'Real Men' Don't See Pain

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‘REAL MEN’ DON’T SEE PAIN
By
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B.A., University of Maine, 2019

A THESIS
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There is a long-standing tradition of men being held to an unobtainable “man enough” standard of masculinity. Our societal conditioning of men to be emotionless, tough, aggressive and anything-but-feminine through the social punishments of being called a “pussy,” “soft,” or told to “man up” has created an inflexibility for what it means to be a man. The purpose of this study is to capture men’s accuracy in perceiving the pain of masculine as compared to feminine targets when the targets are observed in tourniquet pain procedure. Participants observed ten videos of women and ten videos of men experiencing the tourniquet pain procedure then were asked to rate from one to ten how much pain the target would say they experienced then how much pain the participant thinks the target actually experienced. These ratings were analyzed against the targets’ actual pain rating from the filmed procedure. Analysis for sex of stimuli revealed a significant main effect on pain rating was ($F(1,78) = 110.774, p = .000$) thus supporting Hypothesis I. Hypotheses II, III, and I, assessing correlations with pain rating accuracy and levels of varying masculinity domains, were not supported by findings. The mean pain score rating was significantly different for masculine-presenting stimuli compared to female-presenting stimuli. There was a robust effect of male participants rating female stimuli’s pain as significantly lower than male stimuli’s pain. No significant correlation between various masculine identity domains and pain perception accuracy was discovered.
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CHAPTER 1: LITERATURE REVIEW

‘Real Men’ Don’t See Pain

What does it mean to be a man? America has no formal rituals inaugurating boys to men, however, this does not mean manhood is not regarded as a coveted status men must earn (Gilmore, 1990). America, like many western cultures, has constructed an ambiguous rubric for manhood, leaving men to prove their masculine status with informal and often problematic expressions of masculinity (Herek, 1986). Masculinity is characterized by its elusive nature, uncertainty, and requirement of social validation. The unique qualifications of manhood and the consequences of failing to meet them make masculinity a distinctly fragile identity (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). The APA (2018) guidelines emphasized the need to comprehend the “impact of power, privilege, and sexism on the development of boys and men.” This study aims to do just that; uncover the nuances of masculine ideals and behaviors in today’s societies changing conceptualization of gender.

Masculinity

Modern culture idealizes hypermasculine stereotypes of unafraid, unemotional, and tough men. American advertisements and television programs often depict the ideal masculine standard though popularly held stereotypes of men: sports fans, muscular, builders, and leaders (Fowler & Thomas, 2015). This is an intense standard to live up to. Our society perpetually enforces the value of these ideals when we tell men to “man up” or question if someone is “man enough.” Men seek to behave within their traditional gender role scripts to appear masculine and avoid identity misclassification as homosexual (Bosson, Taylor, Prewitt-Freilino, 2006).

The masculinity literature interprets masculinity as a unitary concept with intersecting dimensions, or a constellation of attributes, as attitude and behavior influences (Wilkinson,
This constellation includes calloused sex attitudes toward women, believing violence is manly and danger is exciting, having a manly (or nonfeminine) aesthetic, and adhering to traditional gender scripts (Bosson, 2009). The behavioral definition of masculinity requires men to be high power individuals (strength and status), emotionally and physically tough (emotionless and strong), as well as dominant over anything considered to be feminine (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). Men are socialized to believe these traits are what make a man a man. Only recently has gender research begun to dissect these behavioral, ideological, and aesthetic domains to investigate their interactions with the social world.

Masculinity is often designated as the opposite of femininity (Fragoso, & Kashubeck, 2000). Until recently, the male gender role has been used as a control for studying women’s behavior. Displays of masculinity include emotional suppression or emotional distancing behaviors, performing aggression, and building an idealized male physique while women seek to be emotional and soft (Silverstein et al., 2002). Other societal scripts followed by men to fit the masculine mold include domination over females or rejecting anything associated with femininity (Bosson et al, 2009). These expectations are built into young men through socialization with their fathers (Silverstein et al., 2002), through popular media like television shows and movies (Jakupcak, Tull, & Roemer, 2005) and through their friendships during periods of critical social identity development (Way, 2011).

Deeply embedded in our society is a tradition of gender role expectations and with them comes consequences for violating gender norms or not living up to societal standards. The performance of these traits holds social benefits of maintenance and consequences of revoked status (Gebhard, 2018), with violations of these social norms bearing a greater social cost for
men than for women (McCreary, 1994). Men are held to a standard of “man enough” but similar verbiage or expectations do not exist for women (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008).

Many gender role theories depend on the idea that masculinity or manhood can only be earned by rejecting or differentiating from anything considered feminine (Bosson & Michniewicz, 2013). The value placed on traditional male gender roles leaves men fearing being perceived as feminine or not ‘man enough’ (Fragoso, & Kashubeck, 2000). Men reminded of their gender status avoid performing any feminine traits, behaviors, or taking up female associated aesthetics (Bosson & Michniewicz, 2013). Govorun et al. (2006) argue that cultural stereotypes, including gender stereotypes, “guide and justify” defensive reactions toward targets stereotyped as having the undesirable traits people want to deny in themselves. This model implies that if a man believes he may possess undesired feminine personality traits, he will express more negative affect toward feminine others (Glick, et al., 2007).

**Precarious Manhood**

The maintenance of one’s masculine status is a unique plight for men. Women’s gender status is not often or as popularly questioned; we don’t tell women they have to “woman up” (Vandello et al., 2008). When men are reminded of their gender status, they are more motivated to avoid feminine behaviors or aesthetics (Bosson & Michniewicz, 2013). Interestingly, when women are reminded of their gender status, they do not increase rejection with their gender out-group characteristics or avoid traits that are not explicitly feminine (Bosson & Michniewicz, 2013). Gender threats to women do not elicit the same anxiety regarding how their gender status is perceived by others (Bosson & Michniewicz, 2013). Unlike womanhood, manhood is an earned status rather than an innate characteristic of an adult male (Vandello et al., 2008). Men’s
status of masculinity is more insecure or can be easily lost compared to womanhood status, thus manhood needs constant validation (Bosson et al., 2009).

This phenomenon is known as precarious manhood (Bosson et al., 2009). Precarious Manhood Theory asserts that manhood is a fragile status that is hard-won but easily lost (Bosson & Vandello, 2011; Vandello Bosson, Cohen, Burnaford & Weaver, 2008). Moreover, manhood must be engaged and defended through mechanisms of regular social proof through the employment of behaviors that fall into the masculinity constellation (Vandello et al., 2008). In the United States, precarious manhood ideology, the belief that masculinity is something to be earned not a birthright, is still culturally endorsed (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008).

Precarious manhood theory has three principles (Vandello & Bosson, 2012). The first, manhood is an achieved status. This contrasts with womanhood which is viewed as an ascribed status, unwavering, and relatively unquestioned or needing to be affirmed by others (Vandello, 2008). Gilmore (1990) examined this across many cultures noting coming of age ceremonies for men who earned their status in many cultures that did not have equivalent formalities for women. Gilmore also noted the severe stress enveloping the masculine role; they need to be tough and aggressive, emotionless, and sexually dominating while also being human beings with emotions and desires.

