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ORIGINAL ARTICLE

Men's Interpersonal (mis)Perception: Fitting in with Gender Norms Following Social Rejection

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Abstract Interpersonal perception (IP) is useful for meeting affiliation needs, but what if IP skills are derogated by those one wishes to affiliate with? We tested the effects of affiliation motivation on IP in predominately Caucasian men. Participants were mainly U.S. undergraduates from the intermountain west. We expected that following rejection, IP performance would vary depending on the skill's gender appropriateness. Study 1 (N=69) found men who recounted an in-group rejection performed better on a masculine-framed IP test. Study 2 (N=102) extended findings to empathic accuracy, demonstrating that rejection influenced IP as a function of the gender norms of an in-group member. The role of affiliation motivation and gender norms in the development and maintenance of men's nonverbal skills is discussed.

Keywords Interpersonal sensitivity · Empathic accuracy · Affiliation motivation · Rejection · Gender

Introduction

Affiliation with others is a reoccurring staple in the list of fundamental "needs" or "motives" essential to human functioning (Maslow 1968; McClelland et al. 1953; Murray 1938). One way (of many) a person might fulfill this need is to be sensitive to the demands and expectations that others hold, and as such, strategically assimilate the self to "fit in" and "belong". In order to fit in with others, a person may rely on his or her ability to accurately interpret the expressive cues and messages of other people; that is, rely on his or her interpersonal perception and sensitivity skills (Costanzo and Archer 1989; Gardner et al. 2000; Pickett et al. 2004).

Interpersonal perception (IP) is the skill used to correctly perceive and respond to one's interpersonal and social environment (Bernieri 2001). This ability is important in most social situations because it allows individuals to determine the meaning behind another person's behavior. The current project examined the paradoxical proposition: what happens when the very skill that is useful for restoring social ties (i.e., interpersonal perception) is the same skill derogated by the social network? Specifically, we were interested in investigating whether men performed worse on tests of interpersonal perception when motivation to affiliate with other men was high, in order to conform to the "insensitive" masculine gender norm (and thereby "fitting in" with the male-in-group). We designed two studies to investigate this research question using a sample of primarily Caucasian U.S. male undergraduates (with a small subsample of community members) in the intermountain west.

Interpersonal perception ranges from awareness of unspoken cues (e.g., noticing one's conversation partner is glancing at her watch and likely in a hurry to end the encounter) to sensing and responding appropriately to the internal states of others (e.g., consoling a tearful friend who has lost a loved one). In all, IP consists of the detection of subtle cues such as facial expressions, vocal tone, and other nonverbal signals, as well the detection of more obvious cues such as direct verbal communication. IP is likely important to people from various cultures and all walks of life as it allows people to coordinate and navigate their interactions with others. For instance, IP

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allows individuals to accurately judge the romantic interest of potential mates (Place et al. 2009). Furthermore, research has shown that interpersonal perception is positively associated with successful affiliation with others, as evidenced by high quality relationships (Schachner et al. 2005), smooth social interactions (Lopes et al. 2005), and accuracy in judging new acquaintances (Ambady et al. 1995).

Interpersonal perception is enhanced when people are motivated to "tune in" to their social and personal environment (e.g., Williams et al. 2000; Gardner et al. 2000). People may be motivated to tune in for a number of reasons (e.g., money, Klein and Hodges 2001), and we focus here on the motivation that arises when feeling vulnerable to social rejection or social exclusion. In a recent review, Williams (2007) identified social rejection and similar constructs (e.g., ostracism) as an experience that typically consists of feeling ignored, excluded, or separated from the group. The experience of rejection can be conceptualized (in laboratory settings) in a variety of ways, including having confederates exclude participants from a ball tossing game (Williams 1997), instructing participants to relive a past rejection experience via a writing task (Pickett et al. 2004), or giving participants fake feedback from a personality test that predicts they are likely to end up alone later in life (Twenge et al. 2001). The experience of social rejection ultimately results in thwarted belonging needs (Baumeister and Leary 1995). Individual responses may include increased psychological distress (Williams et al. Williams et al., 2000), increased aggression (Twenge et al. 2001), decreased self-esteem (Leary et al. 1995), increased sensations of coldness (Zhong and Leonardelli 2008), and activation of brain regions linked to the regulation of physical pain (Eisenberger et al. 2003).

In order to avoid these unwelcome consequences associated with a loss of group membership, several researchers posit that individuals have developed sensitive systems to detect instances of social rejection (e.g., Leary and Downs 1995; Pickett et al. 2004) that prompt individuals to seek out companionship from other sources (Epley et al. 2008; Maner et al. 2007) and "reconnect" with the group (e.g., Maner et al. 2007). For example, Williams and his colleagues have found that ostracism leads to increased assimilation to incorrect, but unanimous, group judgments (Williams et al. 2000) and that, for women, social rejection leads to increased social compensation on collective tasks (Williams and Sommer 1997). Likewise, Maner et al. (2007) found that following a rejection experience, participants preferred to work with others over working alone, were more likely to view others as friendly, and gave others more positive evaluations.

