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DOES SHARING INFORMATION WITH FRIENDS AND FAMILY CAUSE MEN TO ADHERE MORE STRONGLY TO MASCULINE NORMS?

by

CLINT E. JOHNSON

(Under the Direction of Nicholas S. Holtzman)

ABSTRACT

It is clear that social influence can elicit conformity to norms (e.g., Asch, 1956). It remains unclear, however, how various relationships elicit differential conformity to masculine norms in particular. In this pre-registered experiment, I tested the hypothesis that when men are asked to reveal their responses on the Conformity to Masculine Norms Inventory (CMNI; Mahalik et al., 2003), men conform more when sharing that identifiable information with others who know them (i.e., "public" conformity), namely friends and family, as compared to sharing that information anonymously with a random stranger (i.e., the anonymous "private" condition). My convenience sample consisted of participants (valid N = 65) who were all European American heterosexual men enrolled in a large rural state university in the southeastern United States. Participants entered each of the three randomized conditions (i.e., family, friends, anonymous), guided by a research assistant who was blind to the hypotheses and who verbally delivered each manipulation. For the two public conditions, participants provided an email address for two intended recipients of the conformity scores. For each of the public conditions, participants indicated their perceived psychological closeness to the people with whom they were supposedly sharing the information. For each of the three conditions, participants indicated their comfort with sharing said information. Unexpectedly, the CMNI score means for the three conditions were virtually identical and were not significantly different. Granting credence to the manipulation, however, participants were significantly less comfortable with sharing information in the public conditions ($M_{\text{Family}} < M_{\text{Friends}} < M_{\text{Anonymous}}$). Thus, despite men being relatively less comfortable with publicly sharing CMNI responses, in both public and private, men may exhibit stability in gender conformity (with the caveat that there are, of course, individual differences in mean levels). This finding contrasts with the idea that men exhibit a public masculine façade; men appear to privately accept the degree of masculinity that they portray to close others.

INDEX WORDS: Gender conformity, Social conformity, Masculinity, Relationships, Family, Friends, Anonymous, Adherence.

DOES SHARING INFORMATION WITH FRIENDS AND FAMILY CAUSE MEN TO ADHERE MORE STRONGLY TO MASCULINE NORMS?

by

CLINT E JOHNSON

B.S., Armstrong State University, 2017

A Thesis Submitted to the Graduate Faculty of Georgia Southern University

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MASTER OF SCIENCE

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CHAPTER 1

INTRODUCTION

From an early age, individuals learn what societal members expect of them through prescribed norms establishing suitable situational beliefs, values, and behaviors (Rutland, Cameron, Milne, & McGeorge, 2005). Societal norms are the perceived standards and guidelines that direct and constrain a member's behavior (Cialdini & Trost, 1999). Societal norms shape our "customs, traditions, standards, rules, values, fashions" (Sheriff, 1936, p. 3). Effects of generated norms of others on conformity have been documented through various situations and contexts (e.g., Asch, 1956; Hewlin, Dumas, & Burnett, 2017; Gockeritz et al., 2010). Individuals gather information from various unique dynamic social interactions to gain an accurate depiction of shared reality to aid in choosing expected behaviors. For example, researchers have influenced pedestrians to look up at a building simply by modeling the behavior (Milgram, Bickman, & Berkowitz, 1969). People change their behavior as a strategy to conform to, or match, the responses of others and to match the societal norms of the situation (Cialdini & Goldstein, 2004).

When individuals choose not to adhere to social norms, they not only expose themselves to social rejection but also risk the costs associated with outgroup status such as decreases in resources, alienation, lower self-esteem, and lower well-being (Leary & Baumeister, 2000; Schachter, 1951). Discrepancies between personal beliefs and perceptions of the beliefs of close others may cause further psychological tension. Internalized tension may solicit the need to conform in order to establish social appropriateness and increase self-worth and stable selfconcepts (Cohen & Prinstein, 2006).

When individuals are faced with conflicts of enacting and affirming personal beliefs versus fitting in and belonging, they may engage in conformity strategies such as enacting

inauthentic behaviors or using facades (Hewlin, 2003; Hewlin, Dumas, & Burnett, 2017). Carl Jung (1953, pp. 166-167) refers to masks of self-presentation that elicit favorable responses from others and insulate oneself from detrimental responses. Individuals may employ conformity strategies to attempt to create and maintain meaningful relationships with others. Indeed, conformity to social norms may be sustained by an individual's fear of social isolation from these relationships, or by their fear of being misclassified into a devalued group (Bosson, Prewitt-Freilino, & Taylor, 2005; Bosson, Taylor, & Prewitt-Freilino, 2006). For example, research suggests that when publicly misclassified as gay, heterosexual men feel an increase in discomfort and threat (Bosson, Taylor, & Prewitt-Freilino, 2006; Bosson, Vandello, Burnaford, Weaver, & Wasti, 2009).

Social norms can be divided into descriptive and injunctive. A descriptive norm refers to what is typically or actually done in certain situations based on one's understanding of how other individuals in the context are behaving. By contrast, injunctive norms are what is expected to be done, or conduct that carries a moral or judgmental component (Cialdini, Reno, & Kallgren, 1990). A distinguishing characteristic of injunctive norms is the manifestation of social control from perceptions of evaluative reactions from others. This anticipated approval/disapproval of appropriate conduct both from society and close relationships, such as relationships with friends and family, may attribute to alterations in personal behavior (Böckenholt & van der Heijden, 2007; Cialdini et al., 1990; Reno, & Kallgren, 1990). Further, research suggests a direct relationship between our fondness for a person and conformity, such that affiliations may cause an increase in attitudes and behaviors intended to solidify the social reward of the relationship (Cialdini & Trost, 1999; Cohen & Prinstein, 2006; Fisher & Fisher, 1992). This suggests that the perceived closeness of the relationship may cause various levels of conformity to cultural norms

in question. Further, conformity may be used to obtain desired levels or sustain previously achieved levels of engagement, ingroup status, and perceived reward.

Perhaps one of the strongest forms of social influence is that of gender roles. Gender roles are enforced by various members of society from parents and family to peers and friends (Gupta, 2000; West & Zimmerman, 1987). Western societal masculine norms are often rigidly enforced and constrained, and therefore men strongly adhere to them (Bosson, Taylor, & Prewitt-Freilino, 2006; Hort, Fagot, & Leinback, 1990). Societal pressure may be increased due to the view that manhood is earned via a passage of social milestones (Bosson et al., 2009; Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). Nonstigmatized heterosexual men who fail to adhere to these norms risk being misclassified as gay (Deaux & Lewis, 1984; Kite & Deaux, 1987). Stigma associated with gender role violation and misclassification as gay, whether actual or anticipated, may expose men to negative interpersonal consequences such as (a) ridicule from family and friends, (b) potential physical abuse, (c) ostracization from their social groups, and (d) being treated as less than fully human (Bosson, Prewitt-Freilino, & Taylor, 2005; Bosson, Taylor, & Prewitt-Freilino, 2006; Crocker, Major, & Steele, 1998). Ultimately, the threat of negative consequences and ostracism may lead to anxiety and low self-esteem (Zadro, Williams, & Richardson, 2004). Further, tensions caused from misclassification from close groups may elicit feelings of personal insecurity and lower self-stability (feelings of self-permanence and firmness of personal positions). Conformity to masculine norms may increase perceptions and feelings of belonging and help reestablish in-group status. Mahalik and colleagues (2003) define conformity to masculine norms as "meeting societal expectations for what constitutes masculinity in one's public or private life". In this way, men learn masculine social expectations. Once understood, individuals exhibit behavior conforming or nonconforming to these

expectations. However, it remains unclear if there is a difference between an individual's expression of public and private conformity. Public or private conformity to social expectations are not often addressed as separate influences, but rather one overarching influence—an important gap in the literature. In theory, public conformity to norms suggests a situational surface-level change that lacks private acceptance or attitude change. Public conformity, when one changes their behavior to fit that of the group, is often driven by the prediction of consequences and attitudes of others (Kelman, 1958). As social situations and conditions change, someone engaged in public conformity may respond only with surface-level change rather than internalized private acceptance of the norm. Private conformity occurs when individuals are willing to privately accept group norms, suggesting an internalized conformity (Kelman, 1958). Further, private conformity may suggest a shift in attitude or belief, such that norms held by others are deemed correct and adopted as part of the value system and self-concept of the individual (Nosanchuk & Lightstone, 1974). However, little research has been done to differentiate between the effects of public and private conformity (Smith, Mackie, & Claypool, 2014; Zimbardo, Weisenberg, Firestone, & Levy, 1965). Taken together this begs the question: Do public and private scenarios lead to different rates of adherence to masculine norms?

