THE ROLE OF MASCULINITY IN MALE GAMERS’ EXCLUSIONARY TREATMENT
OF WOMEN

A Dissertation in
Psychology and Women’s Studies

by
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Women are frequently harassed and excluded by men in video gaming communities, implying that many men who play video games believe women do not belong in gaming. Interestingly, while gaming as a domain has historically been male-dominated, being a “gamer” is associated with stereotypes that do not match traditional conceptions of masculinity. I hypothesized that this conflict with masculinity presents the opportunity for gamer identity to act either as a replacement for masculinity, with potentially positive outcomes, or a stigmatized identity that men conceal, with potentially negative outcomes. Across six studies, I examined how masculinity is implicated in how men embrace gamer identity, conceal gamer identity, and negatively treat women in gaming. In a correlational pilot study, gamer identity correlated with less gender role conflict and less acceptance of men’s harassment of a female gamer, whereas concealment correlated with greater sexism and more acceptance of harassment. In Studies 1a and 1b, higher gamer identity prevented men from reacting to masculinity threats with increased acceptance of the harassment of a female gamer, and higher concealment again predicted more acceptance of harassment. In Studies 2 and 3, male gamers generally showed more positive treatment of female game developers, critics, and gamers, whereas concealment predicted mixed reactions and more gender stereotyping. In Study 4, gamer identity correlated with more positive views of gamers regardless of gender, whereas concealment correlated with more negative views of gamers and in particular a diminishment of female gamers’ competence. Overall, consistent with hypotheses, gamer identity predicted more positive and accepting treatment of women, whereas concealment predicted more negative and excluding treatment of women. Some results also indicate that gamers may behave in a patronizing way towards women in gaming such that women are treated positively, but not equally.
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Chapter 1. INTRODUCTION

Women are frequently harassed in masculine domains (e.g., Berdahl, 2007), impeding their access to careers in masculine fields. One domain where women are vastly underrepresented is computer science, a field with well-paying careers and growing social importance as computer technology is increasingly integrated into everyday life (e.g., software developers; Bureau of Labor Statistics, 2015). In fact, computer science is the one science, technology, and engineering field in which women’s representation has declined over the past twenty years; for instance, bachelor’s degrees in computer science declined from 28.3% in 1993 to 18.2% in 2012 (National Science Foundation, 2015). Importantly, many people are first acquainted with computers and the potential of computer programming through entertainment software such as video games; however, video games are mostly marketed to men and boys (Gorriz & Medina, 2000). Therefore, it is perhaps not surprising that the resulting masculine nature of computer science leads women to feel like they don’t belong (Cheryan, Meltzoff, & Kim, 2011; Cheryan, Plaut, Davies, & Steele, 2009). One way to improve women’s representation in computer science would be to create environments within that domain that are more welcoming to women. Thus, if video games are an early point of exposure to computer software that can interest women in pursuing computer science careers, video games are an important avenue of research for increasing women’s representation in computer science. Importantly, however, instead of being welcomed in video gaming communities and multiplayer video games, women are often harassed because of their gender, creating barriers that prevent women from participating in this entry-point to computer science careers.

Harassment of women in video gaming communities gained attention in 2014 due to multiple high-profile instances of harassment connected to the “GamerGate” controversy. The
term GamerGate was originally coined as a Twitter hashtag “#GamerGate” which was used to support accusations that a particular female game developer, Zoe Quinn, was having sex with games journalists to gain favorable reviews of her game. People who furthered the GamerGate accusations — GamerGaters — cited the example of Zoe Quinn as demonstrating a lack of ethics in games journalism. However, rather than focus on the journalists who had allegedly violated their journalistic integrity, many GamerGaters attacked Zoe Quinn by publicly releasing her personal information and sending her threats of rape or death (Dewey, 2014). The GamerGate movement quickly expanded from the particular case of Zoe Quinn into a movement railing against feminists and progressives (termed derogatively as “social justice warriors;” Heron, Belford, & Goker, 2014) who voiced the need to be more inclusive of women or minorities in video games (see Yiannopoulos, 2014). This expansion included attacks on women like Anita Sarkeesian, the author of a web series on negative video game tropes involving women. Despite Sarkeesian’s lack of involvement in the video game industry or video game journalism, her opposition to sexist tropes in video games made her a target of the same kinds of threats and intimidation as Zoe Quinn (Dewey, 2014). The fact that these attacks have focused on women and are often inspired by efforts to be more inclusive of women in video games points to the possibility that masculinity plays a role in men’s perceptions of who belongs in video games and men’s harassment of women in gaming communities.

Interestingly, while gaming may be considered a masculine domain by virtue of its high proportion of men (e.g., Williams, Yee, & Caplan, 2008), or the masculine content of many popular video games (e.g., Burgess, Stermer, & Burgess, 2007), being a gamer is not associated with stereotypically masculine traits (e.g., Kowert, Griffiths, & Oldmeadow, 2012). This places gamer identity in a uniquely ambivalent relationship with masculinity where it is stereotypically
male, but not stereotypically masculine, creating a potential conflict for men who enjoy playing video games. I suggest that because of this conflict, men’s identification as gamers can serve as a facilitator of both the acceptance and the rejection of women, depending on whether or not men openly embrace a gamer identity. I argue that men who are comfortable with this non-masculine identity may be more accepting of women, whereas men who are uncomfortable with it may express the kind of hostility and harassment mentioned above.

The goal of the present research is to examine the relationship between masculinity and gamer identity, as well as their combined effects on how men respond to women who create, critique, and play video games. More specifically, the current research examines how gamer identity can act as an alternative masculinity and how concealment of gamer identity is related to the negative treatment of women in video game domains. In contrast to the idea that video game content is a primary cause of harassment, which is a direct extension of the idea that video game content is a cause of aggression (e.g., Anderson et al., 2010) and sexism (e.g., Dill, Brown, & Collins, 2008), I suggest that the way men navigate the pressures of masculinity while identifying as gamers may inspire the harassment of women. This suggestion is consistent with a recent correlational study among gamers which found that the endorsement of masculine norms of dominance over women and needs for heterosexual self-presentation were positively correlated with the endorsement of beliefs that women don’t belong in video games (Fox & Tang, 2014). My research will expand on these ideas by using theories of masculinity and a social identity framework to posit causal relationships considering how identification as a gamer intersects with masculinity to affect beliefs and behaviors toward women involved in the creation, criticism, and play of video games.
To consider the relation between masculinity and gamer identity and to derive testable hypotheses I first review the history of video games and discuss how men and women are represented in video games. Then I review research on the construction of masculinity, with attention to the question of why being a gamer is a stigmatized identity that many men may be motivated to avoid. Finally, I review why the conflict between masculinity norms and gamer identity can lead male gamers to conceal a stigmatized gamer identity and harass and distance from women as a way of demonstrating more socially desirable embodiments of masculinity. My review of the relationship between masculinity and gamer identity provides a foundation for a series of specific hypotheses about how men who vary in gamer identity and concealment respond to women who develop, critique, and play video games. These hypotheses are described in Chapters 2 – 6 and summarized in Table 1.

**Video Games and Men**

Historically, the development and play of video games has simultaneously been dominated by men and stigmatized as “nerdy.” Largely the hobby of engineers, video game development started as a way to push the boundaries of computing capabilities – to demonstrate mastery of computer programming and create a product that was entertaining, but challenging to play. The first video games were developed in the late 1960s on computers so large and expensive that only students pursuing technical degrees in elite universities had access to them. Those who programmed games were thus prototypical nerds – academically inclined and spending long hours away from typical social functions and athletics in order to complete their video games. A decade passed before the proliferation of smaller, more affordable computer technologies made video games a marketable product on home computers and dedicated home video game consoles in the late 1970s (Kent, 2001). Over time, an increase in the complexity and
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| 1a & 1b | 1. Men whose masculinity is threatened (vs. control) will be more accepting of harassment  
2. Higher adherence to hegemonic masculinity norms will predict greater desires to conceal gamer identity (Study 1a only) and greater acceptance of harassment  
3. Above effects will be mediated by public discomfort, anger, shame, and/or desire to conceal gamer identity (Study 1a only) | **Independent Variable:** Masculinity Threat  
**Moderators:** Gamer Identity  
Gamer Identity Concealment (Study 1b only) | **Dependent Variables:**  
Gender Harassment Comfort and Threat  
Sexual Harassment Comfort and Threat  
**Mediators:** Public Discomfort, Anger, Shame  
Desire to Conceal Gamer Identity (Study 1a only) |
| 2 | 1. Men will rate a game developed by a woman (vs. a man) as less enjoyable and less valuable  
2. A negative game review written by a woman (vs. a man) will have less of an effect on men’s opinions of the game  
3. Above effects will be moderated by gamer identity concealment  
4. Above effects will be mediated by public discomfort, anger, shame, and/or critic credibility | **Independent Variables:** Gender of Developer  
Gender of Critic  
**Moderators:** Gamer Self-categorization  
Gamer Identity Concealment | **Dependent Variables:** Enjoyment of Game  
Value of Game  
**Mediators:** Public Discomfort, Anger, Shame  
Critic Credibility |
| 3 | 1. Men who are high (vs. low) in gamer identity concealment will distance more from the female partner, evaluate her more negatively, and see themselves as less similar to her compared to the male partner  
2. Men who are high (vs. low) in gamer identity concealment will choose more stereotypical characters to represent themselves and their partners  
3. Above effects will be mediated by public discomfort, anger, and/or shame | **Independent Variable:** Gender of Partner  
**Moderators:** Gamer Self-categorization  
Gamer Identity Concealment | **Dependent Variables:** Distancing from Partner  
Evaluation of Partner  
Similarity to Partner  
**Mediators:** Public Discomfort, Anger, Shame |
| 4 | 1. Higher gamer identity will predict more personal endorsement of positive stereotypes and positive feelings about gamers  
2. Gamer identity concealment will predict perceptions that society has more negative stereotypes and more negative feelings about gamers  
3. Gamers high (vs. low) in concealment will stereotype female (vs. male) gamers as warmer, but less competent, more popular, attractive, and social, but less idle, and will feel more pity and less admiration for female (vs. male) gamers | **Independent Variable:** Gender of Target Gamer  
**Moderators:** Gamer Identity  
Gamer Identity Concealment | **Dependent Variables:** Competence of Gamer  
Warmth of Gamer  
Feelings toward Gamer  
Endorsement of Gamer Stereotypes |
difficulty of home video games led to the requirement that people dedicate many hours of play to finish or master them (Juul, 2010). Perhaps because of this requirement, as well as the connection video games have with computer technology, being a “gamer” dedicated to playing and mastering video games became associated with the stereotypes of social isolation and lack of athleticism that have also been applied to engineers and computer programmers (Kowert et al., 2012; Williams, 2003).

The fact that video games have historically been a niche product that were primarily created and consumed by men has influenced video game marketing and content, with video games often focusing on masculine desires of adventure, conquest, and sexually attractive women (Burgess et al., 2007; Dietz, 1998). While video games in general have become a mainstream hobby that 155 million Americans enjoy in some capacity (Entertainment Software Association, 2015), most video games still feature male protagonists (Downs & Smith, 2010). Certain types of games have also retained a hyper-masculine image and male user base; those games are generally more complex, more violent, and have more stereotypically masculine male protagonists. For instance, first-person shooter games are considered more masculine and more likely to be played by men than the generally less complex and nonviolent genre of puzzle games (Eden, Maloney, & Bowman, 2010). As a result, game content and marketing reinforces the idea that gaming is a hobby for men, and women are less likely to consider themselves gamers because one’s gender and the types of games one plays (i.e., masculine “hardcore” games) are defining aspects of a gamer identity (De Grove, Courtois, & Van Looy, 2015; Shaw, 2010; 2012).

I suggest that the way that male gamers represent and respond to masculinity norms in video games interacts with the greater cultural context to shape the ways that gamers think about
and interact with women who participate in gaming communities. Video games are dominated by masculine norms and traditional gender roles that privilege men and sexualize women. An analysis of six popular video game magazines found that 33% of men were portrayed as hyper-masculine (e.g., exaggerated muscles, dominant facial expressions) and nearly 60% of women were portrayed in a sexualized manner (e.g., large breasts, cleavage; Dill & Thill, 2007). In fact, women on the covers of the most popular video games in 2003 were much more likely than men to be wearing sexually revealing clothing and have sexualized body proportions (Downs & Smith, 2010). Some prior findings are consistent with the idea that the sexist content of video games may be a key factor in the acceptance and perpetration of the harassment of women. For example, correlational research has found that the amount of time men report playing sexist games is positively correlated with their level of benevolent sexism (Stermer & Burkley, 2012). Experimental research has also found that exposure to the kind of gender-stereotypical content found in video games increases positive attitudes toward sexual harassment (Dill et al., 2008) and the accessibility of sexual and objectifying words (Yao Mahood, & Linz, 2010). Importantly, however, longitudinal research conducted over a period of two years in Germany failed to reveal evidence for a relationship between video game usage or genre preferences and sexist beliefs (Breuer, Kowert, Festl, & Quandt, 2015). Thus, whether or not video game content influences sexist beliefs in the long term is unclear.

Psychological research that shows increases in aggression following exposure to violence in video games could explain why men aggress toward women who play games, but findings across experimental, cross-sectional, and longitudinal research have been inconsistent. Aggression and violence have and continue to be present in the majority of video games (Burgess et al., 2007; Dietz, 1998), and a recent meta-analysis of 136 articles concluded that
exposure to violent video games decreases empathy, decreases prosocial behavior, and increases aggression (Anderson et al., 2010), perhaps particularly aggression directed at outgroup members (Greitemeyer, 2014). However, comparisons of effect sizes and considerations across multiple longitudinal studies indicate that violent video games may have negligible effects on long-term behavior (e.g., Breuer, Vogelgesang, Quandt, & Festl, 2015; Ferguson, San Miguel, & Hartley, 2009; Ferguson, San Miguel, Garza, & Jerabeck, 2012). In sum, there is evidence that gamers are aggressive during and immediately after playing violent video games, but this work does not fully explain why harassment includes gendered insults that are directed at women at later points in time, such as the attacks on Zoe Quinn and Anita Sarkeesian.

Beyond instances of explicit harassment and sexualization, women are also frequently excluded or marginalized within video game content, further reinforcing the male-dominated nature of video games. The outright exclusion of women in video games may have a powerful effect on perceptions of women’s belonging beyond the effect of sexualized images. First-person shooters, for example, are some of the most popular and violent games (e.g., Call of Duty: Advanced Warfare was the top selling video game of 2014; Te, 2015). While the violent characters and storylines in first-person shooters may be expected to affect player aggression, the connection of video games in this genre with the exclusion of women is more indirect because it is rare that women in first-person shooter games are explicitly sexualized; in fact, first-person shooter games often do not contain any women at all. The most popular modern first-person shooters are military-based, and until very recently have often had entirely male casts or only one or two female supporting characters (e.g., Call of Duty’s first female multiplayer character was introduced in 2013; McWhertor, 2013). Because sexist behavior toward women appears while they play games in genres where there are few representations of women, it seems unlikely that
sexist tendencies in gaming can be completely explained by sexist representations of women; instead the exclusion of women may create an environment that is hostile to women because of the valorization of masculine attributes and absence of strong female characters.

When included in video game communities, women may be explicitly marginalized. Salter and Blodgett (2012) documented a case in 2010 where the community of the popular gaming webcomic Penny Arcade dismissed the concerns of women who pointed out the problematic nature of their references to rape. In a comic meant to portray the absurdity of video game mechanics, the Penny Arcade writers created creatures called “dickwolves,” and wrote about them raping villagers. Multiple women chimed in about the issue of using the term “rape” so lightly, but Penny Arcade and its users defended the comic as humor and even created and sold t-shirts that included the dickwolves. Such exclusion and marginalization of women in video games may combine with the dominant masculine themes of many video games to create an atmosphere where only men are welcome and women are demeaned as outsiders. When women observe these masculine environments they may feel like they do not belong and may be unlikely to pursue an interest in video games or careers related to video games (Cheryan et al., 2009).

In light of the sexual harassment that occurs in gaming communities, theory and research that moves beyond simple considerations of the consequences of sexist and violent content in video games is needed. In particular, I suggest that exploring the potential links between masculinity, traditional gender roles, and sexual harassment can critically contribute to an understanding of the factors that motivate the sexual harassment of women in gaming.

**Masculinity and Threats to Masculinity**

Social scientists define masculinity by the characteristics, roles, and practices that are culturally expected of men. *Hegemonic masculinity* refers to the culturally normative and valued
performance of masculinity, which reinforces gender differences and men’s dominance over women (Connell, 1995). In the U.S., hegemonic masculinity contains prescriptive norms that mirror the three components of Thompson and Pleck’s (1986) Male Role Norms Scale. First, men should be dominant, high status, and powerful within work and family roles; men are expected to lead rather than follow, influence rather than be influenced, and be independent rather than dependent. Importantly, given heterosexual interdependencies, men are particularly expected to be dominant, high status and powerful relative to women (Vescio, Schlenker, & Lenes, 2010). Second, men should be tough – physically, emotionally, and mentally; men are expected to be able to defend themselves and others, control their emotions, and be resolute. Third, men should repudiate all that is feminine, gay, or otherwise non-manly (Pascoe, 2007). This anti-femininity aspect of masculinity drives men to reject femininity within themselves and is foundational to men’s distinction from and social and physical dominance over women (Connell, 1995).

Hegemonic masculinity is a cultural ideal that many men strive toward, but few men embody given the rigid definition of masculinity and nearly impossible standards of maintaining masculinity across contexts. Because of its social importance, most men internalize the values of hegemonic masculinity as a cherished social identity and core component of self (e.g., Herek, 1986). However, given the requirement to consistently enact masculine behaviors to embody hegemonic masculinity, masculinity is a precarious identity that can be easily threatened and is difficult to maintain (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). The difficulty of meeting the ideals of hegemonic masculinity is evidenced by findings that efforts to maintain masculinity leads to stress, anxiety, and other negative health outcomes (Cohn & Zeichner, 2006; Eisler, Skidmore, & Ward, 1988; O’Neil, Helms, Gable, David, & Wrightsman, 1986).
The fact that men put stress on themselves to meet the ideals of hegemonic masculinity is not surprising, however, as multiple lines of research show that men who do not act or appear hegemonically masculine are subordinated and/or physically and socially punished by their peers. Adolescent boys denigrate and reject boys who do not conform to dominant gender norms (Pascoe, 2007) and gender non-conforming boys are also more likely to be the victims of bullying and physical assault (D’Augelli, Grossman, & Starks, 2006). For adult men, hegemonic masculinity is focused on work, wealth, and the consumption of masculine products (Kimmel, 2008; Thompson & Pleck, 1986). Failure to conform can affect adult men’s ability to make a living; jobs that are high status and earn high pay are generally associated with hegemonically masculine qualities (Cejka & Eagly, 1999; Glick, 1991; Glick, Wilk, & Perreault, 1995).

Given the physical and social consequences men face when they do not appropriately demonstrate hegemonic masculinity, men must constantly monitor their behaviors and can be easily threatened when they believe their behaviors will not be perceived as appropriately masculine. Research suggests that people experience threats to social identities when they are perceived to be bad ingroup members (i.e., prototypicality threat; Branscombe, Ellemers, Spears, & Doosje, 1999) or when they are categorized as members of an unwanted group (i.e., category threat, Branscombe et al., 1999; identity misclassification, Bosson, Prewitt-Freilino, & Taylor, 2005). As noted, hegemonic masculinity contains an anti-femininity component, so being feminine or like a woman is indicative of being a bad group member. Therefore, in the case of masculinity, a great deal of research has shown that men become uncomfortable when they are told they are similar to women in their personalities (e.g., Schmitt & Branscombe, 2001), or their knowledge (e.g., Dahl, Vescio, & Weaver, 2015; Vandello et al., 2008; Weaver & Vescio, 2015). Additionally, work on masculinity has found that men who act in ways that are considered
feminine feel threatened because they may be categorized as gay men (e.g., Bosson et al., 2005; Bosson, Taylor, & Prewitt-Freilino, 2006), who are considered bad men. In support of this logic, when men assert their heterosexuality, thus expressing that they are good men, the discomfort that results from being categorized as feminine or gay diminishes (Bosson et al., 2006).

Because the values of hegemonic masculinity are often internalized by men as a cherished social identity (see Dahl et al., 2015; Herek, 1986; Maass et al., 2003; Weaver & Vescio, 2015; Vescio et al., 2010), social identity theory can be extended to predict that men will enact dominance and derogate outgroup members (e.g., women) in reaction to identity threat. More specifically, I predict that men who are concerned or ashamed because they are not prototypic group members, or otherwise fear being perceived as bad men, will behave in ways consistent with masculinity norms (e.g., be dominant or tough) and distance from women and other bad men. This idea is supported by research across different social identities, which indicates that when one’s social identity is threatened either because one is a bad group member (e.g., a bad man) or one is miscategorized into a devalued outgroup (e.g., a heterosexual mistaken as gay), one compensates by displaying normative ingroup behaviors and by attempting to increase the ingroup’s status relative to outgroups (Baretto & Ellemers, 2000; Ellemers, Spears, & Doosje, 2002; Noel, Wann, & Branscombe, 1995).

In the case of masculinity, as a social identity, aggression is theorized to be a frequent reaction to threats because acts of aggression are masculine behaviors that effectively and immediately restore one to a position of dominance or power (Bosson & Vandello, 2011). Because of the social importance of masculinity and the internalization of hegemonic masculinity, threats to masculinity lead to stress and concern about how one’s masculinity is perceived by others (Bosson et al., 2005, 2006; Dahl et al., 2015; Vandello et al., 2008; Weaver
& Vescio, 2015), that, in turn, leads to anger (Dahl et al., 2015). Importantly, both anger and shame predict men’s aggressive behaviors. For example, men’s trait anger is associated with frequency of electric shocks in aggression tasks (Cohn, Seibert, & Zeichner, 2009), men’s proneness to shame is associated with endorsement of overt hostility (Jakupcak, Tull, & Roemer, 2005), and body shame moderates sexually aggressive reactions to masculinity threats (Mescher & Rudman, 2014). Much research also shows that men who are presented with evidence that they are bad men have more aggressive cognitions (Vandello et al., 2008), punch harder (Bosson et al., 2009), and aggress against competitors (Cohn et al., 2009) and gay men (Talley & Bettencourt, 2008). In addition, men who value their masculinity, but believe they are bad men, have more positive feelings toward good men and negative feelings toward bad men. For example, when highly gender identified men are given false feedback that they have a feminine personality, they report more liking for stereotypically masculine men (e.g., they enjoy sports) than counterstereotypic men (e.g., they enjoy cooking; Schmitt & Branscombe 2001) and more negative emotions toward effeminate gay men than masculine gay men (Glick, Gangl, Gibb, Klumpner, & Weinberg, 2007), suggesting that masculine performances are more important than sexual orientation, per se.

particularly important to the current research, men react to masculinity threats with attempts to dominate women through aggression and derogation. Men react to masculinity threats by denying discrimination against women (Weaver & Vescio, 2015) and endorsing ideologies that directly enforce traditional gender roles and women’s subordinate status, such as benevolent sexism and social dominance orientation (Dahl et al., 2015). Additionally, threats to masculinity lead to more sexual harassment (Maass, Cadini, Guarnieri, & Grasselli, 2003; Vescio, Gallegos, & Laubach, 2016), stronger endorsement of rape myths (Vescio et al., 2016),
and greater sexualization of threatening women (Dahl et al., 2015). Thus, men who believe that they are not enacting masculinity appropriately, according to the judgement of others, attempt to prove their masculinity by being especially hostile to women.

**Gamer Identity and Masculinity**

While the research cited above has focused on men’s performance of hegemonic masculinity as the typical way that men perform their masculinity, psychological research also shows that different groups of men emphasize different aspects of hegemonic masculinity. For example, research on the “southern culture of honor” shows that men from the southern United States are more prone to react to insults with violence than men in the northern United States (Cohen, Nisbett, Bowdle, & Schwarz, 1996). Cohen and his colleagues argue that the southern US was colonized by people from herding cultures, which subsist based on the cultivation of livestock, and the prevention of livestock theft required a reputation of violent retribution. In contrast, the northern US was colonized by cultures based on agriculture, which subsist based on raising crops, which are not as easily stolen (Nisbett & Cohen, 1996). As a result, status in the southern US has historically been based on responding quickly and harshly to challenges, and southern men’s masculinity emphasizes violence more than northern men’s masculinity. This research illustrates that even though there is a hegemonic conception of masculinity that men typically strive to enact, the subgroups to which men belong alter their performance of masculinity.

Given that the subgroups to which men belong affect their performance of masculinity, it is also possible for men to identify with alternative forms of masculinity that facilitate the rejection of hegemonic notions of masculinity. Examples of such alternative masculinities include subgroups of gay men who practice masculinity in ways that reject hegemonic
masculinity and embrace some stereotypically feminine behaviors (Connell & Messerschmidt, 2005) and subgroups of adolescent men (e.g., thespians) who experiment with performances of masculinity that question rather than reinforce male dominance (Pascoe, 2007).

A particularly relevant illustration of an alternative masculinity is the way that nerdy men’s practices of masculinity differ from hegemonic masculinity norms. Nerd identities are often constructed as an active rejection of predominant social expectations. This rejection of social expectations extends to gender such that hegemonic masculinity and normative gender constructions are often rejected within nerd groups, leading to a freedom of expression of (or even a preference for) non-hegemonic practices (Bucholtz, 1999; 2011). Specifically, nerd masculinity is constructed as an alternative masculinity that replaces some of the emphasis of hegemonic masculinity on physical toughness and athleticism with an emphasis on academic excellence and technical savvy (Smiler, 2006; Taylor, 2012).

While many men who play video games may not explicitly identify as nerds, gamer identity and nerd identity overlap; gamers and nerds engage with masculinity in a similarly non-hegemonic way. There are well-known stereotypes about gamers that overlap with stereotypes about nerds, including social awkwardness, non-dominance, and unpopularity (Kowert, et al., 2012; Williams, 2003). Therefore, gamers may be grouped with nerds by non-gamers and treated accordingly, and that common grouping may play a role in how multiple nerdy social subgroups (e.g., computer nerds, fans of comics or anime) form shared communities with shared outlooks on hegemonic norms (Tocci, 2009). Rather than focusing on activities that emphasize hegemonically masculine traits, such as sports, these communities often include people who enjoy reading, chess, or other knowledge-based activities (Bucholtz, 2011). These communities also often include people rejected from other traditional groups due to their lack of gender
conformity, such as LGBT and queer individuals, who are not pressured to conform to traditional
gender norms in these spaces (Taylor, 2012). The different focus of these communities suggests
that men who reject norms prescribed by hegemonic masculinity and unabashedly identify with
an alternative masculinity can come together to create a space where men are accepted and able
to express themselves in an unthreatening environment. In support of this idea, men in gaming
often represent a set of body types (e.g., non-athletic) and personalities (e.g., socially awkward)
that would be unacceptable from the perspective of hegemonic masculinity (Taylor, 2012). Thus,
I suggest that when men reject hegemonic ideals of masculinity and instead embrace an
alternative masculinity within these shared communities, it can provide a space where men are
freer to express themselves in non-hegemonic ways.

More specifically, I suggest that gamer identity may serve as an alternative masculinity
that has the potential to offer positive alternatives to some of the destructive elements of
hegemonic masculinity that, as previously mentioned, motivate aggression toward and rejection
of women (Connell, 1995; Pascoe, 2007). Importantly, however, despite the potential benefits of
developing an alternative masculine identity, hegemonic masculinity remains the socially
dominant form of masculinity to which alternative masculinities are subordinated, marginalized
from, or otherwise stigmatized (Connell, 1995). In fact, the lesser status of subordinate
masculinities is typically reinforced and punished through acts of aggression that range from
subtle harassment and discrimination to open acts of violence (Connell, 1995). To adopt an
alternative masculinity, then, one must reject attempts to embody, associate, or otherwise benefit
from hegemonic displays of masculinity.

Together, the foregoing lines of logic converge. On the one hand, adopting an alternative
masculinity can relieve the pressures of conforming to hegemonic masculinity ideals, but on the
other hand, the stigma attached to alternative masculinities may make it difficult for men to reject hegemonic notions of masculinity in favor of alternative masculinities. As a result, some men may conceal their identification with alternative masculinities to avoid negative comparison to hegemonic masculinity and the resulting consequences.

Men who conceal their identification with alternative masculinities to avoid stigma may do so for a variety of reasons. For example, research indicates that gay men are more likely to conceal their gay identity both when they internalize social stigmas (i.e., have negative attitudes about being homosexual), and when they anticipate negative treatment due to stigma (Herek, Gillis, & Cogan, 2009). Gay men who internalize the negative attitudes that society has about homosexuality do not want to express an aspect of themselves that they think is negative (Herek, Cogan, Gillis, & Glunt, 1998). Importantly, however, even when gay men do not internalize stigmas about homosexuality and do not believe their homosexuality is negative, they still face discrimination if their sexuality is revealed in a situation where homosexuality is devalued.

Similarly, some male gamers may value hegemonic masculinity and have internalized the stigma surrounding gamers (i.e., that gamers are bad men), leading them to conceal their gamer identity to avoid discrimination and/or punishment for non-hegemonic embodiments of masculinity.

I suggest that how men perceive and identify with conflicting identities of hegemonic masculinity and gamer identity may influence how male gamers react to women who create video games and participate in gaming. Although one’s identification with competing relevant social identities may vary across situations and individuals, in some situations social identities are contradictory. As noted above, gamer identities are typically associated with being a nerd and arouse nerd stereotypes, including physical weakness and non-dominance, which violate norms of hegemonic masculinity. Because gamers are considered to lack traits necessary to fully
conform to hegemonic masculinity, gamers are stereotypically perceived to be less masculine, and thus less prototypical of men as a group. One’s identity as a gamer can provide an alternative masculine identity that replaces hegemonic ideals and frees men from restrictive gender roles by considering men who embody traditional notions of hegemonic masculinity to be part of an outgroup. However, when hegemonically masculine ideals are salient – either because they are situationally cued or chronically endorsed – men who enjoy video games may fear failures of hegemonic notions of masculinity and wish to conceal their stigmatized gamer identity.