The second principle speaks to the instability of the masculine status. It states that once manhood status is achieved, it is easily lost and must be maintained (Vandello & Bosson, 2012). Vandello, Bosson et al. (2008) measured participants' endorsements of proverbs regarding masculine gender roles including statements such as “some boys do not become men, no matter how old they get” and “some girls do not become women, no matter how old they get” to gage
the elusiveness of manhood. Across several proverbs presented in the survey, participants more likely agreed with statements about manhood compared to womanhood. This suggests a culture of viewing manhood as an elusive status that must be earned.

The third tenet of precarious manhood theory is that one’s masculine status is primarily affirmed by others, therefore, requiring public displays to prove one’s masculinity (Vandello & Bosson, 2012). This comes from acting out any of the points in the masculinity constellation (Bosson, 2009). Weaver et al. (2010) showed evidence of this by asking participants to complete open-ended sentences “a real man …” or “a real woman…” . Researchers found expectations for men were defined with more action terms than women and this effect was heavily driven by male participant responses. This suggests men have more of a public display rubric to follow to achieve manhood. Vandello et al. (2008) reviewed this idea throughout American history, describing it as an uncertainty, a struggle, and a never-ending battle to prove one’s self that is ever-present in our western history.

“Toxic” Hegemonic Masculinity

The concept of precarious manhood describes anxiety related to meeting and shame of not meeting societal standards of the masculine identity (Vandello & Bosson, 2012). To quell these anxieties, men often employ stereotypically masculine behaviors as a public display to prove their masculinity (Vandello & Bosson, 2012). Many of these displays are harmful to bystanders and even the man employing them. Popular media and rhetoric have colloquialized the behaviors that negatively impact patriarchally minoritized populations as “toxic Masculinity.”

Parent and Moradi (2011) describe “Toxic Masculinity” as a drive for dominance and the enforcement of misogynistic and homophobic attitudes. Examples of this would be the behaviors
asserting their dominance over women, for example, the banners put up outside the University Of Maine fraternity houses in 2018 that read “daughter drop off” that caught media attention. Another example is aggressive behavior and the spectacle of men in sports competitions stopping the game to pick fights in the heat of football or hockey games. In a consumer culture context, it’s often exhibited with product marketing like “man-sized Kleenex” or BIC’s pink pens “for women”; taking something that may be associated with emotionality and making it more masculine by increasing the size or making the label blue. Even in social contexts, some may use phrases such as “your masculinity is so fragile” when addressing the ‘toxic’ behaviors.

The “toxic masculinity” phenomenon is one characterized by hyper-masculine behaviors employed by some men to prove one’s manhood and hypermasculine ideologies that influence behaviors (Kupers, 2005; Connell & Messerschmidt, 2005; Courtenay, 2000). The behaviors implemented to prove manhood are often exaggerated employment of behaviors from the masculinity constellation described by Kupers (2005). Recent research has worked to break down these domains to further understand how they are socially constructed and how they influence behavior. The pattern of behaviors performed to ease anxieties and prove one’s manhood, often referred to as “toxic,” may be better described using the hegemonic masculinity literature.

Kupers (2005) uses the phrase “hegemonic masculinity” to describe a piece of the puzzle explaining “toxic” male behavior. Hegemonic masculinity refers to the enforcement of rigid gender roles serving as a reinforcement of existing power structures that favor men as dominant (Messerschmidt, 2005; Courtenay, 2000; Kupers, 2005). Hegemonic masculinity is the behavior popularly called “toxic” (Connell & Messerschmidt, 2005), but the cause of these behaviors is rooted in the rigidity of the male gender role paired with the precarity of the masculine status and
some men’s insecurity regarding their masculinity (Vandello, Bosson, et al., 2008; Bosson, 2009; Vandello & Bosson, 2012).

Some of the traits commonly housed in the umbrella of “toxic” masculine behaviors are violence and aggression. Violence and aggression are a shame response to the man’s masculine identity being threatened (Thomaes, Bushman, Stegge, & Olthof, 2008). Men’s fear of expressing emotions associated with shame is highly correlated with an external expression of aggression (Jakupcak, Tull, Roemer, 2005). Alternatively, the feeling of shame brought on by men’s masculinity being threatened or questioned can present as a redirection of frustration onto others in the form of blame or dominance assertion (Thomaes, Bushman, Stegge, & Olthof, 2008). All this is a mechanism of protecting the man’s ego (Thomaes, Bushman, Stegge, & Olthof, 2008.)

The unique qualities of masculinity and the employment of masculine behaviors may also be a contributor to men’s rates of violent crimes. Masculine norms also contribute to acts of sexual violence against women (Hermann, Liang, & DeSipio, 2018). There is a discrepancy in the rates of what sexes commit violent crimes with men associated with more instances than women (Gebhard, Cattaneo, Tangney, Hargrove, & Shor, 2018). There is a relationship between men’s attitudes and behaviors relative to sexual dominance and their adherence to gender roles (Hermann, Liang, & DeSipio, 2018). This relationship helps to explain why the demographic of sexual crime perpetration is a male majority.

Unfortunately, there is a longstanding attitude that violence, hostility, and dominance over women are masculine norms that, when performed, are viewed as greater adherence to one’s manhood (Hermann, Liang, & DeSipio, 2018). This has been termed “hostile masculinity” and is linked to sexually aggressive behaviors (Hermann, Liang, & DeSipio, 2018). These men
also relied more on visual cues (rather than verbal cues) for consent, but are more likely to misinterpret visual cues, which the Miscommunication theory suggests is a behavior that explains high rates of sexual assault (Hermann, Liang, & DeSipio, 2018). Societal expectations have men stuck in a system where they must adhere to a standard of masculinity to be perceived as “man enough,” (Hermann, Liang, & DeSipio, 2018).

**Pain Perception**

The United States Marine Corps often quotes, “Pain is weakness leaving the body.” A demographic breakdown of the U.S. Marine Corps as an organization reveals only 6.55% of enlisted members are female as of 2016 (United States Department of Defense, 2017). This inherently masculine entity has a long-standing tradition of sexist attitudes against women as compared to civilian attitudes (Young & Nauta, 2013). If femininity is considered a weakness among men, the Precarious manhood model posits an idea that expressing weakness is inherently threatening to the male identity.

