate disapproval of aggression, but men do not hear them, or they hear only what corresponds to their preconceptions. Such motivated reasoning to believe information that confirms one's expectations is quite ubiquitous and well-documented (Kunda, 1990).

#### Final thoughts and implications for interpersonal conflict resolution

The present studies suggest two lessons regarding changing norms about male aggression. First, in order to understand aggression norms and motivations for individual aggressive acts, it is important to consider the social context in which aggression occurs, particularly in terms of audience or bystander composition. Second, norms can be very powerful even when they are illusory. In order to change norms about aggression, interventions might aim at exposing pluralistic ignorance and cross-sex misperceptions. Although norms can be stubbornly resistant to change, there is room for hope that making transparent the true beliefs of the collective can lead to normative changes, at both the micro- and macro-levels (e.g. Kuran, 1995; Miller & Prentice, 1994; Schroeder & Prentice, 1998).

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