I suggest that men who are insecure regarding identification with alternative masculinities, such that they conceal their gamer identity, aggress toward and otherwise reject members of less masculine outgroups from gamer communities, leading to greater harassment and exclusion of women who create, critique, and play video games. Given the male-dominated nature of video games noted above, women already face harassment when they participate in gaming communities, which is consistent with prior findings from laboratory and workplace research showing that women are more likely to be sexually harassed in male-dominated domains (e.g., banking vs. teaching; Berdahl, 2007; Maass et al. 2003). In addition, because gamer identity is associated with feminine traits, men who are gamers are considered bad men from a hegemonic standpoint. Therefore, when their association with gaming is established (e.g., while playing video games), gamers’ status as bad men should motivate men who value hegemonic masculinity or are in situations that require displays of hegemonic masculinity to distance themselves from feminine stereotypes by enacting more extreme prototypically masculine actions (e.g., aggression) and derogating relevant outgroups (e.g., women). These men would be expected to endorse sexist beliefs, accept men’s harassment of women, and reject
women from gamer communities, as these actions demonstrates one’s masculinity through aggression while also derogating the outgroup of women.

When men are more secure in their identification with an alternative masculinity and do not seek to conceal their identity as a gamer, however, their identity should buffer against the expectations of hegemonic masculinity that lead men to harass and exclude women from gamer communities. In other words, men who think being a gamer is important to their identity and do not conceal that identity from others would be expected to be less sexist and less likely to participate in or accept the sexual harassment of women. Because these men are less threatened by the prospect of failing to express masculinity in a hegemonic way, they are not motivated to differentiate themselves from non-masculine outgroups by rejecting non-masculine group members from their communities. Therefore, because gender presentation is less of a concern, they may be less tolerant of other men’s harassment of women in gamer communities and more accepting of women who create, critique, and play video games.

In sum, the proposed research examines the possibility that gamers who are motivated to perform hegemonic masculinity, and therefore conceal their gamer identity, are more likely to aggress toward and exclude women than gamers who are motivated to perform alternative masculinities, and therefore do not conceal their gamer identity. Thus, while concealment can be an unconscious process, whereby men become habituated to presenting a certain image of themselves (see Leary & Kowalski, 1990), I focus on concealment as a deliberate process meant to avoid the social exclusion that results from performing an alternative masculinity. Extending prior social identity research showing that bad group members, or peripheral group members, are more motivated to positively differentiate ingroups from outgroups and use outgroup derogation to that end (Noel et al., 1995), I predict that gamers who report higher rates of concealing their
gamer identities from others (compared to those who do not) will be uncomfortable with and feel angry and/or ashamed when women participate in video game communities, which will predict greater acceptance of gender-based harassment in video game communities and more distancing from women. This follows from the logic that those who see their gamer status as making them bad men will accept and participate in the derogation of women to positively differentiate men from women, just as men who experience threats to masculinity accept and participate in the sexual harassment of women in experimental contexts (Maass et al., 2003). Importantly, embracing one’s gamer identity as an alternative masculinity and repudiating the ideal hegemonic notions of masculinity is a rejection of traditional gender roles and should predict less discomfort, anger, and shame when women participate in video game communities, and therefore less acceptance of harassment and distancing from women as a means of exhibiting masculinity. As a starting point for considering these issues, I first examined the foundational assumption that concealing a gamer identity is more likely to be associated with gender role conflict, sexism, and acceptance of sexual harassment.
Chapter 2. PILOT STUDY: EXPLORING GAMER IDENTITY’S RELATIONSHIP WITH MASCULINITY AND SEXISM

I first ran a pilot study to examine how gamer identity, concealment of gamer identity, and other gaming-related factors (e.g., game preferences, time spent playing games) are related to gender role conflict, sexism, and acceptance of harassment of women. Given the research outlined in Chapter 1, concealing one’s gamer identity may represent a distancing or repudiation of gamer identity because of its violations of hegemonic masculinity norms. If so, concealment should be positively related to other factors relevant to men’s navigation of the social expectations of masculinity. Therefore, concealment should be positively related to traditional attitudes about men’s and women’s social roles (i.e., ambivalent sexism; Glick & Fiske, 1996), the difficulty men have conforming to hegemonic masculinity norms, (i.e., gender role conflict; O’Neil, Helms, Gable, David, & Wrightsman, 1986), and measures of how men feel about women’s negative treatment in gaming contexts (tolerance of the harassment of a female gamer). On the other hand, as an alternative masculinity, gamer identity should be negatively (or less strongly) related to these measures.

Method

Participants. Fifty-three workers (36 men, 16 women, 1 transgender) on Amazon’s Mechanical Turk were recruited to participate in a study on the relationship between video games and personality. Data from eight participants were removed because they failed to complete the entire study ($n = 1$), or failed attention checks ($n = 7$). Therefore, the working data set included the responses of 45 participants (29 men, 15 women, 1 transgender). Participants in the working data set ranged in age from 18 to 64 ($M = 30.04, SD = 8.87$) and self-described as
White (68.9%), Asian (13.3%), Multiracial (6.7%), Hispanic or Latino/Latina (4.4%), Native American, American Indian, or Alaskan Native (4.4%), and Black or African American (2.2%).

**Procedure.** In an online survey, participants consented to participate and then filled out several questionnaire measures. The first questionnaire was about the types and amount of video games played and one’s identification as a gamer (see Appendix A). To establish how much participants identified as a gamer, I included the four centrality items from Luhtanen and Crocker’s (1992) collective self-esteem scale. I also generated questions to determine how much participants concealed their identity as a gamer, how much they thought gamers were socially liked and respected, and what gaming platforms and types of games participants enjoyed playing. This was followed by a modified version of the gender role conflict scale short form (Wester, Vogel, O’Neil, & Danforth, 2012; see Appendix B) and the ambivalent sexism inventory (ASI; Glick & Fiske, 1996; see Appendix C).

After the questionnaires, participants were asked to listen to two audio clips taken from Jenny Haniver’s website *Not in the Kitchen Anymore*, where she documents her experiences playing multiplayer video games online with men. The two audio clips were meant to represent two different kinds of harassment of the woman: one based on gender role stereotypes, in which the male players reference to how the female player should be cooking in the kitchen (Haniver, 2012), and one based on sexuality, where the male players ask what the female player is wearing and inquire about the hairiness of her pubic area (Haniver, 2013; see Appendix D for transcripts). The audio clips were presented in a random order and following each clip participants were asked about the characteristics of the men and women in the interaction and the appropriateness of the interaction in that context (see Appendix E). After responding to the audio clips, participants completed demographics, were probed for suspicion, debriefed, and thanked.
Measures.

**Gamer identity.** Identification as a gamer was assessed using four modified items from the identity centrality subscale of the collective self-esteem scale (Luhtanen & Crocker, 1992). Using 5-point scales (1 = disagree strongly, 5 = agree strongly), participants rated their agreement with how important being a gamer is to their identity (e.g., “being a gamer is an important reflection of who I am”; see Appendix A). Appropriate items were reverse-scored and averaged into a single gamer identification variable (α = .79), with higher numbers indicating greater identification.

**Concealment of gamer identity.** Using a 5-point scale (1 = Never/seldom, 5 = Almost always/always), participants rated how often they “conceal my identity as a gamer because I think others will socially exclude me.” Thus, higher numbers indicated a higher rate of concealment.

**Gender role conflict.** The short form of the gender role conflict scale (Wester et al., 2012) was modified so that its questions could be answered by any gender participant (e.g., items about “other men” were changed to be about “men”) and used to assess gender role conflict (see Appendix B). Using 6-point scales (1 = strongly disagree; 6 = strongly agree), participants rated their agreement with 16 items concerning restrictive emotionality (e.g., “I have difficulty expressing my tender feelings”), the importance of success (e.g., “I strive to be more successful than others”), affectionate behaviors with men (e.g., “affection with men makes me tense”), and conflicts between work and family relations (e.g., “my work or school often disrupts other parts of my life [home, health, leisure, etc.]”). Items were averaged into variables representing each of their respective subscales: restrictive emotionality (α = .86), success, power, and competition (α = .77), affectionate behaviors with men (α = .84), and conflicts between work and family
relations ($\alpha = .78$), as well as all items being averaged into a single gender role conflict variable ($\alpha = .82$), with higher numbers indicating more conflict.

**Sexism.** The ambivalent sexism inventory was used to assess participants’ levels of sexism (Glick & Fiske, 1996; see Appendix C). Using 6-point scales (1 = disagree strongly; 6 = agree strongly), participants rated their agreement with 22 items concerning both benevolent forms of sexism (e.g., “women should be cherished and protected by men”) and hostile forms of sexism (e.g., “when women lose to men in a fair competition, they typically complain about being discriminated against”). Appropriate items were reverse-scored and averaged into their respective subscales: benevolent sexism ($\alpha = .94$) and hostile sexism ($\alpha = .80$), as well as all items being averaged into a single ambivalent sexism variable ($\alpha = .91$), with higher numbers indicating more sexism.

**Harassment acceptance.** Responses to the audio clips at the end of the survey were used to assess participants’ acceptance of harassment (see Appendix E). Using 6-point scales (1 = strongly disagree; 6 = strongly agree), participants rated their agreement with 12 items concerning positive and negative perceptions of the men and the woman in the audio clips (e.g., “the men speaking in the clip were playful,” “the woman speaking in the clip was oversensitive”) and one item about the appropriateness of the interaction in that context. Results from an exploratory factor analysis indicated that items loaded well on two factors for each harassment scenario. Thus, items were averaged into variables representing the perceptions of how threatening the men’s actions were toward the woman in the gender role harassment ($\alpha = .92$) and sexual harassment ($\alpha = .93$) clips and perceptions of how positive and comforting the men’s actions were toward the woman in the gender role harassment ($\alpha = .74$) and sexual harassment ($\alpha$
clips, with higher numbers indicating more threatening or more positive perceptions, respectively.

Results

Means and standard deviations, separated by participant gender, are presented in Table 1. Participants represented a range of different kinds of gamers, and on average identified moderately with gamer identity ($M = 2.72, SD = 0.86$) and played several hours of video games per week ($M = 13.24, SD = 13.15$). On average, participants rarely concealed their identity as gamers ($M = 1.82, SD = 0.98$), and concealment of gamer identity was not significantly correlated with strength of gamer identity, $r(43) = .247, p = .102$. There were also no differences between men and women on gamer identity, number of hours playing video games per week, or concealment of gamer identity, $t$s < 1, $ps > .50$.1

I calculated a series of bivariate correlations with the goal of examining the relationships between gamer identity, concealment of gamer identity, and each of the other variables. Because I theorized that men and women relate to gamer identity differently because of its connection to male-dominated spaces, and I expect differences between how men and women relate to gender role conflict, sexism, and acceptance of harassment, I also present correlations that were only significant for men or women. By presenting these gender-specific correlations I can better examine gender differences that may not be statistically significant when gender is entered as an interaction in a regression equation due to the small sample. To further examine gender differences, I also ran a series of $t$-tests to determine which variables differed between men and women. I then calculated regression equations to determine which variables best predicted sexism and responses to the harassment audio clips when examined together, and if any of these

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1 The transgender participant was excluded from analyses that compared between men and women, but was included in all other analyses.
Table 2
Means by Gender in Pilot Study

<table>
<thead>
<tr>
<th></th>
<th>Overall (N = 45)</th>
<th>Women (n = 15)</th>
<th>Men (n = 29)</th>
<th>Overall (N = 45)</th>
<th>Women (n = 15)</th>
<th>Men (n = 29)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamer Identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.72 (0.86)</td>
<td>2.75 (0.82)</td>
<td>2.66 (0.88)</td>
<td>2.26 (0.82)</td>
<td>2.16 (0.74)</td>
<td>2.34 (0.86)</td>
</tr>
<tr>
<td>Concealment</td>
<td>1.82 (0.98)</td>
<td>1.73 (1.03)</td>
<td>1.83 (0.97)</td>
<td>3.77 (1.30)</td>
<td>3.83 (1.37)</td>
<td>3.68 (1.26)</td>
</tr>
<tr>
<td>Gender Role Conflict (GRC)</td>
<td>3.26 (0.79)</td>
<td>2.91 (0.66)</td>
<td>3.40 (0.81)</td>
<td>2.36 (0.95)</td>
<td>2.47 (0.96)</td>
<td>2.33 (0.97)</td>
</tr>
<tr>
<td>GRC Restrictive Emotionality</td>
<td>3.29 (1.32)</td>
<td>2.75 (1.08)</td>
<td>3.52 (1.36)</td>
<td>3.79 (1.36)</td>
<td>3.36 (1.38)</td>
<td>3.96 (1.32)</td>
</tr>
<tr>
<td>GRC Importance of Success</td>
<td>3.42 (1.09)</td>
<td>3.30 (0.85)</td>
<td>3.45 (1.21)</td>
<td>5.81 (8.67)</td>
<td>6.40 (8.52)</td>
<td>5.61 (9.02)</td>
</tr>
<tr>
<td>GRC Affection with Men</td>
<td>2.96 (1.33)</td>
<td>2.65 (1.11)</td>
<td>3.13 (1.44)</td>
<td>7.42 (5.97)</td>
<td>8.73 (6.84)</td>
<td>6.80 (5.59)</td>
</tr>
<tr>
<td>GRC Work and Family Conflict</td>
<td>3.36 (1.15)</td>
<td>2.95 (1.19)</td>
<td>3.52 (1.09)</td>
<td>5.71 (8.22)</td>
<td>6.00 (5.03)</td>
<td>5.72 (9.63)</td>
</tr>
<tr>
<td>Ambivalent Sexism</td>
<td>3.12 (0.91)</td>
<td>3.11 (0.95)</td>
<td>3.16 (0.90)</td>
<td>4.04 (1.09)</td>
<td>4.20 (1.21)</td>
<td>4.00 (1.04)</td>
</tr>
<tr>
<td>Benevolent Sexism</td>
<td>3.05 (1.28)</td>
<td>3.13 (1.42)</td>
<td>3.07 (1.22)</td>
<td>3.80 (1.01)</td>
<td>4.00 (1.20)</td>
<td>3.72 (0.92)</td>
</tr>
<tr>
<td>Hostile Sexism</td>
<td>3.18 (0.86)</td>
<td>3.08 (0.91)</td>
<td>3.24 (0.85)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note. N = 45. One person identified as transgender and is not represented in the columns for women or men. GH = Gender Harassment Scenario, SH = Sexual Harassment Scenario. Possible range of scores for Gamer Identity = 1 (disagree strongly) to 5 (agree strongly), Concealment = 1 (seldom/never) to 5 (almost always/always), Gender Role Conflict and subscales = 1 (strongly disagree) to 6 (strongly agree), Ambivalent Sexism and subscales = 1 (disagree strongly) to 6 (agree strongly), GH Comfort, GH Threat, SH Comfort, and SH Threat = 1 (strongly disagree) to 6 (strongly agree), Gamer Social Liking = 1 (very disliked) to 7 (very liked), Gamer Social Respect = 1 (very disrespected) to 7 (very respected). Means with different subscripts within each variable differed significantly (p < .05) between women and men.
specific relationships were moderated by gender.

Gamer identity. Across all participants, gamer identity was positively correlated with the number of hours spent playing games on the weekend, $r(43) = .296, p = .048$, but not hours spent playing games on weekdays, $r(43) = .072, p = .639$. Those who were more highly identified as gamers played more games on the weekends. Gamer identity was also negatively correlated with preferences for sports games, $r(36) = -.332, p = .042$, and preferences for competition in multiplayer games, $r(43) = -.361, p = .016$; those who more highly identified as gamers spent less time playing sports games and preferred to cooperate in multiplayer games rather than compete.

Some correlations were only significant for men or women when examined separately. For men, gamer identity was negatively correlated with the restrictive emotionality subscale of gender role conflict, $r(27) = -.369, p = .049$, and the comfort of the gender roles harassment scenario, $r(27) = -.385, p = .039$. Consistent with the idea that gamers internalize a subordinated masculinity based on the rejection of hegemonic masculinity norms, men who identified more as gamers were less restricted in their emotions and were less tolerant of men’s actions in the gender roles harassment scenario. In other words, the more strongly men identified as gamers the more willing they were to express their emotions and the more they rejected the idea that women should be harassed based on their gender. Interestingly, however, while male gamers were less traditionally male and less accepting of open acts of harassment, they were not lower in benevolent sexism. Rather, gamer identity was positively correlated with benevolent sexism, $r(27) = .407, p = .029$; men who identified more as gamers were more benevolently sexist and

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2 All analyses involving game platform and genre preferences have fewer degrees of freedom because five women and two men were removed from those analyses due to reporting percentages of time playing games on each platform and/or of each genre that totaled over 110 percent. Results for other variables were similar when excluding these participants, but they are included in what is presented.
thus more likely to think that women should be protected and adored. For women, greater gamer identity was significantly related with only one variable – hours spent playing games on the weekend, $r(13) = .529, p = .042$; the stronger women identified as gamers the more hours of games they played on weekends.

**Gamer identity concealment.** Across participants, concealing gamer identity was significantly related to sexism; more concealment was associated with more ambivalent sexism, $r(43) = .496, p = .001$, more benevolent sexism, $r(43) = .423, p = .004$, and more hostile sexism, $r(43) = .417, p = .004$. Concealing gamer identity was also positively correlated with perceptions of comfort in the sexual harassment situation, $r(43) = .436, p = .004$, preferences for PlayStation branded handhelds, $r(36) = .401, p = .013$, and preferences for action games, $r(36) = .348, p = .032$. These correlations indicate that the more often people conceal their identity as gamers in order to avoid social exclusion, the more sexist they are, the more tolerant they are of men’s actions in the sexual harassment scenario, and the more time they spend playing PlayStation branded handhelds, as opposed to PC, tablet/phone, home console, or Nintendo branded handheld games, and the more time they spend playing action games (i.e., games that require fast reactions and good hand-eye coordination).

Again, some correlations were only significant for men or women when examined separately. For men, there were positive correlations with ambivalent sexism, $r(27) = .557, p = .002$, benevolent sexism, $r(27) = .507, p = .005$, hostile sexism, $r(27) = .452, p = .014$, and comfort with men’s actions in the sexual harassment situation, $r(27) = .368, p = .050$. Consistent with the foundational logic of my predictions, men who concealed their gamer identity were more sexist and more tolerant of the sexual harassment of a female gamer. Men who concealed their gamer identity also showed a greater preference for PlayStation branded handhelds, $r(25) =$
.483, \( p = .011 \), and action games, \( r(25) = .416, p = .031 \). For women, concealment was also positively correlated with ambivalent sexism, \( r(13) = .522, p = .046 \) and tolerance of men’s actions in the sexual harassment situation, \( r(13) = .649, p = .009 \). Women’s concealment of gamer identity was not, however, related to preferences for PlayStation branded handhelds as no women expressed spending any time playing games on that platform, nor was their concealment of gamer identity significantly related to preferences for action games, \( r(8) = -.056, p = .878 \).

Women’s concealment of gamer identity was negatively related to how threatened they thought the woman felt in the sexual harassment scenario, \( r(13) = -.589, p = .021 \), meaning that the more women concealed their gamer identity, the less they thought that the woman who was being sexually harassed felt threatened.

**Gender t-tests.** To test for gender differences, I ran two-tailed \( t \)-tests comparing men to women for each of the variables in the data set. As would be expected, men reported higher levels of overall gender role conflict (\( M = 3.40, SD = 0.81 \)) than women (\( M = 2.91, SD = 0.66 \)), \( t(42) = -2.025, p = .049 \). Men are expected to struggle more with fulfilling masculine role norms than women, so it is not a surprising finding. However, when considering the gender role conflict subscales, there was only a marginally significant difference between men and women on the restrictive emotionality subscale, \( t(42) = -1.90, p = .065 \), all other subscale ts < 1.59, \( ps > .120 \). This indicates that men and women in this sample have similar needs for success, trouble emotionally connecting with men, and work-life conflict. Men and women also differed in some of their game preferences. Women spent a greater percentage of their time playing on Nintendo handhelds (\( M = 15.50, SD = 19.21 \)) than men (\( M = 1.07, SD = 3.45 \)), \( t(35) = 2.36, p = .042 \). Men spent a greater percentage of their time playing management games (\( M = 29.80, SD = 33.70 \)) than women (\( M = 8.41, SD = 16.02 \)), \( t(42) = 2.326, p = .032 \), and men spent a greater percentage
of time playing racing games ($M = 40.00, SD = 38.08$) than women ($M = 9.14, SD = 16.89$), $t(42) = 2.991, p = .008$. These differences are also not particularly surprising as Nintendo has historically tried to be inclusive in their marketing and management and racing games may be considered more masculine genres.

Surprisingly, and contrary to prior findings showing that men score higher on hostile sexism (e.g., Glick & Fiske, 1996; Glick & Fiske, 2001), men and women did not differ in their endorsement of ambivalent sexism, nor its benevolent or hostile sexism subscales, $ts < 0.60, ps > .561$. This result may indicate that among people who play video games, in particular, or who are attracted to masculine domains, in general, may have more similar beliefs about gender roles than do men and women either in the general population or who are attracted to more gender-neutral activities.

**Regression analyses.**

**Sexism.** Correlational analyses showed that concealment of gamer identity was correlated with benevolent sexism, and for men, gamer identity was also correlated with benevolent sexism. To control for gamer identity and clarify the unique role of identity concealment in benevolent sexism for men, I regressed men’s benevolent sexism on both men’s gamer identity and gamer identity concealment simultaneously. The results showed that when both gamer identity and identity concealment are included in the regression equation, men’s identity concealment remains a significant predictor of benevolent sexism, $\beta = 0.42, t(28) = 2.47, p = .020$, while men’s gamer identity becomes nonsignificant, $\beta = 0.27, t(28) = 1.61, p = .120$. This indicates that concealment of gamer identity was a stronger predictor of men’s benevolent sexism than gamer identity itself.
Additionally, a separate analysis indicated that gender did not moderate the relationship between identity concealment and any form of sexism, interaction $r$ < 0.16, $ps > .875$. Thus, concealment of gamer identity predicted greater ambivalent, benevolent, and hostile sexism for both men and women.

**Harassment Acceptance.** Across participants, concealment of gamer identity predicted more acceptance of the sexual harassment scenario in the audio clip. However, concealment of gamer identity was also related to sexism, and sexism was related to more acceptance of harassment in the audio clip, suggesting that concealment of gender identity may simply be a proxy for sexism’s relationship with acceptance of harassment. To eliminate that possibility, I controlled for sexism by regressing acceptance of the sexual harassment scenario on gamer identity concealment, benevolent sexism, and hostile sexism simultaneously. The results of this analysis showed that concealment of gamer identity remained a significant predictor of harassment acceptance, $\beta = 0.32$, $t(44) = 2.05$, $p = .047$, while benevolent sexism, $\beta = 0.14$, $t(44) = 0.91$, $p = .371$, and hostile sexism, $\beta = 0.12$, $t(44) = 0.77$, $p = .446$ were nonsignificant. Thus, concealment of gamer identity was a stronger predictor of acceptance of the sexual harassment scenario than either form of sexism. Additionally, gender did not moderate any of these effects, interaction $r$ < 1.33, $ps > .190$.

**Discussion**

Overall, the results of the pilot study are consistent with the ideas that gamers represent an alternative masculinity and that when gamers are motivated to conceal that identity, they derogate women. First, stronger identification as a gamer overall correlated with characteristics that are not stereotypically masculine, including a preference for cooperation and less restrictive emotionality. Second, men who more strongly identified as gamers showed less tolerance for the
gender harassment of the female gamer in the audio clips. These correlations show that men who identify more as gamers are inclined to reject some of the aspects of hegemonic masculinity. In contrast, concealment of gamer identity overall was associated with more sexism and more acceptance of the sexual harassment of a female gamer, indicating a rejection of the alternative masculine identity represented by gamer identity and a rejection of femininity in favor of hegemonically masculine characteristics. Together, these results are consistent with the idea that gamers who seek to conceal their stigmatized identity are particularly likely to lash out at or exclude women. Stated differently, as noted in the introduction, gamer identity may provide either an alternative identity that facilitates the rejection of hegemonic masculinity ideals or represent a stigmatized identity from which one may distance. Whether the latter or the former prevails may vary across men and across situations. Importantly, however, the degree to which men are motivated to conceal their stigmatized gamer identity critically affects acceptance of, and presumably participation in, the harassment and exclusion of women from gaming communities. The correlational evidence provided by the pilot study is consistent with this logic, which is based on the assumptions that gamers who seek to identify with hegemonic masculinity ideals rather than reject them will exhibit anti-femininity.

Importantly, the findings of the pilot study also revealed that women showed many of the same tendencies that men exhibited. Like men, women who concealed their gamer identity were more likely to tolerate harassment and were more ambivalently sexist. Given that concealment is theoretically linked to masculinity, this raises questions about why female gamers may be motivated to conceal their identity. One possibility is that female gamers conceal their gamer identity because they fear backlash from men for being gender-atypical and participating in a male-dominated hobby (Rudman & Fairchild, 2004), and may be more accepting of men’s
harassment of others as a strategy to appease men’s threat and avoid backlash; such a possibility is consistent with findings documenting that threats to masculinity motivate men to sexualize women (Dahl et al., 2015) and motivate women to self-sexualize in attempts to appease masculinity threats (Schlenker, 2009). Alternatively, women may conceal gamer identities because they are incongruent with female gender roles (Eagly & Karau, 2004) or to facilitate belonging as “one of the guys” (Kimmel, 2008). The issue of when and with what consequences female gamers conceal their gamer identity is a potentially important and interesting question that warrants future theoretical and empirical attention. The identities and behaviors of female gamers are, however, beyond the scope of the present work. More specifically, the goal of the present work is to begin to consider why women in gaming communities are sexually harassed and marginalized. Because the majority of documented cases of such harassment involve male gamers harassing female gamers, I narrow initial focus to male gamers’ identities, attitudes, and behaviors.

While the pilot study shows associations between concealment, sexism, and harassment, the pilot study did not measure endorsement of hegemonic ideals nor pit gamer identities against hegemonically masculine identities. To further examine the relationship between gamer identity, concealment, hegemonic masculinity, and harassment of women, I conducted five additional studies (Studies 1a, 1b, 2, 3, and 4) that examined male gamers’ reactions to women’s presence in video games and stereotypes about male and female gamers. Extending the pilot findings, Studies 1a and 1b examined the causal connections between masculinity and concealment of gamer identity and acceptance of harassment. Studies 2 and 3 examined how concealment of gamer identity predicts male gamers’ responses to women who develop, critique, and play video games. These two studies focused on contexts in which there is documented evidence of the
harassment of women. Finally, to better understand how gamer identity is related to perceptions of men and women in gaming, Study 4 examined how gamer identity and concealment predict the stereotypes and feelings that male gamers personally endorse and perceive that society endorses about male and female gamers.

These studies were designed to test the hypotheses that gamers who are situationally threatened and/or conceal their gamer identity will (a) accept more sexual harassment of a female gamer, (b) more negatively rate games that are developed by women compared to men, (c) rate women who criticize games as less credible and take their opinions less seriously than men, (d) distance from and more negatively rate a potential female teammate than a potential male teammate in a video game, and (e) endorse more negative stereotypes and feelings about female gamers than male gamers. Across studies I examine the potential mediation of public discomfort and anger, which were discussed in the introduction and have been shown to mediate effects of masculinity threat in previous research (Dahl et al., 2015; Weaver & Vescio, 2015). In addition, consistent with research connecting shame and men’s aggression (Jakupcak et al., 2005) and suggestions that shame, like anger, may mediate the link between masculinity threats and aggression (Weaver & Vescio, 2015), I measure shame across studies.
Chapter 3. STUDIES 1A AND 1B: HOW GAMER IDENTITY AND CONCEALMENT AFFECT REACTIONS TO MASCULINITY THREATS

As noted in the introduction, I suggest that the concealment of gamer identity may result from men’s insecurity about how they compare to hegemonically masculine ideals. Presumably, an openly embraced gamer identity can provide men with an alternative masculinity that facilitates the rejection of hegemonically masculine ideals. Consistent with this presumption, pilot findings showed that higher gamer identity was associated with fewer stereotypical masculine features (e.g., restrictive emotionality) and less tolerance of harassment of women. In some situations, however, men may seek to conceal their gamer identity as a response to the feminine stigma attached to being a gamer. Men may conceal their gamer identity because they personally value hegemonically masculine ideals and/or are in situations where hegemonic masculinity norms prevail. The pilot study also revealed findings pertaining to the relationship between concealment and anti-feminine sentiment. Specifically, greater dispositional concealment of gamer identity was associated with higher levels of sexism and more tolerance of harassment of women. These findings are consistent with the idea that gamer identity is a subordinate form of masculinity that many men are motivated to avoid, but the pilot study was correlational and did not measure endorsement of hegemonic masculinity norms.

To examine the potential links between competing gamer and hegemonically masculine identities, concealment, and harassment, participants in Studies 1a and 1b completed an online study where their gamer identity and adherence to hegemonic masculinity norms were measured and their masculinity was situationally threatened. In Study 1a, participants reported their gamer identity and adherence to hegemonic masculinity norms, then their masculinity was threatened, assured, or not mentioned before they reported public discomfort, anger, shame, and their desire
to conceal gamer identity. In Study 1b, participants first completed the masculinity manipulation and reports of public discomfort, anger, and shame, but did not report their desire to conceal gamer identity because concealment was measured as an individual difference at the end of the study. In an ostensibly unrelated second part of the online session, participants in both studies read a description of a first-person shooter game before listening and responding to an interaction that presumably occurred during a multiplayer session of the described game. Within this context, men listened to the harassment audio clips from the pilot study. In Study 1b, participants then completed measures of their gamer identity, adherence to hegemonic masculinity norms, and dispositional gamer identity concealment.