In order to know what behaviors would help to regain affiliation with others, rejection also makes people more attentive to those around them as evidenced by increased retention of social information (as opposed to nonsocial information) following rejection (Gardner et al. 2000). Gardner and colleagues postulated that experiencing rejection leads to unmet affiliation and belonging needs, which in turn, elevate "social monitoring" as a way to fulfill the unmet need (Gardner et al. 2000; Gardner et al. 2005; Pickett and Gardner 2005). This increased need to belong is in turn associated with greater accuracy at tasks that require interpersonal perception (Pickett et al. 2004). For example, Bernstein et al. (2008) found that social exclusion increased the ability to correctly detect genuine (versus fake) facial expressions. Thus, following rejection, individuals attend to information or cues that will help them to regain affiliation with others.

One source for renewing or reaffirming affiliative bonds that individuals may turn to following rejection are other in-group members. Knowles and Gardner (2008) found that rejection activates group constructs, including constructs related to broad social categories (e.g., gender and ethnicity). This "amplification" of the social bonds tied to group membership may influence the way individuals behave following rejection. People may monitor a group's norms or attend to the expressed opinions of important others in order to learn what behaviors might help reestablish affiliation ties. For example, Morrison et al. (2007) found that people with a high need to belong were more likely to assimilate to the goals of other people, even when these goals conflicted with or did not match personally held goals.

Research by Sinclair and her colleagues also suggests that individuals can renew affiliation ties by establishing a "consensus" with other people's views and beliefs (Sinclair et al. 2006; Sinclair and Huntsinger 2006; Sinclair et al. 2005; see also Hardin and Conley 2001). This line of work assumes that when affiliation motivation is high, people desire to create a "shared reality" with other people's views. Thus, similar to reflective appraisal (Cooley 1902), people "tune" their self-beliefs toward the opinions of others (Sinclair and Huntsinger 2006). However, people do not tune their self-beliefs toward just any other person's opinion. Rather, this tuning depends on the degree of affiliation motivation inherent in the relationship and/or the situation. Case in point, individuals are likely to hold views similar to the perceived views of close others, such as parents and friends (Sinclair and Huntsinger 2006; Sinclair, et al. 2006; Sinclair et al. 2005).

In support of this "affiliative tuning hypothesis", Sinclair et al. (2006) demonstrated that people tune toward the explicitly held views of others with whom they are close to or wish to affiliate with, even when assimilation requires downplaying important self-defining traits, or missing out on other rewards. Although no research has specifically examined whether or not rejection motivates affiliative tuning, given that rejection thwarts belonging needs (Baumeister and Leary 1995) heightened affiliation motivation seems likely following rejection. We predicted that

because rejection enhances awareness of the social environment (e.g., Gardner, et al. 2000), rejection should lead people to tune their IP skills to the opinions of others (at the individual or group level) with whom a norm exists. In this way, affiliative tuning of IP skills would serve to restore the social bond.

Research shows the anticipated or actual experience of social rejection amplifies group memberships (Knowles and Gardner 2008) and enhances interpersonal sensitivity to group norms and social cues (Williams et al. 2000; Gardner et al. 2000). We chose to focus on gender as a group category, as this is arguably one of the most salient social cues available. The gender norm of the in-group should dictate the behaviors needed to rejoin or "fit in" with the group (Walsh and Smith 2007). Given that men, as a group, are stereotyped as insensitive (Horgan and Smith 2006; Leyens et al. 2000; Gabriel and Gardner 1999; Cross and Madson 1997; Briton and Hall 1995), acting in accordance with the gender norms of the masculine in-group requires men to behave less interpersonally perceptive. Indeed, Ickes et al. (2000) argued that when gender differences are found in tests of interpersonal perception skills, these differences may be due to a differential *desire* to be seen as interpersonally perceptive, as opposed to real differential skills. Thus, assuming rejection enhances an individual's surveillance of the social environment as demonstrated by Pickett et al. (2004), we suggest that if that same environment simultaneously dictates that the individual behave *less* interpersonally sensitive, IP performance should decrease.

Awareness of group norms should be heightened under conditions of social rejection because experiencing rejection threatens feelings of group membership (Williams et al. 2000; Williams et al. 2003). Indeed, defying group norms is risky insofar as not fitting in with a group can result in ostracism, thus group norms are often powerful motivators of behavior (e.g., Cialdini et al. 1991). We were particularly interested in the influence of gender group norms because of the reliable finding that men perform worse than women on tests of interpersonal perception (Hall 1978; Hall and Schmid Mast 2008). Typically, men are thought of as less interpersonally sensitive than women (Briton and Hall 1995; Spence and Buckner 2000; Horgan and Smith 2006; Leyens et al. 2000), but this portrayal is complicated. Gender stereotypes often translate into perceptions about the traits associated with an individual, but more importantly, gender stereotypes are also heavily prescriptive. That is, gender stereotypes can result in a gender "norm" for the appropriate behavior expected of a person (Prentice and Carranza 2002; Spence and Buckner 2000). Because of these opposing forces (i.e., enhanced IP monitoring, but a gender norm to be less IP) we chose to focus our research on men who face or feel vulnerable to social rejection.