Public conformity to societal norms may be causing individuals to follow or endorse maladaptive or deviant standards in unwarranted situations (Brechwald & Prinstein, 2011; Cohen & Prinstein, 2006). Endorsements of societal standards such as traditional masculine norms (i.e., toughness, success-status, and antifemininity) correspond to negative outcomes for men and their relationships (Bender, 2006; Burn & Ward, 2005; Levant, 1996). Indeed, Burn and Ward (2005) found that the facets of Playboy, Power Over Women, Dominance, Winning, and Violence measured by the Conformity to Masculine Norms Inventory (CMNI; Mahalik et al., 2003) were not only negatively correlated with relationship satisfaction, but viewed by others as disrespectful behaviors and attitudes. Mahalik et al. (2003) found positive relationships between masculine norm facets of Winning, Violence, Dominance, and Self-Reliance as measured by the CMNI with self-ratings of hostility and social discomfort as measured by the Brief Symptom Inventory (BSI; Derogatis, 1993). Rice and colleagues (2016) found that higher conformity to masculine norms significantly predicted depression and shame proneness. Further, research suggests that when heterosexual men believe others have publicly judged them as deviating from masculine conformity, they exhibit amplified expressions of masculine norms such as increased pain tolerance, expressions of disdain for gay men, power over women, and tendency for high risk behavior (Adinkrah, 2012; Fowler & Geers, 2017; Keiller, 2010). This literature suggests that public exposure of one's beliefs to individuals of importance may cause increased conformity to norms, as opposed to when not exposed to public scrutiny. Therefore, an important topic under investigation in this study is if the influence of relationships causes a temporary decision to adhere to socially expected gender norms with private dissent or if the private and public conformity is equal. In this experiment, I investigate whether individuals conform to societal norms when actively engaging in social relationships, but shirk conformity when not actively engaging in social relationships.

I also intend to parse two key types of social relationships—disclosure to family versus friends: Are there differences in the rates of adherence to masculine norms that hinge on whether one is disclosing information to family versus friends? Research abounds on the influence that family and friends collectively have on societal norms (e.g., Mahalik et al., 2003; Mesurado & Richaud, 2017; Nagasawa, Qian, & Wong, 2000), but less emphasis has been placed on the different influence family and friends have separately. Previous research suggests that, as individuals age, the parental influence yields to peers and friends (John, 1999). More recently, however, Pedersen, Gronhoj, and Thogersen (2015) found that parents maintain a continued and somewhat stable strong influence on behavioral norms. Peer influence seems to be most prevalent in early (12 - 14 yrs) and middle (15 - 17 yrs) adolescence, during times of social development and learning, but it may not maintain its strength into adulthood (Newman & Newman, 2001; van Hoorn, van Dijk, Meuwese, Rieffe, & Crone, 2016). Indeed, van de Bongardt, Reitz, Sandfort, and Deković (2015) found conformity to friend norms and peer norms may follow an inverted U-shaped age pattern, decreasing in strength toward later adolescence (18 - 24 yrs). Additionally, research into gender norms suggests that beliefs in traditional gender roles are established early through parent-child interactions and observed interactions of adults within society (Mahalik et al., 2003; Witt, 1997). Later, peer socialization may cause a rich reinforcement of prior learned values and beliefs of homogeneous social norms (Choukas-Bradley, Giletta, Cohen, & Prinstein, 2015; Urberg, 1992). Together, it may be that peer influence on norms may begin to wane and lose importance as individuals enter adulthood, whereas parental influence maintains its stable strong influence. With previous findings suggesting diverging patterns of family and peer influence on social norms, one may expect to see similar effects on gender norms. In emerging adults, influence on conformity may be stronger with family members than friends or peers.

- Hypotheses:
 - Based on the effects of public conformity on masculinity, individual participants
 will conform more on a masculine norms inventory when their responses are

made public (to family or to friends) as compared to when their responses remain private (i.e., the anonymous condition).

 Given the large influence of family on gender norms in this age group, individual participants will conform more on the masculine norms inventory when responding to questions their family will see, as compared to when responding to questions their friends will see.

CHAPTER 2

Method

Preregistration

Given the increased interest and benefits of preregistration of psychological experimentation (van't Veer & Giner-Sorolla, 2016), this study was preregistered. Nosek and Lindsay (2018) discuss the value of preregistration to ensure sound research practices such as confirmatory research (rather than exploratory) and the reduction of effect-size bias. The preregistration for this study can be found online [https://osf.io/5n4ex/]. Prior to the study, a power analysis (f = 0.15, power = .80, α = 0.05) revealed that 73 participants would be needed. Because I expected that some participants would ultimately be excluded due to random responding or failed attention checks, I decided to recruit more than 73 participants in order to obtain a final number of 73; therefore, I agreed to recruit a total of 100 participants and then stop. This also reflects the preregistered stop rule of 100 participants. The thesis committee recommended that thesis data collection (for the purposes of degree completion) terminate on February 8th, 2019. Therefore, data collection and the subsequent following analyses comply with this recommendation, and data collection for thesis purposes was terminated February 8th, 2019. As this written document was being created (with the data as downloaded on February 8th), data collection continued in order to obtain 100 participants, as per the stop rule specified on OSF.

Participants

Due to the cultural differences of gender norms in western society (Mahalik et al., 2003; Parent & Moradi, 2009), I recruited volunteer participants who identified as heterosexual European-American males who were enrolled in an introductory psychology course; they signed up via SONA to receive 1.5 research participation credits (see Appendix 5 for SONA recruitment). A student population was ideal for this project, as research suggests that social relations of friends and family have a strong influence on students' perceptions and decisions (Abar & Turrisi, 2008; Wayt, 2012).

Data analyzed for the purposes of the thesis document (see info on stop rule above) were collected from a convenience sample of 72 heterosexual European-American male participants with ages ranging from 18 to 39 (M = 20.15, SD = 3.25), with 24 from rural backgrounds, 7 from urban backgrounds, and 34 from suburban backgrounds. Participants ranged from first year to fourth year undergraduate students from various socioeconomic backgrounds at a large rural state university in the southeastern United States. Characteristics of the 65 valid participants were not notably different from the total sample earlier reported.

Materials

I assessed participants' self-reported age (open response), region of the country/world in which participants were born and raised (as reported by rural, urban, or suburban), year in college (number of college credits earned with an open response option), and socioeconomic status by asking participants to describe their financial resources while growing up (presented on a sliding bar option with the left anchor as *low* and right anchor as *high*; see Appendix 1 for list of preceding questions). I also assessed participants' level of closeness to their selected family and friends, and comfort when sending responses to family, friends, and an anonymous other. Closeness was assessed using a sliding bar presentation of the questions "How close do you feel to the family members/friends whose email addresses you provided?" with the left anchor as

"Not At All Close" and right anchor as *"Very Close"*. Additionally, comfort was assessed using a sliding bar presentation of the questions "How comfortable did you feel sending your responses to your family/friends/providing totally anonymous responses?" with the left anchor as *"Very Uncomfortable"* and right anchor as *"Very Comfortable"* (see Appendix 1). All sliding bar options were scored left as 0 and right as 100. When presented to participants, all visual numerical values were removed from the sliding bar and the sliding scale marker started in the middle of the bar. These items were created by the researchers and had not been previously validated.