The traditional perception of showing pain as a weakness is detrimental to men’s mental and physical health. Existing literature has established a link between stark adherence to male and female gender roles and negative health outcomes (Barlow, & Hetzel-Riggin, 2018). Higher levels of caring about being the idealized masculine stereotype are correlated with higher levels of depression and anxiety (Fragoso & Kashubeck, 2000). Additionally Higher levels of gender role conflict were linked to higher levels of stress (Fragoso & Kashubeck, 2000). The more a man proves he needs to prove his manhood or live up to a masculine ideal, the more negative attitudes he holds towards psychological intervention seeking (Berger, Levant, McMillan, Kelleher, & Sellers, 2005). Men who subscribe to the traditional masculine ideology, the less likely he is to seek psychological help when needed (Berger, Levant, McMillan, Kelleher, &
Sellers, 2005). This reveals that both physical and psychological or emotional weakness may be suppressed to avoid the threat of being perceived as weak or more feminine.

Perceivers often underestimate or fail to recognize pain experienced by others (Craig, 2009). Social identity may be a moderator of one’s ability to recognize the pain of others. Social identity theory (Tajfel & Turner, 1979) and self-categorization theory (Turner, Higg, Oaks, Reicherm, & Wetherell, 1978) demonstrate the powerful influence on interpretation and response to social phenomena based on one’s self-categorization and categorization of others in the context of a social group membership. Men’s motivation to be man enough may make them particularly sensitive to self-categorization so they can employ behaviors that will maintain acceptance in the “man enough” in-group.

The sex of an observer affects responses to one’s pain (Edwards et al., 2017). Social categorization theory describes the human tendency to think of oneself as a member of a group, whether a social group, status group, race, or gender group (Tajfel & Turner, 1986; Turner et al., 1987). When group identity is threatened, establishing clear ingroup vs outgroup boundaries may serve as a coping mechanism (Branscombe et al., 1999). Men’s gender status is constantly threatened by various social factors (Vandello et al., 2008). This theory of categorizing the self vs others may offer explanations to differences in pain perception of men and women and how these differences potentially lead to disparities in the healthcare treatment of men vs women.

Early work investigating the perception of facial expression of pain suggests males and females are differentially judged on their non-verbal communications of pain (Hirsh et al., 2009; Schafer et al., 2016). In their study investigating attentional biases towards facial expressions of pain in men and women, Keogh et al. (2018) observed that both men and women were slower to respond to pain expressed by women and relevantly faster to respond to congruent male
expressions. Perceptions of pain and treatment decisions by healthcare professionals can differ depending on the sex of the person expressing non-verbal cues of pain (Hirsh et al., 2009; Schaefer et al., 2016).

The association between the masculine gender role and underestimating the pain of others (particularly women), may help explain gender disparities in our healthcare system. Gender issues remain a salient barrier to proper healthcare (Kupers, 2005). Despite major advances in medical technologies and revolutionary treatments created to cure or drastically reduce disease mortality, medicine is still failing half of the world’s population, perhaps more. For centuries, women have been dismissed by medical professionals as hysterical, been subject to longer waiting times to receive diagnosis or treatment (Chen, et al. 2008), given a misdiagnosis, less aggressive treatment (Hoffmann & Tarzian, 2001), and subjected to gender bias at the hands of medical professionals. This phenomenon referred to as the “Health Gap” is not surprising when the medical models on which doctors base their practice are created from studying the male body (McGregor, 2020).

In the United States, men make up the majority of active physicians spanning all specialties at 64.8% (AMA Physician Masterfile, 2017). Breaking this down further, men are the majority in thirty-seven of forty-four recorded specialties with twenty-five of those categories being over 70% male (AMA Physician Masterfile, 2017). This demographic breakdown of male physician dominance demands an investigation of how the unique qualities of the male gender role may infiltrate the medical profession. The proposed research seeks to investigate the role of masculinity, if it has one, and its effect on men’s perception of pain.

Given the documented disparities of proper medical treatment for women or frightening trends of male violence against women (Truman & Morgan, 2014), it is imperative we
investigate how the masculine identity may play a role in these phenomena. However, these are only a few of the life-worlds where this failure in men’s perception may affect women’s experience. Are men underappreciating women’s pain? Are they able to accurately recognize pain when they see it? And how may the varying levels of specific domains of the masculinity constellation affect pain perception?

The Current Research

The cisgender, straight, male identity carries a lot of social power in American culture as well as many other cultures around the world (Liu, 2017). The goal of the current research is to test the accuracy of a participant’s pain perception of different or same-sex targets to understand and investigate the relationship between varying levels of measured masculine domains with pain perception accuracy. Specifically, the hypothesis is that masculinity and the male gender role may influence men to underestimate the pain of others, particularly women.

Ruben and Hall’s (2013) pain perception procedure was utilized to test this hypothesis. Participants were shown video clips of targets experiencing pain from an overinflated blood pressure arm cuff. This was employed to assess their accuracy of pain perception. The videos captured real reactions of targets to the overinflation of the BP tourniquet. The subjects recorded their pain on a scale from 1 (no pain at all) to 10 (worst pain imaginable). These ratings were then compared to perceivers’ ratings of how much pain they thought the target experienced from the overinflated arm cuff. The difference in scores, if any, represents an error of pain perception. If participants' scores fell higher than the targets, they were overestimating the target's pain experience. If participant scores fell below, they underestimated target pain experience. In the current study, the perception that targets may be exaggerating their expressions of pain, or reporting their pain as higher than what they’re actually experiencing, is explored by comparing
two perceptions: 1) how much pain does the participant believe the target is *actually* experiencing, 2) how much pain does the participant believe the target would *report* experiencing. Rating the target as likely to report more pain than the participant believes they are actually experiencing demonstrates a perceived exaggeration in pain on the part of the target. Thus, this paradigm is ideal for examining whether men underestimate the pain of others.

Considering the preceding literature review, I predict to see these outcomes:

**Hypotheses**

H1: Male participants will be less accurate when reporting perceptions of women’s pain compared to men’s pain.

H2: Male participants who score higher in masculinity domains correlated with valuing dominance over women will be less accurate in their perception of women’s pain.

H3: Male participants will report greater belief of exaggeration of pain for female compared to male targets.

H4: Male participants who score higher in masculinity domains correlated with valuing dominance over women will report a greater exaggeration of pain for women targets.
CHAPTER 2: METHODS

This study was designed to assess correlations between levels of masculinity in male participants and the accuracy of pain detection of female targets. To accomplish this, we employed selected social personality inventories associated with the male gender role to build a complete masculine identity constellation of our participants to serve as our independent variable. To measure our dependent variable, pain perception accuracy, we showed videos of a standard tourniquet procedure on male and female targets to our participants and gave them the opportunity to rate the target’s pain levels.

Given the digital nature of the pain perception task, this study was held online via Qualtrics survey software. An online study allowed for us to collect data quickly, reach a wider demographic sample, and gave participants the ability to complete the study in a comfortable place. The flexibility of an online survey is believed to have increased the response rate of our participants by permitting them to set their schedule and their pace for taking the survey. Further, without an interviewer administering the surveys, participants were more willing to answer honestly giving us more accurate data.