Given research showing that men react to masculinity threats by behaving in stereotypically masculine ways (e.g., aggressing; Bosson & Vandello, 2011), distancing from femininity (e.g., preferring masculine men; Glick et al., 2007), and derogating women (e.g., sexualization and/or harassment; Dahl et al., 2015; Maass et al., 2003), I formulated three main hypotheses. My hypotheses are summarized in the first row of Table 1 and discussed below.

My first hypothesis is that men whose masculinity is threatened (vs. control), will (a) conceal their gamer identities (Study 1a) and (b) be more accepting of harassment of the female gamer (Studies 1a and 1b). Threatened men’s greater acceptance of the sexual harassment of the female gamer should be evidenced by two patterns in the data. First, men should be more accepting of harassment following a threat to masculinity (vs. control). Second, gamer identity concealment should either (a) mediate the relationship between masculinity threat and acceptance of sexual harassment, if masculinity threats motivate desires to conceal (Study 1a), or (b) be correlated with acceptance of harassment (Studies 1a and 1b), replicating the pilot study findings, if masculinity threats do not motivate desires to conceal.
Additionally, because adherence to hegemonic masculinity norms is associated with measures of sexism (e.g., Kilianski, 2003) and hostility (e.g., Jakupcak et al., 2005), my second hypothesis is that men who highly adhere to hegemonic masculinity norms will be more likely to (a) conceal their gamer identity and (b) accept harassment of the female gamer. Together, the first two predictions converge to suggest that both situational factors that arouse motives to enact hegemonic masculinity norms and dispositional variability in acceptance of hegemonic masculinity norms influence men’s concealment of their gamer identity and acceptance of the harassment of women. Furthermore, consistent with the idea that gamer identity acts as an alternative masculinity that facilitates the rejection of hegemonic masculinity norms, I expect gamer identity to be negatively correlated with adherence to hegemonic masculinity norms.

Though I predict main effects of masculinity threat and adherence to hegemonic masculinity norms on concealment of gamer identity, prior work has found indirect effects such that masculinity threat produces concern about how one looks to others, referred to as public discomfort that, in turn, predicts anger and aggression (e.g., Dahl et al., 2015, Weaver & Vescio, 2015). Prior work also suggests that shame could mediate the effects of masculinity threats (Jakupcak et al., 2005, Weaver & Vescio, 2015). Replicating prior work, my third hypothesis is that the previously hypothesized effects will be mediated by public discomfort, anger, and/or shame.

The effects in each of these hypotheses could also be affected by men’s dispositional levels of gamer identity and gamer identity concealment. In Study 1a, men who identify more strongly as gamers may be more motivated to conceal their identity than those who do not, simply because men who identify less strongly as gamers may not have an identity they need to conceal. Also, given the results of the pilot study, men who identify more strongly as gamers
may be less likely to accept harassment overall, and may be less likely to value hegemonic masculinity norms. Thus, men highly identified as gamers may be less affected by masculinity threats in general or only when considering acceptance of harassment. In contrast, because men who dispositionally conceal their gamer identity were more sexist and accepting of harassment in the pilot study, they may be more greatly affected by masculinity threats, especially when considering acceptance of harassment. To address the possibility of moderation, gamer identity is measured in both studies and dispositional gamer identity concealment is measured in Study 1b.

**Method**

**Participants and Design.** In Study 1a, participants were 286 male undergraduate students at a large Northeastern university who participated in exchange for course credit. Data from 10 participants were removed because they failed to complete the entire study ($n = 6$), were suspicious of the purpose of the study ($n = 3$), or did not complete the study properly ($n = 1$). Therefore, the working data set included the responses of 276 men. Participants in the working data set ranged in age from 18 to 42 ($M = 19.59, SD = 3.07$) and self-described as White (71.7%), Asian (12.3%), Multiracial (5.1%), Black or African American (5.1%), Hispanic or Latino/Latina (3.6%), other (1.4%), and don’t know/not sure (0.4%).

In Study 1b, participants were 180 male undergraduate students at a large Northeastern university who participated in exchange for course credit. Data from 32 participants were removed because they failed an attention check ($n = 20$), failed to complete the entire study ($n = 11$), or were suspicious of the purpose of the study ($n = 1$). Therefore, the working data set included the responses of 148 men. Participants in the working data set ranged in age from 18 to

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3 Four men failed to report their age, one of which also failed to report his race, but all were included in analyses. Participants who were excluded from analyses did not significantly differ in age, $t(280) = 0.687, p = .492$, or racial composition ($p = .121$, Fisher’s exact test) from those who were included.
49 ($M = 19.68, SD = 3.02$) and self-described as White (74.3%), Asian (7.4%), Multiracial (7.4%), Black or African American (4.7%), Hispanic or Latino/Latina (2.7%), other (2.0%), and don’t know/not sure (0.7%). Both studies were single factor (masculinity threat: threat vs. assurance vs. control) between-participants designs.

Procedure. In an online survey, participants gave consent and were told that they were participating in two separate studies. The first part of each study session was presented as a test of how personality affects later peer interactions and the second part was presented as an examination of perceptions of people’s feelings and behaviors while playing video games. Participants proceeded to fill out a series of surveys, purportedly to assess multiple dimensions of their personality. In Study 1a, the surveys began with a filler survey about movie preferences, then participants completed the gamer identity and platform/genre preference portions of the gamer identity and preferences questionnaire from the pilot study (see Appendix A) and a measure of adherence to hegemonic masculinity norms (see Appendix F). The completed gamer identity and preferences questionnaire acted as the disclosure of gamer identity that participants were expected to desire to conceal. In Study 1b, participants proceeded immediately to the next step without completing the surveys.

To manipulate masculinity threat, participants then completed a gender knowledge test (Rudman & Fairchild, 2004; Appendix H). The gender knowledge test consisted of 30 questions that were divided equally between questions appearing to tap feminine knowledge (e.g., “The TV show ‘Sex in the City’ popularized which drink? [Cosmopolitan vs. Manhattan]”) and questions

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4 One man failed to report his age and race, but was included in analyses. Participants who were excluded from analyses did not significantly differ in age from those who were included, $t(166) = 0.193, p = .847$, but differed in racial composition ($p = .019$, Fisher’s exact test) as there was a higher percentage of Black/African American, Hispanic/Latino/a, and Asian participants in the excluded group than included group and a higher percentage of White, don’t know/not sure, other, and Multiracial participants in the included group than the excluded group.
appearing to tap masculine knowledge (e.g., “To help an engine produce more power you should [inject the fuel vs. reduce displacement]”). Two-thirds of participants were told that this was a test of gender-related knowledge used to determine their gender identity and then following the test, they received feedback on their gender identity, ostensibly based on their scores. The feedback was altered to create the two experimental conditions (see Figure 1). These participants were first shown Panel A of Figure 1 so that they could see how they compare to other men and women at the university. Then, in the masculinity threat condition, participants were shown a chart indicating that they scored in the 37th percentile compared to other male students (Top box of Panel B). In the masculinity assurance condition, participants were shown a chart indicating that they scored in the 83rd percentile compared to other male students (Bottom box of Panel B). To create a control condition, one-third of the participants were told that the test was about pop culture knowledge and they did not receive any feedback about their scores. This control condition allowed for a comparison where participants’ masculinity was neither threatened nor assured.

Participants in both studies were then told that their test scores are going to be shared with a randomly assigned partner, with whom the participant will interact at a later point. Participants were told that the purpose of sharing the information is to see how perceptions of others affect interactions upon first meeting them. Participants were then asked how much they would feel a series of emotions, or their public discomfort, upon other people seeing their results for the study session, followed by a separate list of emotions pertaining to anger and shame. Then, in Study 1a, to give participants an opportunity to conceal their gamer identity, they were presented with a list of all of the surveys they completed asked to rate how much they would like to share each of the survey results with their partner (see Appendix L). They were told that this
Figure 1. Results of the gender knowledge test as shown to participants in Studies 1a and 1b. Panel A ostensibly represents the average scores of women and men at the university. In the masculinity threat condition, participants’ scores will be represented by the top box in Panel B. In the masculinity assurance condition, participants’ scores will be represented by the bottom box in Panel B.

will not affect what information is sent to their partner, but will be used when selecting surveys for future studies. Participants’ ratings of how much they want to share their gamer identity and gaming preferences were used as the measure of desire to conceal gamer identity.

In what was ostensibly the second study on perceptions of other people’s feelings and behaviors while playing video games, participants in both studies first read a description of a video game, which mentioned the design of the game and gave a short summary of the plot (see Appendix I). This description was created using a description of a real video game, but details of the game were changed to prevent participants’ previous experiences from affecting their behavior in the study. Following the presentation of the game description, participations were told that they were going to listen to people playing the game that was just described and will be
asked to evaluate the interaction between those people. Participants then listened to the audio clips from the pilot study of men harassing a female gamer while playing a multiplayer game (see Appendix D for transcripts). After each audio clip, participants were asked to evaluate how the men and the woman in the clip feel in that situation, using the same questions as in the pilot study (see Appendix E). After rating the audio clips, participants in Study 1b completed the gamer identity and preferences questionnaire and adherence to masculinity norms measures that participants in Study 1a completed prior to the masculinity threat and also completed a measure of dispositional concealment of gamer identity (see Appendix G). Participants in both studies were then asked for feedback, probed for suspicion, completed a demographics questionnaire, and then were fully debriefed.

**Measures.**

_Gamer self-categorization._ Men categorized themselves as gamers or not gamers by answering the question “People who play video games may identify themselves as ‘gamers.’ Do you consider yourself to be a gamer?” Those who answered “yes” were considered gamers and those who answered “no” were considered non-gamers.

_Gamer identity._ As measured in the pilot study (Study 1a: $\alpha = .80$, Study 1b: $\alpha = .81$)

_Adherence to hegemonic masculinity norms._ Adherence to hegemonic masculinity norms was measured using the Male Role Norms Inventory – Short Form (MRNI-SF; Levant, Hall, & Rankin, 2013; Appendix F). Using 7-point scales ($1 = strongly disagree; 7 = strongly agree$), participants were asked 21 questions that assess seven dimensions of male role norms, including Restrictive Emotionality (e.g., “a man should never admit when others hurt his feelings;” Study 1a: $\alpha = .73$, Study 1b: $\alpha = .70$), Self-Reliance through Mechanical Skills (e.g., “men should have home improvement skills;” Study 1a: $\alpha = .82$, Study 1b: $\alpha = .78$), Negativity
toward Sexual Minorities (e.g., “homosexuals should never marry;” Study 1a: $\alpha = .84$, Study 1b: $\alpha = .84$), Avoidance of Femininity (e.g., “men should watch football games instead of soap operas;” Study 1a: $\alpha = .83$, Study 1b: $\alpha = .86$), Importance of Sex (e.g., “men should always like to have sex;” Study 1a: $\alpha = .83$, Study 1b: $\alpha = .86$), Dominance (e.g., “The President of the U.S. should always be a man;” Study 1a: $\alpha = .84$, Study 1b: $\alpha = .82$), and Toughness (e.g., “it is important for a man to take risks, even if he might get hurt;” Study 1a: $\alpha = .71$, Study 1b: $\alpha = .74$). Items were averaged to create seven subscores according to each dimension noted above and an overall score including all 21 items (Study 1a: $\alpha = .92$, Study 1b: $\alpha = .92$), with higher numbers indicating greater endorsement.

**Public discomfort.** After completing all of the surveys, participants were asked how they feel about their results being seen by other people (see Appendix J). Using 7-point scales (1 = not at all; 7 = very much), participants were asked “When you think about your name and score being seen by others, how ______ do you feel?” about eight different emotions: anxious, nervous, defensive, depressed, calm, joyful, happy, and confident (e.g., Dahl et al., 2015; Weaver & Vescio, 2015). Appropriate items were reverse-scored and all eight items were averaged to create a single public discomfort score, with higher numbers indicating greater public discomfort (Study 1a: $\alpha = .81$, Study 1b: $\alpha = .84$).

**Anger and shame emotions.** Using 9-point scales (1 = not at all; 9 = extremely), participants were asked to report how much they feel 14 emotions “at this moment” (see Appendix K). Four emotions in this list were averaged to create an anger variable (i.e., angry, frustrated, hostile, and mad; Study 1a: $\alpha = .88$, Study 1b: $\alpha = .89$), and four other emotions in this list were averaged to create a shame variable (i.e., ashamed, self-conscious, humiliated,
embarrassed; Study 1a: $\alpha = .84$, Study 1b: $\alpha = .84$), with higher numbers indicating greater anger and shame, respectively.

**Desire to conceal gamer identity.** Participants in Study 1a were presented with the option to rate how much they would like to share the results of each of the surveys they filled out in the first part of the study with their randomly assigned partner (see Appendix L). They were informed that their partner will receive all of their information regardless of how they complete the form, but that the information will be used when developing future studies. Participants’ ratings of how much they want to share their gamer identity and preferences questionnaire was reverse-scored such that higher numbers indicate a greater desire to conceal their gamer identity from others.

**Harassment acceptance.** As measured in pilot study. Items were averaged into variables representing perceptions of how threatening the men’s actions were toward the woman (and how threatened the woman felt) in the gender role harassment (Study 1a: $\alpha = .83$, Study 1b: $\alpha = .79$) and sexual harassment (Study 1a: $\alpha = .86$, Study 1b: $\alpha = .80$) clips and perceptions of how comforting the men’s actions were toward the woman (and how comfortable the woman felt) in the gender role harassment (Study 1a: $\alpha = .80$, Study 1b: $\alpha = .81$) and sexual harassment (Study 1a: $\alpha = .80$, Study 1b: $\alpha = .71$) clips. Higher numbers indicate more threatening or more comforting perceptions, respectively.

**Gamer identity concealment.** In Study 1b only, participants used 5-point scales (1 = Never/seldom, 5 = Almost always/always) to rate how often they performed the same behavior as in the pilot study (i.e., “conceal my identity as a gamer because I think others will socially exclude me”) and an additional 6 items derived from Anderson, Croteau, Chung, and DiStefano’s 2001 measure of sexual identity concealment (e.g., “avoid contact with people
known to be gamers to prevent suspicions that I am a gamer;” see Appendix G). However, these additional items did not form a satisfactory composite (α = .58) and were not related to the original concealment item from the pilot study, \( r(147) = .087, p = .295 \). To maintain consistency of measurement across studies, the concealment item from the pilot study was used to represent concealment, so these additional 6 items were not used and will not be mentioned further.

Results

Means and standard deviations for each variable – across conditions and separated by masculinity threat condition – and correlations between variables are presented in Table 2 for Study 1a and Table 3 for Study 1b. About 40% of the sample (110 men) in Study 1a and about 44% of the sample (65 men) in Study 1b categorized themselves as gamers. Those who self-categorized as gamers were significantly higher in gamer identity (1a: \( M = 2.69, SD = 0.87 \); 1b: \( M = 2.34, SD = 0.93 \)) than non-gamers (1a: \( M = 1.76, SD = 0.74 \); 1b: \( M = 1.81, SD = 0.71 \)), \( t(274) = -9.57, p < .001, d = 1.18 \); 1b: \( t(146) = -3.90, p < .001, d = 0.64 \). Consistent with the pilot results and the idea that gamers represent an alternative masculinity, those who identified themselves as gamers in Study 1a were significantly lower in endorsement of hegemonic masculinity norms (\( M = 3.30, SD = 1.02 \)) than non-gamers (\( M = 3.62, SD = 1.01 \)), \( t(274) = 2.52, p = .012, d = 0.31 \).

When considering the subscales of the masculinity norms measure, gamers were significantly lower in anti-femininity (\( M = 3.59, SD = 1.53 \)) than non-gamers (\( M = 4.01, SD = 1.57 \)), \( t(274) = 2.18, p = .030, d = 0.27 \), lower in dominance (\( M = 2.54, SD = 1.39 \)) than non-gamers (\( M = 3.02, SD = 1.45 \)), \( t(274) = 2.71, p = .007, d = 0.33 \), and lower in toughness (\( M = 4.34, SD = 1.34 \)) than non-gamers (\( M = 4.69, SD = 1.28 \)), \( t(274) = 2.21, p = .028, d = 0.27 \). In Study 1b the pattern of means for adherence to hegemonic masculinity norms was similar (gamers were consistently
Table 3
*Means by Condition and Correlations among Variables in Study 1a*

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall (N = 276)</td>
<td>Threat (n = 90)</td>
</tr>
<tr>
<td>1. GH Comfort</td>
<td>2.32 (0.92)</td>
<td>2.30 (0.89)</td>
</tr>
<tr>
<td>2. GH Threat</td>
<td>3.77 (1.04)</td>
<td>3.68 (0.96)</td>
</tr>
<tr>
<td>3. SH Comfort</td>
<td>2.41 (0.89)</td>
<td>2.51 (0.86)</td>
</tr>
<tr>
<td>4. SH Threat</td>
<td>3.91 (1.13)</td>
<td>3.74 (1.14)</td>
</tr>
<tr>
<td>5. Desire to Conceal</td>
<td>3.22 (1.31)</td>
<td>3.36 (1.29)</td>
</tr>
<tr>
<td>6. Gamer Identity</td>
<td>2.13 (0.91)</td>
<td>2.16 (0.91)</td>
</tr>
<tr>
<td>7. MRNI</td>
<td>3.49 (1.03)</td>
<td>3.50 (1.08)</td>
</tr>
<tr>
<td>8. Public Discomfort</td>
<td>3.10 (1.00)</td>
<td>3.12 (1.04)</td>
</tr>
<tr>
<td>9. Anger</td>
<td>2.25 (1.48)</td>
<td>2.39 (1.61)</td>
</tr>
<tr>
<td>10. Shame</td>
<td>2.31 (1.43)</td>
<td>2.53 (1.65)</td>
</tr>
</tbody>
</table>

Note. N = 276. One participant in the Assurance condition failed to complete the Public Discomfort measure, but was included for all other measures. GH = Gender Harassment Scenario, SH = Sexual Harassment Scenario, MRNI = Adherence to Hegemonic Masculinity Norms. Possible range of scores for GH Comfort, GH Threat, SH Comfort, and SH Threat = 1 (strongly disagree) to 5 (strongly agree); Desire to Conceal = 1 (do not want to share at all) to 7 (very much want to share), Gamer Identity = 1 (strongly disagree) to 7 (strongly agree), MRNI = 1 (strongly disagree) to 7 (strongly agree), Public Discomfort = 1 (not at all) to 7 (very), Anger and Shame = 1 (not at all) to 7 (not at all) to 7 (very). Differences between condition means are not indicated here because planned comparisons were made using regression analyses; the results of those comparisons are presented in Table 4.

*p < .08, *p < .05, **p < .01, ***p < .001.*
Table 4
Means by Condition and Correlations among Variables in Study 1b

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Threat</td>
</tr>
<tr>
<td></td>
<td>(N = 148)</td>
<td>(n = 50)</td>
</tr>
<tr>
<td>1. GH Comfort</td>
<td>2.38 (0.92)</td>
<td>2.35 (0.92)</td>
</tr>
<tr>
<td>2. GH Threat</td>
<td>3.94 (0.93)</td>
<td>3.88 (0.93)</td>
</tr>
<tr>
<td>3. SH Comfort</td>
<td>2.48 (0.83)</td>
<td>2.35 (0.92)</td>
</tr>
<tr>
<td>4. SH Threat</td>
<td>4.09 (0.91)</td>
<td>4.04 (0.90)</td>
</tr>
<tr>
<td>5. Concealment</td>
<td>1.59 (0.88)</td>
<td>1.56 (0.86)</td>
</tr>
<tr>
<td>6. Gamer Identity</td>
<td>2.04 (0.85)</td>
<td>2.07 (0.87)</td>
</tr>
<tr>
<td>7. MRNI</td>
<td>3.36 (0.97)</td>
<td>3.37 (1.10)</td>
</tr>
<tr>
<td>8. Public Discomfort</td>
<td>3.33 (1.12)</td>
<td>3.67 (1.19)</td>
</tr>
<tr>
<td>9. Anger</td>
<td>2.30 (1.47)</td>
<td>2.56 (1.68)</td>
</tr>
<tr>
<td>10. Shame</td>
<td>2.48 (1.52)</td>
<td>3.00 (1.71)</td>
</tr>
</tbody>
</table>

Note. N = 148. GH = Gender Harassment Scenario, SH = Sexual Harassment Scenario, MRNI = Adherence to Hegemonic Masculinity Norms. Possible range of scores for GH Comfort, GH Threat, SH Comfort, and SH Threat = 1 (strongly disagree) to 6 (strongly agree), Concealment = 1 (never/seldom) to 5 (almost always/always), Gamer ID = 1 (strongly disagree) to 5 (strongly agree), MRNI = 1 (strongly disagree) to 7 (strongly agree), Public Discomfort = 1 (not at all) to 7 (very), Anger and Shame = 1 (not at all) to 9 (extremely). Differences between condition means are not indicated here because planned comparisons were made using regression analyses; the results of those comparisons are presented in Table 5.

†p < .09, * p < .05, ** p < .01, *** p < .001.
lower than non-gamers for the overall measure and most subscales), but did not reach significance ($t < 1.22, p > .220$).

In Study 1b, the individual differences (gamer identity, adherence to hegemonic masculinity norms, and gamer identity concealment) were measured at the end of the study, so they were first tested to see if they were affected by the masculinity threat manipulation. To do this, each individual difference was submitted to a one-way analysis of variance (ANOVA) using masculinity threat condition as the independent variable. The ANOVAs revealed a significant effect of masculinity threat on gamer identity, $F(2, 145) = 3.05, p = .050, \eta^2_p = .040$, but not adherence to hegemonic masculinity norms, $F(2, 145) = 0.43, p = .653, \eta^2_p = .006$, or gamer identity concealment, $F(2, 145) = 0.19, p = .830, \eta^2_p = .003$. Because gamer identity was affected by the manipulation in Study 1b, it is not used in further analyses.

In Study 1a, primary analyses were conducted in two steps: first, two hierarchical regression equations were calculated to determine the effects of and interactions between masculinity threat and gamer identity on desire to conceal gamer identity and acceptance of harassment. Second, moderated mediation analyses were conducted to determine (a) the mediation of public discomfort, anger, and shame on the main and interactive effects of masculinity threat and gamer identity on desire to conceal gamer identity and (b) the mediation of public discomfort, anger, shame, and desire to conceal gamer identity on the main and interactive effects of masculinity threat and gamer identity on acceptance of harassment.

In Study 1b, primary analyses were conducted in a similar manner to Study 1a, but with two exceptions. First, because gamer identity was altered by the masculinity threat, it was not included as a moderator in regression analyses. Second, because gamer identity concealment was
measured as an individual difference in Study 1b, it was used as a moderator rather than a dependent variable/mediator.

**Hypothesis 1.** My first hypothesis was that men whose masculinity is threatened (vs. control), will (a) conceal their gamer identities more and (b) be more accepting of sexual harassment of the female gamer. To test this hypothesis, and the possibility that it is moderated by level of gamer identity (Study 1a) or dispositional gamer identity concealment (Study 1b), hierarchical regression analyses were performed in the following way. Masculinity threat was dummy-coded into two variables representing the comparison of masculinity threat to the control condition (threat = 1, assurance = 0, control = 0) and masculinity assurance to the control condition (threat = 0, assurance = 1, control = 0). Gamer identity (Study 1a) and gamer identity concealment (Study 1b) were mean-centered to reduce collinearity and aid in the interpretation of the interaction variables (Tabachnick & Fidell, 2006). Each hierarchical regression then proceeded in three steps. In Step 1, each dependent variable (desire to conceal gamer identity and each harassment acceptance variable) was regressed on the two dummy-coded variables representing the comparisons of masculinity threat to control and masculinity assurance to control. In Step 2 gamer identity or gamer identity concealment was added to each equation. Finally, in Step 3, the two-way interactions between the dummy-coded masculinity threat variables and gamer identity or gamer identity concealment were added to each equation.

**Desire to conceal gamer identity.** No predictors at any step of the hierarchical regression equation reached significance, $t_s < 1.69, p_s > .09$. Neither the threat manipulation nor gamer identity predicted changes in participants’ desire to conceal their gamer identity from their supposed partner in Study 1a. Contrary to my hypothesis, masculinity threat did not produce a change in how much men conceal their gamer identity from others.
Harassment acceptance. Acceptance of harassment was determined by participants’ ratings of how comfortable and threatened the woman was in each harassment scenario. Therefore, there were a total of four regression equations for each study examining either comfort or threat in either the gender harassment or sexual harassment scenarios.

Study 1a. As shown in Table 4, Step 2 of the regression equation examining comfort in the gender harassment scenario in Study 1a revealed a single marginally significant effect of gamer identity\(^5\), \(b = 0.11, se = 0.06, t(274) = 1.83, p = .069\). Higher levels of gamer identity predicted higher ratings of comfort in the situation where a female gamer is gender harassed.

Also shown in Table 4, masculinity threat significantly interacted with gamer identity in Step 3 of the regression equation, \(b = 0.46, se = 0.18, t(274) = 2.57, p = .011\). This interaction was driven by the fact that men low in gamer identity rated the sexual harassment scenario as less threatening when their masculinity was threatened compared to when their masculinity was not mentioned (i.e., the control condition), \(b = -0.66, se = 0.23, t(274) = -2.82, p = .005\) (see Figure 2). In contrast, men high in gamer identity did not rate the sexual harassment scenario differently across threat conditions, \(b = 0.19, se = 0.23, t(274) = 0.80, p = .424\). As a result, in the masculinity threat condition, men low in gamer identity rated the sexual harassment scenario as less threatening than men high in gamer identity, \(b = 0.28, se = 0.13, t(274) = 2.12, p = .035\), whereas men in the control condition did not vary in their ratings of the sexual harassment scenario, \(b = -0.19, se = 0.12, t(274) = -1.51, p = .133\). Consistent with my hypothesis, men who identified more strongly as gamers were not affected by masculinity threats, suggesting that

\(^5\) The order of audio clip presentation also affected ratings of comfort in the gender harassment scenario such that presenting the gender harassment clip before the sexual harassment clip produced more comfort with the gender harassment \((M = 2.52, SD = 0.81)\) than when it was presented after the sexual harassment clip \((M = 2.16, SD = 0.77)\), \(t(280) = 3.26, p = .001\). When controlling for this effect, the relationship between gamer identity and comfort in the gender harassment scenario remained, \(b = 0.13, se = 0.06, t(274) = 2.18, p = .030\).
Table 5
Unstandardized Regression Coefficients using Gamer Identity as a Moderator in Study 1a

<table>
<thead>
<tr>
<th></th>
<th>Gender Harassment Comfort</th>
<th>Sexual Harassment Comfort</th>
<th>Gender Harassment Threat</th>
<th>Sexual Harassment Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(b (SE))</td>
<td>(t)</td>
<td>(\Delta R^2)</td>
<td>(b (SE))</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat</td>
<td>-0.04 (0.14)</td>
<td>-0.26</td>
<td>0.00</td>
<td>0.14 (0.13)</td>
</tr>
<tr>
<td>Assurance</td>
<td>-0.01 (0.14)</td>
<td>-0.09</td>
<td></td>
<td>0.02 (0.13)</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gamer Identity</td>
<td>0.01†</td>
<td></td>
<td>0.01</td>
<td>0.08 (0.06)</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat × GiD</td>
<td>0.00</td>
<td>0.03</td>
<td>-0.08 (0.14)</td>
<td>-0.53</td>
</tr>
<tr>
<td>Ass. × GiD</td>
<td>0.08 (0.15)</td>
<td>0.51</td>
<td>0.02 (0.14)</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Note. \(N = 276\). Threat and Assurance were compared to the Control condition. Ass. = Assurance, GiD = Gamer Identity. Degrees of freedom for all \(t\)-tests = 275. 
†\(p < .10\), * \(p < .05\), ** \(p < .01\), *** \(p < .001\).

Table 6
Unstandardized Regression Coefficients using Concealment as a Moderator in Study 1b

<table>
<thead>
<tr>
<th></th>
<th>Gender Harassment Comfort</th>
<th>Sexual Harassment Comfort</th>
<th>Gender Harassment Threat</th>
<th>Sexual Harassment Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(b (SE))</td>
<td>(t)</td>
<td>(\Delta R^2)</td>
<td>(b (SE))</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat</td>
<td>-0.02 (0.18)</td>
<td>-0.11</td>
<td>-0.10 (0.17)</td>
<td>-0.63</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.05 (0.19)</td>
<td>0.28</td>
<td>0.21 (0.17)</td>
<td>1.23</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concealment</td>
<td>0.13 (0.09)</td>
<td>1.53</td>
<td>0.13 (0.08)</td>
<td>1.70†</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat × Conc.</td>
<td>0.15 (0.21)</td>
<td>0.75</td>
<td>0.04 (0.18)</td>
<td>0.23</td>
</tr>
<tr>
<td>Ass. × Conc.</td>
<td>0.01 (0.22)</td>
<td>0.06</td>
<td>-0.05 (0.19)</td>
<td>-0.26</td>
</tr>
</tbody>
</table>

Note. \(N = 148\). Threat and Assurance were compared to the Control condition. Ass. = Assurance, Conc. = Concealment. Degrees of freedom for all \(t\)-tests = 147. 
†\(p < .10\), * \(p < .05\), ** \(p < .01\), *** \(p < .001\).
Figure 2. Interaction between Masculinity Threat and Gamer Identity (GID) on Perceptions of Threat in Sexual Harassment Scenario in Study 1a.

* $p < .05$, **$p < .01$.

Gamer identity may serve as a buffer against threats to masculinity.

**Study 1b.** As shown in Table 5, there was a marginally significant main effect of masculinity assurance in Step 1 of the regression equation examining threat in the sexual harassment scenario, $b = -0.32$, $se = 0.18$, $t(147) = -1.75$, $p = .082$. Men in the masculinity assurance condition perceived the sexual harassment of a female gamer to be less threatening ($M = 3.95$, $SD = 1.00$) than did men in the control condition ($M = 4.28$, $SD = 0.82$). In other words, when men’s masculinity was assured they appeared to become more tolerant of the sexual harassment of a female gamer.