Project Overview

Study 1 was designed to examine whether and how reliving a rejection experience from a same-sex other via a writing task (Pickett et al. 2004) influenced men's assimilation to gender norms transmitted by a task framing manipulation (Horgan and Smith 2006) on an objective measure of IP skills, the Interpersonal Perceptions Task (Costanzo and Archer 1989). We expected that when reflecting upon a time men felt vulnerable to social rejection, men would be more likely to conform to the in-group's gender norms in an attempt to reestablish the threatened social ties (Hertel and Kerr 2001; Sinclair et al. 2006). Study 2 was designed to replicate and extend Study 1 by including an alternative and more uniform manipulation of rejection using a "fake personality feedback" paradigm (Twenge et al. 2001) and an additional measure of IP (the Diagnostic Analysis of Nonverbal Accuracy; Nowicki and Duke 1994). Finally, in Study 2 we provided participants with a more immediate source of affiliation by having the experimenter personally transmit the IP-related gender norm manipulation.

Study 1

The aim of Study 1 was to explore the joint effects of gender norms and social rejection on men's interpersonal perception skills. In particular, we created conditions of in-group rejection (vs. out-group rejection, modeled after Pickett et al. 2004) and expected that this rejection would lead an individual to assimilate his IP to the gender norm. To manipulate the content of men's culturally shared gender norm, we borrowed from Horgan and Smith (2006) who found that participants working on a gender-incongruent nonverbal decoding task (e.g., men working on a feminine-framed "Helper" nonverbal task) underperformed compared to peers who worked on the same, but gender-congruent, task (i.e., men who worked on a masculine-framed "Hunter" task). Men were randomly assigned to 1 of 4 conditions in a 2 (relived in-group rejection vs. relived out-group rejection) by 2 (gender appropriate skills vs. gender inappropriate skills) between participants design.

Hypothesis 1

We predicted an interaction between social rejection group and gender norm such that reliving an in-group (i.e., same-sex) rejection experience would result in men's assimilation to the manipulated gender norms as evidenced by better performance on an IP task that was framed as gender appropriate (i.e., as the "HUNTER" task).

Hypothesis 2

We further predicted that compared to men reliving an out-group rejection, men reliving an in-group rejection experience would perform worse on the IPT when it was framed as gender inappropriate (i.e., as the "HELPER" task).

Hypothesis 3

Our final prediction was that compared to men who relived an in-group rejection, those who were rejected from the out-group would show the reverse pattern of IPT performance such that performance would be better on the HELPER task relative to the HUNTER task.

Method

Participants

A total of 69 men participated in Study 1. A portion of these were undergraduates who participated in exchange for course credit. The remaining participants were community members and were paid $10 for their participation. To recruit community members, fliers advertising a psychology study that was investigating "judgment skills" were posted on public billboards in local coffee shops and grocery stores.

Data from 8 participants were discarded due to failure to comply with task instructions (e.g., choosing to write about a different topic than the one assigned in the writing task), or inability to recall task instructions accurately (e.g., failure of the instruction awareness check), resulting in 61 participants. Ages ranged from 18 to 70 years (M=21.58, SD=7.06) and participants predominately identified as Caucasian (95.1%). Through random assignment, the low numbers of non-Caucasian participants were fairly evenly distributed across conditions. Participants reported a range of educational levels, from some high school (1.6%), to some college (54.1%), to college graduate or beyond (9.8%).

Social Rejection Manipulation

To manipulate social rejection, we followed methods established by Pickett et al. (2004) and asked participants to relive a rejection experience during a 3 minute writing task. Participants were randomly assigned to one of two rejection conditions (relived in-group rejection vs. relived out-group rejection) and were asked to

> "Please write about a time in which you felt intensely rejected by other men in some way, a time that you felt as if you did not belong. This rejection can be a time in which you felt rejected from just one man (e.g., a time in which someone no longer wanted to be your friend) or can be a rejection from a group of men (e.g., a time in which you were chosen last for a team). Choose an experience memorable enough that you can relive the event and accompanying emotions. Try to write with as much detail as possible – write about your feelings as well as the event itself."

Participants in this condition wrote about a variety of in-group rejection events, such as not fitting into any cliques of other men on a cross country running team, or feeling rejected by their father following a divorce. In the out-group rejection condition, participants were given the same directions, but were asked to write about a time they felt intensely rejected by women.

Gender Norm Manipulation

All participants completed the same performance measure of interpersonal sensitivity (described below), but in order to make different gender norms and expectations salient, the skills measured by the task were framed as either gender appropriate or gender inappropriate, following procedures used by Horgan and Smith (2006). In the gender appropriate skills condition, participants were told that the task was called the HUNTER Task and that it was developed by the Department of Defense to determine which job applicants had the necessary judgment skills to work as interrogators. In the gender inappropriate skills condition, participants were told that the task was called the HELPER Task and that it was developed by the Department of Social Services to determine which job applicants had the necessary judgment skills to work as social workers.

Instruction Awareness Check

Participants were given an "instruction awareness check" to assess participants' memory for the task instructions. As the task characterization manipulation was crucial to the salience of the gender norms, participants were asked to recall the name of the task they were about to take (i.e., HELPER or HUNTER), who was most interested in the research they were participating in (i.e., Dept. of Social Services or Dept. of Defense), and what occupation would require the skills measured by this task (i.e., interrogators or social workers). Each question was presented in an open-response format and was coded to determine if the answer was correct (+1) or incorrect (0) given the condition assignment. Participants who did not answer all of the items correctly were dropped from analyses (n=4).

