EXPLORING HEGEMONIC MASCULINITY IN ONLINE INTERCTIONS AND BEHAVIOR

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EXPLORING HEGEMONIC MASCULINITY IN ONLINE INTERCTIONS AND BEHAVIOR

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Abstract: Hegemonic masculinity represents in an ideal, but flawed, representation of specific behaviors (e.g. sexual prowess, emotional inexpressiveness, athletic/workplace dominance) that men engage in. The behaviors are prioritized above others forms of masculinity (e.g. nonheterosexualism, feminism,) and rewarded societally. Men who engage in these behaviors are perceived as "masculine". However, not all men express these behaviors or adhere to the belief that these behaviors represent masculinity and are thus ostracized from societal benefits. Men who do not represent these traditional expressions of masculinity have since reaffirmed their masculinity through technological expertise. However, these reaffirmations can come at the cost of other groups, notably women and minorities. The online interactions between the men in these online spaces and women and other vulnerable groups can be disrespectful, threatening and even potentially dangerous. Users who interact online can be emboldened by the anonymity and depersonalization of the internet. They can engage in behaviors and say things that are normally checked by societal standards. The purpose of this study is to examine how online disinhibition moderates the relationship between masculinity and negative behavior online. More specifically, does the online disinhibition effect moderate the relationship between gender role stress (enforced by hegemonic masculinity) and trolling? Utilizing a bivariate correlation analysis, the study seeks to further investigate the relationship. Results of a moderation analysis demonstrated that online disinhibition did not significantly moderate the relationship between gender stress and trolling behavior.

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CHAPTER I

INTRODUCTION

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Previous research has shown that adherence to hegemonic masculinity ideals creates an expectation of certain behaviors in men. Hegemonic masculinity promotes a set of behaviors in men (e.g. athletic prowess, workplace dominance, sexual promiscuity) and values this form of masculinity over other nontraditional forms of masculinity (e.g. nonheterosexualism, embracing feminism, and emotional expressiveness) as well the continued economic, sexual, and physical dominance over women (Connell, 2005). Perceived threats to a man's hegemonic masculine identity can result in negative responses and behavior, including threats of violence, aggression, sexism and subordination of other identities (Smith, Parrott, Swartout & Tharp, 2015). Additionally, Eisler and Skidmore (1988) identified specific stressors that result in men reacting negatively: physical inadequacy, emotional expressiveness, subordination from women, intellectual inferiority, and performance failure. As a result of these stressful events, men engage in negative behaviors as way to reaffirm their masculinity (Smith et. al, 2015)

Meanwhile, previous literature has also examined online user behavior as well the characteristics of those who use social media sites. Suler (2004) examined the propensity for users to disassociate their online identities from their real-world selves, and to engage in specific behaviors in doing so. These include developing anonymous profiles, behaving more aggressively, disregarding authority figures, and freely expressing more taboo or controversial viewpoints (Suler, 2004). For men in particular, these behaviors tend to become more hostile when interacting with women and minority populations online. These actions can quickly devolve into blatantly racist and sexist jokes, taunts or threats (Mantilla, 2014; Smith et. al, 2015; Salter, 2017).

Research into how these negative behaviors manifests in online social media sites has been widely documented. For example, the act of trolling - online users (i.e. trolls) seeking to elicit responses and create disruption or conflict among the users they interact with online- is commonplace (Suler & Phillips, 1998; Bergstrom, 2011; Fichman & Sanfilippo, 2015). Trolling often involves attacking women and minority groups. Websites like Reddit, Twitter and 4chan are plagued by trolling and attacks on women, feminist groups and minorities (Mantilla, 2014; McCormack & Rhinesmith, 2017; Salter, 2017). The majority of these trolls are young (aged 18-29), white, heterosexual males (Salter, 2017). This demographic also happens to make up a majority of the users of social media sites like Twitter, Reddit and 4chan (McCormack & Rhinesmith, 2017; Salter, 2017). Indeed, Salter (2017) described online spaces like these as bastions of "geek masculinity" where technological knowledge and aptitude are highly valued and allowed male users to reclaim their masculinity.

Hegemonic Masculinity

Connell's 1987 study of the concept of hegemonic masculinity expanded the way patriarchy, masculinity, and gender hierarchies were viewed and the literature surrounding them. Connell (1987, 2005) defined hegemonic masculinity as not just the traditional gender roles and stereotypical behaviors of men, but emphasized the importance of the hierarchical power than masculinity holds and how those behaviors and actions maintain this dominance over women. The researcher noted that hegemony itself means to enforce specific behaviors at the expense of certain male behaviors, even other forms of masculinity. Hegemonic masculinity requires men to adopt the most idealized virtues of manhood, and for all other values of manhood to be secondary. This is all done to enforce the global domination of men over women (Connell, 2005). As mentioned earlier, these secondary beliefs and male behaviors, while still complicit in patriarchy, do not necessarily align with the concept. For example, men who reject traditional masculine norms or men who identify as gay or bisexual are recognized as having "subordinated masculinity" even if they still affirm their masculinity and benefit from patriarchy (Connell, 2005). Hegemonic masculinity is never a final declaration, but a constant battle for control and maintaining subordination of women and other forms of masculinity. As such, the behaviors and values that are considered representative of hegemonic masculinity are flexible (Johannson and Ottemo, 2015). Hegemonic masculinity demotes any form of masculinity that does not actively engage in the subordination of women to "subordinate" or "complicit". Connell (2005) noted that a majority of men is not needed to advance the concept, as long as it is normative and seen as the ideal form of masculinity.

Hegemonic masculinity is maintained in nearly every aspect of men's lives. This is especially so in the traditional masculine concepts such as athletic performance, work/organization dominance, and autonomy/independence, as well as statistically male dominated behaviors such as

thrill seeking, criminal activity, and minimization of health/ helping concerns (Connell, 2005). The supposed "subordinate" forms of masculinity are ever present as well and researchers have begun to reexamine the concept and clarify certain forms of hegemony (Johannson and Ottemo, 2015).

Gender Role Stress

A key aspect of hegemonic masculinity (and masculinity as a whole) is the concept of women being inferior and playing a subordinate role to men in the general society (Connell, 1995, 2005; Dahl, Vescio, & Weaver, 2015). Additionally, because masculinity represents such high-status social position, men will go to great lengths to defend and ultimately attack those who represent a perceived threat to their feelings of masculinity. Women who perform well in traditionally male dominated roles challenge the gender-based status quo and can be perceived as de-legitimizing to a man's sense of identity and masculinity (Dahl, Vescio, & Weaver, 2015). When men experience these challenges to their masculinity (i.e. their self-worth) they are likely to engage in aggressive or other negative behaviors in an effort to reclaim and reaffirm their masculinity (Eisler & Skidmore 1988; Smith et. al, 2015; Salter, 2017).

(Toxic) Masculinity Online

Salter (2017, p.6) describes online spaces in which young, predominantly White, heterosexual males dominate the platform as "bastions of geek masculinity" which are "a formation of gendered subjectivity in which boys and men claim technological knowledge and aptitude as an alternative basis for masculine identity". Indeed, theses spaces can act as areas where men who are traditionally shut out of or do not meet the standards of hegemonic masculinity can reaffirm their masculinity. Furthermore, in reclaiming their sense of masculinity the users gain a community of other likeminded individuals, but can simultaneously cause friction with other users outside of their

community (e.g. older, nonwhite and/or female users) (Salter, 2017). For example, men who have a shared interest in video games may feel a sense of community and acceptance among other likeminded men, but when a woman attempts to enter the community through the same shared interest, she is likely to be rejected based on her gender.

Women in particular often are the victim of targeted attacks from men who feel their masculinity being threatened online. For example, multiple studies have outlined women being threatened, harassed and even had personal information revealed online (Mantilla, 2014; Megarry, 2014; Leong & Morando, 2015; Synnott, Coulias & Ioannou, 2017). In extreme cases, women have been forced to quit jobs or move to another field of work entirely (Salter, 2017). In many of these cases, the mere presence of women in these male dominated online spaces have been met with vitriol (Herring, Job-Sluder, Scheckler & Barab 2002, Salter, 2017).

Online Disinhibition.