My dependent variable was the Conformity to Masculine Norms Inventory (CMNI; Mahalik et al., 2003). The CMNI is a 94-item measurement set on a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with Mahalik and colleagues (2003) finding overall α = .94 and 47 reverse scored items (Mahalik et al., 2003). The CMNI is designed to measure behaviors, attitudes, and cognitions regarding conformity to dominant western societal masculine norms. This scale contains 11 facets that are designed to capture the major individual masculine norms (winning, emotional control, risk-taking, violence, power of women, dominance, playboy, self-reliance, primacy of work, disdain for homosexuals, and pursuit of status). The CMNI has good test-retest reliability in the United States samples with a total score test-retest coefficient of .95 (Mahalik et al., 2003; Parent & Moradi, 2009). To ensure that each phase consists of an equal number of items, I removed from the dominance facet one item that had the lowest item-total correlation ("I make sure people do as I say."). Therefore, I presented 93 items rather than the 94 items that constitute the entire survey.

A random third of the items of the CMNI were presented to participants (further referred to as Block A, Block B, and Block C) during each phase (i.e., one third of the items [31 items]

for the anonymous condition; one third [31 items] for the friends condition; and one third [31 items] for the family condition). Block A consisted of questions 2, 8, 11, 12, 16, 21, 24, 25, 27 ,35,40,41,42,43,44,47,48,51,57,59,64,66,69,72,74,75,79,80,85,88, and 90. Block B consisted of questions 1, 4, 6, 9, 10, 14, 17, 20, 22, 23, 26, 30, 31, 32, 33, 37, 38, 49, 53, 56, 58, 60, 65, 67, 68, 71, 73, 77, 78, 86, and 87. Block C consisted of questions 3, 5, 7, 13, 15, 18, 19, 28, 29, 34, 36, 39, 45, 46, 50, 52, 54, 55, 61, 62, 63, 70, 76, 81, 82, 83, 84, 89, 91, 92, and 93. Additionally, Block A contained "This is an attention check, please select the response button "Disagree". Block C contained "This is an attention check, please select the response button "Strongly Agree". There was no attention check within Block B. Questions within each facet were randomized and as close to equally distributed across the three blocks as possible. This was done to ensure each facet was represented as equally as possible across conditions. Additionally, blocks were set to randomize to ensure that no one block of questions was presented with any one condition consistently but had the potential to appear randomly in any condition sequence. Qualtrics was set to make sure that the participants received each item one time only. In this way, all participants' responded once to each and every item from the inventory. To compute Cronbach's alpha, conditions and question blocks were used to group like subsets (e.g., condition A block A, condition B block A, etc.). Alpha was run on each of these subsets (see Table 1). To compensate for a potential over-inflation of Cronbach's Alpha with condition, Alpha was computed as the average of the nine Alpha's by condition and block. Tests of item reliability revealed overall acceptable reliability ($\alpha = .79$).

Table 1

Question Block	Condition						
	Anonymous		Fr	Friends		Family	
	n	α	n	α	n	α	
Block A	24	0.85	17	0.62	24	0.84	
Block B	16	0.79	26	0.75	23	0.76	
Block C	25	0.80	22	0.88	18	0.82	

Sample Size and Cronbach's Alpha's by Condition and Question Block

Design

This study was a one-way repeated measures design in which participants experienced each of three conditions: friends condition (in which each participant was told that the answers they were about to give would be sent to friends), family condition (in which each participant was told that the answers they were about to give would be sent to family), and the anonymous condition (in which each participant was told that the answers they were are about to give would be made anonymous in that their name would not be connected to their responses, and that they would be sent to a random person from a national sample). The purpose of the anonymous condition was to remove the influence of injunctive social norms formed by perceived relationships and encourage private responding. Through the anonymous condition I hoped to release participants from the evaluate social control of their close relationships with family and friends. It is through this difference I hoped to reveal the influence of the injunctive norm of gender conformity. The conditions were presented in a random order, the item blocks were presented in a random order, and the items were randomized within each block.

Procedures

Participants were greeted by the research assistant and shown to the lab space where they were asked to sign-in to verify participation. Participants completed a written consent form (see Appendix 2) and then they sat at a computer in order to begin the surveys, which were randomized both by survey order and item order (within surveys). Condition order was previously randomly determined. All conditions were verbally delivered by the research assistant following scripted language (see Appendix 4). For the conditions that were not anonymous (i.e., family condition, friends condition), participants were prompted by the research assistant to provide two email addresses at the beginning of each phase per the predetermined condition. Participants were able to access electronic devices in order to produce email addresses but were then asked by the research assistant to stow their device for the remainder of the phase. For example, for the friends condition, they were verbally prompted by the research assistant: "In this phase of the study we are trying to better understand the dynamic and distinct personality of your close friendships across situations. To do that, you will input the email addresses of two close friends on this screen, one in each box...Once you click submit at the end of this phase, your questions and responses will be sent to these close friends for their review." The prompt for the family condition was identical with the obvious exception that the word *friend* was replaced with family. In the anonymous condition, participants were told: "In this phase of the study we are trying to better understand responses when random others are reviewing your anonymized specific individual responses. To do that, your de-identified responses are going to be sent to a random person from around the country...Once you click submit at the end of this phase, your questions and responses will be made anonymous (your name will not be connected to the responses) and they will be sent to a random person from the national sample for their review."

For each condition, each participant completed one random selection of one-third of the items from the CMNI in Qualtrics on a laboratory computer (block A, block B, or block C). Then, after two conditions, the participants completed one question about who received their answers (to check for whether they understood the instructions). Participants then completed an attention check question by Aust, Diedenhofen, Ullrich, and Musch (2012) of "It would be very helpful if you could tell us at this point whether you have taken part seriously, so that we can use your answers for our scientific analysis, or whether you were just clicking through to take a look at the survey?" The participants were then presented with the set of demographic questions. Once this was complete, the research assistant verbally debriefed each participant.

Pre-Registered Data Cleaning Plan

As per OSF preregistration, I did not remove outliers. There were two total attention check items added to the surveys (e.g., "This is an attention check, please select Strongly Agree"). If either of these items were missed, then the participant's data was excluded from the survey. Email fields were recorded as complete or incomplete rather than recording the email address itself. If there were any incomplete email fields, then the participants' data was removed. There was a manipulation check at the end of two survey phases. The first asked "Will anyone be able to see your specific answers?" with a yes or no response. The second read "Who is now going to see your answers?" with a free response text box. Participants' responses were coded to ensure accuracy with their assigned condition. Additionally, research suggests that including a seriousness check at the end of the demographic section improves validity (Aust et al., 2012). Thus, I included a seriousness check on a single page at the end of the survey. I removed the responses of those individuals that choose the statement "I have just clicked through, please throw my data away."

Missing data were analyzed using Little's missing completely at random (MCAR) test to ensure that missing values were truly MCAR (Little, 1988). If the analysis provided significant results, missing values were replaced using the Expectation Maximization computation (Moon, 1996). A total of eight missing item level responses were replaced using Expectation Maximization. This replacement was conducted using the existing data points provided by the participant to create a value most closely related to their existing responses to maintain the existing variance.

For each participant, I computed an average score for the CMNI corresponding to each condition they entered—that is, three scores per participant. These CMNI scores were used in the analyses that follow.