Participants and procedure. A total of 79 heterosexual-identified undergraduate males \((M \text{ age} = 19.28, SD = 1.351)\) from the University of Maine community were recruited for participation from introductory psychology courses hosted by the university. As part of the participant pool requirements, an online pre-screen survey hosted by UMaine’s SONA platform is administered to all prospective participants to determine eligibility. This survey is used by the entire UMaine psychology department to recruit participants for their research. Participants completed a comprehensive array of questionnaires included in the pre-screen measures including demographic measures such as age, gender, sexual orientation, and sexually prejudiced
beliefs. Men were invited to complete this study after successfully completing all prescreen measures (gender and sexuality) in an optional pre-screen survey offered to the students as extra credit for the class. Participants were provided additional extra credit in one psychology course for their participation in the pre-screen.

Participants qualified to participate in this study were given access to our survey sign-up via SONA systems. Qualified participants were also contacted to encourage them to take part in the experiment. This online experiment was described as “Perceiving Nonverbal Signals” as to not clue participants in on the actual aim of the study. At the convenience of the participant, they accessed the Qualtrics online survey through the SONA website and then were immediately provided with an informed consent page. Once informed consent was given, the experiment commenced by providing the cover story to the participant.

Participants began the study by completing a series of measures assessing their masculine identity. Measures include those assessing adherence to the male gender role, engagement in masculine behaviors, precarious manhood, and desire to exert social power. Each scale aided in completing the masculine identity profile of the man to determine the orientation and utility participants have to their own social construction of masculinity.

Measures

Precarious Manhood Scale (Vandello, et al., 2008) contains several statements about the insecure nature of womanhood and manhood. These statements are mixed in with many other common proverbs to keep participants from finding the true nature of the survey. On a scale ranging from 1 (not at all true) to 7 (very true), participants rated statements like: “It is fairly easy for a man (woman) to lose his (her) status as a man (woman),” “A male's (female's) status as a 'real man' ('real woman') sometimes depends on how other people view him (her),” “Some
boys (girls) do not become men (women), no matter how old they get,” “Other people often question whether a man (woman) is 'real man' ('real woman'),” “Manhood (Womanhood) is something that can be taken away,” “Manhood (Womanhood) is not assured—it can be lost,” and “Manhood (Womanhood) is not a permanent state, because a man (woman) might do something that suggests that he (she) is just a 'boy' ('girl').” This scale aims to establish that the participants believe masculinity is not a birthright, but something uncertain and insecure to be earned compared to womanhood. ($\alpha = .79$).

Conformity to Masculine Norms Inventory (CMNI) (Mahalik, et al. 2003) was developed to measure the endorsement of 11 distinct masculine role norms using a 7-point Likert scale (1 = Strongly Disagree to 6 = Strongly Agree). Norms measured in this inventory are those related to winning, dominance over women, emotional control, interpersonal power, and antigay attitudes. This scale also measures how conformity to masculine gender roles correlates with anger, a component in many definitions of aggression. Higher scores reflect a tighter adherence to masculine gender roles. Overall, this measure assesses negative outcomes as they are correlated to adherence to rigid masculine gender norms. Items of this measure include: “It is best to keep your emotions hidden,” “Feelings are important to show,” “I treat women as equals,” and “In general, I control the women in my life.” ($\alpha = .77$).

Masculine Behaviors Scale (Snell, 2013) measures four behavioral tendencies stereotypically associated with the masculine gender role. The four behaviors measured are restrictive emotionality, inhibited affections, success dedications, and exaggerated self-reliance. This 20-item measure judges how behaviors tend to differ across gender. Participants respond to items such as, “I make sure that I "call all the shots" in my life,” “I don't take orders (or advice) from anybody,” and “In general, I avoid discussions dealing with my feelings and emotions,” by
indicating their agreement or disagreement with each item. The 7-point scale measures from A (strongly agree) to E (strongly disagree). ($\alpha = .73$).

*Bem Sex Role Inventory (BSRI)* (Bem, 1974) assesses how people identify themselves psychologically on the gender binary spectrum. The BSRI has been used to measure levels of masculinity and femininity in many investigations of gender. This questionnaire has 2 subscales (each with 20 items) and 20 neutral items: Masculinity (how masculine is your psychological profile) and 2) Femininity (how feminine is your psychological profile). The test is formatted with 60 different personality traits which participants rate themselves on the 1-7, Likert scale, thus a score of 4 puts you exactly in the middle. Those scoring above median on both the masculinity and femininity scale are considered to be "androgynous". ($\alpha = .79$).

These scales were housed in the psychology department survey of the study and participants were awarded one credit to participate in both the departmental survey and another credit for completing this pain perception study. The pain task was administered after participants signed up, however, they were only given access to signing up after their eligibility was assessed via the departmental survey. The surveys were presented separate from each other to dissociate the scales from the pain task to prevent participants from understanding the true nature of the study.

**Pain Perception Session**

An instruction page detailed the cover story as a research study examining the efficacy of telehealth practices. Participants were told they will watch a series of video clips, each clip followed up by two questions about what they saw in the video. Participants were then encouraged to answer the questions honestly to aid in the accuracy of our research effort and were reminded their recorded answers are anonymous. The instruction page was locked for 3
minutes to prevent participants from clicking through without reading the instruction block. The participants were warned that they could only watch each video one time before answering the subsequent questions.

After completing the instructions block, the participants moved on to the pain perception task. The task required the participants to view a series of 20 10-second clips of a person in pain from an inflated blood pressure arm cuff (lab-standard tourniquet procedure). Videoclips were coded to play automatically and participants were not able to pause, skip, or restart clips. This helped us to ensure participants give an honest, initial reaction when answering succeeding questions. The targets in the video clips varied by gender (10 clips of men completing the pain procedure and 10 clips of women). This allowed for comparisons in pain perception accuracy within and between groups.

Following each video clip, the participants were asked to indicate on a scale from 0 “no pain at all” to 10 “the most intense pain imaginable” 1) “If the person in this video were rating their pain, how much pain would they say they are experiencing?” And 2) “From your perspective, How much pain do you think the person in the video is experiencing?” Question 1 evaluated the recognizability of intergroup pain while question 2 appraised if the targets’ assessment of their own pain experience is believed. This series of questions allowed us men to assess the accuracy of pain perception in question 1 and if the participant will discount the target pain in a difference of scores between questions 1 and 2. Question 1 and 2 appeared on separate survey pages to allow for full attention to be given to one question at a time. The questions appeared in the same order after each video clip.

After completing the video and question blocks, participants were directed to a demographic questionnaire. Here, participants answered questions to report characteristics of
their social identity that may have influenced their responses to the intergroup pain perception task. Demographic data collection included questions of social class, race-ethnicity, religious orientations, political ideology, age, sex, and gender identity. Participants were given the option to answer as they are comfortable or leave items blank if they wish. These demographic items were recorded in both the departmental and pain perception surveys.