Also shown in Table 5, there was a marginally significant effect of gamer identity concealment in Step 2 of the regression equation examining comfort in the sexual harassment scenario, $b = 0.13$, $se = 0.08$, $t(147) = 1.70$, $p = .092$. Replicating the effects of the pilot study, higher levels of gamer identity concealment predicted higher ratings of comfort in the situation where a female gamer is sexually harassed.
Hypothesis 2. My second hypothesis was that men who highly adhere to hegemonic masculinity norms will be more likely to (a) conceal their gamer identity and (b) accept harassment of the female gamer. To test this hypothesis, I first calculated the correlations between adherence to hegemonic masculinity norms and (a) desire to conceal gamer identity (Study 1a), (b) dispositional gamer identity concealment (Study 1b), and (c) each variable representing acceptance of harassment (Studies 1a and 1b).

Correlations with adherence to hegemonic masculinity norms are presented in Tables 2 and 3 for Study 1a and Study 1b, respectively. These correlations were partially consistent with predictions. Consistent with hypotheses, adherence to hegemonic masculinity norms was negatively correlated with perceptions of threat in the gender harassment scenario in Study 1a, $r(275) = -0.19, p = .002$ and Study 1b, $r(147) = -0.15, p = .069$, and negatively correlated with perceptions of threat in the sexual harassment scenario in Study 1b, $r(147) = -0.18, p = .030$. Also consistent with hypotheses, adherence to hegemonic masculinity norms was positively correlated with perceptions of comfort in response to both the gender harassment scenario, 1a: $r(275) = 0.35, p < .001$, 1b: $r(147) = 0.23, p = .006$, and the sexual harassment scenario, 1a: $r(275) = 0.28, p < .001$, 1b: $r(147) = 0.23, p = .004$. However, adherence to hegemonic masculinity norms was not significantly correlated with desire to conceal gamer identity in Study 1a, $r(275) = -0.02, p = .747$, nor dispositional gamer identity concealment in Study 1b, $r(147) = 0.02, p = .821$. Together, adherence to hegemonic masculinity norms was not directly related to men’s concealment of gamer identity, but was predictive of men’s acceptance of the harassment of a female gamer.

Hypothesis 3. My third hypothesis was that the previous hypothesized masculinity threat effects would be mediated by public discomfort, anger, and/or shame. To test this hypothesis,
moderated mediation analyses were conducted to determine if the interactive effects of masculinity threat and gamer identity (Study 1a) or dispositional gamer identity concealment (Study 1b) on acceptance of harassment were mediated by public discomfort, anger or shame, and desire to conceal gamer identity.

*Gamer identity concealment.* While there was no direct effect of masculinity threat or the interaction of masculinity threat and gamer identity on concealment in Study 1a, I tested whether there was an indirect effect of masculinity threat and its interaction with gamer identity through public discomfort, anger, or shame, as in prior work (Dahl et al., 2015). To do so I used model 8 in Hayes’ (2012) PROCESS macro for SPSS with 95% confidence intervals estimated using 5,000 bootstrapping samples. Partially standardized indirect effects of threat on concealment of gamer identity were not significant for any mediator, nor were there indirect effects of threat condition on any of the harassment acceptance variables, as all 95% confidence intervals contained zero.

*Harassment acceptance.* To test if there were mediating or indirect effects of masculinity threat on any of the harassment acceptance variables via public discomfort, anger, or shame, I again used model 8 in the PROCESS macro.

*Study 1a.* I first tested whether public discomfort, anger, or shame mediated the interactive effect of masculinity threat and gamer identity on perceptions of threat in the sexual harassment scenario. Analyses revealed that the index of moderated mediation for all three mediators was significant, as indicated by 95% confidence intervals that do not include zero: public discomfort, CI [-0.1280, -0.0004]; anger, CI [-0.1910, -0.0172]; shame, CI [-0.1400, -0.0014].
The pattern of effects was similar for each of the three mediators (see Figure 3). When men low in gamer identity were threatened, their public discomfort, anger, and shame increased. Paradoxically, increased public discomfort, anger, and shame each predicted perceptions of greater threat in the sexual harassment condition, the opposite of the direct effect for threatened low gamer identity men. However, the direct effect outlined above remained significant.

**Figure 3.** Mediation of Masculinity Threat and Gamer Identity effects on Perceptions of Threat in the Sexual Harassment Scenario via Public Discomfort (PD), Anger (A), and Shame (S) in Study 1a. Models are shown separately for men high in gamer identity (top model) and men low in gamer identity (bottom model). Solid lines are significant effects; dashed lines are nonsignificant effects. Numbers represent unstandardized regression coefficients with standard errors in parentheses. Numbers in brackets are direct effects without mediators in the model.

* p < .05, ** p < .01.
when the mediators were present in each model. While low gamer identity men generally found the sexual harassment scenario less threatening for the woman when their masculinity was threatened, when these men felt public discomfort, shame, or anger, they actually found the scenario more threatening for the woman.

Next, I tested if there were any indirect effects of masculinity threat and gender identity on the other harassment acceptance variables. The only variable on which there was an indirect effect was comfort in the gender harassment scenario; here, there were significant indices of moderated mediation for both anger, 95% CI [-0.1305, -0.0016], and shame, 95% CI [-0.1187, -0.0021]. As shown in Figure 4, threatened men who were low in gamer identity felt more anger and more shame; anger and shame, in turn, predicted higher ratings of comfort in the gender harassment scenario. Stated differently, when threatened, low gamer identity men felt an increase in shame or anger, which subsequently predicted perceiving the woman in the gender harassment to be more comfortable.

Study 1b. Because there were no direct effects on any of the harassment variables, I tested for indirect effects of masculinity threat and dispositional gamer identity concealment on each of the harassment variables via public discomfort, anger, and shame. Only comfort in the sexual harassment scenario was indirectly affected via anger, as indicated by a significant index of moderated mediation, 95% CI [-0.3047, -0.0533]. As shown in Figure 5, when threatened, men low in concealment were angrier, and anger, in turn, predicted higher ratings of comfort in the sexual harassment scenario. By contrast, when threatened, men high in concealment were less angry, and anger, in turn, predicted lower ratings of comfort in the sexual harassment scenario.
Figure 4. Indirect effect of Masculinity Threat and Gamer Identity on Perceptions of Comfort in the Gender Harassment Scenario via Anger (A) and Shame (S) in Study 1a. Models are shown separately for men high in gamer identity (top model) and men low in gamer identity (bottom model). Solid lines are significant effects, dashed lines are nonsignificant effects. Numbers represent unstandardized regression coefficients with standard errors in parentheses. Numbers in brackets are direct effects without mediators in the model.

†p < .06, *p < .05, **p < .01.
Figure 5. Indirect effect of Masculinity Threat and Concealment effects on Perceptions of Comfort in the Sexual Harassment Scenario via Anger in Study 1b. Models are shown separately for men high in gamer identity concealment (top model) and men low in gamer identity concealment (bottom model). Solid lines are significant effects, dashed lines are nonsignificant effects. Numbers represent unstandardized regression coefficients with standard errors in parentheses. Numbers in brackets are direct effects without mediators in the model.

* p < .05, **p < .01.

Discussion

Studies 1a and 1b expand upon the results of the pilot study and prior research by examining (a) links between threats to masculinity and shame, (b) potential benefits of alternative masculinity as a buffer to the threat of comparison to hegemonic masculinity ideals, (c) links between gamer identity, stigma, and the cultural ideals of hegemonic masculinity, and
(d) links between masculinity threat and men’s identities, feelings, and behavior in gaming communities.

Importantly, while neither masculinity threat nor assurance had a causal effect on gamer identity concealment when compared to a control, several findings support the idea that gamer identity can act as an alternative masculinity that buffers threats to masculinity. Each set of consistent findings is discussed below.

First, men who identified as gamers in Study 1a adhered to hegemonic masculinity norms at a significantly lower rate than men who did not identify as gamers. Gamers in Study 1b also had consistently lower mean levels of adherence to hegemonic masculinity norms, though the differences did not reach significance. Gamers’ rejection of hegemonic masculinity norms is in line with ethnographic research showing that nerds tend to reject mainstream gender norms (e.g., Bucholtz, 1999, 2011). Findings are also consistent with the idea that gamers may not value the typical behaviors expected of men in American society, and because these norms are correlated with greater acceptance of harassment, their rejection may facilitate less sexist treatment of women.

Second, men who identified more strongly as gamers appeared to be buffered against the effects of masculinity threats in Study 1a. When threatened, men who identified less as gamers were more accepting of sexually harassing a female gamer. Together, findings support the idea that embracing a gamer identity may provide an alternative to hegemonic masculinity ideals that enables men to have more feminine qualities and avoid pressures to repudiate femininity.

While the above effects are consistent with the idea that embracing gamer identity buffers against masculinity threats and lessens sexual harassment, the mediation tests produced seemingly inconsistent results. Recall the findings of Study 1a; consistent with predictions, when
threatened, men low in gamer identity were *more* accepting of sexual harassment. By contrast, appearing to contradict predictions, when threatened, low gamer identity men who felt more shame or anger were *less* accepting of sexual harassment. Similarly, recall that in Study 1b, consistent with predictions, higher concealment predicted *more* acceptance of sexual harassment. By contrast, appearing to contradict predictions, when threatened, high concealment men who felt less angry were *less* accepting of sexual harassment, and low concealment men who felt angrier were *more* accepting of sexual harassment. Importantly, these results may reflect varying reactions of different groups of men. In Study 1a, men who highly (vs. weakly) identify as gamers share that identity and show less variability in their responding. As a result, variables beyond gamer identity may predict less identified gamers’ responses to the sexual harassment of women. This interpretation could explain the fact that the direct effect remained significant in the mediation models in Study 1a. Likewise, in Study 1b only those men who felt angry showed the opposite effect of the overall concealment correlation. While it is unclear why men high in concealment would become less angry when their masculinity is threatened, this pattern indicates that only this subset of men who felt less angry reacted differently from other men.

There was an additional surprising finding in Study 1b: men whose masculinity was assured perceived the sexual harassment scenario as less threatening for the female gamer than men in the control condition. Importantly, this effect was only marginally significant, and while it is counter to predictions, because assured men should not need to prove their masculinity by rejecting femininity, it should be interpreted with caution. Perhaps more importantly, as shown in Table 5, men whose masculinity was threatened also found the sexual harassment scenario to be predictably less threatening, though the effect was weaker and less significant. This result parallels other findings showing that in certain contexts men whose masculinity is assured are
more aggressive toward gay men (Bosson, Weaver, Caswell, & Burnaford, 2012) and deny discrimination against women and gay men (Weaver & Vescio, 2015). Thus, as in prior work (Bosson et al., 2012, Weaver & Vescio, 2014), it is possible that both the assurance and threatening of masculinity motivated men to distance from women in Study 1b. More curious is the fact that the results of Study 1a and 1b were not consistent in this regard. Comparing the effects in Study 1a in Table 4 to 1b in Table 5, masculinity threat (vs. control) in both studies had a similar negative effect on perceptions of threat in the sexual harassment scenario, but assurance (vs. control) had a very small positive effect in Study 1a and a larger negative effect in Study 1b. This inconsistency could be due to the differences in methodology where the gamer identity and preferences measures, and the adherence to hegemonic masculinity measure were measured at the beginning of Study 1a, but the end of Study 1b. These measures may have provided alternative identities for men to consider in Study 1a so that women’s outgroup status was not as salient as when only gender was considered as in Study 1b. To prevent similar methodological issues in future studies (and to prevent manipulations from affecting individual differences as the manipulation affected gamer identity in Study 1b), measurements of individual differences will occur in a separate survey prior to the main studies.

Having established links between hegemonic masculinity, gamer identity concealment, and acceptance of the sexual harassment of female gamers in Studies 1a and 1b, Study 2 examines how concealment of gamer identity is related to male gamers’ reactions to female game developers and female game critics. As noted earlier, female game developers and critics like Zoe Quinn and Anita Sarkeesian, have been key targets of harassment (Dewey, 2014); thus, learning what factors predict how gamers respond to female developers and critics is essential to understanding why such harassment occurs. To examine how concealment of gamer identity is
related to how gamers respond to female developers and critics, Study 2 measures gamer identity concealment and then measures responses to a game described as being developed by either a man or a woman and reviewed negatively by a man or a woman.
Chapter 4. STUDY 2: GAMER IDENTITY CONCEALMENT AND MEN’S TREATMENT OF FEMALE GAME DEVELOPERS AND CRITICS

As noted, video game development is dominated by men and video game content overwhelmingly contains depictions of hegemonically masculine men and sexualized women (e.g., Dietz, 1998, Downs & Smith, 2007), which together reinforce the idea that video games are for men and not women. Because the context of video games implies that video games are not for women, gamers might perceive that games developed by women are of lesser quality than games that are developed by men and/or that women are not as qualified as men to be game critics. As noted in Chapter 1, there are multiple instances where women have been harassed because they developed or critiqued video games, while men have rarely faced similar consequences for making the same criticisms (e.g., Dewey, 2014). The devaluation of female game developers and critics may be part of the reason why women like Zoe Quinn and Anita Sarkeesian are harassed by male gamers, as they are seen as unqualified outsiders. The devaluation may be especially strong for men who conceal their gamer identity because they are more motivated to differentiate themselves from women and derogate women to avoid the feminine stigma of gamer identity. To test these ideas, men reported their gamer identity concealment, and then read the description of the first-person shooter video game from Studies 1a and 1b. Here, however, the description was manipulated between participants to include information stating that the developer of the game is either male or female. Participants then rated how much they thought they would enjoy and be willing to pay for the game. Then, participants read a negative review of the game that mentioned its sexist content, which was also manipulated so that it was written either by a man or by a woman. Following the review, participants rated the credibility of the critic and again rated how much they believe they would
enjoy playing and be willing to pay for the game. To determine if gamers experience women developing video games like they experienced a threat to masculinity in Studies 1a and 1b, participants also reported public discomfort, anger, and shame. Additionally, because the masculinity threat affected gamer identity in Study 1b and measurements of individual differences at the beginning of the study may affect men’s responses, participants completed all individual difference variables in a separate study session approximately one week before completing the main study.

Based on previous results and my suggestions that men who conceal their gamer identity are more motivated to distance themselves from women, I formulated four main hypotheses, which are summarized in the second row of Table 1 and explained in the following. Because gaming may be construed as a masculine domain where women do not belong, my first hypothesis is that men will rate games developed by a woman (vs. a man) as less enjoyable and less valuable. My second hypothesis is that a negative game review written by a woman (vs. a man) will have less of an effect on men’s opinions of the game and, therefore, result in a smaller decrease in enjoyment and value following the review. To the degree that gamer identity concealment reflects desires and/or situational pressures to conform to hegemonic masculinity norms, my third hypothesis follows; the effects of game developer gender and game critic gender will be moderated by gamer identity concealment. More specifically, I predict that men who are high (vs. low) in concealment will rate a game with a female (vs. male) developer as less enjoyable and less valuable. Likewise, men who are high (vs. low) in concealment will view the female (vs. male) game critic as less credible and the woman’s (vs. man’s) review will have less of an effect on how they rate the game. As in Studies 1a and 1b, my fourth hypothesis is that the effects of developer and critic gender on ratings of the game will be mediated by public
discomfort and anger or shame. Finally, I hypothesize that the effect of the critic’s gender on ratings of the game will be mediated by men’s ratings of the critic’s credibility such that male critics will be rated as having greater credibility, which will predict a greater difference between the pre- and post-review ratings of the game.

Although these effects are expected to emerge across all men, they may be stronger or only appear among gamers. Compared to gamers, non-gamers may be more indifferent about video games, leading to less enjoyment or value of video games in general. Thus, there may be a floor effect or a lack of variability in non-gamers’ responses, resulting in a lack of differences based on experimental condition. To examine whether the hypothesized effects only occur for gamers, men will be grouped as either gamers or non-gamers based on their own self-categorization, which will be considered as a predictor and moderator across analyses.

**Method**

**Participants and Design.** Participants were 500 men recruited through Amazon’s Mechanical Turk. Men were compensated $0.25 for completing a survey that included the same measures of gamer identity, game preferences, and concealment used in Studies 1a and 1b. The same men were contacted approximately one week later to complete the main study for $0.50. Of the 500 men who completed the individual difference survey, 286 (57%) returned to complete the main study, 105 of whom were removed from the sample due to failing one or both of the manipulation checks (n = 79), suspicion about the study (n = 16), or failing the attention check (n = 10). Thus, the working sample consisted of 181 men who ranged in age from 18 to 73 (M = 35.87, SD = 10.64) and self-described as White (80.1%), Asian (5.5%), Black or African American (5.5%), Multiracial (3.9%), Hispanic or Latino (3.3%), American Indian or Alaskan Native (1.1%), and Native Hawaiian or other Pacific Islander (0.6%). The study used a 2
(developer gender: male vs. female) X 2 (critic gender: male vs. female) X 2 (time: pre-review vs. post-review) mixed model design with developer gender and critic gender as between-participants factors and time as a within-participants factor.

**Procedure.** Participants first completed an online survey to assess several individual differences prior to engaging in the main study. In this survey, participants gave consent and completed the same individual differences measures that participants completed in Studies 1a and 1b. First, as filler, participants completed a survey of their TV and movie preferences, then they completed items that measured their gamer identity and preferences (see Appendix A), concealment of gamer identity (see Appendix G), and adherence to hegemonic masculinity norms (see Appendix F).

Approximately one week later, ostensibly as part of a study about media reviews, participants who returned for the main study read the same description of the first-person shooter video game used in Studies 1a and 1b (see Appendix I). Here, however, participants were randomly assigned to read a description that presented the game as being developed by either a man or a woman. To do this, the name of the lead developer of the game was presented to participants at three different points in the survey. The developer’s name was inserted twice into the game description introduction (“…a video game being developed by veteran game designer Mark [Mary] Williams. Mark [Mary] says that his [her] inspiration comes from…”) and again in the enjoyment ratings prompt (“…how much you think you would enjoy Mark [Mary] Williams’ game”). After reading the description, participants were asked to rate how much they would enjoy the game (see Appendix N) and how much money they would be willing to pay for it.

Immediately following their ratings of the game, participants were asked to read an excerpt from a review of the game that was just described (see Appendix M). The review was
based on an actual game review taken from the video game website polygon.com, but was altered so that it was written by either a man or a woman by presenting the critic’s name to participants at three different points in the survey. The critic’s name was inserted twice into the review introduction (“It is written by game critic Joshua [Jessica] McConnell…Joshua [Jessica] says that his [her] reviews…”) and again in the critic credibility ratings prompt (“consider your thoughts about the person who wrote this review, Joshua [Jessica] McConnell.”). Across conditions, the review always mentioned the sexist content of the game as a reason for lower ratings. For example, part of the review mentioning sexism read as follows:

The treatment of women may be its most disappointing aspect. The game doubles down on its negative treatment of women, who are props for the protagonist and player in the campaign, and completely absent in the multiplayer. This constant detriment weighs down what would otherwise be an excellent multiplayer experience, even if the campaign is generally lacking. (modified from Gies, 2015, para. 28)

After reading the review, participants were asked questions about the critic’s credibility, and then asked the same questions from before reading the review about how much they would enjoy the game and how much money they would be willing to pay for the game. Participants were then asked to complete a measure of their public discomfort at the thought of playing the game in public and measures of anger and shame emotions. Finally, participants were probed for suspicion, asked manipulation check questions about the gender of the developer and critic, debriefed, and thanked.

**Measures.**

*Gamer self-categorization.* Single item used in Studies 1a and 1b.

*Gamer identity.* As measured in Studies 1a and 1b (α = .88).
**Gamer identity concealment.** Single item used in Study 1b.

**Adherence to hegemonic masculinity norms.** As measured in Studies 1a and 1b. Restrictive Emotionality: $\alpha = .75$, Self-Reliance through Mechanical Skills: $\alpha = .86$, Negativity toward Sexual Minorities: $\alpha = .92$, Avoidance of Femininity: $\alpha = .87$, Importance of Sex: $\alpha = .86$, Dominance: $\alpha = .87$, Toughness: $\alpha = .74$, Overall: $\alpha = .93$.

**Game enjoyment.** Game enjoyment was assessed using four items (see Appendix N). Using seven-point scales (1 = *strongly disagree*; 7 = *strongly agree*), participants rated how fun, boring, enjoyable, and entertaining they predicted the game would be. The “boring” item was reverse-scored and all ratings were averaged into a single game enjoyment variable such that higher scores indicated more enjoyment (pre-review $\alpha = .92$, post-review $\alpha = .91$)

**Game value.** Value of the game was assessed by asking participants how much money they would be willing to spend to purchase the game. They used a sliding scale to choose a value between 0 and 75 dollars. Higher scores indicated a higher value attached to the game.

**Critic credibility.** Credibility of the critic was measured using four items (see Appendix O). Using seven-point scales (1 = *strongly disagree*; 7 = *strongly agree*) participants answered questions about the critic’s expertise and legitimacy as a game critic (e.g., “The reviewer assessed the game fairly”). Appropriate items were reverse-scored and averaged to create a single credibility variable such that higher scores indicated greater credibility ($\alpha = .88$).

**Public discomfort.** As measured in Studies 1a and 1b, but in reference to others seeing the participant playing the described game rather than others seeing the participant's personality survey summary ($\alpha = .87$).

**Anger and shame.** As measured in Studies 1a and 1b (Anger: $\alpha = .90$, Shame: $\alpha = .78$)
Results

Means and standard deviations for each variable, overall and separated by condition, are presented in Table 6. Correlations between variables are presented in Table 7. The characteristics of the men in this sample were very similar to those of the previous studies. About 46% of the sample (84 men) self-categorized as gamers, and those who self-categorized as gamers were significantly higher in gamer identity ($M = 2.89$, $SD = 1.00$) than non-gamers ($M = 1.79$, $SD = 0.76$), $t(153.02) = -8.24$, $p < .001$, $d = 1.24$. Those who self-categorized as gamers were significantly lower in endorsement of hegemonic masculinity norms ($M = 3.23$, $SD = 1.14$) than non-gamers ($M = 3.71$, $SD = 1.03$), $t(179) = 2.97$, $p = .003$, $d = 0.44$. When considering the subscales of the masculinity norms measure, men who self-categorized as gamers were significantly lower in restrictive emotionality ($M = 2.84$, $SD = 1.30$) than non-gamers ($M = 3.27$, $SD = 1.29$), $t(179) = 2.26$, $p = .025$, $d = 0.33$, lower in negative attitudes toward homosexuals ($M = 2.04$, $SD = 1.50$) than non-gamers ($M = 2.85$, $SD = 1.85$), $t(178.25) = 3.26$, $p = .001$, $d = 0.48$, lower in anti-femininity ($M = 3.39$, $SD = 1.72$) than non-gamers ($M = 3.98$, $SD = 1.50$), $t(166.26) = 2.28$, $p = .024$, $d = 0.37$, lower in importance attached to sex ($M = 3.10$, $SD = 1.67$) than non-gamers ($M = 3.64$, $SD = 1.47$), $t(179) = 2.30$, $p = .023$, $d = 0.34$, lower in dominance ($M = 2.43$, $SD = 1.37$) than non-gamers ($M = 2.97$, $SD = 1.45$), $t(179) = 2.58$, $p = .011$, $d = 0.38$, and marginally lower in toughness ($M = 4.19$, $SD = 1.42$) than non-gamers ($M = 4.52$, $SD = 1.20$), $t(179) = 1.69$, $p = .093$, $d = 0.25$.

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6 $t$-tests with degrees of freedom less than 179 failed Levene’s test for equality of variances and use adjusted $t$ statistics. This did not change any of the relationships.

7 Because of the large age range in the sample and generational differences in consumption of video games, age was tested as a possible explanation for the differences in gamer identity and adherence to hegemonic masculinity norms. While gamers were significantly younger ($M = 31.79$, $SD = 7.09$) than nongamers ($M = 39.41$, $SD = 11.89$), $t(159.85) = 5.32$, $p < .001$, $d = 0.78$, the same relationships remained when controlling for age (all $ps < .071$).
### Table 7
**Means by Condition in Study 2**

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>By Developer Gender</th>
<th>By Critic Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Female Developer</td>
<td>Male Developer</td>
</tr>
<tr>
<td></td>
<td>(N = 181)</td>
<td>(n = 75)</td>
<td>(n = 106)</td>
</tr>
<tr>
<td>Enjoyment Pre-Review</td>
<td>4.93 (1.24)</td>
<td>5.00 (1.11)</td>
<td>4.88 (1.32)</td>
</tr>
<tr>
<td>Enjoyment Post-Review</td>
<td>4.39 (1.29)</td>
<td>4.52 (1.28)</td>
<td>4.29 (1.29)</td>
</tr>
<tr>
<td>Value Pre-Review</td>
<td>26.40 (14.98)</td>
<td>25.09 (15.10)</td>
<td>27.33 (14.90)</td>
</tr>
<tr>
<td>Value Post-Review</td>
<td>22.03 (14.84)</td>
<td>20.91 (14.66)</td>
<td>22.84 (14.99)</td>
</tr>
<tr>
<td>Concealment</td>
<td>1.55 (0.93)</td>
<td>1.45 (0.87)</td>
<td>1.61 (0.97)</td>
</tr>
<tr>
<td>Gamer Identity</td>
<td>2.30 (1.03)</td>
<td>2.44 (1.01)</td>
<td>2.21 (1.04)</td>
</tr>
<tr>
<td>MRNI</td>
<td>3.49 (1.10)</td>
<td>3.37 (1.12)</td>
<td>3.57 (1.09)</td>
</tr>
<tr>
<td>Critic Credibility</td>
<td>4.70 (1.16)</td>
<td>4.44 (1.18)</td>
<td>4.89 (1.11)</td>
</tr>
<tr>
<td>Public Discomfort</td>
<td>3.10 (1.08)</td>
<td>2.96 (1.09)</td>
<td>3.19 (1.09)</td>
</tr>
<tr>
<td>Anger</td>
<td>1.90 (1.28)</td>
<td>2.00 (1.39)</td>
<td>1.82 (1.21)</td>
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<tr>
<td>Shame</td>
<td>1.96 (1.15)</td>
<td>1.99 (1.22)</td>
<td>1.94 (1.11)</td>
</tr>
</tbody>
</table>

*Note. N = 181. MRNI = Adherence to Hegemonic Masculinity Norms. Possible range of scores for Enjoyment Pre-Review and Post-Review = 1 (strongly disagree) to 7 (strongly agree), Value Pre-Review and Post-Review = 0 to 60 US dollars, Concealment = 1 (seldom/never) to 5 (almost always/always), Gamer Identity = 1 (strongly disagree) to 5 (strongly agree), MRNI = 1 (strongly disagree) to 7 (strongly agree), Public Discomfort = 1 (not at all) to 7 (very), Anger and Shame = 1 (not at all) to 9 (extremely). Differences between condition means are not indicated here because planned comparisons were made using regression analyses; the results of those comparisons are presented in Tables 8 and 9.\[†p < .08, * p < .05, ** p < .01, *** p < .001.\*
<table>
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<tbody>
<tr>
<td>1. Enjoyment Pre-Review</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>2. Enjoyment Post-Review</td>
<td></td>
<td>.781***</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>3. Value Pre-Review</td>
<td></td>
<td>.579***</td>
<td>.547***</td>
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<td>4. Value Post-Review</td>
<td></td>
<td>.499***</td>
<td>.664***</td>
<td>.852***</td>
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<td>5. Concealment</td>
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<td>.001</td>
<td>-.082</td>
<td>-.052</td>
<td>-.086</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Gamer Identity</td>
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<td>.039</td>
<td>.010</td>
<td>-.027</td>
<td>-.018</td>
<td>.239**</td>
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<td>7. MRNI</td>
<td></td>
<td>.106</td>
<td>.089</td>
<td>.009</td>
<td>.013</td>
<td>.079</td>
<td>-.123</td>
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<tr>
<td>8. Critic Credibility</td>
<td></td>
<td>-.223**</td>
<td>-.399***</td>
<td>-.178*</td>
<td>-.339***</td>
<td>-.092</td>
<td>-.026</td>
<td>-.066</td>
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<tr>
<td>9. Public Discomfort</td>
<td></td>
<td>-.408***</td>
<td>-.442***</td>
<td>-.275***</td>
<td>-.332***</td>
<td>.176*</td>
<td>.035</td>
<td>-.012</td>
<td>.182*</td>
<td></td>
</tr>
<tr>
<td>10. Anger</td>
<td></td>
<td>-.088</td>
<td>-.103</td>
<td>-.114</td>
<td>-.066</td>
<td>.033</td>
<td>-.006</td>
<td>.086</td>
<td>.021</td>
<td>.354***</td>
</tr>
<tr>
<td>11. Shame</td>
<td></td>
<td>.007</td>
<td>.017</td>
<td>-.059</td>
<td>-.040</td>
<td>.125†</td>
<td>-.014</td>
<td>.130†</td>
<td>-.053</td>
<td>.404***</td>
</tr>
</tbody>
</table>

*Note. N = 181. Degrees of freedom for each correlation vary due to unanswered questions.*

†p < .10, * p < .05, ** p < .01, *** p < .001.
Analyses were then conducted in four steps. First, two 2 (developer gender: male vs. female) X 2 (critic gender: male vs. female) X 2 (gamer self-categorization: gamer vs. non-gamer) X 2 (time: pre-review vs. post-review) analyses of variance (ANOVAs) with repeated measures on the fourth factor were conducted on game enjoyment and game value. Second, a 2 (developer gender: male vs. female) X 2 (critic gender: male vs. female) X 2 (gamer self-categorization: gamer vs. non-gamer) between-participants ANOVA was conducted on critic credibility. Third, eight hierarchical regression equations were calculated to determine how gamer identity concealment moderated the effects of developer gender, critic gender, and gamer self-categorization on pre- and post-review game enjoyment and value, and the change in game enjoyment and value after exposure to the review. Fourth, moderated mediation analyses were conducted to determine if public discomfort, anger, shame, and/or critic credibility mediated the previously mentioned effects.