CHAPTER 3

Results

Data Pre-Processing and Exclusions

Two participants gave incorrect responses to the attention check "This is an attention check, please select the response button "Disagree". One participant gave an incorrect response to the attention check "This is an attention check, please select the response button "Strongly Agree". Three participants requested their data be deleted as per the seriousness check (Aust et al., 2013), and one participant did not provide an email address when prompted to input an email address for the given condition (friends/family). Data from these seven participants were excluded from analysis, and thus data analysis was performed on 65 valid participants.

Imputation

Item-level data were missing from eight random cells in the data file. An MCAR test (Little, 1988) revealed missing data points to be completely at random. After exclusions were applied, missing data was replaced using EM imputation (Moon, 1996).

Testing for Order Effects

In order to ensure block presentation and condition did not interact, thereby affecting the results, a 3 (within factor of condition: anonymous, friends, family) × 6 (between factor of block order) mixed factorial ANOVA was conducted (see Table 2 for *M*s and *SD*s). The results revealed no significant interaction between condition and block order F(2,59) = 1.53, p = .14, η - $p^2 = 0.12$. Results suggest that the order of block presentation did not interact with the condition and thus order is not analyzed further.

Table 2

Question Block	Condition					
	Anonymous		Friends		Family	
	М	SD	М	SD	М	SD
Block A	2.40	0.34	2.34	0.25	2.39	0.28
Block B	2.39	0.21	2.30	0.24	2.40	0.35
Block C	2.39	0.28	2.38	0.27	2.35	0.29

Means and Standard Deviations by Condition and Question Block

Primary Analysis

Prior to running the primary analysis, Mauchly's test (Mauchly, 1940) revealed assumptions of sphericity had not been violated, $\chi^2(2) = 0.31$, p = .85, meaning that all variances between possible pairs of conditions did not significantly differ. To test for effects of relationship on conformity to masculine norms, a repeated measures ANOVA was conducted with three conditions: anonymous (M = 2.39, SD = 0.29, CI [2.32 to 2.46]), friends (M = 2.36, SD = 0.28, CI [2.29 to 2.43]), and family (M = 2.38, SD = 0.28, CI [2.31 to 2.45]; see Figure 1). The omnibus test revealed no statistically significant main effect of condition on CMNI responses F(2, 62) = 0.96, p = .38, $\eta_p^2 = 0.02$, indicating that the condition did not appear to significantly impact the conformity scores.

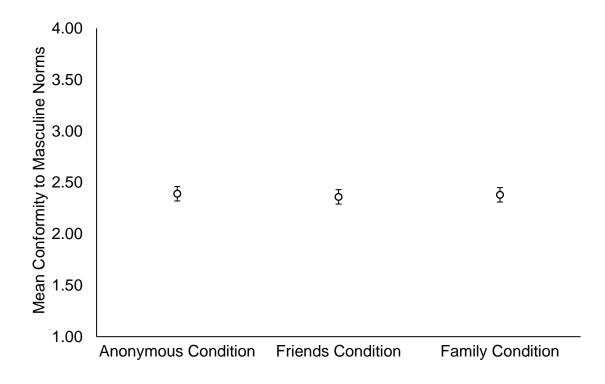


Figure 1. Condition means and 95% confidence intervals

Exploratory Analysis

Previous research has suggested that relational closeness and social comfort may influence conformity to norms (Cialdini & Trost, 1999; Mahalik et al, 2003). As exploratory factors, I included participant self-report measures of closeness and comfort after completing the main measures. I ran a paired samples *t*-test determine whether there was a difference in closeness between the friends and family conditions. The analysis revealed no difference, t(62) = 0.35, p = .73 (see Table 3 for *M*s and *SD*s). This suggests no significant difference in the level of closeness to their selected family and selected friends.

Table 3

Means and Standard Deviations for Closeness of Friends and Family and Comfort at Sending

Question Block		Condition					
	Anony	Anonymous Friends			Family		
	М	SD	М	SD	М	SD	
Closeness			87.00	15.90	88.17	19.54	
Comfort	89.12	20.87	72.76	30.33	61.00	33.56	

Responses to Friends, Family, and Anonymously to a Random Other Participant

Note. Data for closeness were not collected for the anonymous condition

In order to detect whether there were any differences among the conditions in participant comfort level about sending their CMNI responses, I ran a repeated measures ANOVA. There was indeed a significant difference between conditions with comfort as the dependent measure, F(2,61) = 26.22, p < .001, $\eta_p^2 = 0.30$. Comfort levels for family were lower than comfort levels for friends (p = .001, d = 0.37); comfort levels for friends were lower than comfort levels for anonymous (p = .002, d = 0.63); and thus of course comfort levels for family were lower than comfort levels for anonymous (p < .001, d = 1.01). Participants were most comfortable sending their responses to an anonymous individual and least comfortable sending their responses to their selected family.

CHAPTER 4

Discussion

I hypothesized that individual participants would conform more to masculine norms (as measured by the CMNI) when their responses were made public to family or friends as compared to when their responses were private. The hypothesis was not supported. My data suggest that there was no difference between conditions of public and private conformity in that participant responses to the CMNI were not significantly different across the three conditions: family, friends, and anonymous. My experiment did not produce an effect of gender conformity by attempting to activate personal relationships. Although previous literature suggests that masculinity fluctuates with varied social conditions (Addis & Mahalik, 2003), my findings suggest an equal conformity to masculine norms across social conditions. These findings could further suggest a similar level of participants' public and private acceptance of gender norms across conditions. Rather than exhibiting an inauthentic "public" self to others, men may be privately accepting the gender norms being enacted across social interactions. These results help fill the gap in the literature about the potential stability of conformity to masculine norms. In fact, Mahalik (2014) refers to measurable stability of masculinity within individuals over time and across social structures, and urges viewing conformity to masculine norms as a fluid social construct rather than a trait-like quality. My data suggests that a fluid social construct of masculinity may not be influencing conformity to masculine norms in this sample. Rather, my results suggest stability of masculine norms across active social relationships, lending support to a more trait like quality of masculinity. Additionally, if the active social relationships caused perceptions of potential inconsistency in the way participants viewed their gender conformity, participants may have been motivated to reduce inconsistency and restore their stable self-view

(Baumeister & Finkel, 2010, p. 8). Participants' motivation to retain internal self-consistency by delivering congruent responses to the CMNI may help explain the equalized means across conditions.

An alternative interpretation of these findings is that participants may not have perceived a potential loss of ingroup status, which may have been a key ingredient necessary to increase conformity. As reviewed in the Introduction, research suggests that if individuals value group membership, then they may conform to group norms in an effort to retain relationships and avoid outgroup status or misclassification (Cialdini & Trost, 1998; Leary & Baumeister, 2000). The null effect observed in this study may stem from a lack of perceived outgroup threat by the participants. If participants did not perceive a risk of outgroup threat, then there may have been no perceived benefit to increase conformity to masculine norms (Mahalik, Talmadge, Locke, & Scott, 2005). I speculate men may show increased rates of conformity to masculine norms when under conditions of explicit outgroup threat and when misclassification is likely. For example, if feedback on participants' responses was given that suggested an outgroup threat, conformity may have increased.

My findings about participants' levels of closeness and comfort may also offer insight into the way participants responded to the CMNI. Results suggested no difference in levels of closeness with family and closeness with friends. Analysis did reveal differences, however, between participants' comfort with sending their responses on the CMNI to close family, close friends, or an anonymous individual. Participants reported feeling least comfortable with sending results to selected family, somewhat more comfortable with sending results to friends, and (unsurprisingly) most comfortable with sending results to an anonymous individual. Previous research suggests that individuals who are engaged in uncomfortable relationships may use conformity to masculine norms as a coping mechanism and a way to regain internal consistency and a more accurate self-view (Lam & McBride-Chang, 2007). Indeed, this effect has been experimentally replicated by directly challenging participants' masculinity (e.g., Cohn, Seibert, & Zeichner, 2009; Hunt, Fasoli, Carnaghi, & Cadinu, 2016; Fowler & Geers, 2017). However, previous results have been typically found using paradigms that challenge participants' masculine gender identity whereas my study did not directly challenge their gender identity. One possibility is that, in order to maintain ingroup status and avoid misclassification, conformity to masculinity as a whole may manifest most obviously in uncomfortable, challenging relationships rather than close relationships (when individuals may feel less threatened). Lastly, the overall measured effect of relationships on CMNI responses was small. Given the effect size found in my current research, it may be that a much larger sample of individuals with similar characteristics would be necessary in order to reveal the effect of public versus private social influences on gender conformity.