Upon completion of the demographic section, participants were probed for suspicion and debriefed via text block at the end of the Qualtrics survey, awarded their credits, and provided with contact information of the lab should they have questions about their experience. Optional resources including literature on masculinity, men’s groups that discuss topics concerning masculinity, and a link for masculinity groups that meet in the state of Maine were provided at the end of the study. Participants can enter their email addresses to get information on a local Maine Boys To Men chapter that encourages conversations about masculinity and its implications. Should participants provide their contact information for this resource, this information will not be connected to their study responses.
CHAPTER 3: RESULTS

Were there differences in men’s perceptions of pain by apparent target gender?

Our dependent variable of pain perception accuracy comes in four parts: WYouMean, MYouMean, WTheyMean, and MTheyMean. MYouMean is the mean participant perception of the pain masculine-presenting targets experienced during the pain task. WYouMean is the same rating but for our female-presenting targets. This is captured by our survey question “indicate on a scale from 0 ‘no pain at all’ to 10 ‘the most intense pain imaginable’ how much pain would you say the person in the video is in?” This score represents the mean participant perception of pain for all the male vs female-target videos. This score, compared to the actual pain rating given to us by the target in the video, measures our participants’ accuracy of pain perception.

MTheyMean is the mean rating for how much the participant would guess the male target would rate their own pain. WTheyMean is the same but for our female target. This is captured by our survey question “indicate on a scale from 0 “no pain at all” to 10 “the most intense pain imaginable” how much pain would the person in the video say they were in? This score represents the mean participant guess for how male vs female targets would rate their own pain. This score, compared to the target stimuli’s actual pain rating, allows us to see if participants trust the expression of pain exhibited by our targets. This is to gauge whether participants believe the targets are exaggerating their pain.

Said another way, should our participants say they believe the target experiences a five out of ten on the pain scale, but also a belief that the target would report a seven out of ten on the pain scale, we can glean a three-point exaggeration of pain by the participant. This investigation is to examine whether women vs men’s account of their own pain is perceived as accurate. This stands with the long history of women’s pain being taken less seriously in society.
H1: Male participants will be less accurate when reporting perceptions of women’s pain compared to men’s pain.

A 2 (Perception: You, They) by 2 (Target: Men, Women) mixed-model ANOVA was used to examine whether pain ratings were dependent on the apparent gender of the target. Consistent with predictions, analysis for sex of stimuli revealed a significant main effect on pain rating with a very large effect size ($F(1,78) = 110.774, p = .000, \eta^2 = .587$). The mean pain score rating was significantly different for masculine-presenting stimuli ($M = 4.87, S = 1.30$) compared to female-presenting stimuli ($M = 3.34, S = 1.127$; see figure 1). There was a robust effect of male participants rating female stimuli as significantly lower than male stimuli. Overall, men underestimate the pain of both men and women, however, participants were significantly more likely to underestimate women’s pain, rating them as far lower than their stimuli-matched male counterparts.
Figure 1. Women’s pain was consistently perceived to be lower than men’s pain. Both men’s and women’s pain were perceived to be less than actual pain experienced by targets.

Are men’s perceptions of pain in others moderated by masculinity?

H2: Male participants who score higher in masculinity domains correlated with valuing dominance over women will be less accurate in their perception of women’s pain.

The robust main effect for men to underestimate the pain of women was only part of our investigation. To understand why this phenomenon of men’s and women’s pain differing significantly exists, we looked at possible moderators within the masculine role. The masculinity domains covering the behavioral, ideological, and aesthetic traits employed by men to prove their manhood status were the investigated moderators. For example, would higher levels of precarious manhood (anxiety associated with a perceived threat to masculinity due to presenting or acting more feminine) predict pain rating inaccuracy? Further, would there be a difference in this association with pain rating accuracy for female vs male targets?
The masculinity profile of each participant was created using four different scales quantifying gender identification and ideology. All scales were measured as a 7-point Likert scale. Our participants, on averaged, scored at or around the midpoint for all scales. This tells us our participants are not as likely to employ behaviors deemed “toxic.” The Precarious Manhood Scale (Vandello et al, 2008) measures levels of precarious manhood ideology ($M = 3.39, SD = 1.23$). The Masculine Behaviors Scale (Snell, 2013) measured tendencies for employing behavioral tendencies associated with masculinity ($M = 3.92, SD = 0.61$). Male Role Norms Inventory-REVISED (Levant, et al. 2010) measures tendencies to meet feelings of gender anxiety associated with threatened masculinity with hegemonic masculinity behaviors ($M = 3.92, SD = 0.61$). Sex Role Inventory (BSRI) (Bem, 1974) assesses how people identify themselves psychologically on the gender binary spectrum ($M = 3.74, SD = 0.61$).

While moderated regression analyses were planned, preliminary correlation analyses revealed no significant relationships between any of the tested masculinity domains (BSRI, Precarious manhood, Conformity to Masculinity, and Masculine Behaviors) and any measure of perceived pain (see figure 2). These results are inconsistent with our hypotheses and leave us with the questions: what is it about the male gender role or masculinity that prevents accurate pain perception? What features of manhood predict reduced ability to accurately perceive the pain of others and why is woman’s pain harder to perceive?

**H3: Male participants will report greater exaggeration of pain for female compared to male targets.**

Contrary to predictions, there was no evidence that men perceived targets overall as exaggerating (no main effect of perception, ($F(1,78) = .123, p = .727, \eta^2 = .002$) or women specifically as more likely to exaggerate their pain (no perception X target interaction), ($F(1,78)$
As shown in Figure 1, participants did not distinguish between the “you” and “they” perceptions. In sum, men in the current study demonstrated a robust effect of minimizing the pain experienced by women relative to men, and to the target’s own reported experience of pain.

**H4:** Male participants who score higher in masculinity domains correlated with valuing dominance over women will report a greater exaggeration of pain for women targets.

As previously stated, a correlation between adherence to masculine gender role stereotypes or traditions nor levels of hegemonic or precarious masculinity was found. Additionally, there was no documentation of perceived exaggeration from male participants for male or female targets. Thus, hypothesis 4 is unsupported.

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<td>.330**</td>
<td>.376**</td>
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<td>1.31306</td>
<td>.63826</td>
<td>.61181</td>
<td>1.23127</td>
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**. Correlation is significant at the .01 level (2-tailed).**

*Figure 2. No correlation between levels of masculinity domains and pain rating inaccuracy.*
CHAPTER 4: DISCUSSION

Consistent with previous studies investigating pain perception, the results of this study show women are perceived to experience less pain than men by male perceivers than actually reported by women targets. Even when female targets were subjected to the same pain task and reported the same pain levels as their male counterparts, male participants still expected them to feel more and report higher pain levels than the males. Additionally, male targets’ pain was underestimated as well. This reveals that maybe there is an “all men” component to deficits in pain perception accuracy.