Men who engage in these attacks against women and others are often emboldened by their anonymity online (Suler & Phillips, 1998). Online disinhibition is defined as "a lowering of behavioral inhibitions in the online environment" (Lapidot-Lefler & Barak, 2012, p. 434). Within online spaces, users have the ability to engage in ways in which they would not customarily act in real world settings. Manago (2013, p. 481) referred to these acts as affordances, or "particular sets of capacities that are mobilized by users' capacities and proclivities". These affordances allow users to interact with a host of other users, be they real world friends or just online strangers. Given this audience, online users can express their thoughts and views to much wider audience than just in the real world (Manago, 2013). Additionally, the online setting allows users to create "digital artifacts"

which can be more meaningful and longer lasting expressions than a real-world conversation (Manago, 2013).

Additionally, users of online and social media spaces often experience a feeling of depersonalization when interacting online. Separating their real-world persona from their online one removes the inhibitions that normally occur when interacting with others in real world settings. Suler (2004) outlined six characteristics of behavior that users exhibit more in an online setting than they would in a real-world setting, known as the online disinhibition effect: Dissociative anonymity refers to act of online users creating aliases or pseudonyms in their online profiles, hiding their IP addresses to mask their location as a way to stay anonymous and further separate their real world and online personas. Invisibility refers to the ability for online users to not be physically present when interacting with others. In real world interactions, a facial expression expressing disapproval or boredom could affect another person's behavior; without this inhibition, online users are not able to say and do things that are not socially acceptable without repercussion (Suler, 2004). Asynchronicity refers to the idea that while real-world interactions are time sensitive, with responses often required to be immediate or timely. Online discussions do not require a timely response and can be delayed by minutes, hours and or days. This lack of time required allows for users to lower their disinhibitions; for example, a user could say something inflammatory and immediately then leave the conversation and would not be held accountable by the users they are interacting with. Solipsistic Introjection refers to the tendency for online users, absent the actual characteristics, to create a persona or schema about another user using the behaviors and actions they have exhibited online. Dissociative Imagination refers to the idea that users create personas who do not reflect the characteristics and are not beholden to the rules that the user is in "real-life" (Suler, 2004). For example, users are able to behave negatively online, and then returning to their

"real-life" persona once they leave the online world. *Minimization of Status and Authority* refers to the idea that online spaces create an egalitarian community, and authority is not designated by traditional positions, but by the writing and communication skills (Suler, 2004). As a results, users can behave and make statements that would normally be checked by real world authority figures.

Trolling

Trolling is an act where certain online users (i.e. trolls) seek to elicit responses and create disruption or conflict among the users they interact with online. These disruptors (i.e. trolls) attempt to annoy, belittle, or harass users, and in some severe cases threaten to harm them or reveal sensitive information (Fichman & Sanfilippo, 2015). These trolls often attack popular or controversial topics, and seek out unsuspecting or novice users (Buckels, Trapnell, & Paulhus, 2014). These trolls are typically young, heterosexual, White males (Suler & Phillips, 1998; Bergstrom, 2011) and males in general typically engage in more acts of trolling (Suler & Phillips, 1998; Fichman & Sanfilippo, 2015). Energized by the aforementioned disinhibitions, and combined with the aforementioned threats to masculinity, male trolls can engage in negative behaviors that attack other users, particularly women and people of color.

There has been a host of literature examining the personality traits of individuals engage in trolling online. For example, researchers have found correlations between trolling behavior and the Dark Tetrad of personality (i.e. Narcissism, Machiavellianism, psychopathy and sadism) (Buckels, Trapnell, & Paulhus 2014; March et al., 2017, Sest & March 2017). Specifically, individuals who engage in trolling have been found to endorse impulsivity, sadism and thrill-seeking behaviors (Sest & March 2017). Fichman & Sanfilippo (2015) also identified that these trolls engaged in antisocial behavior that was reflective of certain DSM-V characteristics for antisocial personality disorder.

These findings echoed the findings of Bishop (2013) who interviewed a self-professed troll. The researcher compared the troll's words and behaviors to the diagnostic criteria of antisocial personality disorder, using descriptions of the symptoms (e.g. impulsivity, ego-centrism, callousness, etc.) that troll stated. Additionally, the researcher pointed out how the lack of self-confidence was a common factor in trolls and evidenced by the individual that he interviewed. This deficit drives the trolls to demean others for the accomplishments they wish they had (Bishop, 2013.)

Online Spaces

The internet also provides spaces where these negative behaviors can be acted out freely and without the normal societal checks, and also can provide breeding grounds for toxic masculinity. Consider the website Reddit, for example. Reddit is the 4th most visited website in the United States ("How Popular Is Reddit?" 2017). Reddit's popularity has created an unintended effect where moderators are overwhelmed by the number of users, and it has thus been plagued by racist, misogynist and increasing political extremist behaviors (McCormack and Rhinesmith, 2017). Reddit's overwhelming demographic of young, White male users have been noted to be perpetrators of these toxic behaviors (Barthel, Stocking, Holcomb & Mitchell, 2016; Salter, 2017). These behaviors have also been observed in websites like YouTube, Facebook Twitter, and the notoriously problematic 4chan (Frank, 2014; Buckels, Trapnell & Paulhus, 2014; Fox, Cruz & Lee, 2015; Salter, 2017). 4chan was created in 2004 as a forum focused on discussing Japanese anime (Bernstein et. al, 2011). In the following years, it has morphed into a larger discussion forum for 60 different board ranging from "Japanese animation and culture, video games, music and photography" (4chan.org). Like Reddit, the site has unique communities centered on these topics, and also like Reddit these communities can become fiercely protective of their communities to outside users. 4chan's typical users (i.e. young, male, white, heterosexual, and socially awkward) and its lack of oversight through

moderators cause it to be plagued by the same issues of threats and trolling as other online forums. Salter (2017, p. 19) noted that 4chan's users engage in "technological hegemony", where technological expertise is the ideal trait of masculinity and replaces traditional masculine behaviors (e.g. athletic prowess, sexual promiscuity, emotional inexpressiveness etc.) While these spaces allow for men who were previously ostracized to reaffirm their self-worth and masculinity, it comes at the cost of denying others access to online spaces and engaging in toxic behaviors when they attempt to (Salter, 2017).

Current Study

Despite the previous literature, there are still gaps outlining the association between hegemonic masculinity and online behavior in young men. More specifically, the concept of male gender roles and what happens to the self-worth of men when these traditional gender roles are challenged. Additionally, there is a paucity of research that examines the specific trolling behaviors of users in online sites and what link (if any) there is between that behavior and gender stress. Further, there is little research outlining the effect of anonymous online spaces in exacerbating the trolling behaviors.

The research questions are as follows:

- 1). Does online disinhibition moderate the relationship between gender role stress and negative behavior (i.e. trolling) in male online users?
 - a. Hypothesis: Online disinhibition will moderate the relationship between gender role stress and trolling.
- 2). Does online disinhibition alone predict trolling behavior in male online users?

Hypothesis: Online disinhibition alone will be a significant predictor of trolling behavior in male online users.

CHAPTER II

METHOD

Participants

Men who are 18 and older and lived in the United States were eligible for this study. Participants were recruited through the use of Amazon's Mechanical Turk website (www.mturk.com). Individuals were not excluded on the basis of race, ethnicity, sexual orientation, or religious/spiritual belief. All available measures to protect the identities of the participants were taken, and no specific identifying information was collected. Participants were compensated one dollar (\$1.00) for their participation in the study. All participants identified as male, as these were criteria for inclusion of participant data in the analysis phase. Exclusion criteria for the study were identifying as female, being under the age of 18, and living outside of the United States. The majority of participants identified as White/Non-Latino (80.4%, n = 107), while the remainder of the sample was comprised of individuals who identified as African American/Non-Latino (5.3%, n = 7), Asian American (10.5%, n = 14), Native/American Indian/Alaska Native (1.5%, n = 2), and Mixed race (2.3%, n = 3).

Participants ranged in age from 18-55+. The majority of participants also identified as heterosexual (91%, n=121) while the remaining identified as gay or bisexual (9%, n=12). No participants defined as transgender or non-binary. In terms of education, the majority of the sample held a bachelor's degree (39.9%, n= 53), while the remaining had some college (29%, n = 38), a master's degree (15%, n=20), a high school graduate/GED (12%, n=16), a doctoral degree (5%, n=4), or did not graduate high school (0.1%, n=1).