**Hypotheses 1 and 2.** My first two hypotheses were: 1) men would rate a game developed by a woman as less enjoyable and less valuable than a game developed by a man and 2) a female critic would have less of an influence on men’s opinions of a game than a male critic. To address these hypotheses, two 2 (developer gender) X 2 (critic gender) X 2 (gamer self-categorization) X 2 (time) ANOVAs with repeated measures on the fourth factor were conducted on game enjoyment and game value.

One significant effect emerged on game enjoyment: an interaction between developer gender condition and gamer self-categorization, $F(1, 171) = 5.17, p = .024, \eta_p^2 = .029$. When considering a game developed by a man, both gamers’ and non-gamers’ enjoyment ratings before reading the negative review (Gamer: $M = 5.02, SD = 1.36$; Non-gamer: $M = 4.77, SD = 1.31$) were significantly higher than after reading the review (Gamer: $M = 4.32, SD = 1.35$; Non-
gamer: \( M = 4.27, SD = 1.26 \), Gamer: \( F(1, 171) = 32.18, p < .001, \eta^2_p = .158 \), Non-gamer: \( F(1, 171) = 19.69, p < .001, \eta^2_p = .103 \). Similarly, when considering a game developed by a woman, both gamers’ and non-gamers’ enjoyment ratings before reading a negative review (Gamer: \( M = 5.01, SD = 1.15 \); Non-gamer: \( M = 4.99, SD = 1.10 \) were significantly higher than after reading the review (Gamer: \( M = 4.73, SD = 1.33 \); Non-gamer: \( M = 4.32, SD = 1.21 \) ), Gamer: \( F(1, 171) = 4.30, p = .040, \eta^2_p = .025 \), Non-gamer: \( F(1, 171) = 22.98, p < .001, \eta^2_p = .118 \). However, there was a smaller effect for gamers when the developer was a woman, \( \eta^2_p = .025 \), compared to other conditions, \( \eta^2_p > .103 \). This finding indicates that gamers, but not non-gamers, were more resistant to changing their opinions about a game based on a negative review when the game was developed by a woman, but not when it was developed by a man.

Two effects emerged from the analysis of game value. First, there was a marginally significant effect of critic gender such that the review of the game had a greater negative effect on value when the critic was male (\( M = -5.39, SD = 11.22 \) compared to when the critic was female (\( M = -3.03, SD = 12.17 \) ), \( F(1, 170) = 3.63, p = .058 \). This indicates that when a man reviewed a game negatively his opinion had more of an impact than did a woman’s opinion. Second, there was a marginally significant interaction between the gender of the developer and gamer self-categorization such that gamers valued a game developed by a man (\( M = 30.98, SD = 29.89 \) ) more than non-gamers (\( M = 24.09, SD = 26.51 \) ) before reading the review, \( F(1, 170) = 5.29, p = .023, \eta^2_p = .030 \), but not after reading the review, \( F(1, 170) = 1.77, p = .185, \eta^2_p = .010 \). There were no differences between gamers and non-gamers at either time when the game was developed by a woman (\( Fs < 1, ps > .467 \)). Thus, gamers placed more initial value on (i.e., were willing to pay more money for) a game developed by a man compared to a game developed by a woman.
An additional 2 (developer gender) X 2 (critic gender) X 2 (gamer self-categorization) between-participants ANOVA was conducted on critic credibility. This analysis produced one significant effect of developer gender showing that men overall thought that the critic was more credible when reviewing a game developed by a man ($M = 4.87\ SD = 1.53$) compared to a game developed by a woman ($M = 4.44\ SD = 1.79$), $F(1, 173) = 6.10, p = .015, \eta^2_p = .034$.

**Hypothesis 3.** My third hypothesis was that gamer identity concealment would moderate the effects of developer and critic gender such that only men high in concealment would find games developed by women less enjoyable and less valuable, would find a female critic less credible than a male critic, and be less affected by a female critic’s compared to a male critic’s opinion. To test this hypothesis, I conducted eight hierarchical regressions, which proceeded as follows. Developer gender, critic gender, and gamer self-categorization were dummy-coded (male = 0, female = 1 for developer and critic gender, gamer = 1, non-gamer = 0 for gamer self-categorization) for use in the regression equations and gamer identity concealment was mean-centered to reduce collinearity and aid in the interpretation of the interaction variables (Tabachnick & Fidell, 2006). To examine differences between pre- and post-review ratings of enjoyment and value, two difference score variables were calculated by subtracting post-review enjoyment and value ratings from pre-review enjoyment and value ratings. Then each hierarchical regression proceeded in four steps. In Step 1, each dependent variable (pre-review, post-review, and change in game enjoyment and value) was regressed on the dummy-coded variables representing developer or critic gender and gamer self-categorization, and the interaction between developer or critic gender and gamer-self-categorization. This initial step introduced the variables that were already tested in the ANOVAs above so that the moderation of concealment could be added in the later steps. In Step 2, gamer identity concealment was added
to each equation to examine the additional variance explained by the main effect of gamer identity concealment. In Step 3, the two-way interactions between developer or critic gender and gamer identity concealment and between developer or critic gender and gamer self-categorization were added to the model to examine if the effects of developer or critic gender were moderated by gamer identity concealment or gamer self-categorization. Finally, in Step 4, the three-way interaction between developer or critic gender, gamer self-categorization, and gamer identity concealment was added to the model to examine if the interaction between developer or critic gender and gamer self-categorization was moderated by gamer identity concealment.

Results for hierarchical regressions examining the effects of developer gender are presented in Table 8 and for those examining the effects of critic gender are presented in Table 9. Step 1 of each regression mirrored the ANOVAs above, so the results are not discussed here. Step 3 of the regression equation estimating the effects of critic gender and gamer identity concealment on the change in enjoyment ratings revealed a marginally significant interaction between critic gender and gamer identity concealment, $b = -0.30$, $se = 0.15$, $t(178) = -1.98$, $p = 0.049$. As shown in Figure 6, the simple effects of the interaction indicated that men low in gamer identity concealment (-1 SD) were less affected by a female critic than men high in gamer identity concealment (+1 SD), $b = -0.34$, $se = 0.13$, $t(179) = -2.63$, $p = .009$. Contrary to predictions, this finding indicates that men high in gamer identity concealment were more willing to change their opinion when the game was negatively reviewed by a woman than were men lower in concealment.
Hypothesis 4. My fourth hypothesis was that the effects of game developer gender and game critic gender would be serially mediated by public discomfort and anger or shame and also that effects of game critic gender would be mediated by critic credibility. To test this hypothesis, moderated mediation analyses were conducted using Hayes’ (2012) PROCESS macro for SPSS and moderated serial mediation analyses were conducted using structural equation modeling in AMOS. All analyses used 5,000 bootstrapping estimates and 95% confidence intervals. I will first discuss the models containing gamer self-categorization as a moderator and then the models containing gamer identity concealment as a moderator.

Gamer self-categorization. First, I used model 12 in PROCESS to test if public discomfort, anger, or shame mediated the effects of developer gender, critic gender, and gamer self-categorization on the change in game enjoyment or value after reading the negative review. There was no evidence of mediation via public discomfort, anger, or shame as confidence intervals for all indices of moderated moderated mediation contained zero. In these models, neither public discomfort, anger, nor shame predicted changes in game enjoyment or value.
Table 9
Unstandardized Regression Coefficients for Developer Gender using Gamer Self-Categorization and Concealment as Moderators in Study 2

<table>
<thead>
<tr>
<th></th>
<th>Enjoyment Pre-Review</th>
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<th>Enjoyment Change</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>b (SE)</td>
<td>t</td>
<td>ΔR²</td>
<td>b (SE)</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developer Gender</td>
<td>0.22 (0.26)</td>
<td>0.83</td>
<td>-0.17 (0.17)</td>
<td>-0.94</td>
</tr>
<tr>
<td>Gamer SC (GSC)</td>
<td>0.24 (0.26)</td>
<td>0.98</td>
<td>-0.20 (0.16)</td>
<td>-1.20</td>
</tr>
<tr>
<td>Developer × GSC</td>
<td>-0.21 (0.38)</td>
<td>-0.57</td>
<td>0.58 (0.25)</td>
<td>2.30*</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concealment (Conc.)</td>
<td>-0.02 (0.10)</td>
<td>-0.18</td>
<td>-0.11 (0.07)</td>
<td>-1.54</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developer × Conc.</td>
<td>0.04 (0.22)</td>
<td>0.18</td>
<td>0.06 (0.14)</td>
<td>0.38</td>
</tr>
<tr>
<td>Gamer SC × Conc.</td>
<td>-0.12 (0.21)</td>
<td>-0.58</td>
<td>-0.08 (0.14)</td>
<td>-0.53</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dev. × GSC × Conc.</td>
<td>-0.24 (0.44)</td>
<td>-0.55</td>
<td>0.12 (0.29)</td>
<td>0.42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Value Pre-Review</th>
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<th>Value Change</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b (SE)</td>
<td>t</td>
<td>ΔR²</td>
<td>b (SE)</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developer Gender</td>
<td>0.45 (3.09)</td>
<td>0.14</td>
<td>-1.49 (1.70)</td>
<td>-0.87</td>
</tr>
<tr>
<td>Gamer SC (GSC)</td>
<td>6.56 (2.90)</td>
<td>2.26*</td>
<td>-2.60 (1.60)</td>
<td>-1.62</td>
</tr>
<tr>
<td>Developer × GSC</td>
<td>-6.10 (4.50)</td>
<td>-1.36</td>
<td>4.30 (2.48)</td>
<td>1.74†</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concealment (Conc.)</td>
<td>-1.67 (1.22)</td>
<td>-1.37</td>
<td>-0.24 (0.68)</td>
<td>-0.35</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developer × Conc.</td>
<td>2.01 (2.55)</td>
<td>0.79</td>
<td>1.15 (1.41)</td>
<td>0.82</td>
</tr>
<tr>
<td>Gamer SC × Conc.</td>
<td>1.66 (2.49)</td>
<td>0.67</td>
<td>-1.36 (1.39)</td>
<td>-0.98</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dev. × GSC × Conc.</td>
<td>2.20 (5.16)</td>
<td>0.43</td>
<td>-1.23 (2.86)</td>
<td>-0.43</td>
</tr>
</tbody>
</table>

Table 10
Unstandardized Regression Coefficients for Critic Gender using Gamer Self-Categorization and Concealment as Moderators in Study 2

<table>
<thead>
<tr>
<th></th>
<th>Enjoyment Post-Review</th>
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<th>Enjoyment Change</th>
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<tbody>
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<td></td>
<td>b (SE)</td>
<td>t</td>
<td>ΔR²</td>
<td>b (SE)</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critic Gender</td>
<td>-0.12 (0.27)</td>
<td>-0.44</td>
<td></td>
<td>0.11 (0.17)</td>
</tr>
<tr>
<td>Gamer SC (GSC)</td>
<td>0.19 (0.27)</td>
<td>0.71</td>
<td></td>
<td>0.11 (0.17)</td>
</tr>
<tr>
<td>Critic × Gamer SC</td>
<td>0.08 (0.39)</td>
<td>0.19</td>
<td></td>
<td>-0.14 (0.26)</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concealment (Conc.)</td>
<td>-0.15 (0.11)</td>
<td>-1.36</td>
<td>-0.13 (0.07)</td>
<td>-1.90†</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critic × Conc.</td>
<td>-0.17 (0.24)</td>
<td>-0.72</td>
<td>-0.28 (0.16)</td>
<td>-1.83†</td>
</tr>
<tr>
<td>Gamer SC × Conc.</td>
<td>-0.23 (0.22)</td>
<td>-1.07</td>
<td>-0.11 (0.14)</td>
<td>-0.80</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critic × GSC × Conc.</td>
<td>0.30 (0.48)</td>
<td>0.61</td>
<td>-0.18 (0.31)</td>
<td>-0.58</td>
</tr>
</tbody>
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<table>
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<tr>
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<th>Value Post-Review</th>
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<th>Value Change</th>
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<tbody>
<tr>
<td></td>
<td>b (SE)</td>
<td>t</td>
<td>ΔR²</td>
<td>b (SE)</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td>0.01</td>
<td></td>
<td></td>
<td>0.02</td>
</tr>
<tr>
<td>Critic Gender</td>
<td>-0.25 (3.07)</td>
<td>-0.08</td>
<td>1.77 (1.67)</td>
<td>1.06</td>
</tr>
<tr>
<td>Gamer SC (GSC)</td>
<td>2.44 (3.05)</td>
<td>0.80</td>
<td>-1.33 (1.66)</td>
<td>-0.80</td>
</tr>
<tr>
<td>Critic × Gamer SC</td>
<td>1.73 (4.49)</td>
<td>0.38</td>
<td>0.96 (2.45)</td>
<td>0.39</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>0.01</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Concealment (Conc.)</td>
<td>-1.68 (1.25)</td>
<td>-1.35</td>
<td>-0.23 (0.68)</td>
<td>-0.34</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td>0.00</td>
<td></td>
<td></td>
<td>0.01</td>
</tr>
<tr>
<td>Critic × Conc.</td>
<td>-0.02 (2.83)</td>
<td>-0.01</td>
<td>0.45 (1.54)</td>
<td>0.29</td>
</tr>
<tr>
<td>Gamer SC × Conc.</td>
<td>0.29 (2.52)</td>
<td>0.11</td>
<td>-1.63 (1.38)</td>
<td>-1.19</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td>0.01</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Critic × GSC × Conc.</td>
<td>-7.06 (5.64)</td>
<td>-1.25</td>
<td>0.82 (3.09)</td>
<td>0.27</td>
</tr>
</tbody>
</table>

\( ts < 1.33, ps > .188 \), so serial mediation models through public discomfort and anger or shame were not calculated.

I then used AMOS to create moderated moderated serial mediation models to test if the effect of developer gender, critic gender, and gamer self-categorization on the change in game enjoyment or value was serially mediated by public discomfort, anger, or shame and critic credibility. While public discomfort was a significant mediator for critic credibility, 95% CI [0.0273, 0.7289], critic credibility did not significantly mediate the effect of public discomfort on change in game enjoyment, or change in game value, as both confidence intervals contained zero. Neither anger or shame were significant mediators for critic credibility, and critic credibility did not significantly mediate the effect of anger or shame on change in game enjoyment or change in game value, as all of the confidence intervals also contained zero.

**Gamer identity concealment.** Again, I used model 12 in PROCESS to test if public discomfort, anger, or shame mediated the effects of developer gender, critic gender, and gamer identity concealment on the change in game enjoyment and value after reading the negative review. Again, there was no evidence of mediation via public discomfort, anger, or shame; as confidence intervals for all indices of moderated moderated mediation contained zero. In these models, neither public discomfort, anger, nor shame predicted change in game enjoyment or value \( ts < 1.18, ps > .242 \), so serial mediation models through public discomfort and anger or shame were not calculated.

I then used AMOS to create moderated moderated serial mediation models to test if the effect of developer gender, critic gender, and gamer identity concealment on the change in game enjoyment or value was serially mediated by public discomfort, anger, or shame and critic credibility. Neither public discomfort, anger, nor shame were significant mediators for critic
credibility, nor was critic credibility a significant mediator of the effect of public discomfort, anger, or shame on change in game enjoyment or change in game value, as all confidence intervals contained zero.

**Discussion**

Expanding on Studies 1a and 1b, Study 2 examined how the same gamer identity factors that predicted evaluations of harassment relate to more real-world behaviors: purchasing games developed by women and considering women’s opinions as game critics. These two actions are representative of how much men value women within the realm of gaming and have direct consequences for women’s success within the video game industry. The results of Study 2 were mixed in their support of my hypotheses.

Supporting the idea that embracing a gamer identity reduces the need for men to prove their masculinity by distancing from women, men who considered themselves gamers were more hesitant than non-gamers to change their opinion about a game developed by a woman after reading a negative review of it. This reaction could partially be due to the fact that men overall thought that critics were more credible when negatively reviewing a game developed by a man. Because the review mentioned the negative treatment of women as a factor in not recommending the game, men may simply think that the negative treatment of women is less excusable for a man than a woman, making the negative review more valid. Because gamers are less traditionally masculine, they may be more empathetic with the female developer, and in turn be less reactive to the review that they think is less valid.

Importantly, however, gamers may not be willing to put their money where their mouth is, as they were initially willing to spend more money on a game developed by a man than one developed by a woman. This result may be particularly informative regarding the nature of gamer identity. In line with research on the patronizing treatment of women in masculine
domains (e.g., Vescio, Gervais, Snyder, & Hoover, 2005), gamers may be egalitarian in ways that do not actually cost them resources (i.e., rate games developed by men and women as equally enjoyable and be less critical of a game developed by a woman) while simultaneously providing more resources to male developers than female developers. This pattern of effects also makes sense considering the pilot findings that gamer identity was positively correlated with benevolent sexism, so gamers may feel more paternalistic about women than non-gamers.

Contrary to hypotheses, public discomfort, anger, shame, and critic credibility did not serve as mediators in any of the hypothesized relationships. Public discomfort and anger have been shown to mediate the effects of masculinity threats in previous research (e.g., Dahl et al., 2015), so the fact that these emotional variables did not mediate any of the observed relationships in this study may indicate that female developers and critics do not pose threats to men’s masculinity. This may be interpreted as a positive finding, as this could indicate that women’s presence in game development and criticism is not felt as a threat and may not generally produce negative reactions from men. Additionally, because critic gender did not affect ratings of critic credibility, men may not be using gender as a relevant indicator of the validity of someone’s opinion about a video game, indicating that they do not think women are unqualified outsiders in the domain of gaming. However, as these interpretations are based on null findings, they would need to be tested further to come to any firm conclusions.

Also contrary to hypotheses, men who concealed their gamer identity more changed their ratings of enjoyment more in reaction to the female critic than men who concealed their gamer identity less. In other words, men who conceal less took the female critic less seriously, indicating that they are more dismissive of a woman’s opinion compared to a man’s. Importantly, however, this same effect did not occur when considering how much they would be
willing to pay for the game. Thus, while men who conceal more seemed to consider a woman’s opinion more seriously when rating enjoyment of the game, they did not do so when determining how much they value the game. This may indicate a similar patronizing pattern to that shown by gamers overall, such that high concealing men are presenting a more extreme version of benevolent sexism than gamers who do not conceal. A possible alternative to this interpretation that is consistent with the current results is that men who regularly conceal their gamer identity do not do so because they are trying to enact masculinity norms out of personal value, but because they are motivated to conceal their feminine identity to avoid backlash (Rudman & Fairchild, 2004). This could mean that these men may be more accepting of women and therefore take their opinions more seriously than men who do not conceal their gamer identity. This explanation seems at odds with the results of the pilot study and Studies 1a and 1b, which indicate that men who conceal more are more sexist and accepting of the harassment of female gamers. However, in Rudman and Fairchild’s (2004) experiments, gender deviants who feared backlash were more likely to conform to gender stereotypes. Acceptance of harassment could be a way that gender-deviant men who conceal their gamer identity attempt to express conformity to gender norms as a strategy to hide their deviance.

As part of Study 3, men will be required to evaluate the helpfulness of a potential female game partner and their similarity to her, which could clarify the inconsistent results of Study 2. If high concealing men report that female gamers would be more helpful and that they are more similar to female gamers, it may indicate that high concealing men consider themselves to be more like women than men and support the interpretation that men who conceal their gamer identity embody and value femininity more than men who do not conceal.
Chapter 5. STUDY 3: GAMER IDENTITY CONCEALMENT AND MEN’S TREATMENT OF FEMALE GAMERS

Study 3 turned attention to perceptions of female game partners. Women are frequently harassed while playing multiplayer video games with men (e.g., Haniver, 2012; 2013). While the pilot study and Studies 1a and 1b observed men’s reactions to a recorded example of harassment, they do not address what men think of female gamers more directly. Examining the perceptions of a woman with whom one will play a video game can help identify relevant predictors of men’s harassment in these contexts. To test the effects of game partner gender on men’s evaluations of their partner, I use a design similar to Talley and Bettencourt’s (2008) study examining the effects of anti-gay prejudice on psychological distancing from a gay partner. As part of a study ostensibly about the effects of personality on cooperative success, participants first completed some personality measures, and then were informed that they will partner with another participant to cooperate in a first-person shooter video game. Participants were then given what is ostensibly a summary of their partner’s answers to the previous questionnaires, which were manipulated such that the partner was either male or female. After receiving the summary of their partner’s answers, participants were asked to rate their own personality in relation to their partner’s, evaluate how much they think their future partner will be helpful in the video game task, report how similar they think they are to their future partner, and then choose avatars to represent themselves and their partner in the game.

Based on the results of the pilot study and Studies 1a and 1b, where gamer identity concealment was related to sexism and tolerance of harassment, I formed three hypotheses, which are summarized in the third row of Table 1 and explained in the following. My first hypothesis is that men who are high (vs. low) in gamer identity concealment will have stronger
negative reactions to potential female video game teammates. Therefore, men who are high (vs. low) in gamer identity concealment will distance more from the female partner, evaluate her more negatively than the male partner and see themselves as less similar to her compared to the male partner. If, instead, gamer identity concealment is reflective of a more feminine personality that men try to hide by rejecting gamer identity, men high in gamer identity concealment may react similarly to those in Study 2 and distance less from the female partner, evaluate her more positively than the male partner and see themselves as more similar to her compared to the male partner. Because concealment is associated with preferences for traditional gender roles (i.e., ambivalent sexism; Glick & Fiske, 2001), my second hypothesis is that men who are high in gamer identity concealment will choose more stereotypical characters to represent themselves and their partners, regardless of their partner’s gender. In other words, they will choose both more stereotypical male characters to represent male partners and more stereotypical female characters to represent female partners. As in the previous studies, my third hypothesis is that women’s presence in gaming will be perceived by men as a threat to their masculinity, and therefore public discomfort, anger, and/or shame will mediate these effects.

Similar to Study 2, while the above effects are hypothesized to occur for all men, there are reasons to believe that gamers may respond differently from non-gamers. Because participants are judging female gamers, participants who are gamers could be less sensitive to the potential game partner’s gender because they share a common interest. Therefore, non-gamers may use their partner’s gender as a cue to how they distance from and evaluate their partner more than gamers do. To examine this possibility, men will be grouped as either gamers or non-gamers based on their own self-categorization, which will be considered as a predictor and moderator across analyses.
Method

**Participants and Design.** Participants were 500 men recruited through Amazon’s Mechanical Turk using the same method and compensation as in Study 2. Men completed the online individual difference survey used in Study 2 before being contacted approximately one week later to complete the main study. Of the 500 men who completed the individual difference survey, 315 (63%) returned to complete the main study, 30 of whom were removed from the sample due to failing the manipulation check \((n = 14)\), suspicion about the study \((n = 11)\), or failing the attention check \((n = 5)\). Thus, the working sample consisted of 285 men who ranged in age from 18 to 73 \((M = 34.99, SD = 11.88)\) and self-described as White (72.3%), Hispanic or Latino (7.4%), Asian (6.7%), Multiracial (5.3%), Black or African American (4.9%), American Indian or Alaskan Native (1.1%), Native Hawaiian or other Pacific Islander (0.4%), or other (2.1%).\(^8\) The study used a single partner gender (male vs. female) between-participants design.

**Procedure.** Participants completed an initial individual difference survey, which measured their gamer identity and game preferences (see Appendix A), concealment of gamer identity (see Appendix G), and adherence to hegemonic masculinity norms (see Appendix F).

Approximately one week later, participants received an email invitation to participate in a second online study, ostensibly about how personality affects success in cooperative video games. The study began by referencing the previous surveys participants had completed about their personality and movie/video game preferences to reinforce the cover story that they would receive information from another participant in the same study. Participants were then told they were randomly assigned to work with a 29-year-old man or woman from the US. Paralleling the previous studies, participants then completed measures of public discomfort about revealing their

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\(^8\) Three men failed to report their age, but were included in analyses.
gaming/movie preferences to their partner, anger, and shame. To establish their partner’s competence in the upcoming task, participants received a summary of their partner’s video game preferences, which indicated that their partner identified as a gamer and preferred first-person shooters. As a measure of distancing, participants were shown what they believed were their partner’s self-ratings on 20 personality traits collected in a previous study and participants were asked to complete the same items (see Appendix P). Participants were then asked to evaluate how helpful their partner will be in the upcoming cooperative video game task (see Appendix Q) and report perceptions of self-partner similarity (see Appendix R). Finally, participants chose between preselected avatars to represent themselves and their partner in the game (see Appendix S) before being probed for suspicion, fully debriefed, thanked, and compensated for their time.

**Measures.**

*Gamer identity.* As measured in Studies 1a, 1b, and 2 (α = .88).

*Adherence to hegemonic masculinity norms.* As measured in Studies 1a, 1b, and 2. Restrictive Emotionality: α = .76, Self-Reliance through Mechanical Skills: α = .84, Negativity toward Sexual Minorities: α = .91, Avoidance of Femininity: α = .87, Importance of Sex: α = .88, Dominance: α = .87, Toughness: α = .78, Overall: α = .94.

*Gamer identity concealment.* Single item used in Studies 1a, 1b, and 2.

*Gamer self-categorization.* Single item used in Studies 1a, 1b, and 2.

*Public discomfort.* As measured in Studies 1a, 1b, and 2 (α = .85).

*Anger and shame.* As measured in Studies 1a, 1b, and 2 (Anger: α = .88, Shame: α = .77).

*Distancing from Partner.* Distancing from partner was assessed by comparing participants’ self-ratings on 20 trait adjectives to what they were told were their partner’s self-
ratings of the same adjectives (see Appendix P; Pyszczynski, Greenberg, Solomon, Sideris, & Stubing, 1993). Participants were shown the score that their partners ostensibly chose to describe themselves on a 0-100 scale for each of 20 adjectives, 10 of which are considered moderately desirable (e.g., witty, bold, neat, self-satisfied), and 10 of which are considered moderately undesirable (e.g., clumsy, restless, tiresome, extravagant). The partners’ scores were randomly generated to be between 25 and 50 for the moderately undesirable traits and between 50 and 75 for the moderately desirable traits. After each score, participants used a slider to rate themselves on that the same adjective using the same 0-100 scale. A single distancing variable was created by summing the absolute values of participants’ self-ratings subtracted from the randomly generated partners’ self-ratings with higher numbers representing more distancing.

**Partner evaluation.** Evaluations of the partner were assessed using four items (see Appendix Q). Using seven-point scales (1 = strongly disagree; 7 = strongly agree) participants reported how competent (e.g., “I think my partner will be good at the game”) and helpful (e.g., “My partner will be helpful in completing our goals”) they think their partner will be, in addition to how well they will work together (e.g., “My partner and I will work well together”). Appropriate items were reverse scored and averaged into one rating score such that higher numbers indicate perceptions that the partner will be more helpful (α = .74).

**Partner similarity.** Participants’ felt similarity to their partner was assessed using four items (see Appendix R). Using seven-point scales (1 = strongly disagree; 7 = strongly agree) participants reported how similar they think they are to their partner (e.g., “I have a lot in common with my partner”). Appropriate items were reverse scored and averaged into one similarity score such that higher numbers indicate a greater felt similarity with the partner (α = .85).
**Avatar stereotypicality.** Participants chose avatars to represent themselves and their partner from a predetermined set of choices (see Appendix S). The choices were presented in random order and coded so that higher numbers correspond with a wider chest for men and larger breasts and hips for women.

**Results**

Means and standard deviations for each variable and the correlations between them are presented in Table 10. The characteristics of the men in this sample were similar to those of the previous studies, but with a lower overall endorsement of hegemonic masculinity norms. About 51% of the sample (144 men) self-categorized as gamers, and those who self-categorized as gamers were significantly higher in gamer identity ($M = 2.85, SD = 1.00$) than non-gamers ($M = 1.75, SD = 0.79$), $t(270.97) = -10.32, p < .001, d = 1.22$. Gamers were marginally lower in endorsement of hegemonic masculinity norms ($M = 3.25, SD = 1.22$) than non-gamers ($M = 3.49, SD = 1.13$), $t(283) = 1.66, p = .098, d = 0.20$. When considering the subscales of the masculinity norms measure, gamers were only significantly lower in negative attitudes toward homosexuals ($M = 2.21, SD = 1.62$) than non-gamers ($M = 2.80, SD = 1.87$), $t(275.91) = 2.84, p = .005, d = 0.34$.

Analyses were conducted in two steps: first, five hierarchical regression equations were calculated to determine the effects of partner gender, gamer self-categorization, and gamer identity concealment on distancing from partner, partner evaluation, partner similarity, and self and partner avatar stereotypicality. Second, moderated mediation analyses were conducted

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9 $t$-tests with degrees of freedom less than 283 failed Levene’s test for equality of variances and use adjusted $t$ statistics. This did not change any of the relationships.

10 Because of the large age range in the sample and generational differences in consumption of video games, age was tested as a possible explanation for the differences in gamer identity and adherence to hegemonic masculinity norms. Gamers were significantly younger ($M = 30.29, SD = 7.52$) than nongamers ($M = 39.83, SD = 13.51$), $t(214.68) = 7.30, p < .001, d = 0.87$, and in this case, the relationships with adherence to masculinity norms became nonsignificant when controlling for age (all $ps > .355$).
### Table 11
Means by Condition and Correlations among Variables in Study 3

<table>
<thead>
<tr>
<th>Mean (SD)</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>1</td>
</tr>
<tr>
<td>Male Partner</td>
<td>148</td>
</tr>
<tr>
<td>Female Partner</td>
<td></td>
</tr>
</tbody>
</table>

1. Partner Distancing: 392.60 (126.14) 390.47 (124.65) 394.91 (128.15)
2. Partner Evaluation: 4.58 (0.58) 4.55 (0.59) 4.62 (0.58)
3. Partner Similarity: 3.66 (0.82) 3.60 (0.89) 3.72 (0.73)
4. Avatar for Self: 2.65 (1.62) 2.81 (1.66) 2.47 (1.57)
5. Avatar for Partner: 3.34 (1.80) 3.07 (1.83) 3.64 (1.74)
6. Concealment: 1.55 (0.91) 1.55 (0.93) 1.54 (0.88)
7. Gamer Identity: 2.30 (1.05) 2.35 (1.10) 2.25 (1.00)
8. MRNI: 3.37 (1.18) 3.34 (1.18) 3.40 (1.18)
9. Public Discomfort: 2.83 (1.06) 2.75 (1.08) 2.91 (1.04)
10. Anger: 1.87 (1.28) 1.92 (1.33) 1.82 (1.22)
11. Shame: 2.08 (1.19) 1.99 (1.10) 2.17 (1.29)

Note. N = 285. One participant in the Female Partner condition failed to complete the Public Discomfort measure, and one participant in the Male Partner condition failed to complete the avatar selection, but both were included for all other measures. MRNI = Adherence to Hegemonic Masculinity Norms. Possible range of scores for Partner Evaluation and Partner Similarity = 1 (strongly disagree) to 6 (strongly agree), Avatar for Self and Avatar for Partner = 1 (least stereotypical) to 6 (most stereotypical), Concealment = 1 (seldom/never) to 5 (almost always/always), Gamer Identity = 1 (strongly disagree) to 5 (strongly agree), MRNI = 1 (strongly disagree) to 7 (strongly agree), Public Discomfort = 1 (not at all) to 7 (very), Anger and Shame = 1 (not at all) to 9 (extremely). Differences between condition means are not indicated here because planned comparisons were made using regression analyses; the results of those comparisons are presented in Table 11.