Surprisingly, male perception of pain was not correlated with any specific masculinity domain. This was contrary to our expectations given the documented consequences of the domains investigated. However, there can be an explanation for this null effect. For one, our participant sample was a group of first-year university students; not necessarily a participant group apt to be offenders of antisocial behaviors as described in the masculinity research. Further, the men in this study were not reminded of their gender status or had that status challenged in any way. Therefore, this study could have captured a dormancy in masculinity exercising as there was no engagement of that identity.

The success in this study comes from the replication of the effect of target sex on perceivers’ pain rating accuracy with these particular stimuli set via an online format. The stimuli videos created by Ruben and Hall (2013) are novel stimuli for the masculinity literature and have proven to be effective in measuring sex differences in pain perception. Additionally, we can count on the accuracy of measuring pain perception via a fully online format using these stimuli set and measurement methods.
Relation to Social Problems: Violence Against Women and Health Care

So what is masculinity’s role? Harkening back to our discussion of masculinity in the introduction, we can start to understand the difficulties of navigating a social world with such a rigid masculine rubric. Hopefully, further research into the implications of the masculine behavior deemed ‘toxic’ can help disrupt the traditions of socialization that plague man.

Psychological understanding of masculinity and how it works in the social world is still relatively unexplored. The masculine identity is at the top of our western social food chain (Liu, 2017), but there is still work to be done to understand the mechanisms, internally and externally, that keep men there. There seems to be a large problem with the masculine identity; the majority of domestic violence perpetrators are men (Truman & Morgan, 2014), more than 80% of violent crime offenders are male (United States Department of Justice, 2010), males accounted for 98.9% of people arrested for forcible rape (FBI, 2011), and, more relevant, 98% of mass shooting perpetrators are male (Peterson & Densley, 2019). Indeed, the tendency for men to discount or simply not recognize the pain of others, especially women, may contribute to this violence.

It was until very recently that women were considered men’s property: her father’s until she was married and then her husband’s (NiCarthy, 2013). British common law, of which American Law was based, gave men permission to “chastise” their wives physically. Though many American states have since rescinded those permissions, it was not until the last quarter of the nineteenth century and even then men who continued to exercise their power over women in this way still were protected under the law (NiCarthy, 2013). As recently as 1962, a woman who took legal action against her husband’s abuse had her case dropped because the California Supreme Court did not want to “destroy the peace and harmony of the home” (NiCarthy, 2013).
Proverbs and poetry also contribute to the traditions of men’s power over any other gender group thus perpetuating masculine superiority. For example, the saying “Man is the hunter, woman is his game,” spoken by Alfred Lord Tennyson or the Russian Proverb, “A wife may love a husband who doesn’t beat her, but does she respect him?” Both illustrate ownership and promote violence over women. Paradoxically, society assumes male control over women while systematically denying and hiding these issues (NiCarthy, 2013). This continues to perpetuate these male behaviors against women.

The recent uptick in negative rhetoric surrounding the topic of men and masculinity, if only as a topical podcast joke, may also be contributing to the social pressures conforming men to their perceptions of masculinity. Popular feminist media paints male behavior as toxic, seemingly dismissing any social undercurrents that may influence these behaviors. Rhetoric never differentiates the “some men” and “not all men” when addressing these male behaviors. Instead, houses all of masculinity into a binary of toxic or not. Our understanding of the world’s external interaction with masculinity must shift to questions of men’s internal experience with their own gender identity. Understanding masculinity as it occurs within a person and see what domains interact with what social orientations, if at all, to create the behaviors marked as toxic is crucial to addressing the external problems.

Through the consumption of feminist media and social psychological research, a link began to form between the male condition and the long tradition of women’s pain or illness not being taken seriously this creating a “Health Gap” in the quality of care given to women vs men (McGregor, 2020). Demographic data of active medical practitioners across all specialties revealed men as the dominating identity of healthcare professionals (AMA Physician Masterfile, 2017). Could these two things be related? Could the domains of masculinity be pronounced by
dominance over women or rejection of femininity (Messerschmidt, 2005; Courtenay, 2000; Kupers, 2005)?

**Health**

Thus, the present study was conducted to address masculinity as it pertains to its consequences for others. The investigation of antinociceptive medication regimens is one way to evaluate the consequences of inaccurate pain perception as it relates to gender. A significant gender difference in the prescribing frequency and dosage of pain medication among men and women has been documented (Calderone, 1990). Women have often been prescribed pain medication far less often and their dosage is significantly less than men's when controlling for body weight (Calderone, 1990). In this study, men perceived women as experiencing significantly less pain than men did during the same tourniquet procedure even when both gender targets rated their pain the same. This finding is a laboratory replication to the reality women face in healthcare settings when being prescribed lower doses of palliative medication, when experiencing more visits to doctors’ offices before receiving the proper diagnosis, or when being dismissed as hysterical.

Problems with masculinity may be on a path to becoming more insidious. Men who perceive their gender ingroup as becoming more feminine over time compensate for this group behavior change with individual action to broadcast traditional masculinity behaviors like posturing or aggression (Bosson & Michniewicz, 2013). This coupled with the findings that men reminded of their gender status are more motivated to reject feminine behaviors or aesthetics (Bosson & Michniewicz, 2013) may spell increased “toxic” behaviors in the future. As more acceptance for non-binary and non-heterosexual identities increase in our global society, this
could mean men bound by more traditional gender ideologies may act on their anxieties about their gender group’s perception.

**Limitations**

This study was not without its limitations. The occurrence of the coronavirus pandemic presented a unique set of challenges. The entirety of this study was presented online. Participants were recruited and completed each section of the study online and on their own time. Presenting this study online allowed us to capture more participants. However, without the ability to supervise participants or control their environment. Some of these complications resulted in data exclusion in the data cleaning process.

Common complications resulting in excluding participant data include participants taking the study more than once, study completion in less than ten minutes, straight-lining (entering the same response for all questions), and failed attention checks. Without the ability to control the participants’ environment, we could not ensure full attention was given to the study. However, using attention checks and determining fairness based on the time taken to complete the study helped us to collect valuable data.

The coronavirus pandemic also limited our participant pool. Participants for this study were recruited from introductory psychology courses at the University of Maine. Students were asked to complete studies using our SONA software to earn credit towards their coursework. The pandemic resulted in fewer students taking the UMaine courses during the data collection period. Of the students that did attend and complete, we can only imagine their mental capacity to give full attention to another online task. Further, given the online nature of the courses, we were limited to recruiting via email and other online formats.
These things combined left us with a significantly lower participant pool and, in turn, $N$ than we had hoped to capture. Despite best efforts, we were unable to recruit more university students or keep some of the participants from committing classic survey sins such as straight-lining or attempting to take the survey multiple times for more credit. Our ideal scenario would include more control over the participants’ environment, a larger participant pool, and less stressful global circumstances in which to complete the study.

However, despite the plethora of procedural limitations, our effect size for our main effect was massive; reporting almost 60% of the variance in pain ratings being due to the apparent gender of the participant. This gives points to the validity of a gender effect and offers hope that moderators to this effect can be discovered. Revisiting this line of inquiry from other angles or after further research on specificity traits of known masculinity domains may be the key to uncovering these moderators.