My study does have some limitations. Although participants were requested not to discuss the nature of the study with anyone who may be participating, there is always a chance that participants were conferring with each other and therefore were aware of the procedures and deception prior to participation. Future studies would benefit from a suspicion check during the debriefing procedure to help rule out participant prior knowledge of deception. Second, the manipulations were delivered verbally by the research assistant. Human error could have caused the assistant to be inconsistent thereby unintentionally varying participant responses. Third, there was no differentiation between the closeness and comfort levels within participants chosen family and friends. Rather, I asked an overall question of closeness and comfort across the condition, despite asking participants to provide two email addresses. Lastly, although during

debriefing all participants' verified they had provided valid email responses, I had no way to verify email addresses for authenticity and to add credibility to the manipulation. The addition of a believability question during the debriefing (i.e. "Did you believe your family/friends would really receive your responses?") may have added support to the effectiveness of the manipulation.

Despite these limitations, it is important to continue work into influences on gender conformity. Future directions could include examining gender conformity using a between subject's design to fully eliminate the possibility of carry over effects, which may allow for the emergence of effects not seen in the present study. Although my data suggest a non-significant interaction between block order and condition, it is difficult to rule out the possibility of carry over effects from one condition to the other. For example, if a participant received the family condition first followed by the anonymous condition, there may not have been enough time between phases for the participant to fully disengage from the family relationship and fully engage with an anonymous individual. A between subject replication may also help to rule out the possibility that participants comfort level was progressing as they advanced through the survey, potentially becoming more comfortable with the task and their responses as they moved forward through the tasks. Participants may have perceived the increase in comfort of advancing through the survey as comfort levels while emailing their responses to the designated individuals. Future research may also benefit from a design controlling for the gender of participants chosen recipients. Systematically controlling for the factor of gender within the relationship may offer further insight into masculine gender conformity. It may be that male family and friends may cause greater conformity than female family and friends. Additionally, replicating this study with men of different ages may give a clearer understanding of the overall developmental timeline.

Results would contribute an understanding of when and how interpersonal relationships (friends, family, or anonymous) impact men's gender conformity. Although my reported alpha levels were within an acceptable range, the items with the lowest inter-item reliability included the facet of primacy of work. This is logical given the college undergraduate sample. A community sample of individuals from the same age range may yield different results. This would also allow for the comparison of other groups means with the means from my findings. In fact, participants in my sample had higher scores on the CMNI than previous samples of average male undergraduate students (Owen, 2011; Smiler, 2006). This may have impacted results in that masculinity may have been induced in my sample causing participants to over-report conformity to masculine norms. Additionally, community samples from various age ranges may offer further insight into the development of masculine norms and how gender conformity is used or influenced through the lifespan. Additionally, a comparison study could include a reconceptualized truly anonymous condition. When creating the current anonymous condition, all attempts were made to avoid potential confounds (every condition included someone seeing the participants' results to ensure consistency across conditions). However, rerunning this study with only a truly anonymous condition may reveal different results and allow for comparisons with my current findings. Although my findings did not confirm public or private influence on masculine conformity, continued work in this domain is important to further understand the role of gender conformity in our society. Unraveling societal effects on gender conformity will aid individuals in understanding subcomponents of traditional masculinity in our culture and help to build a more current understanding of modern masculinity.

REFERENCES

- Abar, C., & Turrisi, R. (2008). How important are parents during the college years? A longitudinal perspective of indirect influences parents yield on their college teens' alcohol use. *Addictive Behaviors*, 33(10), 1360–1368. <u>https://doi.org/10.1016/j.addbeh.2008.06.010</u>
- Addis, M. E., & Mahalik, J. R. (2003). Men, masculinity, and the contexts of help seeking. *American Psychologist*, 58(1), 5–14. <u>https://doi.org/10.1037/0003-066X.58.1.5</u>

Adinkrah, M. (2012). Better dead than dishonored: Masculinity and male suicidal behavior in contemporary Ghana. *Social Science & Medicine*, 74(4), 474–481. https://doi.org/10.1016/j.socscimed.2010.10.011

- Asch, S. E. (1956). Studies of independence and conformity: I. A minority of one against a unanimous majority. *Psychological Monographs: General and Applied*, 70(9), 1–70. https://doi.org/10.1037/h0093718
- Aust, F., Diedenhofen, B., Ullrich, S., & Musch, J. (2013). Seriousness checks are useful to improve data validity in online research. *Behavior Research Methods*, 45(2), 527–535. https://doi.org/10.3758/s13428-012-0265-2
- Baumeister, R. F., & Finkel, E. J. (2010). *Advanced social psychology: The state of the science*. New York USA: Oxford University Press.
- Bender, B. G. (2006). Risk taking, depression, adherence, and symptom control in adolescents and young adults with asthma. *American Journal of Respiratory and Critical Care Medicine*, 173(9), 953–957. <u>https://doi.org/10.1164/rccm.200511-1706PP</u>
- Böckenholt, U., & van der Heijden, P. G. M. (2007). Item randomized-response models form measuring noncompliance: Risk-return perceptions, social influences, and self-protective responses. *Psychometrika*, 72(2), 245–262. <u>https://doi.org/10.1007/s11336-005-1495-y</u>

- Bosson, J. K., Prewitt-Freilino, J. L., & Taylor, J. N. (2005). Role rigidity: A problem of identity misclassification? *Journal of Personality and Social Psychology*, 89(4), 552–565. https://doi.org/10.1037/0022-3514.89.4.552
- Bosson, J. K., Taylor, J. N., & Prewitt-Freilino, J. L. (2006). Gender role violations and identity misclassification: The roles of audience and actor variables. *Sex Roles*, *55*(1–2), 13–24. https://doi.org/10.1007/s11199-006-9056-5
- Bosson, J. K., Vandello, J. A., Burnaford, R. M., Weaver, J. R., & Arzu Wasti, S. (2009). Precarious manhood and displays of physical aggression. *Personality and Social Psychology Bulletin*, 35(5), 623–634. <u>https://doi.org/10.1177/0146167208331161</u>
- Brechwald, W. A., & Prinstein, M. J. (2011). Beyond homophily: A decade of advances in understanding peer influence processes. *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence*, 21(1), 166–179. https://doi.org/10.1111/j.1532-7795.2010.00721.x
- Burn, S. M., & Ward, A. Z. (2005). Men's conformity to traditional masculinity and relationship satisfaction. *Psychology of Men & Masculinity*, 6(4), 254–263. <u>https://doi.org/10.1037/1524-</u> 9220.6.4.254
- Choukas-Bradley, S., Giletta, M., Cohen, G. L., & Prinstein, M. J. (2015). Peer influence, peer status, and prosocial behavior: An experimental investigation of peer socialization of adolescents' intentions to volunteer. *Journal of Youth and Adolescence*, 44(12), 2197–2210. https://doi.org/10.1007/s10964-015-0373-2
- Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. *Annual Review of Psychology*, 55(1), 591–621.