Positive and Negative Affect

To ensure that our manipulation of in-group versus out-group rejection elicited events that were equally negative (i.e., upsetting) we asked participants to complete the PANAS (Watson et al. 1988) which was designed to assess positive and negative affect. The positive subscale included the emotions: interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive, and active (Cronbach's alpha=.80). The negative subscale included distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery and afraid (Cronbach's alpha=.77). Participants rated each word as to "how you are feeling right now" using a scale of 1 (very slightly or not at all) to 5 (extremely).

The Interpersonal Perception Task (IPT)

The IPT served as an objective measure of interpersonal sensitivity. This test was developed by Costanzo and Archer (1989; 1993) as an audiovisual measure of accuracy in interpreting nonverbal behavior. We used the abbreviated 15 item version of the IPT in which participants viewed several different scenes of various individuals interacting. Each scene lasts between approximately 20 seconds and two minutes. This task has high external validity as each scene occurs in a naturalistic setting, is unscripted, and uses individuals who are not actors, which allows for objectively correct answers to questions about each scene. For example, in one scene a woman and a man are having a conversation about their respective childhoods and viewers are asked to estimate if this couple has been together for 10 months or 3 years. In another scene, a woman gives two different descriptions of her childhood and viewers are asked to judge which description is the truth. These scenes tap into five areas of interpersonal communication: kinship, lies, competition, status, and intimacy (Archer et al. 2001). Prior to each scene, a multiple choice question is displayed on the screen and this question corresponds to one on an answer sheet provided to each participant. The IPT was projected onto a white wall via a laptop projector, and the experimenter insured that each participant was able to clearly hear and view the video. Responses to the IPT were then coded (0=incorrect, 1=correct) for accuracy, and a percent correct for each participant was calculated. The observed IPT range of scores in this study was 29% to 100% correct (M=65.11%; SD=18%). The IPT demonstrated low levels of internal consistency in this study (Cronbach's alpha=.35; see Hall 2001 for a review and justification of the IPT's notoriously low internal reliability). To aid in interpretation across the various measures used in Study 1 and Study 2, results are presented as standardized z-scores.

Procedure

Participants were run in groups of 1 to 6 by a female experimenter under the guise of a "judging self and others" study. Participants first engaged in the three minute writing task, which included the rejection manipulation. Next, participants were given the instructions for completing the IPT, which included the gender norm manipulation. In order to ensure gender salience, participants were also directed to mark their gender on the IPT answer sheet (similar to Blanton et al. 2000; Horgan and Smith 2006; Smith et al. 2007). Finally, participants completed the IPT. Once everyone had finished, participants were debriefed and either paid $10 or given research credit.

Results and Discussion

In order to test the hypotheses that men's IPT performance would vary depending on the source of the rejection and the gender appropriateness of the skill, a 2 (relived in-group rejection vs. relived out-group rejection) by 2 (gender appropriate skills vs. gender inappropriate skills) ANOVA was conducted on the percent correct IPT scores. No main effects emerged; however, the predicted interaction between

Table 1 Study 1 standardized interpersonal perception test performance as a function of social rejection and gender norms.

	Social Rejection Condition			
	Relived In-group Rejection		Relived Out-group Rejection	
	M	*(SD)*	*M*	*(SD)*
Gender Norm Condition				
Gender Appropriate Skills	.47[a]	(.26)	-.09[ab]	(.23)
Gender Inappropriate Skills	-.44[b]	(.25)	.13[ab]	(.26)

Note. Means not sharing a superscript differ at $p<.05$ as determined by post-hoc analyses. The observed IPT range of scores was 29% to 100% correct (M=65.11%; SD=18%)

social rejection group and gender norm emerged ($F(1, 57)= 5.051$, $p<.03$, $\eta_p^2=.08$). Simple effect analyses (shown in Table 1) confirmed the hypothesis that men who relived an in-group rejection experience (rejection from other men) would assimilate to the gender norm by performing better on the gender appropriate IPT. As seen in Table 1, results also provided support for Hypothesis 2, such that men who relived an in-group rejection performed worse on the gender inappropriate IPT. Finally, we tested the hypothesis that participants rejected from the out-group would show the reverse (contrasting) pattern of IPT performance. Although the pattern of results was in the predicted direction, the analysis was not statistically significant. As such, Hypothesis 3 was unsupported. Analyses of the positive and negative affect scale suggests that these results were not due to differences in how participants felt in the two rejected conditions, but rather the effects on IPT performance were due to differences between the source of the recalled rejection.

These results suggest that in-group rejection (rejection by other men) led to assimilation of the group relevant gender norms, whereas out-group rejection (rejection by women) did not. Specifically, reliving a rejection experience by other men led to an increase in men's performance on the IPT when the IPT was framed as assessing gender appropriate skills, whereas reliving a rejection experience from women had no such effect.

Our interpretation of these results stems from several assumptions, including that an in-group represented a "similar other" with whom to affiliate. Undoubtedly, there are out-group members who are "similar others" as well. We likewise assumed that rejection from the in-group increased the desire for in-group members to rejoin their gender group via assimilating to the culturally shared gender norm. However, the gender based norm expectations for IP performance were linked to the task and not to a person. Thus, Study 1 provided no real opportunities for achieving affiliation aside from performing inline with the gender norm. Also, although participants were directed to write about rejection from the in-group or the out-group, we had no control over who specifically participants wrote about or the extent and type of rejection experience experienced. Although we believed there was much merit in taking advantage of participants' personal histories with rejection, we recognize the limitations of this approach. Study 2 set out to operationalize gender norms and social rejection in a way that was relatively more direct and independent of participants' pasts. Finally, Study 1 used only one type of performance measure of interpersonal perception (nonverbal decoding skills), limiting the range and generalizability of the results. Study 2 included an additional IP performance measure.