**Implications for Healthcare Fields**

In this research, we defined gender in binary terms. However, our world is no longer one that can be accurately represented by a gender binary. Future directions for this study must include a representative gender sample in its target stimuli catalog. Understanding how masculinity interacts with different identity placements on the spectrum is crucial to address gender violence as often perpetrated by men (Dutton, 2006).

The analysis found no relationship between the various masculinity domains presented (eg., hegemonic, precocious, etc.) and the accuracy of the male participants’ pain perception ratings. It is important now to acknowledge the plurality of masculinity and the hierarchy of masculinities in a given situation. One domain in particular, precarious manhood, may provide a key to triggering further inaccuracy.
The precarious manhood masculine domain theory has three principles: 1) masculinity is an achieved status, 2) can be easily lost, and 3) is affirmed by others (Vandello & Bosson, 2012). Ever-present in our Western American history as an uncertain, a struggle, and never-ending battle to prove one’s own manhood (Vandello et al. 2008). Perhaps by engaging this domain of masculinity, through manipulated threats to one’s manhood status, we may see an effect on pain perception.

Precarious manhood requires a threat to masculinity to experience its consequences (Vandello & Bosson, 2012). Though one’s level of precarious manhood experience can be heightened by identity threats (Vandello & Bosson, 2012). Perhaps activating this domain by reminding male participants of their gender or having them engage in a gender incongruent task may engage this response for us to capture an effect.

Another direction to consider is recruiting a participant pool that has already exhibited these masculine norms against women. In the Bangor area, there is more than one group of Domestic Violence offenders who are made to take classes or attend support groups to address their behaviors. Targeting these populations to complete this study may help us capture higher levels of the various masculine domains to correlate to pain perception. Perhaps too we can find correlations between these masculine domains and frequency, severity, or risk of battering partners thus spreading the utility of this research to many areas that affect women.

The presentation of this study to our participant pool explained that this task was to determine accuracy in perceiving pain via an online format as a response to the coronavirus pandemic pushing many doctors’ visits online. Further research should be conducted to determine whether this gender effect replicates in a clinical setting. Assessing medical professionals’ ability to accurately perceive the pain of their patients, especially those who
identify differently than the professionals is crucial to begin addressing these clear gender discrepancies in medical care.

**Conclusion**

The present study proposal aimed to test the consequences of some men’s masculine orientation and subsequent behaviors as they interact with the accuracy of male perceptions of other peoples’ pain. Particularly, we are investigating the broadly colloquialized phrase “toxic masculinity”; how the breadth of behaviors and ideologies housed in the popular conceptualization of masculinity may influence perceptions of pain depending on the pain receiver's gender expression.

Here it’s been demonstrated that men are less accurate when perceiving women’s pain than they are men's pain. Though they underestimated both men’s and women’s pain, the judgment of women’s pain is significantly less accurate. These findings are a recreation of past studies assessing men’s assessment of women’s vs men’s pain (Robinson & Wise, 2003), and the first to be conducted via an online format with the specific set of stimuli from Ruben and Hall’s (2013). Women’s pain experience was often rated as much lower than men’s. Tested male identity moderators representing ideological, behavioral, and aesthetic traits of the masculine identity revealed no significant correlations with pain perception accuracy. It is within the robust finding of men’s inaccuracy in pain perception when judging women’s pain experience that we begin to understand the mechanism behind a variety of social problems such as violence against women and gender disparities in our healthcare system. This research is another step forward to social equity in our nation.
REFERENCES


APPENDICES

Appendix A

Participant Recruitment

SONA DESCRIPTION

Study Name: Perceiving Nonverbal Signals
Study Type: Online Study
Duration: 60 minutes
Credits: 1 credit

Description: We are investigating how people perceive nonverbal signals in others. You will be asked to perceive different types and intensities of pain in people from videos. While these videos show various levels of pain, they are not graphic nor gory. We will also ask you to complete several personality, attitudinal, and mood questionnaires or a reaction time task. You must be at least 18 years of age to participate. You will receive 1 credit for study completion.
APPENDIX B
INFORMED CONSENT FORM

You are invited to participate in a research project being conducted by Shannon McCoy, PhD and Margaret Gautrau in the Department of Psychology at the University of Maine because you completed the Psychology department prescreen or the Social Attitudes Study. The purpose of the research is to examine the perception of others’ pain. You must be at least 18 years of age to participate.

What Will You Be Asked to Do?

If you decide to participate, you will be asked to make judgments about pain based on videoclips. While people in these videoclips are experiencing varying levels of pain, they are not gory or graphic. We will also collect some demographic information from you. Prior to completing the videoclip task, you will be randomly assigned to either:

1) Fill out questionnaires regarding your attitudes and personality. An example question is: I try to be in control of everything in my life.

   OR

2) Complete a reaction time task matching descriptive adjectives to categories.

   Altogether, the tasks will take approximately 60 minutes to complete.

Risks

- There is the possibility that you may become uncomfortable answering some of the questions in the survey, or completing some tasks. You may skip any questions or tasks that make you uncomfortable.

Benefits

- While this study will have no material benefit to you, this research may help us learn more about how we perceive other people’s pain.
Compensation:
You will receive 1 credit for participating in this study. You may stop at any time and still receive credit. If you skip questions or tasks that you don’t feel comfortable answering, you will still receive full compensation.

Confidentiality:
Your name will not be associated with any of the research findings. If you agree to participate, you will be assigned a participant number which will be used to link your survey data with your prior prescreening responses. A cross-index key will be created linking your name and participant number, and this will be stored using software that provides additional security and will be kept apart from any other study information in a separate datafile. We anticipate this cross-index key will be destroyed May 2021. Once the cross-index key is created, only your participant number will appear on all study data. Data will be kept indefinitely in accordance with guidelines of the American Psychological Association. Data will be kept on a password-protected computer in a locked office.

Voluntary
Participation is voluntary. You may skip any questions or tasks you do not wish to answer without losing compensation.

Contact Information
If you have any questions about this study, please contact Shannon McCoy (shannon.mccoy@maine.edu). If you have any questions about your rights as a research participant, please contact the Office of Research Compliance, University of Maine, e-mail umric@maine.edu.