†p < .09, * p < .05, ** p < .01, *** p < .001.
to determine if public discomfort, anger, and/or shame mediate the previously mentioned effects.

**Hypotheses 1 and 2.** A series of hierarchical regression analyses were conducted to test my first two hypotheses, which were 1) men who are high (vs. low) in gamer identity concealment will distance more from their partner, more negatively evaluate their partner, and rate themselves as less similar to a female partner than a male partner and 2) gamers who are high (vs. low) in gamer identity concealment will choose more gender-stereotypical avatars for both themselves and their partners. In the hierarchical regression analyses, partner gender and gamer self-categorization were dummy-coded (male = 0, female = 1; non-gamer = 0, gamer = 1) and gamer identity concealment was mean-centered to reduce collinearity and aid in the interpretation of the interaction variables (Tabachnick & Fidell, 2006). Each hierarchical regression proceeded in five steps. In Step 1, each dependent variable (distancing from partner, partner evaluation, partner similarity, self-avatar stereotypicality, partner-avatar stereotypicality) was regressed on the dummy-coded variables of partner gender and gamer self-categorization. In Step 2, the interaction between partner gender and gamer self-categorization was added to each equation to determine if the effects of partner gender were moderated by gamer self-categorization. In Step 3, gamer identity concealment was added to each equation to examine the additional variance explained by the main effect of gamer identity concealment. In Step 4, the two-way interactions between partner gender and concealment and between gamer self-categorization and concealment were added to each equation to examine if the effects of partner gender were moderated by gamer self-categorization or gamer identity concealment. Finally, in Step 5, the three-way interaction between partner gender, gamer self-categorization, and gender identity concealment was added to each equation to determine if the interaction between partner
gender and gamer self-categorization was moderated by gamer identity concealment. Results of all hierarchical regressions are presented in Table 11.

**Distancing from partner.** There were no effects of partner gender, gamer self-categorization, or gamer identity concealment on distancing from partner ($t < 1.65, ps > .100$).

**Partner evaluation.** Step 1 of the regression equation examining partner evaluation revealed a main effect of gamer self-categorization. Men who self-categorized as gamers thought that their partners would be more helpful ($M = 4.67, SD = 0.58$) than non-gamers did ($M = 4.49, SD = 0.58$), $b = 0.19, se = 0.07, t(283) = 2.70, p = 0.007$. Step 3 also revealed a main effect of gamer identity concealment such that men thought that their partners would be less helpful the more that they concealed, $b = -0.08, se = 0.04, t(283) = -1.99, p = 0.048$.

**Partner similarity.** Step 1 of the regression equation examining partner similarity revealed a main effect of gamer self-categorization. Men who self-categorized as gamers felt more similar to their gaming partners ($M = 3.89, SD = 0.74$) than non-gamers ($M = 3.42, SD = 0.83$), $b = 0.48, se = 0.09, t(283) = 5.18, p < 0.001$. In Step 5, this main effect was qualified by a three-way interaction between partner gender, gamer self-categorization, and gamer identity concealment, $b = 0.43, se = 0.22, t(283) = 1.93, p = 0.054$.

As shown in Figure 7, decomposing this interaction reveals several effects. First, the interaction between partner gender and gamer identity concealment was significant for people who categorized themselves as gamers, $b = 0.27, se = 0.13, t(283) = 2.02, p = 0.045$, but not non-gamers, $b = -0.16, se = 0.18, t(283) = -0.90, p = 0.370$. Focusing on self-categorized gamers, those who were low in gamer identity concealment felt more similar to a male partner than those who were high in gamer identity concealment, $b = -0.19, se = 0.09, t(283) = -2.18, p = 0.030$. Additionally, self-identified gamers who were high in concealment felt more similar to a female
Table 12
Unstandardized Regression Coefficients for Partner Gender using Gamer Self-Categorization and Concealment as Moderators in Study 3

<table>
<thead>
<tr>
<th></th>
<th>Distancing from Partner</th>
<th>Partner Evaluation</th>
<th>Partner Similarity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b (SE)</td>
<td>t</td>
<td>ΔR²</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner Gender</td>
<td>4.73 (14.98)</td>
<td>0.32</td>
<td>0.03*</td>
</tr>
<tr>
<td>Gamer SC</td>
<td>24.64 (14.98)</td>
<td>1.65</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner × Gamer SC</td>
<td>-34.57 (29.95)</td>
<td>-1.15</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concealment (Conc)</td>
<td>-9.78 (8.51)</td>
<td>-1.15</td>
<td>0.01*</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner × Conc</td>
<td>-4.59 (17.22)</td>
<td>-0.27</td>
<td>0.00</td>
</tr>
<tr>
<td>Gamer SC × Conc</td>
<td>28.73 (17.90)</td>
<td>1.61</td>
<td></td>
</tr>
<tr>
<td><strong>Step 5</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part. × GSC × Conc</td>
<td>-12.70 (35.85)</td>
<td>-0.35</td>
<td>0.01†</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Stereotypicality of Self Avatar</th>
<th>Stereotypicality of Partner Avatar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b (SE)</td>
<td>t</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner Gender</td>
<td>-0.34 (0.19)</td>
<td>-1.77†</td>
</tr>
<tr>
<td>Gamer SC</td>
<td>0.16 (0.19)</td>
<td>0.85</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner × Gamer SC</td>
<td>-0.01 (0.39)</td>
<td>-0.02</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concealment (Conc)</td>
<td>0.06 (0.11)</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner × Conc</td>
<td>0.22 (0.22)</td>
<td>1.00</td>
</tr>
<tr>
<td>Gamer SC × Conc</td>
<td>-0.06 (0.23)</td>
<td>-0.25</td>
</tr>
<tr>
<td><strong>Step 5</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part. × GSC × Conc</td>
<td>-0.16 (0.47)</td>
<td>-0.33</td>
</tr>
</tbody>
</table>


†p < .10, * p < .05, ** p < .01, *** p < .001.
partner than a male partner, $b = 0.34$, $se = 0.16$, $t(283) = 2.11$, $p = 0.036$. Contrary to hypotheses, but consistent with the results of Study 2, these results show that high concealers felt more similar to women and less similar to men, rather than low concealers.

**Figure 7.** Interaction between Partner Gender, Gamer Self-categorization, and Gamer Identity Concealment on Partner Similarity in Study 3. The interaction between Partner Gender and Gamer Self-categorization is not significant for non-gamers.  
* $p < .05$
**Self-avatar stereotypicality.** Step 1 of the regression equation examining the stereotypicality of the avatar that men chose for themselves revealed a marginally significant effect of partner gender. Men chose more stereotypical avatars to represent themselves when their partner was a man ($M = 2.81, SD = 1.66$) than when their partner was a woman ($M = 2.47, SD = 1.57$), $b = -0.34$, $se = 0.19$, $t(283) = -1.77$, $p = 0.079$. Consistent with the idea that masculinity is primarily performed by men for men (e.g., Kimmel, 2008), participants’ self-presentations were more masculine when interacting with a male than female partner.

**Partner-avatar stereotypicality.** Step 1 of the regression equation examining the stereotypicality of the avatar that men chose for their partners revealed a main effect of partner gender. Men chose more stereotypical avatars for female partners ($M = 3.64, SD = 1.74$) than male partners ($M = 3.07, SD = 1.83$), $b = 0.56$, $se = 0.21$, $t(283) = 2.63$, $p = 0.009$. Step 4 revealed an interaction between gamer self-categorization and gamer identity concealment, $b = 0.43$, $se = 0.25$, $t(283) = 1.71$, $p = 0.088$.

As shown in Figure 8, decomposing the interaction between gamer self-categorization and gamer identity concealment shows that self-categorized gamers who were low in gamer identity concealment chose less stereotypical avatars for their partner than gamers who were high in gamer identity concealment, $b = 0.45$, $se = 0.18$, $t(283) = 2.53$, $p = 0.012$. Additionally, self-categorized gamers who were low in gamer identity concealment chose less stereotypical avatars for their partner than did non-gamers who were low in gamer identity concealment, $b = -0.72$, $se = 0.32$, $t(283) = -2.23$, $p = 0.026$. Thus, as hypothesized, gamers who were high in gamer identity concealment chose more stereotypical avatars for their partner than gamers low in gamer identity concealment, regardless of the gender of their partner.
Hypothesis 3. I predicted that the hypothesized relationships would be mediated by public discomfort, anger, and/or shame. Contrary to predictions, neither partner gender, gamer self-categorization, their interaction, nor their interactions with gamer identity concealment predicted public discomfort ($t < 1.34$, $p > 0.182$), anger ($t < 1.14$, $p > 0.255$), or shame ($t < 1.52$, $p > 0.133$). As the predictors were not related to the relevant mediators, mediation could not occur and moderated mediation analyses were not conducted.

Discussion

Study 3 examined whether concealment of gamer identity predicted gamers’ reactions to female partners in a cooperative video game. Because multiplayer video games are a frequent site of harassment for female gamers (e.g., Haniver, 2012; 2013), understanding how men evaluate female partners can aid in preventing harassment, with implications for harassment in other stereotypically masculine domains (e.g., technology, engineering). Several findings were consistent with hypotheses and the results of the previous studies.
As hypothesized, gamers who were high in gamer identity concealment chose more stereotypical avatars for their partners, regardless of their partner’s gender. Additionally, the more men concealed their gamer identity, the more negatively they evaluated their partners; men who more strongly concealed their gamer identity thought that their gamer partners would be more difficult to work with and less helpful when playing a video game. These results imply that gamers who are high in concealment may value traditional gender roles, leading them to dismiss the competence of other gamers and choose avatars for their partners that represent more stereotypical and polarized views of gender.

Consistent with the results of Study 2, but contrary to hypotheses and prior findings (Dahl et al., 2015), neither public discomfort, anger, nor shame mediated the observed effects. As in Study 2, this may indicate that female video game partners do not threaten men’s masculinity. This result could also indicate that men are generally accepting of the presence of women in gaming, but not other masculine domains (see Dahl et al., 2015). Importantly, however, this possibility is speculative and based on null results, and, therefore, in need of direct examination in future work.

Also consistent with the results of Study 2, but contrary to hypotheses, gamers who were high in gamer identity concealment felt more similar to a female partner than a male partner. On the one hand, this finding seems to be consistent with the suggestion that men who conceal their gamer identity may appear or feel more feminine, which leads them to rate themselves as more similar to a woman than to a man. On the other hand, this interpretation is at odds with the finding that men high in concealment evaluate their partners more negatively and choose more stereotypical avatars for their partners; if men actually felt more feminine than masculine, they
would be expected to also evaluate female partners more positively and not stereotype their partners in ways that are consistent with hegemonic conceptions of masculinity.

If men who conceal their gamer identity idealize hegemonic masculinity and view gender in a stereotypical and polarized way, why would they feel similar to female gamers? One possibility that is consistent with my original hypothesis that concealment is related to distancing from the femininity represented by gamer identity is that high concealing men are not accepting female gamers as much as they are rejecting male gamers. Evaluating a female game partner may not make stereotypes about male gamers salient, so high concealing men would not be as motivated to distance from female gamers as they are from male gamers. The motivation to distance from male gamers could result in a higher reported similarity to female gamers in the current study because there is no gender-free control partner, so this result may not actually reflect a true feeling of similarity to female gamers.

To try to determine whether high concealing men embody femininity or value traditional gender roles, Study 4 directly examined men’s thoughts and feelings about gamers by testing how gamer identity and concealment of gamer identity are related to perceived social stereotypes and personally held stereotypes about female and male gamers.
Chapter 6. STUDY 4: GAMER IDENTITY, ITS CONCEALMENT, AND MEN’S STEREOTYPES AND FEELINGS ABOUT GAMERS

The previous studies have found inconsistent results when measuring how men with varying identification as a gamer and concealment of their gamer identity reacted to female gamers, game developers, and game critics. Consistent with the pilot research and hypotheses, gamer identity buffered the effects of masculinity threats and consistently predicted lower levels of adherence to hegemonic masculinity norms. Concealment was related to more acceptance of harassment in the pilot study and Study 1b and more negative evaluations of gamer partners and gender stereotyping in Study 3. However, concealment also predicted more consideration of female game critics in Study 2 and feelings of greater similarity to female gamers in Study 3.

These inconsistent results may be explained by the way that highly concealing men stereotype women in gaming. As discussed in Studies 2 and 3, research on ambivalent sexism (Glick & Fiske, 2001) and the patronization of women (Vescio et al., 2005) shows that positive feelings about women do not necessarily translate to equal treatment of men and women. Rather, women can be placed on a pedestal where they are liked and praised, but not considered competent equals. Across studies, gamers have shown some patterns consistent with the patronizing treatment of women, namely the devaluation of female game developers’ games relative to male game developers’ games. Given the evidence that concealment of gamer identity predicts ambivalent sexism, acceptance of harassment, and increased gender-stereotyping, men who conceal their gamer identity may have positive feelings about women while simultaneously questioning their competence.

I used the stereotype content model (Fiske, Cuddy, Glick, & Xu, 2002) to form hypotheses about high concealing men’s stereotypes about male and female gamers. In the
stereotype content model, the two dimensions of competence and warmth form the basis of intergroup stereotypes. Feelings of admiration, contempt, envy, and pity toward members of social groups depend on levels of competence and warmth stereotyped for those groups. When considering ingroups and outgroups, high competence and warmth are associated with ingroups, whereas high warmth and low competence are associated with subordinate outgroups. Therefore, people high in gamer identity should have stereotypes and feelings about gamers that are associated with ingroups. Namely, higher gamer identity should be related to higher competence and warmth and feelings of admiration for gamers.

Using the logic of the stereotype content model can therefore help in determining what drives high concealing male gamers’ reactions to female gamers. If men’s concealment of their gamer identity is driven by feelings of similarity to female gamers, then higher concealment should predict stereotypes about female gamers that are associated with ingroups. If female gamers are considered to be more of an ingroup than male gamers, then high concealing men should rate female gamers as higher in competence and warmth than male gamers and feel more admiration for female gamers. However, if men’s concealment of their gamer identity is driven by stereotypical beliefs about masculine and feminine roles and the subordination of women, stereotypes about female gamers should reflect a mix of higher warmth, but lower competence compared to male gamers and consequently feelings of more pity for female gamers.

In addition to using the stereotype content model, assessing the effects of gamer identity and concealment on endorsement of specific gamer stereotypes can help to distinguish between thoughts about male and female gamers. Previous research about gamers has established a series of widely-shared stereotypes about online gamers (Kowert, et al., 2012) that include dimensions of popularity, attractiveness, idleness, and sociality. These dimensions reflect the stereotype that
gamers are unpopular, unattractive, lazy, and introverted/not social. The relationship between concealment and these particular negative views of gamers can be compared to assessments of competence as another indicator of how much women are patronized compared to men. If concealment is related to more positive stereotypes of women compared to men, such that they are seen as more popular, more attractive, less idle, and more social, but this positive stereotyping does not extend to greater ratings of competence for women, that would indicate that concealment is related to more patronizing rather than equal treatment of women.

Examining perceptions of stereotypes about male and female gamers also presents an opportunity to examine the extent to which gamer identity concealment is related to perceptions of society’s view of gamers. Gamer identity concealment should be related to a perception that society stereotypes gamers negatively, because that is why gamers may be motivated to conceal their gamer identity. However, there is no research that currently addresses why gamers may conceal their gamer identity. To examine this possibility, I measured perceptions of society’s endorsement of stereotypes in addition to measuring personal endorsement.

Based on the logic outlined above, I formed three hypotheses, which are summarized in the fourth row of Table 1 and explained in the following. My first hypothesis was that higher gamer identity will predict more personal endorsement of positive stereotypes (i.e., higher competence, higher warmth, fewer negative gamer stereotypes) and positive feelings (i.e., more admiration) about both female and male gamers. My second hypothesis was that gamer identity concealment will predict perceptions that society has more negative stereotypes (i.e., lower competence, lower warmth, more negative gamer stereotypes) and more negative feelings (i.e., less admiration, envy, more contempt, pity) about both male and female gamers. Reflecting my suggestion that concealment is related to men’s rejection of femininity, my third hypothesis was
that gamers high (vs. low) in concealment will personally stereotype female gamers as warmer, but less competent than male gamers, indicating a greater gender stereotyping of women rather than a greater inclusion of women in their ingroup. Additionally, I hypothesized that gamers high (vs. low) in concealment will stereotype female (vs. male) gamers as more popular, attractive, and social, but less idle, and will feel more pity and less admiration for female (vs. male) gamers.

**Method**

**Participants and Design.** Participants were 101 male workers on Amazon’s Mechanical Turk. Participants ranged in age from 19 to 75 ($M = 30.09$, $SD = 8.75$) and self-described as White (77.2%), Asian (8.9%), Black or African American (5.9%), Multiracial (5.0%), and Hispanic or Latino (3.0%). The study was a single factor (female gamer vs. male gamer) between-participants design.

**Procedure.** Participants completed a series of questionnaires in an online study about their perceptions of people who play video games. First, participants completed the gamer identity and concealment questions used in previous studies (see Appendices A and G). Participants then reported both their own view and society’s view (in a randomized order) of either male or female gamers’ competence, warmth, and specific gamer-related stereotypes (see Appendix T), and the feelings brought about by male or female gamers (see Appendix U). Participants then completed demographics measures, were debriefed, and thanked.

**Measures.**

*Gamer identity.* As measured in all previous studies ($\alpha = .88$).

*Gamer identity concealment.* Single item used in all previous studies.

*Gamer self-categorization.* Single item used in all previous studies.

---

11 The full sample included 200 participants (101 men, 95 women, 1 transgender, 2 other, and 1 prefer not to say), but only data from the men are included in the current analysis.
**Competence and warmth stereotypes.** Competence and warmth were assessed using 12 items from Fiske et al.’s (2012) stereotype content model (see Appendix T). Using five-point scales (1 = not at all; 5 = extremely) participants reported their perceptions of society’s and their own views on how competent (i.e., competent, confident, capable, efficient, intelligent, skillful) and warm (i.e., friendly, well-intentioned, trustworthy, warm, good-natured, sincere) either male or female gamers are. Appropriate items were reverse scored and averaged into two variables representing competence (α = .86), and warmth (α = .89) as viewed by society and two variables representing competence (α = .82), and warmth (α = .88) from participants’ own perspectives.

**Stereotypes about gamers.** Stereotypes about gamers were assessed using 16 items from Kowert, Griffiths, and Oldmeadow’s (2012) study on stereotypes of online gamers (see Appendix T). Using five-point scales (1 = not at all; 5 = extremely) participants reported their perceptions of society’s and their own views on how popular (i.e., well-groomed, fashionable, popular, athletic), attractive (i.e., attractive, overweight, solitary, obsessive), idle (i.e., young, underachieving, isolated, pale), and social (i.e., socially inept, lazy, reclusive, introverted) either male or female gamers are. Appropriate items were reverse scored and averaged into four variables representing popularity (α = .86), attractiveness (α = .82), idleness (α = .70), and sociality (α = .84) as viewed by society, and four variables representing popularity (α = .79), attractiveness (α = .70), idleness (α = .63), and sociality (α = .81) from participants’ own perspectives.

**Feelings about gamers.** Feelings about gamers were assessed using 17 items from Fiske et al.’s (2012) stereotype content model (see Appendix U). Using five-point scales (1 = not at all; 5 = extremely) participants reported their perceptions of society’s and their own views on how much male or female gamers make people like them feel admiration (i.e., admiring, fond,
inspired, proud, respectful), contempt (i.e., angry, ashamed, contemptuous, disgusted, frustrated, hateful, resentful, uneasy), envy (i.e., envious, jealous), and pity (i.e., pity, sympathetic).

Appropriate items were reverse scored and averaged into four variables representing admiration ($\alpha = .87$), contempt ($\alpha = .94$), envy ($\alpha = .83$), and pity ($\alpha = .32$) as viewed by society, and four variables representing admiration ($\alpha = .89$), contempt ($\alpha = .96$), envy ($\alpha = .74$), and pity ($\alpha = .15$) from participants’ own perspectives.

**Results**

Means and standard deviations for each variable, separated by condition, are presented in Table 12, and correlations between all variables are presented in Table 13. About 77% of the sample (78 men) self-categorized as gamers, and those who self-categorized as gamers were significantly higher in gamer identity ($M = 3.00$, $SD = 0.91$) than non-gamers ($M = 1.74$, $SD = 0.62$), $t(52.67) = -7.62$, $p < .001$, $d = 1.62$.

**Hypothesis 1.** My first hypothesis was that higher gamer identity would predict personal endorsement of more positive stereotypes and more positive feelings about both female and male gamers. To test this hypothesis, 10 hierarchical regression equations were calculated using gamer identity as the independent variable and each of the 10 variables representing stereotypes (competence, warmth, popularity, attractiveness, idleness, and sociality) and feelings (admiration, contempt, envy, and pity) about gamers. First, target gender and stereotype source order were dummy coded (target gender: female gamer = 0, male gamer = 1; stereotype source order: self-first = 0, society-first = 1) for use as control variables. Then gamer identity was mean-centered to reduce collinearity and aid in the interpretation of the interaction variables (Tabachnick & Fidell, 2006). In Step 1 of each regression, the dummy-coded target gender and

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12 $t$-tests with degrees of freedom less than 99 failed Levene’s test for equality of variances and use adjusted $t$ statistics. This did not change any of the relationships.
<table>
<thead>
<tr>
<th></th>
<th>Personally Held Stereotypes/Feelings</th>
<th>Perceived Social Stereotypes/Feelings</th>
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<tbody>
<tr>
<td></td>
<td>Overall ( (N = 101) )</td>
<td>Female Target ( (n = 53) )</td>
</tr>
<tr>
<td>Competence</td>
<td>3.40 (0.65)</td>
<td>3.49 (0.63)</td>
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<tr>
<td>Warmth</td>
<td>3.29 (0.72)</td>
<td>3.39 (0.68)</td>
</tr>
<tr>
<td>Popularity</td>
<td>2.63 (0.75)</td>
<td>2.94 (0.68)</td>
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<tr>
<td>Attractiveness</td>
<td>3.30 (0.75)</td>
<td>3.69 (0.65)</td>
</tr>
<tr>
<td>Idleness</td>
<td>2.61 (0.69)</td>
<td>2.43 (0.67)</td>
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<tr>
<td>Sociality</td>
<td>3.55 (0.84)</td>
<td>3.87 (0.80)</td>
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<tr>
<td>Admiration</td>
<td>2.59 (1.00)</td>
<td>2.67 (1.05)</td>
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<tr>
<td>Contempt</td>
<td>1.38 (0.68)</td>
<td>1.27 (0.64)</td>
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<tr>
<td>Envy</td>
<td>1.46 (0.73)</td>
<td>1.37 (0.69)</td>
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<tr>
<td>Pity</td>
<td>1.88 (0.80)</td>
<td>1.86 (0.76)</td>
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<tr>
<td>Concealment</td>
<td>1.76 (1.04)</td>
<td>1.74 (1.09)</td>
</tr>
<tr>
<td>Gamer Identity</td>
<td>2.71 (1.00)</td>
<td>2.76 (1.08)</td>
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</table>

**Note.** \( N = 101 \). Possible range of scores for all stereotype measures = 1 (not at all) to 5 (extremely), Concealment = 1 (seldom/never) to 5 (almost always/always), Gamer Identity = 1 (strongly disagree) to 5 (strongly agree). Differences between condition means are not indicated here because planned comparisons were made using regression analyses; the results of those comparisons are presented in Tables 14 through 16.
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<td>-</td>
<td>0.471***</td>
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<td>0.221*</td>
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<td>0.451***</td>
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†p < .10, * p < .05, ** p < .01, *** p < .001.
stereotype source order variables were entered as controls. In Step 2, gamer identity was entered to observe the main effect of gamer identity on each dependent variable. Finally, in Step 3, the interaction of target gender and gamer identity was entered to see if gamer identity predicted endorsement of each stereotype differently for male vs. female gamers. Results of all regression equations are presented in Table 14.

**Competence and warmth.** Gamer identity was not a significant predictor of competence or warmth (ts < 1.38, ps > .170), nor was its interaction with target gender (ts < 0.44, ps > .660).

**Specific gamer stereotypes.** Step 1 of the regressions revealed a main effect of target gender such that men overall found female (vs. male) gamers to be more popular, \( b = -0.65, se = 0.14, t(99) = -4.76, p < .001 \), more attractive, \( b = -0.82, se = 0.13, t(99) = -6.50, p < .001 \), less idle, \( b = 0.37, se = 0.13, t(99) = 2.74, p = .007 \), and more social, \( b = -0.67, se = 0.16, t(99) = -4.33, p < .001 \). Step 2 of the regressions revealed a main effect of gamer identity such that men who identified more as gamers thought that gamers overall were more popular, \( b = 0.13, se = 0.07, t(99) = 1.88, p = .062 \), more attractive, \( b = 0.17, se = 0.06, t(99) = 2.82, p = .006 \), less idle, \( b = -0.19, se = 0.07, t(99) = -2.85, p = .005 \), and more social, \( b = 0.22, se = 0.08, t(99) = 2.90, p = .005 \). The effect of gamer identity did not differ for female vs. male gamers, as the interaction between target gender and gamer identity in Step 3 was not significant for any of the dependent variables (ts < 1.03, ps > .308).

**Feelings about gamers.** Step 2 of the regression for admiration revealed a main effect of gamer identity such that men higher in gamer identity felt more admiration for gamers, \( b = 0.41, se = 0.09, t(99) = 4.42, p < .001 \). This effect was not moderated by target gender, \( p = .548 \).

As hypothesized, the more that a man identified as a gamer, the more positive his stereotypes and admiration were of gamers as a whole. This lines up with the general proposition
Table 1

Unstandardized Regression Coefficients for Personally Held Stereotypes using Gamer Identity as a Predictor in Study 4

<table>
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<tr>
<th></th>
<th>Competence</th>
<th>Warmth</th>
<th>Popularity</th>
<th>Attractiveness</th>
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<td></td>
<td>b (SE)</td>
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<td>ΔR²</td>
<td>b (SE)</td>
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<td><strong>Step 1</strong></td>
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<tr>
<td>Target Gender</td>
<td>-0.19 (0.13)</td>
<td>-1.45</td>
<td>-0.22 (0.14)</td>
<td>-1.52</td>
</tr>
<tr>
<td>Source Order</td>
<td>0.13 (0.13)</td>
<td>1.01</td>
<td>0.02 (0.14)</td>
<td>0.16</td>
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<tr>
<td><strong>Step 2</strong></td>
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<tr>
<td>Gamer Identity</td>
<td>0.09 (0.06)</td>
<td>1.32</td>
<td>0.10 (0.07)</td>
<td>1.38</td>
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<td><strong>Step 3</strong></td>
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<td>Target × GID</td>
<td>-0.03 (0.13)</td>
<td>-0.24</td>
<td>0.07 (0.15)</td>
<td>0.43</td>
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<tr>
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<tr>
<td>Target Gender</td>
<td>0.37 (0.13)</td>
<td>2.74**</td>
<td>-0.67 (0.16)</td>
<td>-4.33***</td>
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<tr>
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<tr>
<td>Gamer Identity</td>
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<td>-2.85**</td>
<td>0.22 (0.08)</td>
<td>2.90**</td>
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<td><strong>Step 3</strong></td>
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<tr>
<td>Target × GID</td>
<td>0.14 (0.13)</td>
<td>1.02</td>
<td>0.05 (0.16)</td>
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<th>Attractiveness</th>
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<td>t</td>
<td>ΔR²</td>
<td>b (SE)</td>
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<tr>
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<td>0.18 (0.15)</td>
<td>1.24</td>
<td>0.06 (0.16)</td>
<td>0.35</td>
</tr>
<tr>
<td>Source Order</td>
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<td>-0.28</td>
<td>0.11 (0.16)</td>
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</tr>
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<tr>
<td>Target × GID</td>
<td>0.12 (0.15)</td>
<td>0.76</td>
<td>-0.16 (0.17)</td>
<td>-0.96</td>
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*p < .10, *p < .05, **p < .01, ***p < .001.
from social identity theory (e.g., Tajfel & Turner, 1979) that stronger identification with a group increases positive thoughts and feelings toward members of that group. Importantly, opinions of gamers did not differ when considering male vs. female gamers, indicating that gender was not a deciding factor in how gamers assessed members of their ingroup.

**Hypothesis 2.** My second hypothesis was that gamer identity concealment would predict more negative societal stereotypes and more negative feelings about both male and female gamers. To test this hypothesis, I used the same method as for hypothesis 1. In this analysis, however, I mean-centered gamer identity concealment for used in the regressions and the dependent variables were the 10 variables representing perceptions of society’s stereotypes and feelings about gamers. Results of all regression equations are presented in Table 15.