Procedure

The research survey examined how respondents trolling behaviors are mediated by their self- reported ratings of masculine identity, gender stress and online disinhibition. The link for the study was provided through the researcher's Mechanical Turk account. The online questionnaire was administered through the researcher's Qualtrics account. The link directed participants to a website containing an Informed Consent document (Appendix C) and, if the participant provided consent, the participant completed the demographic document and survey measure. MTurk's crowdsourcing setup allows for "collected data and recruiting with thousands of available participants, a payment mechanism to incentivize participation, a way to prevent to prevent multiple participations by the same individual and a high level of confidentiality" (Litman, Robinson, & Abberbock, 2016, p.441).

Measures

Demographic Information. Participants completed a demographic questionnaire including age, gender, race, ethnicity, and sexual orientation.

Commenting Frequency and Type. Adapted from Buckels, Trapnell and Paulhus (2014), respondents were asked to estimate their commenting frequency: "How many hours per day do

you spend posting comments on websites (e.g. YouTube, Twitter, Reddit, 4chan etc.)" For the purposes of this study, the researchers added Twitter, 4chan, and Reddit to the options. Respondents were asked about their preferred activity when commenting online: "What do you enjoy doing most on these comment sites?" Respondents had five choices: "debating issues that are important to you", "chatting with other users", "making new friends", "trolling other users" and "other (specify)". Using the Qualtrics randomizer tool, the first four questions were randomized. Participants who indicated that they do not comment online did not continue with the study and were linked to the exit. They were thanked for their participation and will still receive their compensation.

Masculine Gender Role Stress Scale (MGRSS). The MGRSS was originally developed by Eisler and Skidmore (1987). The scale was developed as a method to measure an individual's appraisal of stress when their masculinity was challenged. The scale consists of 40 items, each of which are perceived threats to one's masculinity (e.g. losing a sports competition, being perceived as having feminine traits, etc.). The scale splits the items into 5 factors that represent threats to masculinity. The 5 factors are physical inadequacy, emotional expressiveness, and subordination to women, intellectual inferiority, and performance failure.

The MGRSS was originally composed of 66 items and normed on a sample of 173 undergraduate students (82 male, 91 female) at a large Eastern university in the United States. The purpose of having men and women complete the scale was to establish gender role differentiation and identification. The researchers found significant differences in MGRS scores between men and women (Eisler & Skidmore, 1987), indicating that the stressors associated with masculinity were more impactful and representative of men than women. Next, the scale was further reduced by dropping those items that did not have at least a moderate correlation

and did not share at least 10% of the variance with the total score (i.e. r < .33). The scale was thus trimmed from 66 items to 43. Finally, the researchers created minimum levels of loading for each of the factors, with 6 loadings of at least .30 and 3 of at least .50 in each of the 5 factors (Eisler & Skidmore, 1987). The eigenvalue was set at 1.50 to ensure high extractability for each of the factor. An additional three items did not meet these criteria, and the final number of items selected was 40.

The items in Factor 1 were defined as *Physical Inadequacy*. These items reflect a participant's inability to meet the traditional masculine standards of physical fitness, sexual prowess, and "manly appearances" (Eisler & Skidmore, 1987). Factor 2 is defined as *Emotional Inexpressiveness*, and refers to situations where one must express sensitive emotions such as love, fear, hurt feelings, and being seen crying. These situations include being emotional with both women and other men. Factor 3 is defined as *Subordination to Women*. This scale describes situations where men are outperformed by women in traditional masculine roles or having a female superior in the workplace. Factor 4 is defined as *Intellectual Inferiority*, and describes situations where one's intellectual abilities demonstrate uncertainty, lack of ambition and indecisiveness (Eisler & Skidmore, 1987). Factor 5 is defined as *Performance Failure*, and describes situations where one fails in the workplace or sexually. These items represent two domains that are highly valued traits of masculinity and are thus grouped together (Eisler & Skidmore, 1987).

Building on the previous research, Smith et. al, (2015) developed an updated, abbreviated version of the MGRSS. Utilizing a sample of over 1,700 participants that included both college students and community members, the researchers selected 15 items with the highest item-to-total scale correlations (Swartout et al, 2015). The researchers found that the

15-item scale had comparable overall validity and reliability to the 40-item version. Additionally, the researchers cited the changes in societal views of masculinity and more racially diverse population as improvements to the original 40 item version. However, the researchers also noted that the focus of the 15 item so far has only shown to be related to anger and alcohol involvement as outcomes to validate the abbreviated version, while the 40-item version has been shown to be related to several other negative outcomes over its 20+ year existence. Furthermore, the 15-item version does not yet have the track record of studies that substantiate its reliability, theoretical consistency and predictive validity like the 40-item version does. (Swartout et al., 2015). With these findings in mind, the original 40 item was utilized for this study.

Global Assessment of Internet Trolling. The Global Assessment of Trolling (GAIT), developed by Buckels, Trapnell and Paulhaus (2014), is a 4-item scale that examines trolling experience, enjoyment of trolling, and identifying with trolling as an internet subculture. The items are as follows: "I have sent people to shock websites for the lulz", "I like to troll people in forums or the comments section of websites", "I enjoy griefing other players in multiplayer games", and "The more beautiful and pure a thing is, the more satisfying it is to corrupt" The scale is rated using a 5 point Likert type scale (with anchors 1= strongly disagree and 5 = strongly agree). The researchers interspersed these items in between other measures in the larger study and created a composite score of the four items. The internal consistency of the scale is adequate, with a Cronbach value of .82 (Buckels, Trapnell & Paulhaus, 2014).

The Online Disinhibition Scale (ODS). The Online Disinhibition Scale was created by Udris (2014). The scale was originally designed to examine the relationship of online disinhibition and cyberbullying. Utilizing Suler's (2004) original framework and the factors

developed from the *online disinhibition effect* (i.e. dissociative anonymity, invisibility, asynchronicity, solipsistic introjection, dissociative imagination and minimization of authority), the researcher created an 11-item scale with two subscales measuring "benign disinhibition" (7 items) and "toxic disinhibition" (4 items). Items labeled "benign disinhibition" reflected openness (e.g. "The internet is anonymous, so it is easier to express my true feelings or thoughts", while items labeled "toxic disinhibition" reflected rude language and hatred (e.g. "It is easy to write insulting things online because there are no repercussions") (Suler, 2004; Udris, 2014). The responses ranged from "disagree" to "somewhat disagree" to "somewhat agree" to "Agree" and were coded 0-3. The items were then added up for maximum score of 33. Higher scores indicate higher levels of online disinhibition, i.e. those who agreed to more items scored higher on the scale. (Udris, 2014). The scale was normed on a sample of 887 Japanese high school students as a part of a larger survey examining cyberbullying behavior. The internal consistency for the scale was adequate, with an overall Cronbach value of .83, and respective Cronbach values of .81 and .85 for the benign and toxic disinhibition subscales (Udris, 2014).

CHAPTER III

RESULTS

Hypothesis 1: Online disinhibition will moderate the relationship between gender role stress and trolling.

Hypothesis 2: Online disinhibition alone will be a significant predictor of trolling behavior in male online users.

Data Analysis Strategy

Data analysis includes descriptive statistics, Pearson correlational analysis, and a mediated moderation model, in which 1,000 samples were collected using bootstrapping via SPSS. At the time of the study, bootstrapping 1,000 samples was considered an acceptable number of samples to collect for accurate analysis (Hayes, 2013). Statistical significance was assessed at the p < .05 level.

Statistical Assumptions and Preliminary Analyses

Prior to analyses, the data was screened, statistical assumptions were examined, and instrument reliability was assessed.

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Data Screening. The data was manually screened to ensure participants met all requirements of the study (e.g. male, residence in the US, completion of all measurements). Participants who did not meet the requirements were removed from the study. Of the 221 participants who completed the survey, 133 met criteria for the study. 88 participants were removed from the study due to identifying as "female" and thus did not meet the inclusion criteria.

Instrument reliability. As reported in the *Measures* section, results indicated an acceptable level of reliability ($\alpha > .7$) for all scales. The Masculine Gender Role Stress Scale had the highest Cronbach's alpha level ($\alpha = .95$) followed by the Global Assessment of Trolling ($\alpha = .88$) and the Online Disinhibition Scale ($\alpha = .85$).