Please provide your name in the text box below:

By clicking “I agree to participate in this study” you are consenting to participate in the current research. If you do not agree to participate, you may simply click out of this survey window now.
APPENDIX C
Study 1 Survey Measures

Gender Role Endorsement
(Bem, 1974)
To what extent do these words describe you?
Assertive
Leader
Dominant
Strong Personality
Forceful
Aggressive
Willing to take a stand
Independent
Defends own beliefs
Willing to take risks
Understanding
Sympathetic
Eager to soothe hurt feelings
Sensitive to the needs of others
Compassionate
Loves Children
Affectionate
Gentle
Warm
Tender

Masculine Behaviors
(Snell, 2013)
1. I spend a great deal of my time pursuing a highly successful career.
2. I don't usually discuss my feelings and emotions with others.
3. I don't devote much time to intimate relationships.
4. I try to be in control of everything in my life.
5. I am very ambitious in the pursuit of a success-oriented career.
6. I am not the type of person to self-disclose about my emotions.
7. I don't involve myself too deeply in loving, tender relationships.
8. I make sure that I "call all the shots" in my life.
9. I devote extensive time and effort to the pursuit of a professional career.
10. I don't often talk to others about my emotional reactions to things.
11. I don't become very close to others in an intimate way.
12. I don't take orders (or advice) from anybody.
13. I do whatever I have to in order to work toward job success.
14. In general, I avoid discussions dealing with my feelings and emotions.
15. I don't often tell others about my feelings of love and affection for them.
16. I don't let others tell me what to do with my life.
17. I work hard at trying to ensure myself of a successful career.
18. I don't often admit that I have emotional feelings.
19. I tend to avoid being in really close, intimate relationships.
20. I don't allow others to have control over my life.

Response Options:
(7-point scale)
Strongly disagree = 1
Strongly agree = 7

Conformity To Masculine Norms Inventory
(Mahalik, et al., 2003)
1. It is best to keep your emotions hidden
2. In general, I will do anything to win
3. If I could, I would frequently change sexual partners
4. If there is going to be violence, I find a way to avoid it
5. It is important to me that people think I am heterosexual
6. In general, I must get my way
7. Trying to be important is the greatest waste of time
8. I am often absorbed in my work
9. I will only be satisfied when women are equal to men
10. I hate asking for help
11. Taking dangerous risks helps me to prove myself
12. In general, I do not expend a lot of energy trying to win at things
13. An emotional bond with a partner is the best part of sex
14. I should take every opportunity to show my feelings
15. I believe that violence is never justified
16. Being thought of as gay is not a bad thing
17. In general, I do not like risky situations
18. I should be in charge
19. Feelings are important to show
20. I feel miserable when work occupies all my attention
21. I feel best about my relationship with women when we are equals
22. Winning is not my first priority
23. I make sure that people think I am heterosexual
24. I enjoy taking risks
25. I am disgusted by any kind of violence
26. I would hate to be important
27. I love to explore my feelings with others
28. If I could, I would date a lot of different people
29. I ask for help when I need it
30. My work is the most important part of my life
31. Winning isn’t everything, it’s the only thing
32. I never take chances
33. I would only have sex if I was in a committed relationship
34. I like fighting
35. I treat women as equals
36. I bring up my feelings when talking to others
37. I would be furious if someone thought I was gay
38. I only get romantically involved with one person
39. I don't mind losing
40. I take risks
41. I never do things to be an important person
42. It would not bother me at all if someone thought I was gay
43. I never share my feelings
44. Sometimes violent action is necessary
45. Asking for help is a sign of failure
46. In general, I control the women(men) in my life
47. I would feel good if I had many sexual partners
48. It is important for me to win
49. I don't like giving all my attention to work
50. I feel uncomfortable when others see me as important
51. It would be awful if people thought I was gay(lesbian)
52. I like to talk about my feelings
53. I never ask for help
54. More often than not, losing does not bother me
55. It is foolish to take risks
56. Work is not the most important thing in my life
57. Men and women should respect each other as equals
58. Long term relationships are better than casual sexual encounters
59. Having status is not very important to me
60. I frequently put myself in risky situations
61. Women should be subservient to men
62. I am willing to get into a physical fight if necessary
63. I like having gay friends
64. I feel good when work is my first priority
65. I tend to keep my feelings to myself
66. Emotional involvement should be avoided when having sex
67. Winning is not important to me
68. Violence is almost never justified
69. I am comfortable trying to get my way
70. I am happiest when I'm risking danger
71. Men should not have power over women
72. It would be enjoyable to date more than one person at a time
73. I would feel uncomfortable if someone thought I was gay
74. I am not ashamed to ask for help
75. The best feeling in the world comes from winning
76. Work comes first
77. I tend to share my feelings
78. I like emotional involvement in a romantic relationship
79. No matter what the situation I would never act violently
80. If someone thought I was gay, I would not argue with them about it
81. Things tend to be better when men are in charge
82. I prefer to be safe and careful
83. A person shouldn't get tied down to dating just one person
84. I tend to invest my energy in things other than work
85. It bothers me when I have to ask for help
86. I love it when men are in charge of women
87. It feels good to be important
88. I hate it when people ask me to talk about my feelings
89. I work hard to win
90. I would only be satisfied with sex if there was an emotional bond
91. I try to avoid being perceived as gay
92. I hate any kind of risk
93. I prefer to stay unemotional
94. I make sure people do as I say

Response Options:
(7-point scale)
Strongly disagree = 1
Strongly agree = 7

Precarious Manhood Scale
(Vandello, Bosson, Cohen, Burnaord, & Weaver, 2008; 1b)

Please read each statement below and then indicate how true you personally believe it is by selecting one number from the following scale:

1 2 3 4 5 6 7
Not at all true very true

1. It is fairly easy for a man to lose his status as a man.

2. A male’s status as a ‘real man’ sometimes depends on how other people view him.

3. Some boys do not become men, no matter how old they get.

4. Other people often question whether a man is a ‘real man’.

5. Manhood is something that can be taken away.

6. Manhood is not assured – it can be lost.

7. Manhood is not a permanent state, because a man might do something that suggests that he is really just a ‘boy’.
APPENDIX D

Example screenshots of Pain Perception Task

Instructions:
Given the recent pandemic and the push to lessen person to person contact, it is valuable to assess how beneficial tele-health (doctor's appointments, therapy, or other types of healthcare communication over the internet) compared to in-person healthcare. In order to assess diagnostic procedures, we ask that you assess the pain of individuals in the following videos.

In this study you will view a clip of a person in a lab-standard tourniquet procedure. After viewing the video you will answer two questions about the pain experienced by the person in the video. The video will start automatically when you hit "ready for next video" and you can only watch the video once before answering the two questions so please be ready for each clip. Once the video is over it will automatically prompt you to answer each question.

We are interested in how people perceive pain in others in a tele-communication context. We are interested in your initial reactions to what you see so there are no wrong answers! Please go with your gut when answering each question. To accurately assess tele-health communication we need your honest reaction. Recorded answers are anonymous and your name will not be associated with any of the findings.

When you are ready, please hit next to view the first video.
BIOGRAPHY OF AUTHOR

Born in Stamford, Connecticut and a graduate of Daniel Hand High School, MJ Gautrau received a bachelor's degree in psychology from the University of Maine. MJ is a member of The Maine Coalition to End Domestic Violence as well as the Society for Society for Personality and Social Psychology. MJ’s has extensive professional experiences as a mental health and domestic violence advocate as well as marketing and visual content design. MJ Gautrau is a Master of Arts candidate in social psychological sciences at the University of Maine in August of 2021.