https://doi.org/DOI:10.1146/annurev.psych.55.090902.142015

- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct:
 Recycling the concepts of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58(6), 1015–1026. <u>https://doi.org/doi:0022-3514/90/\$00.75</u>
- Cialdini, R. B., & Trost, M. R. (1999). Social influence: Social norms, conformity, and compliance. In
 D. Gilbert, S. Fiske, & G. Lindzy (Eds.), *The handbook of Social Psychology* (Vol. 2, pp. 151–192). Boston: McGraw-Hill.
- Cohen, G. L., & Prinstein, M. J. (2006). Peer contagion of aggression and health risk behavior among adolescent males: An experimental investigation of effects on public conduct and private attitudes. *Child Development*, 77(4), 967–983. <u>https://doi.org/10.1111/j.1467-8624.2006.00913.x</u>
- Cohn, A. M., Seibert, L. A., & Zeichner, A. (2009). The role of restrictive emotionality, trait anger, and masculinity threat in men's perpetration of physical aggression. *Psychology of Men & Masculinity*, 10(3), 218–224. <u>https://doi.org/10.1037/a0015151</u>
- Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In *The handbook of social psychology*, *Vols. 1-2, 4th ed* (pp. 504–553). New York: McGraw-Hill.
- Deaux, K., & Lewis, L. L. (1984). Structure of gender stereotypes: Interrelationships among components and gender label. *Journal of Personality and Social Psychology*, 46(5), 991–1004. <u>https://doi.org/10.1037/0022-3514.46.5.991</u>
- Derogatis, L. R. (1993). *Brief Symptom Inventory: Administration, scoring and procedures manual* (4th ed.). Minneapolis: National Computer Systems.
- Fisher, J. D., & Fisher, W. A. (1992). Changing AIDS Risk behavior. *Psychological Bulletin*, 111(3), 455–474. <u>https://doi.org/0033-2909/92/\$3.00</u>

Fowler, S. L., & Geers, A. L. (2017). Does trait masculinity relate to expressing toughness? The effects of masculinity threat and self-affirmation in college men. *Psychology of Men & Masculinity*, 18(2), 176–186. <u>https://doi.org/10.1037/men0000053</u>

- Göckeritz, S., Schultz, P. W., Rendón, T., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2009).
 Descriptive normative beliefs and conservation behavior: The moderating roles of personal involvement and injunctive normative beliefs. *European Journal of Social Psychology*, 40(3), 514-523. <u>https://doi.org/10.1002/ejsp.643</u>
- Gupta, G. R. (2000). Gender, sexuality, and HIV/AIDS: The what, the why, and the how. *Canadian HIV/AIDS Policy & Law Review*, 5(4), 86–93.

Hewlin, P. F. (2003). And the award for best actor goes to...: Facades of conformity in organizational settings. *The Academy of Management Review*, 28(4), 633–642. https://doi.org/10.2307/30040752

- Hewlin, P. F., Dumas, T. L., & Burnett, M. F. (2017). To thine own self be true? Facades of conformity, values incongruence, and the moderating impact of leader integrity. *Academy of Management Journal*, 60(1), 178–199. https://doi.org/10.5465/amj.2013.0404
- Hort, B. E., Fagot, B. I., & Leinbach, M. D. (1990). Are people's notions of maleness more stereotypically framed than their notions of femaleness? *Sex Roles*, 23(3–4), 197–212. <u>https://doi.org/10.1007/BF00289866</u>
- Hunt, C. J., Fasoli, F., Carnaghi, A., & Cadinu, M. (2016). Masculine self-presentation and distancing from femininity in gay men: An experimental examination of the role of masculinity threat.
 Psychology of Men & Masculinity, 17(1), 108–112. <u>https://doi.org/10.1037/a0039545</u>
- John, D. R. (1999). Consumer socialization of children: A retrospective look at twenty-five years of research. *Journal of Consumer Research*, 26(3), 183–213. <u>https://doi.org/10.1086/209559</u>

Jung, C. (1953). Two Essays on Analytical Psychology. New York: Meridian.

- Kelman, H. (1958). Compliance, identification, and internalization: Three processes of attitude change. *The Journal of Conflict Resolution*, *2*(1), 51–60.
- Keiller, S. W. (2010). Masculine norms as correlates of heterosexual men's attitudes toward gay men and lesbian women. *Psychology of Men & Masculinity*, *11*(1), 38–52.

https://doi.org/10.1037/a0017540

Kite, M. E., & Deaux, K. (1987). Gender belief systems: Homosexuality and the implicit inversion theory. *Psychology of Women Quarterly*, 11(1), 83-96.

https://doi.org/10.1111/j.14716402.1987.tb00776.x

- Lam, C. B., & McBride-Chang, C. A. (2007). Resilience in young adulthood: The moderating influences of gender-related personality traits and coping flexibility. *Sex Roles*, 56(3-4), 159-172. <u>https://doi.org/10.1007/s11199-006-9159-z</u>
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In Advances in Experimental Social Psychology (Vol. 32, pp. 1-62).

https://doi.org/10.1016/S0065-2601(00)80003-9

- Levant, R. F. (1996). The new psychology of men. *Professional Psychology: Research and Practice*, 27(3), 259-265. <u>https://doi.org/10.1037/0735-7028.27.3.259</u>
- Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, 83(404), 1198-1202. https://doi.org/10.2307/2290157
- Mahalik, J. R. (2014). Both/and, not either/or: A call for methodological pluralism in research on masculinity. *Psychology of Men & Masculinity*, 15(4), 365-368. https://doi.org/10.1037/a0037308

- Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P. J., Gottfried, M., & Freitas, G. (2003). Development of the conformity to masculine norms inventory. *Psychology of Men & Masculinity*, 4(1), 3–25. <u>https://doi.org/10.1037/1524-9220.4.1.3</u>
- Mahalik, J. R., Talmadge, W. T., Locke, B. D., & Scott, R. P. J. (2005). Using the Conformity to Masculine Norms Inventory to work with men in a clinical setting. *Journal of Clinical Psychology*, *61*(6), 661–674. <u>https://doi.org/10.1002/jclp.20101</u>
- Mauchly, J. W. (1940). Significance test for sphericity of a normal n-variate distribution. *The Annals* of Mathematical Statistics, 11(2), 204-209.
- Mesurado, B., & Richaud, M. C. (2017). The relationship between parental variables, empathy and prosocial-flow with prosocial behavior toward strangers, friends, and family. *Journal of Happiness Studies*, 18(3), 843–860. <u>https://doi.org/10.1007/s10902-016-9748-7</u>
- Milgram, S., Bickman, L., & Berkowitz, L. (1969). Note on the drawing power of crowds of different size. *Journal of Personality and Social Psychology*, *13*(2), 79–82.
- Moon, T. K. (1996). The expectation-maximization algorithm. *IEEE Signal Processing Magazine*, *13*(6), 47-60.

https://doi.org/10.1037/h0028070

- Nagasawa, R., Qian, Z., & Wong, P. (2000). Social control theory as a theory of conformity: The case of Asian/Pacific drug and alcohol nonuse. *Sociological Perspectives*, 43(4), 581–603. https://doi.org/10.2307/1389549
- Newman, B. M., & Newman, P. R. (2001). Group identity and alienation: Giving the we its due. *Journal of Youth and Adolescence*, (5), 515-538. doi:10.1023/A:1010480003929
- Nosanchuk, T. A., & Lightstone, J. (1974). Canned laughter and public and private conformity. *Journal of Personality and Social Psychology*, 29(1), 153–156. <u>https://doi.org/10.1037/h0035737</u>

Nosek, B. A. & Lindsay, D. S. (n.d.). Preregistration becoming the norm in psychological science – Association for psychological science. Retrieved March 12, 2019, from <u>https://www.psychologicalscience.org/observer/preregistration-becoming-the-norm-in-psychological-science/comment-page-1</u>