Analyses

Descriptive statistics and intercorrelations among variables are shown in Table 2. Of note, results indicated that trolling behavior had a moderate positive relationship with online disinhibition (r = .59) which indicates that individuals with higher levels of online disinhibition are more likely to engage in trolling behaviors online. Small significant positive relationships between gender stress and trolling (r = .23) and gender stress and online disinhibition (r = .18) were also observed. Additionally, there was also a significant relationship between time spent online and online disinhibition (r = .18). Lastly, there was no significant relationship found between time spent online and gender stress.

Results of a moderation analysis demonstrated that online disinhibition did not significantly moderate the relationship between gender stress and trolling behavior, as the Lower Limit Confidence Interval and Upper Limit Confidence Interval includes zero (b = 0.00, 95% CI = -0.005 to 0.006). To examine this significant interaction, the simple slopes were created

by plotting values one standard deviation above and below each variable (Aiken & West, 1991). This analysis showed that the effect of online disinhibition on trolling was not significant at low levels of gender stress (b = 0.03, 95% CI = -0.02 to 0.08). Additionally, at high levels of gender stress the effect of online disinhibition on trolling was also not significant (b= 0.03, 95% CI = -0.01 to 0.08) (Figure 2).

CHAPTER IV

DISCUSSION

Toxic masculinity represents a flawed, unachievable set of ideals that men are socially encouraged to strive for despite it ultimately being harmful to themselves and others (Connell, 2005). The inability to meet these ideals creates a stress unique to men that is exacerbated by, in large part, the acceptance of more feminist culture. In an attempt to both escape from the feminist agenda and reclaim their sense of masculinity, men have retreated to technological spaces which are traditionally male dominated. As theses spaces become populated by more women and minorities, the threat to these men's sense of masculinity returns (Salter, 2017). This stress then causes men to behave in ways that are typically rewarded by the toxic masculinity structure (Smith, Parrott, Swartout & Tharp, 2015). The internet provides a cover for these men to carry out these toxic behaviors through anonymity and lack of community policing (Suler, 2004).

Although there is a body of evidence that outlines toxic masculinity (Connell 1987, 2005; Johannsson and Ottemo, 2015; Smith et al., 2015), online disinhibition (Suler, 2004) and toxic masculinity in online spaces (Mantilla, 2014; Megarry, 2014; Leong & Morando, 2015; Synnott, Coulias & Ioannou, 2017), there are still gaps outlining the association between toxic masculinity and online.

behavior in young men. Additionally, there is a paucity of research that examines the specific trolling behaviors of users in online sites and what relationship is between that behavior and gender stress. Further, there is little research outlining the effect of anonymous online spaces in exacerbating the trolling behaviors. This study investigated how online disinhibition impacts gender stress and trolling behavior. While the results of the study did not find a statistically significant moderation of online disinhibition on trolling behavior, there are still several important takeaways from this study. For example, utilizing the Online Disinhibition scale was developed and normed on a sample of Japanese high school students. To date, this study is one of the first to use an American, predominately White male population. This study adds to the literature on online disinhibition and provides a larger population on which it was used. Additionally, the results showed that there was a significant relationship between gender stress and trolling behavior. This finding is corroborated in other in other studies (Megarry, 2014; Synott, J., Coulias, A., & Ioannou, M. 2017) and is an addition to the body of research on trolling. Lastly, the study demonstrates how willing participants are to express how much they engage in behaviors that are socially problematic. While specific data illustrating how much online disinhibition influenced participants responses was outside the scope of this study, it can be speculated that the anonymity of this study allowed participants to accurately report their trolling behavior.

Hypotheses

The hypotheses were: Online disinhibition alone will be a significant predictor of trolling behavior in male online users, and users who spend more time online and have higher ratings of gender stress will report higher levels of online disinhibition. The first hypothesis was supported, while the second was not. While there were significant bivariate correlations between online

disinhibition and trolling, the moderation model was not significant. Additionally, online disinhibition did predict trolling behavior in participants.

Limitations

There several limitations to the study that must be considered. For example, using a convenience sample can limit the generalizability of a study. Using Mturk, which is a new and somewhat esoteric online database, the users are typically more experienced users.

Furthermore, Mturk users are accustomed to completing surveys for financial compensation; Because they are incentivized to complete as many as possible, it is possible that the motivations for completing this study are not entirely altruistic. This is evidenced by missing items and quick completion time. While most methods of recruiting require some incentives, this sample may be uniquely discouraged from putting forth maximum effort due to its significant financial compensation. Further, because participants are self-selected for the study, there is a "first come, first serve" bias, and this reduces the randomization of the sample. Lastly, nearly one third of the initial sample (n = 88) had to be removed from the study because they identified as female, which did not meet the inclusion criteria. This removed a sizeable portion of potential data and further limited the scope of the study.

Implications

The finding in this study have several implications. First, this study adds novel information to research areas of masculinity, online interactions and trolling. Past research has largely focused on gender stress and trolling behaviors, but has failed to investigate the use of online anonymity and how it fuels these toxic behaviors. The goal of this study was to investigate how online disinhibition moderated the relationship between gender stress and

trolling behavior. This study begins to highlight what types toxic behavior individuals can engage in when they feel protected and disinhibited by the anonymity of the internet. Previous research has shown that this protection manifests in exaggerated negative behaviors and are emboldened by the lack authority online (Suler, 2004), and this study confirms that is possible for online disinhibition alone to affect the behaviors of men online.

Additionally, previous work on toxic masculinity and trolling behaviors have focused solely on younger men, ages 18-29 (Suler & Phillips, 1998, Salter 2017). 60% of the sample of this study was between the ages of 30-55. While the moderation in this study was not significant, the bivariate correlations were, and it could be inferred that the data typically associated with 18-29-year-old men could also be observed in older men.

This research also has implications for mental health providers. Previous research has noted that men who engage in trolling behaviors also display higher levels of antisocial behaviors (Bishop, 2013; Buckels, Trapnell, & Paulhus, 2014). These behaviors may result in poor real-life relationships with others, which could increase depression or lower one's self esteem. Mental health providers could discuss the impact of developing positive relationships with others. Additionally, having high levels of gender stress has resulted in negative attitudes towards women. Previous research has noted how these negative attitudes have resulted in harassment and violence towards women (Mantilla, 2014; Megarry, 2014; Leong & Morando, 2015; Synnott, Coulias & Ioannou, 2017). Mental health providers can investigate how toxic masculinity structures impact men and their treatment of others.

Future Directions

While this study provides some insight into how men who experience gender related stress interact online, additional research is needed. Because this study is somewhat homogenous in terms how population was collected (i.e. AmazonTurk), future research should recruit from other location such as university setting or national database. Conversely, future research could focus on specific demographics, such as how race, location, and educational level affect trolling behaviors. Additionally, previous research as noted that white men aged 18-29 are the most common age group who engages in trolling behaviors (Suler and Phillips, 1998; Bergstrom, 2011). While this study recruited men of all ages, future research could focus on this age group in particular and observed the changes in gender related stress and the propensity of trolling behaviors. Also, only men were recruited for the sample, and thus no data is available generalize this data to women either. Pursuing this further, while men are generally associated with trolling online and toxic expressions of masculinity, there is value in investigating the degree to which women engage in these behaviors as well. Another future research area could focus on how trolling behaviors are manifested on specific websites. Previous research has noted how websites such as Reddit, 4chan and Twitter are breeding grounds for toxic online interaction (Frank, 2014; Buckels, Trapnell & Paulhus, 2014; Fox, Cruz & Lee, 2015; Salter, 2017), and future research could investigate the impact gender stress, online disinhibition and trolling on users of those websites.

Finally, the current study was inspired by previous research on the involuntary celibate (shorthand, Incel) ideology and the men who identify with the ideology, known as Incels. Incel is defined as "an ideology predicated on the notion that feminism has ruined society, therefore there is a need for a 'gender revolt' in order to reclaim a particular type of manhood based on

both male and white superiority" (Zimmerman, Ryan & Duriesmith, 2018). Incels typically congregate and spread in online spaces, most notably Reddit and 4chan. (Rhinesmith and McCormick, 2017; Zimmerman, Ryan & Duriesmith, 2018). It can be inferred that men with high levels of gender related stress, online disinhibition and engage in acts of toxic masculinity would likely identify as an Incel. Future research could further investigate how Incels identify and what how they rate their levels of gender stress and trolling behavior.