Study 2

In Study 2, gender norms were explicitly transmitted in the form of skill performance preferences by a present same-sex (in-group) or opposite-sex (out-group) other in order to provide an immediate opportunity to achieve affiliation (by assimilating to the expressed IP skill preferences of the similar other). Also, Study 2 improved upon Study 1 by including an additional and very different objective measure of interpersonal perception, the Diagnostic Analysis of Nonverbal Accuracy (DANVA, described below), and by manipulating rejection in a more uniform manner across participants. The aim of Study 2 then, was to further examine the potential interaction among gender norm expectations and social rejection on men's interpersonal perception skill performance. Men were randomly assigned to 1 of 6 conditions in a 2 (rejection vs. control) by 2 (same-sex vs. opposite-sex experimenter) by 2 (good IP skills preferred vs. poor IP skills preferred) between participants design.

Hypothesis 4

We predicted a three way interaction among conditions, such that when feeling vulnerable to future rejection, men would perform worse on the IPT and the DANVA when an in-group other (i.e., a same-sex experimenter) expressed a preference for men bad at interpersonal perception compared to when an out-group other (opposite-sex experimenter) expressed the same preference.

Hypothesis 5

We further predicted that men feeling vulnerable to a future rejection experience would perform better on the IPT and DANVA when the same-sex experimenter (but not the opposite-sex experimenter) expressed a preference for men good at interpersonal perception.

Method

Participants

A total of 102 men participated in Study 2 in exchange for course credit. Data from 11 participants were discarded due to suspicion of study manipulations, or problems during the study session (e.g., equipment failure or experimenter error), resulting in a total of 91 participants. Ages ranged from 18 to 33 years ($M=20.80$, $SD=2.88$) and participants predominately identified as Caucasian (90.11%). The 9 non-Caucasian participants were evenly distributed among conditions. The majority of participants were freshman (47.30%) and sophomores (22.00%) from a wide range of majors, including engineering (15.38%), business (8.79%), and general studies (13.19%).

Social Rejection Manipulation

To manipulate feelings of future social rejection, we followed methods established by Twenge et al. (2001) and provided participants with false feedback from an ostensible personality test. Participants were randomly assigned to one of two feedback conditions (rejection vs. accident prone). In the rejection condition participants were told that they were likely to "end up alone in life" and that their relationships "would not last". An "accident prone" control condition was also included (following Twenge et al. 2001) to determine whether or not any effects found in the rejection condition were attributable to feeling rejected or simply due to thoughts of potentially disagreeable events later in life. In the accident prone condition, participants were told that they were likely to have "many accidents later in life" including that they "might break an arm or a leg a few times" (see Twenge et al. for more detailed manipulation information).

Affiliation Target's Gender Manipulation

To manipulate the gender of the person participants desired to affiliate with, experimenter gender was varied across experimental sessions. Given that participants were all men, male experimenters represented in-group members, whereas female experimenters represented out-group members (for a related operationalization of affiliation with group members, see Sinclair and Huntsinger 2006). Two men and two women served as experimenters for Study 2. Each experimenter was Caucasian and one male and one female were undergraduate students and one male and one female were graduate students. To further induce affiliation desires with the experimenter, all participants were informed that at the end of the session, they would have one-on-one interviews with the experimenter to "discuss their personality test results".

Gender Norm Preference Manipulation

Gender norm performance expectations were manipulated by allowing participants to "overhear" a conversation in which the experimenter made a statement about his or her desire for good or poor performance from the participants on the upcoming "personality measures" of interpersonal perception. Participants were thus randomly assigned to one of two gender norm preference conditions (good IP skills preferred vs. poor IP skills preferred).

In the derogation of macho-men condition (i.e., good skills preferred) the experimenter stated that he or she was "tired of all these MACHO-MEN acting all INSENSITIVE" and in the derogation of girly-men condition (i.e., poor skill preferred) the experimenter stated that he or she was "tired of all these GIRLY-MEN acting all SENSITIVE." A recording of an ostensible conversation between the experimenter and another person was used to manipulate skill preferences. The script for the recording was as follows:

> Experimenter: **"**Oh, hey, I'm looking for that spare DVD, this one isn't working.**"**
>
> Other voice: **"**Do you have a lot of guys to interview in your session today?**"**
>
> Experimenter: **"**Not too bad although after last week I'm really getting tired of all these
>
> MACHO-MEN acting all INSENSITIVE/GIRLY-MEN acting all SENSITIVE in my interviews."

Recordings of this manipulation were made using Sound Recorder software, and were played at a standard volume level using Windows Media Player.