**Competence and warmth.** Step 1 of the regressions revealed that men overall perceived society as stereotyping female (vs. male) gamers as both more competent, $b = -0.44$, $se = 0.15$, $t(99) = -2.96$, $p = .004$, and more warm, $b = -0.51$, $se = 0.14$, $t(99) = -3.53$, $p = .001$. Step 2 of the warmth regression revealed a main effect of concealment such that men who concealed more thought that society stereotypes gamers overall as less warm, $b = -0.12$, $se = 0.07$, $t(99) = -1.67$, $p = .099$. In Step 3 of the competence regression, the main effect of target gender was qualified by an interaction with gamer identity concealment, $b = 0.25$, $se = 0.14$, $t(99) = 1.79$, $p = .076$.

As shown in Figure 9, men low in gamer identity concealment (scale minimum) perceived that society stereotypes female gamers as more competent than male gamers, $b = -0.63$, $se = 0.18$, $t(99) = -3.46$, $p = .001$, but men high in gamer identity concealment (+1 SD) did not perceive that society stereotypes male and female gamers’ competence differently, $b = -0.17$, $se = 0.21$, $t(99) = -0.83$, $p = .409$. As a result, men low in gamer identity concealment perceived
Table 16
Unstandardized Regression Coefficients for Perceived Social Stereotypes using Concealment as a Predictor in Study 4

<table>
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<th>Popularity</th>
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<th>Attractiveness</th>
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<td>t</td>
<td>ΔR²</td>
<td>b (SE)</td>
<td>t</td>
<td>ΔR²</td>
<td>b (SE)</td>
<td>t</td>
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<td>-2.96**</td>
<td>0.10**</td>
<td>-0.51 (0.14)</td>
<td>-3.53**</td>
<td>0.12**</td>
<td>-0.81 (0.17)</td>
<td>-4.65***</td>
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<td>-0.16 (0.14)</td>
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<td>-0.07 (0.17)</td>
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<td>-1.67†</td>
<td></td>
<td>-0.02 (0.08)</td>
<td>-0.28</td>
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<td>-1.59</td>
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<td>0.02</td>
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<tr>
<td><strong>Step 3</strong></td>
<td>0.25 (0.14)</td>
<td>1.79†</td>
<td></td>
<td>0.19 (0.14)</td>
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<td>0.20 (0.14)</td>
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<td>Target × Conc.</td>
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</tbody>
</table>

| Idleness             |           |                      |        |                      |            |                      |                  |                      |                  |
|                      | b (SE)     | t                    | ΔR²    | b (SE)               | t          | ΔR²                  | b (SE)         | t                    | ΔR²              |
| **Step 1**           | 0.46 (0.16) | 2.81**               | 0.08*  | -0.78 (0.19)          | -4.09***   | 0.15***              | -0.18 (0.19)   | -0.98                | 0.01              |
| Target Gender        | 0.17 (0.16) | 1.05                 |        | -0.09 (0.19)          | -0.46      |                      | -0.04 (0.19)   | -0.22                |                  |
| **Step 2**           | 0.17 (0.08) | 2.19*                | 0.04*  | 0.02                  |            |                      |                  | 0.00                 | 0.15***           |
| Concealment          |            |                      |        |                      |            |                      |                  |                      |                  |
| **Step 3**           | -0.03 (0.16) | -0.20                | 0.00   | 0.17 (0.19)           | 0.89       |                      | 0.09 (0.18)    | 0.51                 | 0.00              |
| Target × Conc.       |            |                      |        |                      |            |                      |                  |                      |                  |

| Sociality            |           |                      |        |                      |            |                      |                  |                      |                  |
|                      | b (SE)     | t                    | ΔR²    | b (SE)               | t          | ΔR²                  | b (SE)         | t                    | ΔR²              |
| **Step 1**           | 0.04 (0.17) | 0.23                 | 0.00   | 0.25 (0.15)           | 1.66       |                      |                  |                      | 0.04              |
| Target Gender        | 0.00 (0.17) | 0.01                 |        | 0.16 (0.15)           | 1.05       |                      |                  |                      |                  |
| **Step 2**           | 0.34 (0.08) | 4.43***              | 0.17*** | 0.21 (0.07)          | 3.00**     |                      |                  |                      | 0.08**            |
| Concealment          |            |                      |        |                      |            |                      |                  |                      |                  |
| **Step 3**           | -0.15 (0.16) | -0.98                | 0.01   | -0.02 (0.14)          | -0.11      |                      |                  |                      |                  |
| Target × Conc.       |            |                      |        |                      |            |                      |                  |                      |                  |

| Admiration           |           |                      |        |                      |            |                      |                  |                      |                  |
|                      | b (SE)     | t                    | ΔR²    | b (SE)               | t          | ΔR²                  | b (SE)         | t                    | ΔR²              |
| **Step 1**           | -0.03 (0.16) | -0.20                | 0.00   | 0.17 (0.19)           | 0.89       |                      | 0.09 (0.18)    | 0.51                 | 0.00              |
| Target Gender        |            |                      |        |                      |            |                      |                  |                      |                  |
| **Step 2**           | -0.15 (0.16) | -0.98                | 0.01   | -0.02 (0.14)          | -0.11      |                      |                  |                      |                  |
| Target × Conc.       |            |                      |        |                      |            |                      |                  |                      |                  |

| Contempt             |           |                      |        |                      |            |                      |                  |                      |                  |
|                      | b (SE)     | t                    | ΔR²    | b (SE)               | t          | ΔR²                  | b (SE)         | t                    | ΔR²              |
| **Step 1**           | -0.15 (0.16) | -0.98                | 0.00   | 0.17 (0.19)           | 0.89       |                      | 0.09 (0.18)    | 0.51                 | 0.00              |
| Target Gender        |            |                      |        |                      |            |                      |                  |                      |                  |
| **Step 2**           | -0.15 (0.16) | -0.98                | 0.00   | -0.02 (0.14)          | -0.11      |                      |                  |                      |                  |
| Target × Conc.       |            |                      |        |                      |            |                      |                  |                      |                  |

| Envy                 |           |                      |        |                      |            |                      |                  |                      |                  |
|                      | b (SE)     | t                    | ΔR²    | b (SE)               | t          | ΔR²                  | b (SE)         | t                    | ΔR²              |
| **Step 1**           | 0.04 (0.17) | 0.23                 | 0.00   | 0.25 (0.15)           | 1.66       |                      |                  |                      | 0.04              |
| Target Gender        | 0.00 (0.17) | 0.01                 |        | 0.16 (0.15)           | 1.05       |                      |                  |                      |                  |
| **Step 2**           | 0.34 (0.08) | 4.43***              | 0.17*** | 0.21 (0.07)          | 3.00**     |                      |                  |                      | 0.08**            |
| Concealment          |            |                      |        |                      |            |                      |                  |                      |                  |
| **Step 3**           | -0.15 (0.16) | -0.98                | 0.01   | -0.02 (0.14)          | -0.11      |                      |                  |                      |                  |
| Target × Conc.       |            |                      |        |                      |            |                      |                  |                      |                  |

| Pity                 |           |                      |        |                      |            |                      |                  |                      |                  |
|                      | b (SE)     | t                    | ΔR²    | b (SE)               | t          | ΔR²                  | b (SE)         | t                    | ΔR²              |
| **Step 1**           | 0.04 (0.17) | 0.23                 | 0.00   | 0.25 (0.15)           | 1.66       |                      |                  |                      | 0.04              |
| Target Gender        | 0.00 (0.17) | 0.01                 |        | 0.16 (0.15)           | 1.05       |                      |                  |                      |                  |
| **Step 2**           | 0.34 (0.08) | 4.43***              | 0.17*** | 0.21 (0.07)          | 3.00**     |                      |                  |                      | 0.08**            |
| Concealment          |            |                      |        |                      |            |                      |                  |                      |                  |
| **Step 3**           | -0.15 (0.16) | -0.98                | 0.01   | -0.02 (0.14)          | -0.11      |                      |                  |                      |                  |
| Target × Conc.       |            |                      |        |                      |            |                      |                  |                      |                  |

* p < .10, ** p < .05, *** p < .01, **** p < .001.
that society stereotypes female gamers as more competent than men high in gamer identity concealment, $b = -0.22$, $se = 0.09$, $t(99) = -2.39$, $p = .019$, but there was no difference between high and low gamer identity concealment men’s perceptions of society’s stereotypes of male gamers’ competence, $b = 0.03$, $se = 0.11$, $t(99) = 0.32$, $p = .753$.

**Specific gamer stereotypes.** Step 1 of the regressions revealed that men overall perceived society as stereotyping female (vs. male) gamers as more popular, $b = -0.81$, $se = 0.17$, $t(99) = -4.65$, $p < .001$, more attractive, $b = -0.96$, $se = 0.17$, $t(99) = -5.82$, $p < .001$, less idle, $b = 0.46$, $se = 0.16$, $t(99) = 2.81$, $p = .006$, and more social, $b = -0.78$, $se = 0.19$, $t(99) = -4.09$, $p < .001$. Step 2 of the regressions revealed that men who concealed more thought that society stereotypes gamers overall as more idle, $b = 0.17$, $se = 0.08$, $t(99) = 2.19$, $p = .031$. These effects did not differ based on target gender as the interaction between target gender and concealment in Step 3 was not significant for any of the dependent variables ($ts < 1.18$, $ps > .244$).
Feelings about gamers. Step 2 of the regressions found that men who concealed more thought that society feels more contempt, \( b = 0.29, se = 0.07, t(99) = 4.08, p < .001 \), more envy, \( b = 0.34, se = 0.08, t(99) = 4.43, p < .001 \), and more pity, \( b = 0.21, se = 0.07, t(99) = 3.00, p = .003 \), for gamers overall. These effects did not differ based on target gender as the interaction between target gender and concealment in Step 3 was not significant for any of the dependent variables (\( ts < 0.99, ps > .327 \)).

These findings are consistent with my hypothesis that men who are high in concealment perceive more negative social stereotypes about gamers. Interestingly, higher concealers thought that social stereotypes about competence were equally low for male and female gamers, whereas low concealers were more similar to the overall effect of target gender where men thought that social stereotypes of competence are higher for female gamers than male gamers.

Hypothesis 3. My third hypothesis was that gamers high (vs. low) in concealment would personally stereotype female gamers as warmer, but less competent than male gamers, but otherwise have more positive stereotypes about female gamers compared to male gamers and feelings consistent with ingroups for male gamers, but not female gamers (i.e., more admiration and envy for male gamers, but more contempt and pity for female gamers). To test this hypothesis, I used the same method as for hypothesis 2, but using the 10 variables representing personally held stereotypes and feelings rather than social stereotypes and feelings. Results of all regression equations are presented in Table 16. Because Step 1 of these regressions are the same equations as used for Hypothesis 1, those results are not repeated here.
Table 17
Unstandardized Regression Coefficients for Personally Held Stereotypes using Concealment as a Predictor in Study 4

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<td>t</td>
<td>ΔR²</td>
<td>b (SE)</td>
<td>t</td>
<td>ΔR²</td>
<td>b (SE)</td>
</tr>
<tr>
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<td></td>
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<tr>
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<td>0.03†</td>
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<tr>
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<td>-1.68†</td>
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<td>-0.03 (0.07)</td>
</tr>
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<tr>
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<td>-4.33***</td>
<td>-0.16 (0.20)</td>
<td>-0.79</td>
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<td>b (SE)</td>
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<td>0.06 (0.16)</td>
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<td>0.19***</td>
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|                     | Pity       |          |          |          |          |          |          |
|---------------------|------------|----------|----------|----------|          |----------|----------|
|                     | b (SE)     | t        | ΔR²      | b (SE)   | t        | ΔR²      | b (SE)   | t        |
| **Step 1**          |            |          |          |          |          |          |          |          |
| Target Gender       | -0.01 (0.13) | -0.07   | -0.07 (0.14) | -0.50   |          |          |          |          |

†p < .10, *p < .05, **p < .01, ***p < .001.
**Competence and warmth.** Step 2 of the regressions revealed a main effect of concealment such that men who conceal more stereotype gamers overall as less competent, $b = -0.12$, $se = 0.06$, $t(99) = -1.89$, $p = .062$, and less warm, $b = -0.12$, $se = 0.07$, $t(99) = -1.68$, $p = .097$. In Step 3 the main effect of concealment on competence was qualified by an interaction with target gender, $b = 0.24$, $se = 0.12$, $t(99) = 1.97$, $p = .052$.

As shown in Figure 10, men low in gamer identity concealment (scale minimum) stereotyped female gamers as more competent than male gamers, $b = -0.37$, $se = 0.16$, $t(99) = -2.34$, $p = .022$, but men high in gamer identity concealment (+1 SD) did not stereotype male and female gamers’ competence differently, $b = 0.07$, $se = 0.18$, $t(99) = 0.38$, $p = .708$. As a result, men low in gamer identity concealment stereotyped female gamers as more competent than men high in gamer identity concealment did, $b = -0.22$, $se = 0.08$, $t(99) = -2.74$, $p = .007$, but there was no difference between high and low gamer identity concealment men’s stereotypes of male gamers’ competence, $b = 0.02$, $se = 0.09$, $t(99) = 0.24$, $p = .810$.

![Figure 10](image_url)

*Figure 10.* Interaction between Target Gender and Gamer Identity Concealment on Personal Endorsement of Stereotypes of Competence in Study 4.  
* $p < .05$, ** $p < .01$
Specific gamer stereotypes. Step 2 of the regressions revealed that men who concealed more stereotyped gamers overall as more idle, $b = 0.15$, $se = 0.06$, $t(99) = 2.38$, $p = .019$, and less social, $b = -0.13$, $se = 0.07$, $t(99) = -1.80$, $p = .075$. In Step 3 the main effect of concealment was qualified by an interaction with target gender for attractiveness, $b = 0.33$, $se = 0.12$, $t(99) = 2.74$, $p = .007$, and sociality, $b = 0.34$, $se = 0.15$, $t(99) = 2.33$, $p = .022$.

As shown in Figure 11, men low in gamer identity concealment (scale minimum), $b = -1.07$, $se = 0.15$, $t(99) = -7.01$, $p < .001$, and men high in gamer identity concealment (+1 SD), $b = -0.48$, $se = 0.17$, $t(99) = -2.80$, $p = .006$ stereotyped female gamers as being more attractive than male gamers. However, because the difference was greater for men low in concealment, men high in concealment stereotyped female gamers as less attractive than men low in gamer identity concealment did, $b = -0.23$, $se = 0.08$, $t(99) = -2.93$, $p = .004$, but there was no difference between high and low gamer identity concealment men’s stereotypes of male gamers’ attractiveness, $b = 0.10$, $se = 0.09$, $t(99) = 1.10$, $p = .274$.

![Figure 11](image-url)

Figure 11. Interaction between Target Gender and Gamer Identity Concealment on Personal Endorsement of Stereotypes of Attractiveness in Study 4.

* $p < .05$, ** $p < .01$, *** $p < .001$
As shown in Figure 12, men low in gamer identity concealment (scale minimum) stereotyped female gamers as more social than male gamers, $b = -0.93$, $se = 0.19$, $t(99) = -4.95$, $p < .001$, but men high in gamer identity concealment (+1 SD) did not stereotype male and female gamers’ sociality differently, $b = -0.31$, $se = 0.21$, $t(99) = -1.47$, $p = .144$. As a result, men low in gamer identity concealment stereotyped female gamers as more social than men high in gamer identity concealment did, $b = -0.28$, $se = 0.10$, $t(99) = -2.92$, $p = .004$, but there was no difference between high and low gamer identity concealment men’s stereotypes of male gamers’ sociality, $b = 0.06$, $se = 0.11$, $t(99) = 0.57$, $p = .569$.

**Feelings about gamers.** Step 2 of the regressions found that men who concealed more felt more contempt, $b = 0.29$, $se = 0.06$, $t(99) = 4.88$, $p < .001$, more envy, $b = 0.31$, $se = 0.06$, $t(99) = 4.93$, $p < .001$, and more pity, $b = 0.33$, $se = 0.07$, $t(99) = 4.72$, $p < .001$, for gamers. These effects did not differ based on target gender as the interaction between target gender and concealment in Step 3 was not significant for any dependent variable ($ts < 0.51$, $ps > .616$).

Figure 12. Interaction between Target Gender and Gamer Identity Concealment on Personal Endorsement of Stereotypes of Sociality in Study 4.

** $p < .01$, *** $p < .001$
Overall, concealment was related to men’s personal endorsement of stereotypes in very similar ways as it was to their perception of society’s endorsement of stereotypes. As hypothesized, men high in gamer identity concealment stereotyped female gamers as less competent than men low in gamer identity concealment did. However, men high in identity concealment did not stereotype female gamers as being less competent or warmer than male gamers. Likewise, men high in concealment rated female gamers as less attractive and less social than men low in concealment, showing a somewhat more negative perception of female gamers.

**Discussion**

The main purpose of Study 4 was to clarify the inconsistent results from the previous studies. Because gamer identity concealment was related to the hypothesized negative outcomes (i.e., more acceptance of harassment, more negative evaluations of gamer partners, and gender stereotyping), but also other seemingly positive outcomes (i.e., more consideration of female game critics and feelings of greater similarity to female gamers), it was unclear how concealment was related to the treatment of women in gaming. The results of the current study were consistent with hypotheses overall and further supported the idea that gamer identity can act as an alternative masculinity that reduces sexist treatment of women in gaming.

First, greater identification as a gamer predicted more positive stereotypes of gamers overall and more feelings of admiration for gamers overall. This is expected of someone rating a group to which they belong, but importantly, these effects were not moderated by target gender. In other words, men who identified more as gamers thought of gamers more positively regardless of their gender.

Second, as predicted, gamer identity concealment predicted perceptions that society’s stereotypes and feelings about gamers are more negative. It makes sense that men who conceal
their gamer identity more also perceive that society has more negative impressions of gamers as society’s thoughts about gamers are presumably a motivating factor for men’s concealment of their gamer identity. While there were overall effects such that men thought that society stereotyped female gamers more positively, the effects of concealment were generally not affected by target gender. Only in the instance of competence was there an interaction such that low concealers thought that society stereotyped female gamers as more competent than male gamers. This aligns low concealers more with the main effect of target gender, meaning that the effect may be driven by high concealers perceiving that society-wide stereotypes about female gamers’ competence are more negative.

Lastly, concealment generally affected men’s personal endorsement of stereotypes in similar ways as it affected their perceptions of social stereotypes, with a few exceptions. Importantly, high (vs. low) concealers personally endorsed stereotypes that female gamers are less competent. High concealers also stereotyped female gamers as less attractive and social than low concealers did. Overall, higher concealment also predicted more contempt, envy, and pity for gamers. While envy is usually reserved for high competence and low warmth groups members, the lack of admiration for gamers and an association with contempt and pity imply that high concealers think of gamers in general as low status, low competence, and low warmth. Because high concealing gamers personally endorse negative stereotypes about gamers, they may be motivated to distance themselves from gamer identity and therefore think of gamers as an outgroup. Thus, high concealers are not as inclusive of female gamers and stereotypes based on gender are more salient and important for them.

Taken together, these results support my original assertion that gamer identity represents an alternative masculinity whereas concealment is associated with more stereotypical views of
gender. The more men identified as gamers, the more positively they stereotyped both male and female gamers. The lack of dependence on target gender indicates that gamers may include female gamers in their ingroup the same way as male gamers. Effects of concealment, however, often depended on whether or not men were thinking about female or male gamers. Most importantly, high concealers stereotyped female gamers as less competent. Combined with the fact that high concealers thought of gamers in general as more contemptible and pitiful, there is a clear disdain for gamers, and especially female gamers.
Chapter 7. GENERAL DISCUSSION

The current studies extend psychological research on masculinity by examining the consequences of embracing vs. concealing an alternative masculinity – gamer identity. Previous masculinity research has primarily focused on the construction of hegemonic masculinity norms (e.g., Thompson & Pleck, 1986), the correlates of adherence to hegemonic masculinity norms (e.g., Kilianski, 2003), and the effects of threats to hegemonic masculinity on men’s sexism (e.g., Dahl et al., 2015), aggression (e.g., Vandello et al., 2008), and discrimination (e.g., Weaver & Vescio, 2015). To the best of my knowledge, this research is the first to examine the possibility that an alternative to the ideals of hegemonic masculinity buffers the negative effects of masculinity threats and can positively affect men’s behavior toward women.

Across these six studies, I examined (a) whether gamer identity had the characteristics of an alternative masculinity and (b) how embracing vs. concealing a gamer identity affects men’s treatment of women who participate in gaming. First, I will describe how the results support my contention that gamer identity is an alternative masculinity. Second, I will describe how gamer identity was related to men’s treatment of women who develop, critique, and play video games.

Is Gamer Identity an Alternative Masculinity?

As outlined in the introduction, gamer identity has a unique relationship with hegemonic masculinity, which creates the opportunity for it to act as an alternative masculinity. Similar to the way that honor cultures in the southern United States emphasize certain aspects of masculinity (e.g., Cohen et al., 1996), I argue that the history of video games as a pastime for computer nerds created a culture that de-emphasizes certain aspects of masculinity. Thus, when men embrace their gamer identity they may be able to defy what is traditionally expected of men,
creating an alternative to hegemonic masculinity that is less focused on some of the more harmful aspects of hegemonic masculinity.

Across studies, results were consistent with the idea that a gamer identity is an alternative masculinity. In the pilot study, gamer identity was negatively correlated with restrictive emotionality and preferences for competition in games. Those who identified more as gamers experienced less conflict about expressing their emotions and preferred cooperation over competition. Across Studies 1a, 2, and 3, gamers were also consistently lower in adherence to hegemonic masculinity norms than were non-gamers. This included key aspects of masculinity that are directly related to men’s treatment of women: anti-femininity, dominance, and toughness. Overall, these results show that gamers, compared to non-gamers, did not struggle as much with restricting their emotions, did not desire as much competition, and did not believe as strongly that men should always avoid feminine behaviors, dominate groups, or be physically tough.

There were two notable exceptions to gamers’ pattern of adherence to masculinity in Studies 1b and 3. In Study 1b, gamers were lower than non-gamers in adherence to hegemonic masculinity norms, but these differences were not statistically reliable and may be due to the fact that the individual differences were reported after the masculinity threat and after listening to audio clips of a female gamer being harassed. Although the masculinity threat only affected levels of gamer identity, the threat and/or harassment audio clips may have affected the way that men thought about their adherence to hegemonic masculinity norms. In Study 3, gamers adhered less to hegemonic masculinity norms overall than non-gamers, like in Studies 1a and 2, but the effects disappeared when controlling for age. In both Studies 2 and 3, age was an important predictor of adherence to hegemonic masculinity norms, with older men tending to adhere more
than younger men. Age is also conflated with gamer identity in Studies 2 and 3; as younger men tended to identify more as gamers than did older men. However, it is important to note that even among a younger sample composed of undergraduates (Study 1a), gamers were less adherent to hegemonic masculinity norms than non-gamers, and age did not fully explain this relationship (Study 2). Thus, together, the results suggest that men who identify as gamers adhere less to hegemonic masculinity norms regardless of age.

Despite the above exceptions, the pattern of findings across studies indicated that gamer identity can be conceptualized as an alternative masculinity that minimizes the harmful effect of hegemonic masculinity norms on men. Specifically, men who identify as gamers, compared to non-gamers, do not strongly value aspects of masculinity that often lead men to derogate and distance from women, including anti-femininity, dominance, and toughness. These findings are consistent with the idea that men who embrace a gamer identity may be more accepting of women than men who do not embrace a gamer identity. In the following section I consider what my results mean for the treatment of women in gaming.

**How Does Gamer Identity and its Concealment Affect the Treatment of Women in Gaming?**

I argue that gamer identity, as an alternative masculinity, may allow men to be more accepting of women because, in contrast to the prescriptions of hegemonic masculinity, the rejection of women is not necessary to prove masculinity. However, men who enjoy playing video games, but do not embrace gamer identity as an alternative masculinity, given the possible stigmatization that may occur, should be motivated to distinguish themselves from women to prove they adhere to ideals of hegemonic masculinity.
Following the above logic, I predicted that men who embrace, rather than conceal, a gamer identity would be more accepting of women in gaming. Inversely, I predicted that men who conceal their gamer identity, presumably to avoid stigma and to adhere to hegemonic masculinity norms, would distance from and exclude women from gaming. Findings across studies support this general hypothesis, but also present a complex picture of gamer identity that includes both positive and negative ramifications.

Acceptance of the harassment of a female gamer. In the pilot study, higher gamer identity predicted less comfort with the gender harassment of a female gamer, whereas higher concealment predicted greater comfort with the sexual harassment of a female gamer. In other words, there were opposing relationships such that more highly identified gamers thought that harassment was less acceptable, whereas more highly concealing gamers though that harassment was more acceptable.

In Studies 1a and 1b, I additionally manipulated masculinity threat to examine the causal relationships between masculinity threats, gamer identity, concealment, and acceptance of harassment. In Study 1a, as predicted, masculinity threat led to less acceptance of harassment for men high (vs. low) in gamer identity. Contrary to hypotheses, however, masculinity threats did not affect desires to conceal gamer identity in Study 1a and were not moderated by concealment in Study 1b. However, like in the pilot study, higher dispositional gamer identity concealment predicted rating sexual harassment as more comfortable for a female gamer. Thus, concealment was an important predictor of men’s acceptance of harassment, but threats to masculinity did not affect how much gamers concealed their gamer identity. Together, the results of the pilot study and Studies 1a and 1b show that gamer identity may, in part, be related to less acceptance of harassment because it allows men to deflect threats to their masculinity and resist the need to
prove their masculinity by derogating women. These results support my logic that gamer identity is an alternative masculinity that allows men to defy traditional expectations of masculinity and not derogate women to prove their masculinity.

While the pilot study and Studies 1a and 1b consider how gamers react to important instances of harassment that frequently occur in gaming, they do not measure how men themselves participate in behaviors that exclude women from gaming communities. Harassment may also be more blatantly negative than other behaviors that also contribute to the rejection of women in gaming and therefore men may be more motivated to distance themselves from it. Besides blatant harassment, women can also be excluded from gaming in more subtle ways by devaluing their contributions and competence compared to men. The next series of studies were meant to evaluate how gamer identity and concealment are implicated in examples of such subtler exclusion.

**Treatment of female game developers, game critics, and gamers.** In Studies 2 and 3, I turned my attention to the question of how concealment is related to the value placed on the contributions of female game developers, critics, and game partners.

In Study 2, participants reported expected enjoyment and monetary value of a video game that was developed by either a man or a woman, then read a negative review of that game written by either a man or a woman and reported expected enjoyment and value again. Gamers overall were resistant to changing their enjoyment ratings about a game developed by a woman when it was reviewed negatively, but gamers initially valued a game developed by a man more than one developed by a woman. The fact that gamers seemed to consider a game developed by woman as more enjoyable, but were unwilling to spend equal amounts of money on a game developed by a woman may be a form of sugar-coated sexism (e.g., Vescio et al., 2005). Gamers may feel
positively about female developers, but at the same time gamers are not willing to pay as much for women’s games. Similarly, enjoyment ratings by high (vs. low) concealing men were more affected by a woman’s criticism, which seemed to indicate that men who conceal were giving more consideration to the female critic’s opinion. However, this was not true when considering the value of the game, indicating that concealment may also be related to sugar-coated sexism.

In Study 3, participants were ostensibly assigned to a female or male partner with whom they would play a cooperative video game and were asked to evaluate their partner and select avatars for themselves and their partner. Somewhat consistent with predictions, high (vs. low) concealing gamers evaluated partners more negatively and chose to represent their partners with more gender-stereotypical avatars. These results indicate that high concealing gamers may perceive other gamers to be incompetent and prefer rigid gender stereotypes. Seemingly in contradiction to these results, high concealing gamers rated themselves as more similar to a female gamer than to a male gamer. It is possible that the ratings of similarity are an indication of truly felt similarity to women. However, that interpretation is inconsistent with the other results of Study 3 and the results of the pilot study and Study 1b where concealment was related to a greater acceptance of harassment. It could also be that (a) highly concealing men are distancing from male gamers and that desire is driving the greater ratings of similarity to female gamers or (b) that the similarity ratings are another superficial way concealing men patronize female gamers by viewing them positively in a superficial way while at the same time not viewing a female gamer as competent in the task at hand.

To clarify the inconsistent relationships between gamer identity, concealment, and treatment of women in gaming, I conducted Study 4 to determine the stereotypes that gamers hold and perceive that others in society hold about male and female gamers. Consistent with
predictions, higher gamer identity predicted greater personal endorsement of positive stereotypes and feelings about both male and female gamers. In contrast, higher concealment was related to greater personal endorsement of negative stereotypes and feelings about gamers in general and in particular a diminishment of female gamers’ competence. Thus, men who conceal their gamer identity appear to have internalized negative stereotypes about gamers and may be distancing from gamer identity because they do not desire to be part of that group. Given these results, it seems unlikely that high concealing gamers’ ratings of similarity to women in Study 3 represent true feelings of greater similarity to female gamers than to male gamers. Instead, the results seem more consistent with the interpretation that high concealing gamers are distancing from male gamers and generally treating female gamers in a more patronizing way that seems superficially positive.

Across studies, results indicated that gamer identity can lead to both positive and negative treatment of women, but that concealment is generally related to an exacerbation of negative treatment. Some of the positive ways that gamers treat women may be the result of patronizing treatment that praises or elevates women in a superficial way while simultaneously giving men more valued resources. Gamers may be less accepting of harassment in the pilot study and Study 1a not because they respect female gamers and view them as equals, but because they feel positively about women and desire to protect them. Thus, when gamers consider women’s contributions as developers and critics, they are not as valued as men. However, while gamers overall treated women in some patronizing ways, those who were high in concealment treated women more negatively. As indicated by high concealing men’s evaluations of gamers in Study 3 and stereotypes of gamers in Study 4, they believe that gamers are not particularly competent and being a gamer is not a desirable identity. In addition, high (vs. low) concealing men
stereotyped female gamers as less competent, indicating that they not only believe that gamers overall are incompetent and undesirable, but women are particularly less competent.