- Owen, J. (2011). Assessing the factor structures of the 55- and 22-item versions of the conformity to masculine norms inventory. *American Journal of Men's Health*, 5(2), 118–128. https://doi.org/10.1177/1557988310363817
- Parent, M. C., & Moradi, B. (2009). Confirmatory factor analysis of the conformity to masculine norms inventory and development of the conformity to masculine norms inventory-46. *Psychology of Men & Masculinity*, 10(3), 175–189. <u>https://doi.org/10.1037/a0015481</u>
- Pedersen, S., Grønhøj, A., & Thøgersen, J. (2015). Following family or friends. Social norms in adolescent healthy eating. *Appetite*, *86*, 54–60. <u>https://doi.org/10.1016/j.appet.2014.07.030</u>
- Rice, S. M., Aucote, H. M., Moller-Leimkuhler, A. M., Parker, A. G., Kaplan, R. A., Seidler, Z. E., ... Amminger, G. P. (2016). Conformity to masculine norms and the mediating role of internalized shame on men's depression: Findings from an Australian community sample. *International Journal of Men's Health*, 15(2), 157–164. <u>https://doi.org/DOI: 10.3149/jmh.1502.157</u>
- Rutland, A., Cameron, L., Milne, A., & McGeorge, P. (2005). Social norms and self-presentation: Children's implicit and explicit intergroup attitudes. *Child Development*, 76(2), 451–466. <u>https://doi.org/10.1111/j.1467-8624.2005.00856.x</u>
- Schachter, S. (1951). Deviation, rejection, and communication. *The Journal of Abnormal and Social Psychology*, 46(2), 190–207. <u>https://doi.org/10.1037/h0062326</u>

- Schultz, P. W. (1999). Changing behavior with normative feedback interventions: A field experiment on curbside recycling. *Basic and Applied Social Psychology*, 21(1), 25–36. https://doi.org/10.1207/s15324834basp2101_3
- Smiler, A. P. (2006). Conforming to masculine norms: Evidence for validity among adult men and women. *Sex Roles*, *54*(11–12), 767–775. <u>https://doi.org/10.1007/s11199-006-9045-8</u>
- Smith, E. R., Mackie, D. M., & Claypool, H. M. (2014). *Social Psychology: Fourth Edition*. New York: Psychology Press.
- Urberg, K. A. (1992). Locus of peer influence: Social crowd and best friend. *Journal of Youth and Adolescence*, 21(4), 439–450. <u>https://doi.org/10.1007/BF01537896</u>
- van de Bongardt, D., Reitz, E., Sandfort, T., & Deković, M. (2015). A meta-analysis of the relations between three types of peer norms and adolescent sexual behavior. *Personality and Social Psychology Review*, 19(3), 203–234. <u>https://doi.org/10.1177/1088868314544223</u>
- van Hoorn, J., van Dijk, E., Meuwese, R., Rieffe, C., & Crone, E. A. (2016). Peer influence on prosocial behavior in adolescence. *Journal of Research on Adolescence*, 26(1), 90–100. <u>https://doi.org/10.1111/jora.12173</u>
- van't Veer, A. E., & Giner-Sorolla, R. (2016). Pre-registration in social psychology—A discussion and suggested template. *Journal of Experimental Social Psychology*, 67, 2-12. https://doi.org/10.1016/j.jesp.2016.03.004
- Vandello, J. A., Bosson, J. K., Cohen, D., Burnaford, R. M., & Weaver, J. R. (2008). Precarious manhood. *Journal of Personality and Social Psychology*, 95(6), 1325–1339.

https://doi.org/10.1037/a0012453

Wayt, L. (2012). The impact of students' academic and social relationships on college student persistence, 1-88 (Master's thesis). Retrieved from DigitalCommons. West, C., & Zimmerman, D. H. (1987). Doing Gender. Gender and Society, 1(2), 125–151.

- Witt, S. D. (1997). Parental influence on children's socialization to gender roles. *Adolescence*, *32*(126), 253–259.
- Zimbardo, P. G., Weisenberg, M., Firestone, I., & Levy, B. (1965). Communicator effectiveness in producing public conformity and private attitude change. *Journal of Personality*, 33(2), 233–255. https://doi.org/10.1111/j.1467-6494.1965.tb01384.x
- Zadro, L., Williams, K. D., & Richardson, R. (2004). How low can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, self-esteem, and meaningful existence. *Journal of Experimental Social Psychology*, 40(4), 560–567.

https://doi.org/10.1016/j.jesp.2003.11.006

SURVEY ITEMS

(ITEM EMBEDDED WITHIN BLOCK A OF MAIN MEASURE)

This is an attention check, please select the response button "Strongly Agree" SD D A SA

(ITEM EMBEDDED WITHIN BLOCK C OF MAIN MEASURE)

This is an attention check, please select the response button "Disagree" SD D A SA

(ITEMS PRESENTED AT THE END OF MAIN MEASURE)

How close do you feel to the family members whose email addresses you provided?

(Presented as a slider question from left to right with "Not At All close" on the left and

"Very Close" on the right)

How close do you feel to the friends whose email addresses you provided?

(Presented as a slider question from left to right with "Not At All Close" on the left and

"Very Close" on the right)

How comfortable did you feel sending your responses to your family?

(Presented as a slider question from left to right with "Very Uncomfortable" on the left

and "Very Comfortable" on the right)

How comfortable did you feel sending your responses to your friends?

(Presented as a slider question from left to right with "Very Uncomfortable" on the left and "Very Comfortable" on the right)

How comfortable did you feel providing totally anonymous responses?

(Presented as a slider question from left to right with "Very Uncomfortable" on the left and "Very Comfortable" on the right)

(DEMOGRAPHIC QUESTIONS)

- 1. How old are you in years? (Free response)
- 2. How many college credits have you earned? (Free response)
- 3. Was your home town more:
 - a. Rural
 - b. Urban
 - c. Suburban
- 4. Growing up, how would you describe your socioeconomic status (financial resources)?
 (Presented on a sliding scale presented left to right with "Low SES few financial resources" on left and "High SES high amounts of financial resources" on right)

INFORMED CONSENT

COLLEGE OF BEHAVIORAL AND SOCIAL SCIENCES DEPARTMENT OF PSYCHOLOGY

Informed Consent

Attitudes of Men

Dear participant:

We are Clint E. Johnson, Graduate Student, and Nick Holtzman, Ph.D., Associate Professor, Georgia Southern University Department of Psychology.

This is a research study. The purpose of this study is to better understand men's attitudes and beliefs. Because the validity of the results of the study could be affected if the purpose of the study is fully divulged to you prior to your participation, you understand that the purpose of the study cannot be explained at this time. You understand that you will have an opportunity to receive a complete explanation of the study's purpose following your participation in the study.

This study is survey-based. You will be asked to respond with your level of agreement to a number of items asking about your attitudes/behaviors. This study will be completed through the Qualtrics platform on the internet. This study is designed to better understand the personalities of various relationships. To do this, at some point you may be asked to provide email addresses for individuals you know.

To the best of our knowledge, the things you will be doing have no more risk of harm than what you would expect to experience on a normal day. There are very few questions that ask about sensitive information. It is not expected that participants will be harmed by taking the online survey. And, you have the right to stop the study at any time without any loss of credit. However, if you do feel upset or distressed from participating in this study you may contact the GSU Counseling Center at 912-478-5541, GSU Psychology Clinic at 912-478-1685, or the National Suicide Prevention Hotline at 1-800-2738255. All services are free and are equipped to handle questions and concerns about emotional distress. Also if you experience discomfort, you have the right to withdraw at any time without loss of benefits.

Voluntary participation in this study indicates the following

"I understand that medical care is available in the event of injury resulting from research but that neither financial compensation nor free medical treatment is provided. I also understand that I am not waiving any rights that I may have against the University for injury resulting from negligence of the University or investigators."

There is no guarantee that you will get any benefit from taking part in this study. However, some people have obtained a deeper understanding of themselves, others, and the world they live in by participating in psychological research. Additionally, some people have also gained a greater

understanding of how to conduct psychological research. We cannot and do not guarantee that you will receive any benefits from this study.