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APPENDICES

APPENDIX A

Extended Review of the Literature

Masculinity and Power Structure

Connell's 1987 study of the concept of hegemonic masculinity expanded the way patriarchy, masculinity, gender hierarchies were viewed and the literature surrounding them. Connell (1987, 2005) defined hegemonic masculinity in three stages: as the traditional gender roles and stereotypical behaviors of men (e.g. athletic superiority, heterosexual prowess and promiscuity, workplace dominance, subordination of women), the importance of the hierarchical power than masculinity holds, and how those behaviors and actions that maintain this dominance over women. Connell also noted that hegemony means to enforce specific behaviors at the expense of certain male behaviors, even other forms of masculinity. Hegemonic masculinity requires men to adopt the most idyllic virtues of manhood, and for all other values of manhood (e.g. caretaking for a family) to be secondary. This is done to enforce the global domination of men over women (Connell, 2005). As mentioned earlier, these secondary beliefs and male behaviors, while still complicit in patriarchy, do not necessarily align with the concept of hegemonic masculinity. For example, men who reject traditional masculine norms or men who identify as gay or bisexual are recognized as having "subordinated masculinity" even if they still affirm their masculinity and benefit from patriarchy (Connell, 2005).

Hegemonic masculinity is never a final declaration, but a consistent battle for control and maintaining subordination of women and other forms of masculinity. As such, the behaviors and values that considered representative of hegemonic are flexible (Johannson and Ottemo, 2015). Hegemonic masculinity demotes any form of masculinity that does not actively engage in the subordination of women to "subordinate" to the ideal version masculinity. Connell (2005) noted that a majority of men is not needed to advance hegemonic masculinity, as long as it is normative and seen as the ideal form of masculinity.

Hegemonic masculinity is maintained in nearly every aspect of men's lives. These are especially so in the traditional masculine concepts such as athletics performance, work/organization dominance, and autonomy/independence, as well as statistically male dominated behaviors such as thrill seeking, criminal activity, and minimization of health/ helping concerns (Connell, 2005). The supposed "subordinate" forms of masculinity are ever present as well and researchers have begun to reexamine the concept and clarify certain forms hegemony. For example, Johansson and Ottemo (2015) examined fathers who took care of their children in the home. This behavior is traditionally viewed as a feminine role, but the researchers found that their participants embraced the role and were amenable to accepting the changes in traditionally masculine roles of parenting.

Masculine Gender Role Stress

Men who subscribe strictly to the concept of hegemonic masculinity are likely to experience stress when their masculinity is threatened or challenged (Smith et al, 2015). Eisler (1988) developed the Masculine Gender Role Stress Scale as a method to measure an individual's appraisal of that stress. The researchers hypothesized five situations where these

threats would be apparent: physical inadequacy, emotional expressiveness, subordination to women, intellectual inferiority, and performance failure (Eisler et al, 1988). When men are unable to meet these standards of hegemonic masculinity, they react by attempting to reaffirm their masculinity. These attempts of reaffirmation often involve engaging in aggressive behavior and violence towards women (Smith et. al, 2015). Indeed, the signature ideal of hegemonic masculinity-dominance and subordination of others- is apparent and aggressive behavior the most common way of attempting to uphold this standard. (Smith et. al, 2015). These behaviors have begun to researcher in the online and social media spaces as well.

Masculinity Online

While online users represent multiple genders, races and ethnicities, overall, they are overwhelmingly young, white males aged 18-29 (Barthel, Stocking, Holcomb & Mitchell, 2016; Salter, 2017). Online communities like Reddit, 4chan, and Twitter are bastions of "geek masculinity", which Salter (2017, p.6) describes as "a formation of gendered subjectivity in which boys and men claim technological knowledge and aptitude as an alternative basis for masculine identity". Male users who subscribe to online spaces like Reddit, Twitter and 4chan are able to re-establish their masculinity through their technological expertise, but this comes at cost for other users who are not young, white, heterosexual males. Ironically, the male users who feel oppressed and restricted by traditional masculine norms repeat these same oppressive tactics when women and people of color who are viewed as not having the same technological expertise attempt to join the conversation (Salter, 2017). This ideology was exemplified in the aforementioned #Gamergate event, where women game developers "intruded" upon the male dominated video game industry and experienced threats, doxing and daily harassment from online users.

Online Identity

The Online Disinhibition Effect. Users of online and social media spaces often experience a feeling of depersonalization when interacting online. Separating their real-world persona from their online removes the inhibitions that normally occur when interacting with others in real world settings. This lack of inhibition thus allows for users to exhibit more extreme behaviors, and often in negatives ones like, name calling, threats, and harsh language (Suler, 2004). Suler (2004) outlined six characteristics of behavior that users exhibit more in an online setting than they would in a real-world setting: Dissociative anonymity is when online users create aliases or pseudonyms in their online profiles, and hide their IP addresses to mask their location as a way to stay anonymous and further separate their real world and online personas. Invisibility occurs when online users do not have be physically present when interacting with others. In real world interactions, a facial expression expressing disapproval or boredom could affect another person's behavior; without this inhibition, online users say and do things that are not socially acceptable without repercussion (Suler, 2004). Asynchronicity refers to the idea that while real-world interactions are time sensitive, with responses often required to be immediate or timely. Online discussions do not require a timely response and can be delayed by minutes, hours and or days. This lack of time required allows for users to lower their disinhibitions; for example, a user could say something inflammatory and immediately then leave the conversation and would not be held accountable by the users they are interacting with. Solipsistic Introjection refers to the tendency for online users, absent the actual characteristics, create a persona or schema about another user using the behaviors and actions they have exhibited online. Dissociative Imagination indicates that users create personas who do not

reflect the characteristics and are not beholden to the rules that the user is in "real-life" (Suler, 2004). For example, users are able to behave negatively online, and then returning to their "real-life" persona once they leave the online world. *Minimization of Status and Authority* is where online spaces create an egalitarian community, and authority is not designated by traditional positions, but by the writing and communication skills (Suler, 2004). As a result, users can behave and make statements that would normally be checked by real world authority figures.

The concept of online disinhibition has been observed by researchers in newer online technologies, as well. Manago (2011, pg. 89) referred to these acts as affordances, or "particular sets of capacities that are mobilized by users' capacities and proclivities". These affordances allow users to interact of with a host of other users, be they real world friends or just online strangers. Given this audience, online users can express their thoughts and views to much wider audience than just in the real world (Manago, 2011). Additionally, the online setting allows users to "digital artifacts" which can be more meaningful and longer lasting expressions than a real-world conversation (Manago, 2011). In an effort to observe the effect of communication style on online disinhibition, Lapidot-Lefler and Barak (2012) found that lack

Online Behavior

Trolling. Trolling is one of the most common and effective acts of deviant online behavior (Fichman & Sanfilippo, 2015). Trolling is where certain online users (i.e. trolls) seek to elicit responses and create disruption or conflict among the users they interact with online. The trolls attempt to annoy, belittle, or harass users, and in some severe cases threaten to harm them or reveal other sensitive information (Fichman & Sanfilippo, 2015). These trolls are

typically young, heterosexual, white males (Suler & Phillips, 1998; Bergstrom, 2011) and males are typically more likely to engage in acts of trolling than females (Suler & Phillips, 1998; Fichman & Sanfilippo, 2015)). This behavior is conducted and maintained for a variety of reasons. For example, Maltby et al. (2015) conducted a series of studies examining the perceptions and behavior characteristics of trolls online. The findings indicated that participants viewed the trolls as attention seeking, having low self-confidence, amusement seeking, and being uneducated. Additionally, they found that men tend to perceive malevolence as motivation for trolling, while women cited confusion, curiosity and instigation (Fichman & Sanfilippo, 2015). Maltby and colleagues (2015) also identified that these trolls engaged in antisocial behavior that was reflective of certain DSM-5 characteristics for antisocial personality disorder. These findings echoed the findings of Bishop (2013) who interviewed a self-professed troll. The researchers compared the troll's words and behaviors to the diagnostic criteria of antisocial personality disorder, using descriptions of the symptoms (e.g. impulsivity, egocentrism, callousness,) that the troll stated. Additionally, the researcher pointed out how the lack of self-confidence was a common factor in trolls and evidenced by the interviewee. This deficit drives the trolls to demean other for the accomplishments they wish they had (Bishop, 2013.)