The Diagnostic Analysis of Nonverbal Accuracy (DANVA)

The DANVA was developed by Nowicki and Duke (1994) to measure the detection of emotion in facial expressions. According to Nowicki and Duke (2001), the DANVA items measure the four basic core emotions of happiness, sadness, anger and fear. The subtest of the DANVA used in this study, the DANVA2-AF, consists of a combination of 24 adult faces exhibiting both posed and spontaneous facial expressions, equally representing high- and low-intensity expressions of happiness, sadness, anger, and fear (Nowicki and Carton 1993). Each face is displayed for two seconds, followed by a blank screen for 5 seconds in which time the participant is asked to decide if the face is happy, sad, angry or fearful. The DANVA was projected onto a white wall via a laptop projector, and the experimenter insured that each participant was able to clearly view the faces. Participants were given the same general instructions for the DANVA (e.g., how many faces they would see, and how long they had to choose an answer). Responses to the DANVA were then coded (0 = incorrect, 1 = incorrect) for accuracy and a final percent correct score was calculated for each participant. The DANVA demonstrated modest levels of internal consistency in this study (Cronbach's alpha=.63, see also Hall 2001). The observed range of scores on the DANVA in this study was 21% to 100% correct (M=79.8%; SD=12%).

The Interpersonal Perception Task (IPT)

The IPT (see Study 1 for a detailed description) was again administered (Cronbach's alpha=.16). The observed range on the IPT in this study was 20% to 93% correct (M= 65.27%, SD=12%).

Debriefing exit Survey

This survey was composed of questions designed to insure that participants understood that the personality results were not real and was also designed to check for suspicion of the study manipulations. Specifically, participants were asked to mark yes or no to three items: "was it made clear to you that the personality results were fake?" "do you understand why we couldn't tell you in advance that the results were fake?" and "was it made clear to you that the results were generated by the computer?". All participants answered "yes" to all three items. Finally, participants were asked to respond to the open ended item: "did anything strange or suspicious occur during the experience". Five participants answered "yes" of these 3 specifically raised doubts about the recording and 2 did not believe the personality feedback was real. These 5 were dropped from analyses.

Procedure

Similar to Study 1, participants were told they were engaging in a "judging self and others" study that consisted of completing several different personality measures. They were further told that they would receive feedback on the first set of measures directly from the computer, and feedback on the second set of measures from the experimenter. Participants then engaged in the series of "personality measures" on the computer using MediaLab software. After these measures were completed, the computer produced the participant's "personality results." Similar to Twenge et al. (2001), the computer first provided accurate feedback regarding participants' level of extroversion to ensure the rejection/accident information would be more plausible. Second, the computer randomly presented participants with the rejection (or accident prone) "personality results".

After receiving the rejection (or accident prone) feedback, participants were told that the next part of the study consisted of personality tests that measured interpersonal sensitivity, and that these tests involved watching videos and making judgments about the people in the videos. Participants were informed they would receive feedback on these second set of measures from the experimenter via "individual interviews at the end of the session to discuss the results". The experimenter then produced a computer disc which ostensibly held the IPT and DANVA tasks. When the experimenter attempted to load the IPT/DANVA disc in the laptop, a visible and audible error message was produced. At this time the experimenter told participants that there was a spare copy of the disc in the other room and asked the participants not to talk and to remain in their seats while he or she retrieved it. The experimenter then left the laboratory and entered an office adjoining the experimental lab. Leaving the door slightly ajar to allow participants to overhear, the experimenter played a previously recorded conversation with his or her own voice expressing a preference for either good IS skills or poor IS skills. After the recording ended the experimenter returned to the laboratory with the real computer disc.

Participants then completed the IPT and DANVA (in counterbalanced order) which were projected onto a white wall across from the participants using a laptop projector. In order to further activate gender norms, a space provided on the IPT and DANVA answer sheets asked participants to mark their gender (e.g., Steele and Aronson 1995; Smith et al. 2007). In contrast to Study 1, in Study 2 the IPT and the DANVA were referred to by their actual names. After participants completed the IPT and the DANVA, they were fully debriefed, given the debriefing exit survey, and dismissed.

Results and Discussion

To confirm that the IPT and DANVA assess distinct interpersonal perception skills, we first calculated the correlation between the two performance measures. As expected, the relationship between the two measures was essentially zero (r=-.07, p=.51). Next, we set out to test Hypothesis 4 and 5, by conducting separate 2 (future rejection vs. control) by 2 (in-group same sex other vs. out-group opposite sex other) by 2 (good IP skills preferred vs. poor IP skills preferred) ANOVA's on the percent correct IPT scores and DANVA scores. No main effects emerged. However, the predicted three-way interaction among conditions emerged for scores on the IPT (F(1, 83)=5.52, p<.02, η_p^2=.06) and scores on the DANVA (F(1, 83)=10.32, p<.01, η_p^2=.11). As seen in Table 2, after receiving rejection feedback, men assimilated to the gender norm preference of the same-sex other (in-group experimenter) by performing worse on the IPT and DANVA when an explicit preference for poor IS skills was expressed (by derogating girly-men), compared to when an opposite-sex other (out-group experimenter) expressed this same preference, supporting Hypothesis 4. We next tested Hypothesis 5 to examine whether after receiving rejection feedback, men would contrast away from the gender norm preference of the opposite-sex other (out-group experimenter) by performing significantly better on the IPT and DANVA when an explicit desire for poor IP skills was expressed by derogating girly-men, and this hypothesis was confirmed. Interestingly, assimilation and contrast effects appeared much more pronounced when a same-sex or opposite-sex other expressed poor IP skill preferences compared to when the other expressed a preference for good IP skills (by derogating macho-men). Notably, participants who received accident prone feedback (control condition) and were presented with the gender norm of an opposite-sex other who desired poor IP

Table 2 Study 2 standardized interpersonal perception test and DANVA performance as a function of social rejection, target other, and gender norms.