Today's survey will take approximately 40 minutes to complete, and is worth 1.5 research participation credits.

Only individuals who identify as heterosexual Caucasian males will be included in this study. Your identity will be protected to the fullest extent of the law. Your name will only be used to provide you with credit for participating in the study. The researchers will not be able to attach your responses to any identifiable features of your person. Also, we will only communicate your involvement in the study to your professor through the SONA system – all of your information is confidential. Your professors will not be allowed access to any of your responses. Moreover, all of your information will be held in a safe and secure environment. All data will be stored on a password protected data file and only the research team will have access to the data. All data will be kept for at least seven years. Please be aware that Georgia is an "Open Records" state and we cannot guarantee confidentiality. Open records are documents under possession of government agencies that can be made available to the public upon request. Lastly, your information will be combined with information from other people taking part in the study. When we write up the study to share it with other researchers, we will write about this combined information. Your responses will not be identified in these written materials. Your anonymized data may be placed in a public repository for further validation. But, informed consent sheets and names will not be included. Finally, because data will be collected through the internet there are always some risks concerning security. However, we have taken stringent steps to ensure that all your responses will be collected and maintained through the most secure means possible.

All participants, including yourself, have the right to ask questions and have those questions answered. If you have questions about this study, please contact the primary researcher named below. For questions concerning your rights as a research participant, contact Georgia Southern University Office of Research Services and Sponsored Programs at 912-478-5456 or email irb@georgiasouthern.edu.

You will receive research participation credit for participating in this study. Participation in this research study is worth 1.5 research participation credits. Equivalent alternative research participation opportunities will be available for those who elect not to participate. Please see your course instructor for alternative research participation opportunities.

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. If you decide that you would like to withdraw from this study, any data collected prior to your decision will be deleted. Nonparticipation in this study will not negatively impact your grades. Furthermore, if you decide to take part in the study you still have the right to decide at any time that you no longer want to continue. You may also skip any question that causes discomfort or distress.

You must be at least 18 years old to participate in this study. If you are under the age of 18, please seek out your course instructor to obtain information about other research participation opportunities.

This project has been reviewed and approved by the GSU Institutional Review Board under tracking number H19036.

If you have any questions, please contact us.

Principal Investigator: Clint E. Johnson, Graduate Student, cj10242@georgiasouthern.edu, or co-investigator: Nick Holtzman, Ph.D., nholtzman@georgiasouthern.edu, 912-478-5539

____ "I have read and understood the purpose, instructions, and limitations to participating in this study and I give my consent freely to participate in this study as a volunteer."

____ "I have read and understood the purpose, instructions, and limitations to participating in this study and I do not give my consent freely to participate in this study as a volunteer."

Signature/Date

DEBRIEFING STATEMENT

We are very interested in how certain relationships influence man's public and private conformity to masculine norms. It is our hope that your responses will help us understand the different influences on western gender norms.

Your responses were not sent to any of these individuals and the email addresses were not recorded or collected. All responses today were anonymous and not traceable to you individually in any way. We asked you to enter these addresses in order to better understand how your responses may vary depending on who you thought would be viewing them. Again, your responses were not sent to anyone and the contact information was not recorded in any way.

In order to ensure that every participant has the same experience it is important that you not share your experience today with other people who may participate. This will allow our data to valid, and ensure that they have the same experience you had today.

Sometimes, when people participate in research studies, they may become aware of their own feelings and experiences that they may wish to discuss with others, including counseling professionals. We have provided you with a list of resources in case you become aware of your interest in seeking help to cope with your thoughts and feelings about your relationships with friends and family, or to cope with your emotional distress. If you do feel upset or distressed from participating in this study you may contact the GSU Counseling Center at 912-478-5541, GSU Psychology Clinic at 912-478-1685, or the National Suicide Prevention Hotline at 1-800-2738255. All services are free and are equipped to handle questions and concerns about emotional distress.

We appreciate your participation in this study.

FURTHER READING ABOUT THIS TOPIC:

- Cialdini, R. B., & Trost, M. R. (1999). Social influence: Social norms, conformity, and compliance. In D. Gilbert, S. Fiske, & G. Lindzy (Eds.), *The handbook of social psychology* (Vol. 2, pp. 151–192). Boston: McGraw-Hill.
- Hewlin, P. F., Dumas, T. L., & Burnett, M. F. (2017). To thine own self be true? Facades of conformity, values incongruence, and the moderating impact of leader integrity. *Academy* of Management Journal, 60(1), 178–199. <u>https://doi.org/10.5465/amj.2013.0404</u>
- Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P. J., Gottfried, M., & Freitas, G. (2003). Development of the conformity to masculine norms inventory. *Psychology of Men & Masculinity*, 4(1), 3–25. <u>https://doi.org/10.1037/1524-9220.4.1.3</u>

SCRIPT

"Our study is designed to explore the underpinnings and construction of various types of relationships. To do this, you are going to be presented with a series of basic statements on the computer and asked to respond with your level of agreement with each statement. If you would like to continue, please read and sign this consent form, allowing us to begin (Sign form). Thank you. On the computer screen you are going to be presented with your first set of statements".

Phase 1

Deliver predetermined condition of A, B, or C.

(a) "In this phase of the study we are trying to better understand responses when random others are reviewing your anonymized specific individual responses. To do that, your de-identified responses are going to be sent to a random person from around the country. To do that, you will input the word "Random" in each box. You will not be able to go backward in the survey once you have moved forward. Once you click submit at the end of this phase, your questions and responses will be made anonymous (your name will not be connected to the responses) and they will be sent to a random person from the national sample for their review. The email will also request their responses to the same questions. This will allow a clearer understanding of the relationship between you and random others. When your responses are analyzed, no names or email addresses will be connected to the responses. When you come to the end of this questionnaire, please stop and come get me."

- (b) "In this phase of the study we are trying to better understand the dynamic and distinct personality of your close friendships across situations. To do that, you will input the email addresses of two close friends on this screen, one in each box. You will be able to access your email address book from your device during this screen. After you have input the addresses, please store your device for the remainder of this phase. You will not be able to go backward in this survey once you have moved forward. Once you click submit at the end of this phase, your questions and responses will be sent to these close friends for their review. The email will also request their responses to the same questions. This will allow a clearer understanding of the relationship between you and your close friends. When your responses are analyzed, your name and email addresses of your close friends will not be connected to your responses. When you come to the end of this questionnaire, please stop and come get me."
- (c) "In this phase of the study we are trying to better understand the dynamic and distinct personality of your close family across situations. To do that, you will input the email addresses of two close family members on this screen, one in each box. You will be able to access your email address book from your device during this screen. After you have input the addresses, please store your devise for the remainder of this phase. You will not be able to go backward in this survey once you have moved forward. Once you click submit at the end of this phase, your questions and responses will be sent to these close family members for their review. The email will also request their responses to the same questions. This will allow a clearer understanding of the relationship between you and your close family. When your responses are analyzed, your name and email addresses of

your close family members will not be connected to your responses. When you come to the end of this questionnaire, please stop and come get me."

Phase 2

"I would now like you to complete another set of statements. However, (RA delivers the next predetermined condition using the same language written above for phase 1)"

Phase 3

"I would now like you to complete another set of statements. However, (RA delivers the next predetermined condition using the same language written above for phase 1).

Upon completion of phase 3, the RA will deliver the demographic questionnaire. "Please complete these last few items about yourself. Your responses on these items are completely voluntary and anonymous and will not be used to identify you in any way. Again, please come get me and we will continue."

Debrief

SONA RECRUITMENT

"Attitudes of Men"

We are asking heterosexual Caucasian males over the age of 18 to come to the lab (Brannen Hall Room 3032) to complete several short computer-based questionnaires. You will be asked about attitudes and provide basic demographic information about yourself. Your participation time will be roughly 40 minutes, and you will receive 1.5 research participation credits for your time.