Harassing Women Online

When these behaviors are aimed toward women, the results are often humiliating and macabre. Mantilla (2014) investigated the concept of "gender trolling" and its unique proclivity for attacking women online. Unlike regular trolling, this behavior is defined by a large number of trolls targeting one victim, over a long period of time and for the purposes of overwhelming the victim. The attacks are typically gender-based insults, such as attacking the victim's weight and

physical appearance (Mantilla, 2014). These victims are often female users who speak out about feminist issues or advocate for women's rights. Additionally, gendertrollers often engage in "doxing", which involves trolls revealing personal information about female users (e.g. real name, address, pictures, phone number etc.) and encouraging them to be harassed in real life. It also quite common for these trolls to promote violent acts towards women as well (Mantilla, 2014).

Leong and Morando (2015) identified specific instances of trolling taking a drastic turn, such as in the case of video game critic Zoe Quinn having her personal information leaked (i.e. doxed), or trolls encouraging a user of the messaging app Yik Yak to die by suicide. Synnott, Coulias & Ioannou (2017) outlined the dramatic increase of trolling acts online, and the specific case of online trolls attacking a couple whose child disappeared while on family vacation. The researchers described how online trolls used personal attacks on the child's mother, accusing her being a poor mother and too apathetic about the disappearance of her daughter.

Megarry (2014) investigated the interactions on Twitter and the creation of the hashtag #mencallmethings, which was used by women to describe and document the harassment they received online at the hands of other male users. The author cited how women did not conform to traditional female roles and those speak out the feminist issues were more heavily targeted. These attacks are customary of our patriarchal and aimed at continuing to repress woman at the hands of men (Megarry, 2014).

Jane (2014) outlined years of misogynistic vitriol over the course of her online interactions in her personal and professional career. The author details explicit and uncensored comments and threats as a method to show just how deprayed the messages are and to shed

light on the attacks that women face online on a daily basis. By sharing these comments in their "unexpurgated entirety", the author hoped to create a full understanding of the hostility and to develop remedies to this negative behavior (Jane, 2014).

Perhaps one of the most noteworthy and particularly devastating acts of online harassment was the 2014 #Gamergate event, in which the aforementioned game developer Zoe Quinn was the target of threats of violence, doxing, and years of harassment the users from Reddit and 4chan (Salter, 2017). Upset by Quinn's decision to end their relationship, her former partner made false accusations that she established her position in the industry as a result of exchanging sexual favors. The accusations spread throughout the male dominated online community of 4chan in particular, and the attacks against Quinn soon followed (Salter, 2017). The men who propagate the structural sexism in online spaces often belong to community called the "Involuntary celibate" (Incel for short). Incel is defined as "an ideology predicated on the notion that feminism has ruined society, therefore there is a need for a 'gender revolt' in order to reclaim a particular type of manhood based on both male and white superiority" (Zimmerman, Ryan & Duriesmith, 2018). Incels typically congregate and spread in online spaces, most notably Reddit and 4chan. (Rhinesmith and McCormick, 2017; Zimmerman, Ryan & Duriesmith, 2018).

Efforts to protect and advocate for women against trolls has also began to form in the literature. Herring, Job-Sluder, Scheckler and Barab (2002) created a safety protocol for users of online feminist forums. The researchers noted how often these spaces were disrupted by (mostly male) trolls who felt uncomfortable with feminist (or even female led) discussion. The researchers also presented a case study identifying a specific troll and characteristics and behaviors (e.g. provokes other users, starts pointless arguments, and disrupts other genuine

discussions). They also recommended warning novice users of trolls and attempting to educate trolls on their behavior (Herring et al., 2002).

Online Spaces

Reddit. The website Reddit is used by 6% of all adult internet users and bills itself as the "Front Page of The Internet" (Duggan & Smith, 2013). Reddit was initially created as an aggregator site where users could share news stories, pictures and articles in an interactive community setting with other users (McCormack & Rhinesmith, 2017). Reddit allows users to join a community of users unified by their interests, whether they be politics, sports, science and technology, music, art, or many various niche topics. These topics are organized in categories called "Subreddits" or "subs". Reddit users contribute to these discussions, debate back and forth and gain allies or adversaries based on the thoughts and opinions of the users. Each of these subreddits operates as a community, with a moderator who monitors discussion and can notify the site administrator if users engage in negative behaviors like harassment or threatening (McCormack & Rhinesmith, 2017). Reddit is massively popular, with over 160 million users per year and is the 10th most visited website in the United States (McCormack and Rhinesmith, 2017). Additionally, there are over 800,000 subs and thousands of members within each sub. As a result, it nearly impossible to properly operate each and every sub community (McCormack & Rhinesmith, 2017). Despite the moderators and administrators' best efforts, the overwhelming number of users allows for many of these negative behaviors to filter through unchecked. Like many other online discussion forums, Reddit has struggled with moderation their users and protected minority groups (McCormack & Rhinesmith, 2017). Minority Reddit users have frequently voiced complaints of hostile treatment and misogynistic, racist, and threats from other users.

Twitter. With over 300 million users, Twitter has a massive online presence and is also one of the most widely used online platforms (Salter, 2017). Users compose 140 characters messages called "tweets" and communicate among one another through the use of "retweets" and hashtags (Fox, Cruz & Lee, 2015). Twitter's ability for users to broadcast their messages in an open forum and respond to anyone is favorable and used to create dialogue among strangers, but also creates a vulnerable environment for users to gang up on and harass users. Furthermore, Twitter's ability for users to create anonymous usernames or aliases allows for users to disassociate from their real-life personas (Fox, Cruz & Lee, 2015). Twitter also does not have moderators and is notoriously slow to respond to instances of abuse or hostile interactions (Frank, 2014). The result often creates an environment where malicious users can harass, threaten or troll other users without and form of censorship or action from Twitter administrators (Salter, 2017.)

4chan. 4chan was created in 2004 as forum focused on discussing Japanese anime (Bernstein et. al, 2011). In the following years, it has morphed into a larger discussion forum for 60 different board ranging from "Japanese animation and culture, video games, music and photography" (4chan.org). Like Reddit, the site has unique communities centered on these topics, and also like Reddit these communities can become fiercely protective of their communities to outside users. 4chan's typical users (i.e. young, male, white, heterosexual, and socially awkward) and its lack of oversight through moderators cause it to be plagued by the same issues of threats, doxing and trolling as other online forums. Salter (2017) noted that that 4chan's users engage in masculine hegemony, with technological expertise as the ideal instead of traditional masculine behaviors (athletic prowess, sexual promiscuity, emotional inexpressiveness etc.)

APPENDIX B

Tables

Table 1 Demographic Characteristics (N=133)

Characteristic		n	%
Biological Sex			
	Male	133	100
	Female	0	0
Race			
	Black	7	5.3
	White	107	80.4
	Asian/Pacific Islander	14	10.5
	American Indian/Alaskan Native	2	1.5
	Biracial/Multiracial	3	2.3
Ethnicity			
	Hispanic/Latino 39	7	5.3

	Not Hispanic/Latino	122	91.7
	No Data	4	3
Sexual Orientation			
	Straight/Heterosexual	121	91
	Gay/Bisexual	12	9
	Other	0	0
	Prefer Not to Say	0	0
Age			
	18-24	10	7.5
	25-29	29	21.8
	30-39	40	30.1
	40-55	39	29.3
	55+	15	11.3
Education			
	Did not graduate high school	1	0.8
	High school graduate/GED	16	12
	Some college	38	29
	Bachelor's degree	53	39.9

Master's degree	20	15
Doctorate	5	4

Table 2

Bivariate Correlations between *GSTRESS, OnlDis, Troll, TmOnl, and Descriptive Characteristics

Variables	Mean	SD	α	1	2	3	4
1. GSTRESS	69.9	30.03	.95	1	.18*	.23	15
2. OnlDis	9.17	5.43	.85		1	.55**	.18*
3. Troll	28.15	6.65	.88			1	.01
4. TmOnl	1.43	0.90					1

Note. *p < .05; **p < .001 GSTRESS = Masculine Gender Role Stress Scale; OnlDis = Online Disinhibition Scale; Troll = Global Assessment of Trolling; Tm Onl= Hours spent online chatting with other users.