	Affiliation Motivation							
	Same-Sex Other				Opposite-Sex Other			
	Rejection		Control		Rejection		Control	
	M	*(SD)*	*M*	*(SD)*	*M*	*(SD)*	*M*	*(SD)*
IPT PERFORMANCE								
Gender Norm Preference								
Good IP skills preferred	.07^{ac}	(.30)	-.04^{abc}	(.26)	-.04^{abc}	(.30)	.17^{ac}	(.31)
Poor IP skills preferred	-.56^{b}	(.27)	.21^{ac}	(.28)	.61^{c}	(.31)	-.27^{ab}	(.31)
DANVA PERFORMANCE								
Gender Norm Preference								
Good IP skills preferred	.23^{a}	(.29)	.00^{ac}	(.26)	-.21^{ab}	(.29)	.22^{ac}	(.30)
Poor IP skills preferred	-.29^{bc}	(.27)	.55^{a}	(.28)	.29^{a}	(.30)	-.81^{b}	(.30)

Note. Within dependent measure, row and column means not sharing a superscript differ at $p<.05$ as determined by post-hoc analyses. The observed range on the IPT was 20% to 93% correct (M=65.27%, SD=12%). The observed range of scores on the DANVA was 21% to 100% correct (M=79.8%; SD=12%)

skills strongly assimilated to these preferences on the DANVA (and to a lesser extent on the IPT). This suggests that men do want to affiliate with opposite-sex members, and that they tune their behavior to meet the preferences of those others accordingly when not feeling socially excluded. When rejected however, group memberships are amplified (Knowles and Gardner 2008). As such, the same-sex experimenter in this study presented a more salient opportunity for affiliation especially given that the specific rejection feedback led men to believe that they would have difficulty with future (opposite-sex) romantic relationships.

Taken together, these results show that men who were feeling vulnerable to future rejection were eager to conform to the male gender norm (that men are insensitive) when interacting with a male experimenter. Admittedly, it is difficult to know if the observed variability in IP skills represented real differences, or if social desirability and momentary self-presentation goals were operating. We feel social desirability is an unlikely explanation, given that it was only following rejection (a between participant variable) in which assimilation was observed (i.e., there was not a main effect of gender norm IP skill adherence). Likewise, past research showing affiliative tuning on negative traits (such as low intelligence) also argues against a self-presentation interpretation (Sinclair et al. 2005). Nevertheless, even momentary (desirability induced) performance differences would have important implications for IP skills, particularly to the extent that people one wishes to affiliate with regularly dispel (gender-norm) opinions about the skill.

The results of Study 2 build upon Study 1 by providing direct evidence that an in-group member provided an immediate opportunity for achieving affiliation. Also, Study 2 replicated Study 1 by demonstrating that rejection increased assimilation to an in-group other's performance expectations, and Study 2 used a different social rejection operationialization, thereby adding generalizability to our findings. Furthermore, because the IPT and the DANVA examine distinctly different communication channels (verbal and nonverbal cues vs. only facial expressions), Study 2 provides converging evidence that multiple domains of IP are affected by the desire to fit in with gender norms following a rejection experience.

General Discussion

Across two studies our data showed that when desire to affiliate was high, via an actual past or anticipated future rejection experience, participants assimilated their interpersonal perception performance to the salient gender norm. We were particularly interested in the influence these factors had on interpersonal perception because of the somewhat ironic situation in which the skill that is relied upon to meet affiliation motivation needs (as shown in past research), is the same skill susceptible to influence by those a person affiliates with. Indeed, our study replicates and extends prior research that showed rejection leads to increased interpersonal sensitivity (e.g., Gardner et al. 2005; Pickett et al. 2004; Lakin and Chartrand 2003) and that after rejection people may be selective in terms of who they choose to affiliate with (e.g., Maner et al. 2007). Our two experiments add to this line of research by demonstrating that this increased sensitivity may lead men to change their behavior to be in line with salient in-group norms even when the norm calls for presenting the self as interpersonally insensitive. In this situation, social rejection motivated men to affiliate with and "tune" the self toward in-group members to a greater degree than out-group members.

Demonstrating that IP performance in men is malleable following social rejection is a particularly important contribution to the literature given that past research suggests that IP performance is not easily manipulated by situational motiva-

tion factors. For example, across 11 studies Hall et al. (2008) report that nonverbal cue decoding is not enhanced by manipulating motivation (i.e., using various ways to manipulate effort). This suggests that any shift in IP abilities following rejection is likely due to more subtle factors, such as a desire to fit in with group norms, as opposed to simply an increase or withdrawal of effort.

Certainly, people experience rejection from in-group members differently compared to rejection from out-group members (e.g., Mendes et al. 2008) although the emotions accompanying reliving such rejection did not appear to differ (as evidenced in Study 1). Indeed, the results of Study 1 showed men assimilated to the gender norm, especially if rejected by other men, but there was no statistically reliable evidence that men contrasted away from the gender norm in the out-group condition. Yet, in Study 2, contrast effects did emerge on IP performance in the opposite sex (out-group member) conditions. These mixed results are in line with other research suggesting that "anti-tuning" or contrast effects are often small and difficult to detect (e.g., Sinclair et al. 2005).