Table 3

Descriptive Statistics, continued

	GSTRESS	OnlDis	Troll	Time Online
N	133	133	133	133
SD	30.42	5.43	6.65	.90
Variance	902.08	29.48	44.27	.81
Skewness	.398	.94	-1.66	2.08
Kurtosis	235	05	.22	3.08

Table 4

Trolling Behavior Predicted from Online Disinhibition and Gender Stress

Predictor	β	р	95%	S CI
Online Disinhibition	.653	<.001	.461,	.844
Gender Stress	.039	.095	005,	.064
Gender Stress x Online Dis	.0004	.891	006,	.007

^{*}*p* ≤ .05

As shown in Table 3, gender stress was significantly related to trolling and online disinhibition did not moderate that relationship. This interaction is illustrated in Figure 1. The interaction was probed by testing the conditional effects of gender stress at three levels of online disinhibition, one standard deviation below the mean, at the mean, and one standard deviation above the mean. As shown in Table 4, gender stress was not significantly related to trolling when online disinhibition was one standard deviation below the mean and when at the mean (p = .27), nor when online disinhibition was one standard deviation above the mean (p = .16).

Table 5

Conditional Effects of Gender Stress on Trolling

Online Disinhibition	β	р	95% CI	
One SD below mean	.027	.269	214, .076	,
At the mean	.029	.096	005, .064	ļ
One SD above mean	.032	.156	012, .076	;

^{*}*p* ≤ .05

Table 6

Frequency of Scale Response Scores for Predictor Variables

Variable	Score	Frequency	Percent
Online Disinhibition Scale			
	4	39	29.5
	5	10	7.5
	6	6	4.5
	7	7	5.3
	8	18	13.5
	9	4	3
	10	4	3
	11	3	2.3
	12	6	4.5
	14	4	3
	15	7	5.3
	16	5	3.8
	17	4	
	18	4	3 3
	19	1	.8
	20	2	1.5
	21	2	1.5
	22	2	1.5
	23	2	1.5
	24	2 2	1.5
	25	2	1.5
Hours Spent Chatting Online			
Tours Sperit Chatting Offine	1	101	76.5
	2	16	12.1
	3	4	3.0
	4	11	8.3

Variable	Score	Frequency	Percent
	11.00	3	2.3
Global Assessment of Trolling	13.00	1	.8
	15.00	2	1.5
	16.00	1	.8
	18.00	2	1.5
	19.00	2	1.5
	20.00	1	.8
	21.00	10	7.5
	22.00	1	.8
	23.00	6	4.5
	24.00	7	5.3
	25.00	7	5.3
	26.00	6	4.5
	27.00	11	8.3
	28.00	8	6.0
	29.00	10	7.5
	30.00	6	4.5
	31.00	6	4.5
	32.00	6	4.5
	33.00	13	9.8
	34.00	3	2.3
	35.00	2	1.5
	36.00	3	2.3
	37.00	2	1.5
	38.00	3	2.3
	39.00	2 3 2 3 3 3	2.3
	40.00	3	2.3
	42.00	1	.8
	44.00	2	1.5

Variable	Score	Frequency	Percent
Masculine Gender Role Stress Scale	5	1	.8
	6	1	.8
	16	1	.8
	18	1	.8
	20	1	.8
	25	1	.8
	26	1	.8
	28	2	1.5
	30	1	.8
	31	1	.8
	33	1	.8
	34	2	1.5
	35	2	1.5
	36	1	.8
	38	1	.8
			.0
	39	4	3
	40	2	1.5
	41	1	.8
	42	2	1.5
	43	1	.8
	44	3	2.3
	45	2	1.5
	47	1	.8
	49	3	2.3
	50	1	.8
	52	2	1.5
	53	4	3
	55	3	2.3
	56	3	2.3
	57	3	2.3
	58	1	.8
	59	1	.8
	60	1	.8
	61	1	.8
	62	1	.8
	64	2	1.5
	65	1	.8
	66	2	1.5
	67	1	.8
	68		1.5
	69	2 2	1.5
	70	1	.8
	71	4	3
	72 7.4	1	.8
	74	3	2.3
	75 75	3 2 2	1.5
	76	2	1.5

Variable	Score	Frequency	Percent
Masculine Gender Role Stress Scale			
	77	1	.8
	79	1	.8
	81	1	.8
	82	1	.8
	83	1	.8
	84	2	1.5
	85	1	.8
	87	1	.8
	88	3	2.3
	91	1	.8
	94	1	.8
	96	1	.8
	97	2	1.5
	98	$\frac{}{2}$	1.5
	99	1	.8
	100	1	.8
	101	1	.8
	103	1	.8
	104	1	.8
	105	1	.8
	107	2	1.5
	108	2	1.5
	111	1	.8
	113	1	.8
	115	3	2.3
	119	1	.8
	121	1	.8
	126	1	.8
	127	1	.8
	130	1	.8
	132	1	.8
	159	1	.8

APPENDIX C

Figures

Figure 1

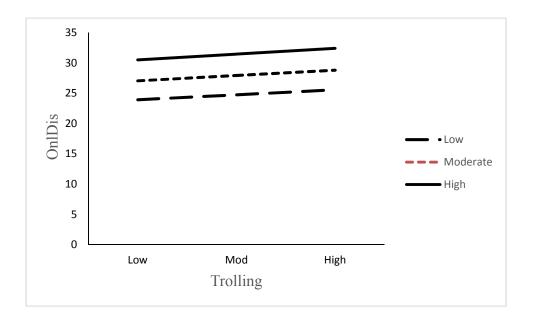


Figure 2

Normal P-P Plot of Regression Standardized Residual

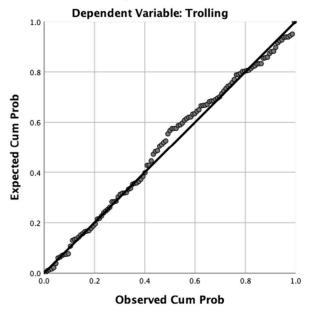
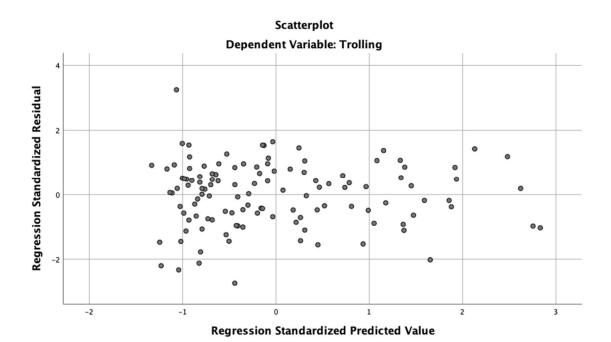


Figure 3



APPENDIX D Informed Consent Agreement

You are being invited to participate in a research study examining the experiences of masculinity and interacting with others online. This study is being conducted by Alexander Bennett, M.S. under the direction of John Romans, Ph.D., from the School of Community Health, Counseling, and Counseling Psychology at Oklahoma State University. Mr. Bennett is currently a graduate student in the Counseling Psychology Ph.D. program at Oklahoma State University, and data gathered in this study will be used in his doctoral dissertation. The study will provide information that may ultimately be used to advocate for increased awareness of one's own sense of masculinity, and how its services and contributes to an existing body of literature about masculinity and online behavior.

Procedures will be taken to protect confidentiality. Due to the personal nature of some of the questions and to encourage honest responses, you will not be asked to provide your name. Computer IP addresses will not be collected, and any demographic information (such as your age, ethnicity, or level of education) will be presented in summary form when findings are reported. Please note that Qualtrics has specific privacy policies of its own. You should be aware that this web service may be able to link your responses to your ID in ways that are not bound by this consent form and the data confidentiality procedures used in this study, and if you have concerns you should consult these services directly. Qualtrics' privacy statement is provided at: http://qualtrics.com/privacy-statement.

The data will be password-protected, and only the researcher and individuals responsible for research oversight will have access to the records. Data collected in the study will be destroyed after 5 years.

Recently, researchers found a data security vulnerability in Amazon Mechanical Turk (MTurk) that can allow MTurk worker IDs to be connected to personally identifying information that MTurk workers post on their Amazon profile pages. For a thorough discussion of this topic, see the journal article titled "Mechanical Turk is Not Anonymous" available at papers.ssrn.com/sol3/papers.cfm?abstract_id=2228728.

Mechanical Turk has specific privacy policies. If you have concerns, you should consult this service directly. Mechanical Turk's Privacy Notice is provided at https://www.mturk.com/mturk/privacynotice.

Compensation:

Completing the short survey will result in a \$1.00 deposit in your Mechanical Turk account. There are no risks involved in participating in the study in excess of those you would experience in everyday life.

Your consent to participate is granted by indicating that you are over 18 years old and are physically located in the United States, and by acknowledging that you have been fully informed about the procedures listed here, and you are aware of what you will be asked to do and the benefits and risks of participation. If you have any questions or concerns about this study, you may contact the researcher. If you would like a copy of the results of this study, please contact the researcher and arrangements will be made.

Researcher: Alexander Bennett, M.S.
School of Community Health, Counseling, and Counseling Psychology
Oklahoma State University
416 Willard Hall
Stillwater, OK 74078
Email: alex.bennett@okstate.edu

Advisor: John S. C. Romans, Ph.D. College of Education, Health, and Aviation Oklahoma State University 339 Willard Hall Stillwater, OK 74078 Email: john.romans@okstate.edu

If you have questions about your rights as a research volunteer, you may contact the Oklahoma State University Institutional Review Board (IRB) Chair.

IRB Chair: Hugh Crethar, Ph.D. 223 Scott Hall Oklahoma State University Stillwater, OK 74078, Phone: (405) 744-3377 Email: irb@okstate.edu

Thank you for your time and participation. If you would like to participate in this study, please select the link provided below:

APPENDIX E

Survey and Measures

Age:
18-24
25-29
30-39
40-55
55+
Gender Identity:
Male
Female
Transgender
-
Sexual Orientation:
Heterosexual/Straight
Gay/Lesbian/Bisexual
Category not listed:
Race:
American Indian/Alaska Native
Asian
Black/African American
Native Hawaiian/Pacific Islander
White
Biracial/multiracial/mixed
Ethnicity:
Hispanic/Latino (a)
Not Hispanic/Latino (a)
What is your highest level of education?
Did not graduate high school
High school graduate/GED
Some college
Bachelor's degree
Master's degree
iviasioi s dogioc

Doctorate

Please specify [Text box]

Commenting Frequency and Type

How many hours per day do you Reddit, 4chan)?:	u spend posting comments on websites (e.g. YouTube, Twitter,
What do you enjoy doing most	on these comment sites?
1.	Debating issues that are important to me
2.	Chatting with other users
3.	Making new friends
4.	Trolling other users
5.	Other (specify):

Global Assessment of Trolling

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

- 1. I have sent people to shock websites for the lulz.
- 2. "I like to troll people in forums or the comments section of websites
- 3. 'I enjoy griefing other players in multiplayer games.
- 4. The more beautiful and pure a thing is, the more satisfying it is to corrupt

Online Disinhibition Scale

1	2	3	4
Disagree	Somewhat disagree	Somewhat Agree	Agree

Prompt: How strongly do you agree or disagree with the following statements?

- 1. It is easier to connect with others through ICTs than talking in person.
- 2. The Internet is anonymous, so it is easier for me to express my true feelings or thoughts
- 3. It is easier to write things online that would be hard to say in real life because you don't see the other's face.
- 4. It is easier to communicate online because you can reply anytime you like.
- 5. I have an image of the other person in my head when I read their e-mail or messages online.
- 6. I feel like a different person online.
- 7. I feel that online I can communicate on the same level with others who are older or have higher status.
- 8. I don't mind writing insulting things about others online, because it's anonymous.
- 9. It is easy to write insulting things online because there are no repercussions.
- 10. There are no rules online therefore you can do whatever you want.
- 11. Writing insulting things online is not bullying

The MGRS Rating Scale

NAME or II) #:		Date:		
Sex: M F Ag	ge: Eth	nicity:	Marital Sta	atus:	
Highest Grad	de in School:	Work/Jol	Title:		
Directions: I	Please rate the	e following items	s according to ho	w stressful the situat	tion would be for
You. Give ea	ach item your	own rating on a	scale from 0 (no	ot stressful) to 5 (ext	remely stressful)
Examples m	ight be:				
A. Driving a	car 0				
B. Discoveri	ng you have	a serious illness	4		
C. Losing yo	our keys 2				
NOT STRE	SSFUL			EXTREMEL	Y STRESSFUL
0	1	2	3	4	5
Begin Here:					
1. Feeling th	at you are no	t in good physica	al condition		
2. Telling yo	our spouse tha	nt you love her/h	im		
3. Being out	performed at	work by a woma	an		
4. Having to	ask for direc	tions when you a	are lost		
5. Being une	mployed				
6. Not being	able to find a	a sexual partner			
7. Having a	female boss _				
8. Having yo	our lover say	that s/he is not sa	atisfied		
9. Letting a v	woman take c	control of the situ	uation		
10. Not mak	ing enough m	noney			
11. Being pe	rceived by so	omeone as gay or	lesbian		
12. Telling s	omeone that	you feel hurt by	what they said		
13. Being ma	arried to some	eone who makes	more money tha	n you	
14. Working	with people	who seem more	ambitious than y	ou	

15	5. Finding you lack the occupational skills to succeed	
16	6. Losing in a sports competition	
17	7. Admitting that you are afraid of something	
18	8. Being with a woman who is more successful than you	
* *	* * Continue on next page * * *	
M	MGRS, page 2	
N	NOT	REMELY
ST	TRESSFUL STRI	ESSFUL
0) 1 2 3 4	5
19	9. Talking with a feminist	
20	0. Being unable to perform sexually	
21	Being perceived as having feminine traits	
22	2. Having your children see you cry	
23	3. Being outperformed in a game by a woman	
24	4. Having people say that you are indecisive	
25	5. Being too tired for sex when your lover initiates it	
26	6. Appearing less athletic than a friend	
27	7. Talking with a woman who is crying	
28	8. Needing your spouse to work to help support the family	
29	9. Having others say that you are too emotional	
30	0. Being unable to become sexually aroused when you want	
31	1. Being compared unfavorably to men	
32	2. Comforting a male friend who is upset	
33	3. Admitting to your friends that you do housework	
34	4. Working with people who are brighter than yourself	
35	5. Getting passed over for a promotion	
36	6. Knowing you cannot hold your liquor as well as others	
37	7. Having a man put his arm around your shoulder	

- 38. Being with a woman who is much taller than you _____
- 39. Staying home during the day with a sick child _____
- 40. Getting fired from your job _____

APPENDIX F

Debriefing Statement

Thank you for your participation in this study. In this study, the researcher studied male gender stress and online disinhibition as predictors of online trolling behaviors. If you would like a copy of the final results of this study or have any further questions, please contact the researcher.

Researcher: Alexander Bennett, M.S.

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Oklahoma State University

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Email: alex.bennett@okstate.edu

Advisor: John S.C. Romans, Ph.D.

College of Education, Health and Aviation

Oklahoma State University

339 Willard Hall

Stillwater, OK 74078

Email: john.romans@okstate.edu

If you have questions about your rights as a research volunteer, you may contact the Oklahoma State University Institutional Review Board (IRB) Chair.

IRB Chair: Hugh C. Crethar, Ph.D.

Oklahoma State University

434 Willard Hall

Stillwater, OK 74078,

Email: irb@okstate.edu

Thank you for your participation

VITA

Alexander J. Bennett

Candidate for the Degree of

Doctor of Philosophy

Dissertation: EXPLORING HEGEMONIC MASCULINITY IN ONLINE INTERCTIONS AND

BEHAVIOR

Major Field: Counseling Psychology

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Counseling Psychology at Oklahoma State University, Stillwater, Oklahoma in July, 2019.

Completed the requirements for the Master of Science in Educational Psychology at Oklahoma State University, Stillwater, Oklahoma in 2015.

Completed the requirements for the Bachelor of Science in Psychology at Iowa State University, Ames, Iowa in 2014.

Experience:

Veterans Affairs Northern California Health Care System

Clinical Psychology Postdoctoral Fellowship (APA accredited)

Veterans Affairs Northern California Health Care System 2018-2019

Clinical Psychology Internship (APA accredited)

Psychological Clinician Intern 2017-2018

Oklahoma Office of Juvenile Affairs

Professional Memberships: Association of Black Psychologists