One factor that may shed light on these mixed results is whether or not assimilation and contrast effects take place at the conscious or nonconscious level. Much past research argues that assimilation to norms is a nonconscious process that has evolved to facilitate social interactions (Lakin et al. 2003; Chartrand and Bargh 1999) especially when affiliation motivation is high (Lakin and Chartrand 2003), yet, less is known about the processes involved with contrast effects (cf., Sinclair et al. 2005). Although Study 2 yielded reliable contrast effects, this was arguably the study that required the most conscious deliberation. The methodology used in Study 2 required participants to reverse the IP skill performance statement made by the experimenter in order to assimilate to that preference. For example, if the experimenter was "tired of macho-men acting insensitive", then to assimilate to the experimenter's preferred gender norm the participant needed to act *more* sensitive. As such, in this particular study, it is possible that the assimilation and contrast effects found for IP performance were more purposive in nature.

Conscious or nonconscious processes notwithstanding, our results suggest that men may at least temporarily assimilate their IP performance to the gender norms of in-group others, especially following an actual or anticipated rejection experience. Our results suggest an important interplay between interpersonal perception skills and a hyperawareness of social cues and stereotypes (Twenge et al. 2007; see also Lowery et al. 2001) such that IP skills may be in use to meet affiliation needs, but may be either masked or exaggerated as required by the social situation. However, we did not explicitly measure participants' desires for affiliation, or measure if assimilation had fulfilled a need for affiliation; instead we emphasized assimilated behavior outcomes. Given that much research has already established support for the "reconnection hypothesis" (e.g., Maner, et al. 2007) in which individuals will create, maintain, or renew social ties when affiliation motivation (or "relational value") is high (e.g., Leary and Baumeister 2000; Williams 2007; Pickett et al. 2004), we felt that a focus on interpersonal perception outcomes was important in and of itself.

Our interpretation of the assimilation results is buttressed by the sheer diversity of manipulations used to create conditions of affiliation motivation and gender norms, which similarly influenced multiple assessments of interpersonal perception. Nevertheless, our results are clearly only applicable to men. We felt that focusing on men was a particularly important contribution to the literature first, because of the opposing forces pulling men's IP performance following rejection, and second, because most research begins with the perhaps erroneous supposition that women are more interpersonally sensitive than men and any gender difference is the product of an innate female advantage (Noller 1980, 1984; Manstead 1992; Henley 1977). Our results suggest that although it is possible women have an innate predilection for interpersonal perception (Hall 1978, 1987; Schmid Mast and Hall 2006), certain social and motivational situations may serve to exaggerate men's "deficits" in the domain (Hall et al. 1997; Hall and Schmid Mast 2008; Horgan and Smith 2006; Klein and Hodges 2001; Snodgrass 1985), that overtime, result in very real gender differences. Case in point, Hall and Schmid Mast (2008) recently found that when masculine purpose goals were made salient, men's IP performance increased, but still did not match the performance of their female peers.

It must also be noted that our sample consisted of predominately Caucasian men perhaps limiting the generalizability of our findings. Gender norms and ethnicity norms can often conflict and result in very different behavior following threats (e.g., Walsh and Smith 2007). For example, it is possible that following rejection, an ethnic minority member may select to tune to ethnicity norms (more so than gender norms) to renew affiliative bonds. Further research is needed to test this possibility. Nevertheless, gender norms can be accessible for ethnic minorities (e.g., Ambady et al. 2001). Thus, the influence of gender norms in understanding interpersonal perception is still an important area for continued research. For example, it would be interesting to compare the assimilation and contrast effects found for men in Study 2 with a sample of women. Theoretically, there would be no reason to predict a gender difference under conditions of social rejection. However, it is possible that because of the stereotype that women should be accommodating and sensitive to those around them, more women (especially older women) than men would assimilate not only to the gender norms of same-sex others, but to opposite sex others as well (e.g., Eagly and Chrvala 1986). In

addition, gender norms and interpersonal perception make for a unique study of gender stereotypes, because although men are targets of the IP deficiency stereotype, they may nevertheless benefit from lower emotional standards (Biernat 2003) compared to women who may suffer from a warmth/competence trade-off (e.g., Rudman and Glick 1999). Much would be gained from future research that explored the role of social rejection and gender norms on assimilation of IP in situations (such as male-dominated work environments) that require women to act insensitive in order to achieve success, yet punish women who take on such a "masculine" trait (e.g., Berdahl 2007; Heilman et al. 2004; Rudman and Glick 1999; Rudman and Goodwin 2004).

In Closing

Our research demonstrated that reliving a past or fearing a future social rejection experience led participants to assimilate their performance to the salient gender norm. Assimilation to specific views of specific others requires enhanced awareness of social cues, which suggests affiliation motivation enhanced participants' interpersonal perception (Gardner et al. 2000; Pickett et al. 2004). Ironically, interpersonal perception was the very skill participants either downplayed or exaggerated as a function of these same conditions. Results from these two studies suggest that interpersonal perception is a skill that may be present and relied upon by people (particularly men) to interpret a given interpersonal situation, but that the observable expression of the skill may be at least temporarily motivated by affiliation needs, social constraints, and gender norms.

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