**Accepting Women in Gaming as Part of a Common Ingroup**

While the results of these studies show that gamers may treat women in patronizing ways, there are also indications that gamers who embrace their identity are more accepting of women as part of their ingroup. Men who identify more as gamers have more positive stereotypes about both male and female gamers, and are equally positive in their feelings about male and female gamers (Study 4). In contrast, men who concealed their gamer identity chose more stereotypical avatars to represent partners (Study 3) and endorsed stereotypes that female gamers were less competent (Study 4). Because high (vs. low) concealing men think of gamers overall more negatively and distance themselves from that identity, they are not able to use that identity as a common reference for themselves and women.

Research using the common ingroup identity model of prejudice reduction shows that prejudice between members of different social groups can be reduced by encouraging people from those groups to focus on a common group identity (e.g., Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993). For example, white Americans and black Americans belong to different racial groups, and ingroup-favoring biases lead white Americans to favor other white Americans, resulting in prejudicial treatment of black Americans. By focusing on nationality as a common identity, the ingroup-favoring biases that lead white Americans to be prejudiced against black Americans when their racial differences are salient are altered to include both white and black Americans as ingroup members. Thus, both black and white Americans become beneficiaries of the same ingroup-favoring biases and prejudice between black and white Americans based on their racial differences is reduced.
Applying the common ingroup identity model to gamer identity, men who identify themselves and women under the same gamer identity may be less sexist. Accepting women as part of a gaming ingroup is a positive step toward gender equity in the gaming industry. If women were better represented within game development, narratives, and journalism, gender stereotypes may be more likely to be challenged. Therefore, even though gaming is generally a male-dominated domain, it may be beneficial to encourage men to embrace an identity as a gamer as it can diminish the importance of gender as a distinguishing factor in gaming communities and increase women’s representation.

Limitations

There are several ways the current research could be improved and extended. First, the measure of concealment across studies only represents one possible kind of concealment. Though this conceptualization of concealment was chosen to focus specifically on gamers’ avoidance of social exclusion, concealment from people at different levels of familiarity (i.e., from friends vs. strangers) or from other gamers vs. non-gamers may predict different outcomes. Second, all studies relied on self-report, which may not reflect men’s behaviors in real-time. Measurements of how gamer identity and concealment relate to harassing behaviors through online channels or in person may be able to further clarify what motivates harassment of women in gaming domains. Third, there were multiple failed manipulation and attention checks, which required removing many participants and reducing the power of the studies, particularly in Study 2. Studies using more interested samples or designed to better motivate participants could decrease participant errors, increasing power and leading to better interpretations of results. Finally, all of these studies (besides Study 4) use the context of a first-person shooter game. While this allows for the type of video game to remain constant across studies, men could have
different reactions when considering games that are less violent and masculine, such as a puzzle game (Eden et al., 2010), or contain more player choice in the creation and actions of the player’s character, such as role-playing games.

Conclusion

Recent incidents of sexual harassment in gaming communities, such as those mentioned in the introduction, have led some people to suggest that forming an identity around video games, or being a “gamer” contributes to toxicity within those communities (e.g., Plunkett, 2014). This perspective focuses on exclusionary aspects of gamer identity under the assumption that identifying as a gamer necessarily excludes women because of its male-dominated nature.

A review of the psychological literature on video game content and masculinity supports the contention that the construction of gamer identities and video game communities leads to an exclusion of women. Most psychological research on video games and sexism has focused on the immediate effects of exposure to the sexist content of video games, suggesting that sexist content will increase sexism in people who play those games (e.g., Dill et al., 2008). Other research on video games suggests that video games contain a disproportionate focus on strong, aggressive men as protagonists and women as scantily-clad eye candy for men who play video games (e.g., Downs & Smith, 2010). Therefore, the content of video games may create a toxic atmosphere in gaming communities that promotes sexism, especially among people who identify as gamers because they spend more time playing potentially sexist games. Additionally, research on masculinity has generally focused on the problematic aspects of hegemonic masculinity rather than the ways that alternative masculinities may be constructed to minimize those harmful aspects. Thus, much of the current psychological research on masculinity suggests that men generally strive to enact hegemonic masculinity norms (e.g., Vandello et al., 2008) and that
masculine domains encourage the exclusion of women (e.g., Cheryan et al., 2009). Because gaming can be considered a masculine domain, it would be expected to encourage the acceptance of masculinity and rejection of femininity.

However, the present results suggest that rather than striving to be less identified with the domain of gaming to reduce sexism, more strongly embracing a gamer identity and its rejection of hegemonic masculinity may allow men to be more accepting of women. Stated differently, the results of this research suggest that gamer identity can be an alternative masculinity that predicts more equitable treatment of women in gaming. By contrast, concealment of gamer identity predicts more negative stereotypes and feelings. Across studies, gamers adhered less to hegemonic masculinity norms than non-gamers and greater gamer identification predicted a resistance to derogating and diminishing women. In contrast, concealment of gamer identity generally predicted more negative views of gamers in general and especially women, whose negative experiences were taken less seriously and whose intelligence was more consistently questioned. Thus, encouraging men to embrace a gamer identity may actually increase the acceptance of women and reduce sexism in gaming.

These results expand knowledge of the cultural impact of video games by using theories of masculinity to understand why women are excluded and harassed in gaming communities. Like other forms of media, women’s voices need to be included in video games in order to represent the gamut of human experience and avoid reinforcing negative stereotypes through media. Understanding how men navigate their relationship with video games in light of their attachment to hegemonic masculinity norms, and how this affects women’s inclusion in the production of video games is thus important for their representation in the video game medium.
Importantly, the results of these studies may also extend to women’s acceptance in other similar fields. Women’s underrepresentation in technology fields such as computer science is especially problematic given the importance of technology to the structure of the economy. For women to be better represented in these important positions, they need to feel like they belong in them. A major barrier to women’s entry into computer science is the way it is stereotyped as a “boy’s club.” Creating a common identity between men and women within these fields is one way to minimize gender distinctions and reduce prejudice against women. “Nerdy” identities like gamer identity de-emphasize the aspects of masculinity that inspire the rejection of women and are prime candidates for an accepting common identity. Computer science contains nerdy stereotypes that are similar to gaming and creating common identities in communities interested in computer technology could potentially have a similar effect in that domain. However, these identities may also be stigmatizing for men, leading them to reject and conceal those identities. Finding a way to make these identities acceptable for both men and women could be one way to increase women’s feelings of belonging in these domains.

**Future Directions**

The current research primarily examined how gamers and non-gamers treat women in gaming differently, but more research is needed on how concealing gamers differ from non-concealing gamers. As an alternative way to address differences among gamers, I reanalyzed Studies 2 and 3 comparing three groups: non-gamers, concealing gamers (i.e., gamers who at least “sometimes” conceal their gamer identity), and non-concealing gamers (i.e., gamers who “never/seldom” conceal their gamer identity). Across both studies, non-gamers and concealing gamers reported similar adherence to hegemonic masculinity norms, but non-concealing gamers were often lower than both of those groups (see Table 18). These results support my idea that concerns about masculinity are an important factor in whether or not a man is comfortable and
Table 18
*Individual Difference Means by Gamer Type in Studies 2 and 3*

<table>
<thead>
<tr>
<th></th>
<th>Study 2</th>
<th>Study 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Gamers (n = 97)</td>
<td>Non-Concealing Gamers (n = 44)</td>
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<tr>
<td>Gamer Identity</td>
<td>1.79 (0.76)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.69 (1.08)&lt;sub&gt;b&lt;/sub&gt;</td>
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<td>Hegemonic Masculinity Norms</td>
<td>3.71 (1.03)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.04 (1.12)&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Restrictive Emotionality</td>
<td>3.27 (1.29)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.51 (1.18)&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Self-Reliance</td>
<td>4.74 (1.16)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>4.63 (1.75)&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Negativity toward Homosexuals</td>
<td>2.85 (1.85)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>1.83 (1.41)&lt;sub&gt;b&lt;/sub&gt;</td>
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<tr>
<td>Anti-femininity</td>
<td>3.98 (1.50)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.96 (1.61)&lt;sub&gt;b&lt;/sub&gt;</td>
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<td>Importance of Sex</td>
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<td>2.92 (1.65)&lt;sub&gt;b&lt;/sub&gt;</td>
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<td>Dominance</td>
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<td>2.27 (1.39)&lt;sub&gt;b&lt;/sub&gt;</td>
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<tr>
<td>Toughness</td>
<td>4.52 (1.20)&lt;sub&gt;a&lt;/sub&gt;</td>
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<td></td>
<td>2.93 (1.23)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.11 (1.11)&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>4.71 (1.26)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>4.38 (1.56)&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>2.80 (1.87)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>1.75 (1.42)&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>3.66 (1.74)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.79 (1.54)&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>3.20 (1.49)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.61 (1.51)&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>2.83 (1.57)&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.13 (1.42)&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>4.27 (1.38)&lt;sub&gt;a,b&lt;/sub&gt;</td>
<td>3.86 (1.56)&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
</tbody>
</table>

*Note.* Study 2 \(N = 181\), Study 3 \(N = 285\). Possible range of scores for Gamer Identity = 1 (strongly disagree) to 5 (strongly agree), Hegemonic Masculinity Norms and subscales = 1 (strongly disagree) to 7 (strongly agree). Differences between means for each gamer type were tested using Analyses of Variance with Bonferroni-corrected post-hoc tests. Means with different subscripts within each variable differed significantly \((p < .05)\).
open with his gamer identity, and my general conclusion that gamer identity can act as an alternative masculinity for men. Importantly, levels of gamer identity did not differ between concealing and non-concealing gamers, indicating that comfort with a gamer identity, rather than just identity itself, is an important factor that is related to gamers’ adherence to hegemonic masculinity norms. However, while non-concealing gamers’ lower adherence to masculinity norms suggests that they should be less motivated to reject and differentiate themselves from women, non-concealing gamers did not reliably differ from concealing gamers on the dependent variables in either study. Future research should identify what negative behaviors are predicted by differences in concealment among gamers, and how these behaviors can affect women’s participation in gaming.

Future research should also continue to investigate women’s experiences in gaming communities and how alternative masculinities can contribute to a reduction of harassment and greater inclusion of women in gaming. A direct step from the current research could be to further examine the situational causes and consequences of the acceptance and rejection of gamer identity. Because concealment of gamer identity seems to be related to an internalization of negative stereotypes about gamers, examples of gamers presented in a more positive light may lower men’s desires to conceal and increase positive treatment of women. More realistic and applied work may also be a beneficial addition to the current line of research. For example, examining how men react to women in real-time while playing video games with them could help understand what factors increase the negative treatment of women. Similarly, other strategies might more accurately assess how men react to female game developers, such as presenting men with a difficult game that they are told is developed by a woman or man to see how long they persist or how negatively they rate the game. While the present research focuses
on men’s gamer identity, it is also important to investigate how women experience gamer
identity. Future research should focus on whether women who embrace their gamer identity feel
accepted by men within gaming communities and how women navigate restrictions imposed by
their gender identities within the domain of gaming.

Like gaming, there are other “nerdy” and not masculine, yet male-dominated domains,
such as the tech industry and academia. Research in these domains may be helpful to determine
how aspects of identity with tech or academia can also act as alternative masculinities that
minimize adherence to hegemonic masculinity norms and create opportunities for men to be
accepting of femininity and form a common identity with women. Men’s embrace of these
alternative masculinities and the formation of common identities with women in these domains is
an important step in the pursuit of a more gender-equitable society.
REFERENCES


Yiannopoulos, M. (2014, September 1). Feminist bullies tearing the video game industry apart. 

Appendix A
Gamer Identity and Preferences Questionnaire

1. Do you consider yourself to be a “gamer”?

**Gamer Identity**

Please indicate the degree to which you agree or disagree with each statement using the following scale:

1 = disagree strongly; 2 = disagree somewhat; 3 = neither agree nor disagree; 4 = agree somewhat; 5 = agree strongly.

2. Overall, being a gamer has very little to do with how I feel about myself.
3. Being a gamer is an important reflection of who I am.
4. Being a gamer is unimportant to my sense of what kind of person I am.
5. In general, being a gamer is an important part of my self-image.

6. How many of your friends would you consider to be gamers?
7. How much do you conceal your identity as a gamer because you think others will socially exclude you? (1-5, never to all of the time)
8. How much do you think gamers are respected? (1-7, very disrespected to very respected)
9. How much do you think gamers are liked? (1-7, very disliked to very liked)
10. How many hours do you play video games on the average **weekday** (i.e., Monday, Tuesday, Wednesday, or Thursday)?
11. How many hours do you play video games on the average **weekend** (i.e., the total hours Friday night through Sunday night)?
12. What percentage of your time playing video games do you spend using each of the following platforms? (Your answers should total 100)
   a. Xbox, Xbox 360, or Xbox One
   b. PlayStation 1, 2, or 3
   c. Nintendo 64, GameCube, Wii, or Wii U
   d. PlayStation Portable or PlayStation Vita
   e. Game Boy, Game Boy Advance, DS, or 3DS/2DS
   f. PC or Mac Desktop or Laptop
g. Tablet or Phone

13. What percentage of your time playing video games do you spend playing each of the following genres? (Your answers should total 100)
   a. Action
   b. Adventure
   c. Fighting
   d. First-person shooter
   e. Management
   f. Party
   g. Racing
   h. Role-playing (RPG)
   i. Simulation
   j. Sports
   k. Strategy

14. What percentage of your time playing video games do you spend playing massively multiplayer online (MMO) games?

15. When you play multiplayer video games, do you prefer to cooperate or compete? (1-6, cooperate to compete)

16. List the names of 1-5 video games that you like to play the most.

17. In a few sentences, explain the main reasons why you do or do not consider yourself to be a gamer.
Appendix B

Gender Role Conflict Scale – Short Form [Modified to apply to any gender]
Wester, Vogel, O’Neil, & Danforth (2012)

Please indicate the degree to which you agree or disagree with each statement using the following scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Restrictive Emotionality
1. Talking (about my feelings) during sexual relations is difficult for me.
2. I have difficulty expressing my emotional needs to my partner.
3. I have difficulty expressing my tender feelings.
4. I do not like to show my emotions to other people.

Success, Power, and Competition
5. Winning is a measure of my value and personal worth.
6. I strive to be more successful than others.
7. Being smarter or physically stronger than others is important to me. [Changed “other men” to “others”]
8. I like to feel superior to other people.

Restrictive Affectionate Behavior Between Men
9. Affection with men makes me tense. [Removed “other” before “men”]
10. Men who touch other men make me uncomfortable.
11. Hugging men is difficult for me. [Removed “other” before “men”]
12. Being very personal with men makes me feel uncomfortable. [Removed “other” before “men”]

Conflicts Between Work and Family Relations
13. Finding time to relax is difficult for me.
14. My needs to work or study keep me from my family or leisure more than I would like.
15. My work or school often disrupts other parts of my life (home, health, leisure, etc.).
16. Overwork and stress, caused by a need to achieve on the job or in school, affects/hurts my life.
Appendix C

Ambivalent Sexism Inventory
Glick & Fiske (1996)

Please indicate the degree to which you agree or disagree with each statement using the following scale:

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

1. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.
2. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality."
3. In a disaster, women ought not necessarily to be rescued before men.
4. Most women interpret innocent remarks or acts as being sexist.
5. Women are too easily offended.
6. People are often truly happy in life without being romantically involved with a member of the other sex.
7. Feminists are not seeking for women to have more power than men.
8. Many women have a quality of purity that few men possess.
9. Women should be cherished and protected by men.
10. Most women fail to appreciate fully all that men do for them.
11. Women seek to gain power by getting control over men.
12. Every man ought to have a woman whom he adores.
13. Men are complete without women.
14. Women exaggerate problems they have at work.
15. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.
16. When women lose to men in a fair competition, they typically complain about being discriminated against.
17. A good woman should be set on a pedestal by her man.
18. There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances.
19. Women, compared to men, tend to have a superior moral sensibility.
20. Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.

21. Feminists are making entirely reasonable demands of men.

22. Women, as compared to men, tend to have a more refined sense of culture and good taste.
Appendix D

Audio Clip Transcripts

Clip #1 (Gender Harassment):

**Man 1:** I think this lobby’s dead.
**Man 2:** No, no, stay in this lobby!
**Woman:** Yeah, you killed it- congratulations.
**Man 3:** Oh, what was that? Were you cookin’ somethin’? I think I heard a stove in the background! Oooh, my laundry needs cleaning!
**Man 4:** Why does everybody say some stupid ignorant shit like that, every fucking time?
**Man 3:** ‘Cause it’s true!
**Man 2:** ‘Cause it’s true!
**Man 4:** You’re a fuckin’ idiot, dude.
**Man 3:** It’s true!
**Man 1:** Nuh-uh, that’s where a woman’s supposed to be! Cleanin’, cookin’. That’s where they’re supposed to be.
**Man 3:** Stop trying to be the better man.
**Man 2:** I cannot wait to drop a Swarm on you. I’m gonna laugh so hard!
**Man 1:** I’mma put you in your place.
**Man 4:** Seriously?
**Man 5:** I tell you what man, you got it all wrong. My wife makes 100K… Let her work.
**Man 3:** Yeah, let her work, heck yeah- props to you, you’re the man!
**Man 2:** Works on the street makes a- [Audio cuts off here]

Clip #2 (Sexual Harassment):

**Man 1:** I need to play Halo. I need to play Halo.
**Man 2:** Todd, back out.
**Man 3:** Huh?
**Woman:** He said back out.
**Man 4:** Back out, and if you back out, bring the party.
**Man 2:** …Oh, you sound hot, baby!
**Man 5:** Thank you.
**Man 6:** Thank you. I really appreciate that. Thank you, you’re a nice guy.
**Man 2:** Oh, she’s beast yo! With that 2.0 K/D.
**Man 2:** Yeah, she got a 2.0. She’s their beast.
**Man 3:** Hey Jenny, where’d you get that? Jenny?
**Man 2:** What up, girl?
**Woman:** Oh boy.
**Man 2:** What are you wearing? What are you wearing right now?
**Man 6:** Pink panties. [laughter]
**Man 2:** Are you shaven?
**Man 6:** He’s talking to me.
**Man 2:** I like a hairy bush. [laughter]
Appendix E

Audio Clip Questions

Please indicate the degree to which you agree or disagree with each statement using the following scale:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

1. The men in the audio clip were **funny**.
2. The men in the audio clip were **flattering**.
3. The men in the audio clip were **playful**.
4. The men in the audio clip were **aggressive**.
5. The men in the audio clip were **threatening**.
6. The men in the audio clip were **offensive**.
7. The woman in the audio clip feels **playful**.
8. The woman in the audio clip feels **comfortable**.
9. The woman in the audio clip feels **happy**.
10. The woman in the audio clip feels **threatened**.
11. The woman in the audio clip feels **scared**.
12. The woman in the audio clip feels **attacked**.
13. The interaction was **appropriate** in that context.
Appendix F
Male Role Norms Inventory – Short Form (MRNI-SF)
Levant, Hall, & Rankin (2013)

Please indicate the degree to which you agree or disagree with each statement using the following scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

Restrictive Emotionality
1. A man should never admit when others hurt his feelings.
2. Men should be detached in emotionally charged situations.
3. Men should not be too quick to tell others that they care about them.

Self-Reliance through Mechanical Skills
4. Men should have home improvement skills.
5. Men should be able to fix most things around the house.
6. A man should know how to repair his car if it should break down.

Negativity toward Sexual Minorities
7. Homosexuals should never marry.
8. All homosexual bars should be closed down.
9. Homosexuals should never kiss in public.

Avoidance of Femininity
10. Men should watch football games instead of soap operas.
11. A man should prefer watching action movies to reading romantic novels.
12. Boys should prefer to play with trucks rather than dolls.

Importance of Sex
13. Men should always like to have sex.
15. A man should always be ready for sex.

Dominance
16. The President of the U.S. should always be a man.
17. Men should be the leader in any group.
18. A man should always be the boss.

Toughness
19. It is important for a man to take risks, even if he might get hurt.
20. When the going gets tough, men should get tough.
21. I think a young man should try to be physically tough, even if he’s not big.
Appendix G

Gamer Identity Concealment
Derived from Anderson, Croteau, Chung, & DiStefano (2001)

Please indicate the degree to which you perform the following behaviors using the following scale:

<table>
<thead>
<tr>
<th>Never/seldom</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Almost always/always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Avoid contact with people known to be gamers in order to prevent suspicions that I am a gamer.
2. Avoid local gamer social events or places so I do not risk revealing my gamer identity to anyone at work or school.
3. Wear or display buttons or symbols known only to those familiar with gaming culture.
4. Openly associate with coworkers or other students known to be gamers, and let others think that I am a gamer too, if they want to.
5. Wear or display commonly known gamer symbols (e.g., buttons, jewelry, t-shirts, bumper stickers) that reveal my gamer identity to coworkers or other students.
6. Tell most or all of my coworkers or other students I meet that I am a gamer.
Appendix H

Gender Knowledge Test Items (Gender Threat Manipulation)

Male Knowledge

1. Basketball great Anfernee Hardaway’s nickname is (Penny vs. Doc).
2. A dime is what kind of play in football? (defensive vs. offensive)
3. What team did Bob Gibson pitch for as a Cy Young winner in 1970? (Cardinals vs. Yankees)
4–5. The next trials will show pictures of cars or motorcycles that you must identify. (Porsche vs. Mazda) (Honda vs. Suzuki)
6. A motorcycle engine generates an exhaust sound at (4000 rpms vs. 8000 rpms).
7. In nature, the best analogy for a spark plug is (Solar fire vs. Lightning).
8. Karate originated in martial arts developed in (Japan vs. China).
9. To help an engine produce more power you should (inject the fuel vs. reduce displacement).
10. The first people to use primitive flamethrowers in battle were (Greeks vs. Turks).
11. The material used between bathroom tiles is called (Spackling vs. Grout).
12. When choosing insulation, the R-value should be (High vs. Low).
13. After shooting a deer, bear, elk, or turkey, you must attach a (kill tag vs. ID tag).
14. By Olympic rules, boxing gloves for all weight classes weigh (12 ounces vs. 10 ounces).
15. When punching someone, you should aim your fist (a foot beyond optimal target vs. directly at target).

Female Knowledge

1. Botox temporarily erases wrinkles by (skin hydration vs. muscle paralysis).
2. Identify the designer of the handbag shown in this picture (Kate Spade vs. Ralph Lauren).
3–4. Identify the designer of the evening gowns shown in these pictures: (Valentino vs. Vera Wang) (Karl Lagerfield vs. Oscar De La Renta)
5. The TV show “Sex in the City” popularized which drink? (Cosmopolitan vs. Manhattan)
6. Children typically start to teethe when they are (over vs. under) 1 year old?
7. Children should not be given which medication? (ibuprofen vs. aspirin)
8. Compared to men, women need more (iron vs. zinc).
9. During pregnancy, morning sickness usually occurs in which trimester? (second vs. first)
10. What was the first website devoted to women? (Glamnet.com vs. Ivillage.com)
11. As the best friend of the bride-to-be, you are most obligated to (be the bridesmaid vs. host the shower).
12. What is the most common request from male sexual partners? (share your sexual fantasies vs. put on sexy lingerie)
13. Exercises that improve a woman’s sex life are called (Kegel’s vs. Pilates).
14. If a party invitation reads “festive casual,” you should wear (slacks and a blouse vs. cocktail dress).
15. According to The Rules, if you are in a long distance relationship, how many times should a man visit you before you visit him? (3 times vs. 1 time)
Appendix I

Video Game Description

The player assumes the role of Samuel Monroe, who can wield various firearms, throw grenades and other explosives, and use other equipment as weapons. The screen glows red to indicate damage to a player's health, which regenerates over time. Samuel is accompanied by friendly troops throughout the game. Although primarily a first-person shooter, certain levels feature sequences where the player pilots a helicopter and various aircraft.

Plot:
In 2004, Samuel is recruited for an assignment against Mike Richardson, whose weapons-trafficking operations were being followed by the CIA. With UN assistance, Samuel and his fellow operatives locate Richardson among a contingent of military generals. However, a firefight breaks out, and Richardson’s group escapes as the operatives are rescued by friendly troops in a helicopter. It is revealed that Richardson is holding Samuel’s daughter captive after murdering the rest of his family.

In light of this information, Samuel begins tracking Richardson, who has established himself as a primary arms dealer for conflicts in South Africa. Later in the year, the CIA authorizes a strike against Richardson, now making a healthy profit running arms across Afghanistan. In Afghanistan, Samuel and his fellow operatives assist the locals in their battle against insurgents. Samuel finds Richardson, who had survived a recent bombing run by US aircraft.

Richardson is interrogated by Samuel and the player is given the option of executing him or finishing the interrogation. In the latter scenario, Samuel executes Richardson after he admits that he has men inside the CIA. Regardless of how Richardson is killed, the locals are revealed to be allied with Richardson, and double-cross Samuel and his fellow operatives. The operatives are beaten, tied, and left for dead in the middle of the desert, unconscious until rescued by two unknown civilians and finally returned to the US.
Appendix J
Public Discomfort
Dahl, Vescio, & Weaver (2015)

Participants were asked to imagine a public situation within the context of each study and asked to answer the following questions about their feelings in that public context:

“To what extent do you feel…”

<table>
<thead>
<tr>
<th>Not At All</th>
<th>Very</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
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<tr>
<td>2</td>
<td>6</td>
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<td>3</td>
<td>5</td>
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<td>4</td>
<td>4</td>
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<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

1. Anxious
2. Nervous
3. Defensive
4. Calm
5. Confident
6. Joyful
7. Happy
8. Depressed
Appendix K

Anger and Shame

Now, consider how you feel at this moment. Please answer as truthfully as possible, your answers to these questions will be kept confidential.

At this moment, how much do you feel:

Not At All  1  2  3  4  5  6  7  8  9  Very

1. Calm
2. Angry
3. Frustrated
4. Competent
5. Happy
6. Hostile
7. Anxious
8. Depressed
9. Mad
10. Proud
11. Ashamed
12. Self-conscious
13. Humiliated
14. Embarrassed
Appendix L
Desire to Conceal Gamer Identity

Your survey scores are now saved and will be sent to a randomly assigned partner, who you will meet in a future study. Below is a list of the surveys you completed. For each survey, rate how much you want to share your scores with your partner.

This will not impact what is revealed to your partner, but will be used when designing future studies.

<table>
<thead>
<tr>
<th>Do Not Want to Share At All</th>
<th>Indifferent about Sharing</th>
<th>Very Much Want to Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
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</tbody>
</table>

1. Movie Preferences
2. Gamer Identity and Preferences
3. Beliefs about Social Roles
4. Gender Identity [Personality Characteristics]
Appendix M

Negative Video Game Review

This game is made up of so many dissonant parts that it's hard to believe they were all made by the same studio. At times it's genius, as with the multiplayer's redesigned class system. But at others, it doesn't feel like it's trying very hard. It's a testament to the extraordinary quality of its multiplayer that it won't go down as a forgotten entry. No other online shooter is offering a better experience right now. A saving grace, if ever there was one, the developers have taken big risks with the most successful multiplayer formula in online shooters since online play and party systems. That innovation makes it the best online shooter out there. For some, that may be enough.

Occasionally, though, it's a complete mess. The campaign is a disappointment. Decisions you make throughout the game can have a huge impact on the story, but many of these decision moments are poorly implemented. There are points where seemingly obvious options result in failure. The treatment of women may be its most disappointing aspect. The game doubles down on its negative treatment of women, who are props for the protagonist and player in the campaign, and completely absent in the multiplayer. This constant detriment weighs down what would otherwise be an excellent multiplayer experience, even if the campaign is generally lacking. For these reasons I can’t recommend that people purchase this game.
Appendix N

Game Enjoyment

Please indicate the degree to which you agree or disagree with each statement using the following scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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<tr>
<td>3</td>
<td>4</td>
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<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

I think this game will be:
1. Fun
2. Boring
3. Enjoyable
4. Entertaining
Appendix O

Critic Credibility

Please indicate the degree to which you agree or disagree with each statement using the following scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I trust this reviewer’s opinion
2. I think this reviewer is credible
3. The reviewer assessed the game fairly
4. The reviewer unfairly criticized the game
Appendix P

Distancing from Partner
(Pyszczynski, Greenberg, Solomon, Sideris, & Stubing, 1993)

Participants read the following instructions and then were presented with each item and used a slider to rate themselves on a 0-100 scale.

“When screening participants for this study, we gave some different questions to different sets of people. Your partner completed different personality questions than you did. While you are reading over your partner’s personality scores below, please also answer the questions yourself to complete your personality profile.”

1. Your partner rated that he [she] was a 57 on the attribute witty. How witty would you rate yourself to be?
2. Your partner rated that he [she] was a 68 on the attribute bold. How bold would you rate yourself to be?
3. Your partner rated that he [she] was a 63 on the attribute neat. How neat would you rate yourself to be?
4. Your partner rated that he [she] was a 67 on the attribute self-satisfied. How self-satisfied would you rate yourself to be?
5. Your partner rated that he [she] was a 67 on the attribute philosophical. How philosophical would you rate yourself to be?
6. Your partner rated that he [she] was a 71 on the attribute meticulous. How meticulous would you rate yourself to be?
7. Your partner rated that he [she] was a 64 on the attribute prudent. How prudent would you rate yourself to be?
8. Your partner rated that he [she] was a 54 on the attribute obedient. How obedient would you rate yourself to be?
9. Your partner rated that he [she] was a 74 on the attribute reserved. How reserved would you rate yourself to be?
10. Your partner rated that he [she] was a 74 on the attribute progressive. How progressive would you rate yourself to be?
11. Your partner rated that he [she] was a 31 on the attribute **clumsy**. How **clumsy** would you rate yourself to be?

12. Your partner rated that he [she] was a 40 on the attribute **restless**. How **restless** would you rate yourself to be?

13. Your partner rated that he [she] was a 31 on the attribute **tiresome**. How **tiresome** would you rate yourself to be?

14. Your partner rated that he [she] was a 30 on the attribute **extravagant**. How **extravagant** would you rate yourself to be?

15. Your partner rated that he [she] was a 34 on the attribute **overcautious**. How **overcautious** would you rate yourself to be?

16. Your partner rated that he [she] was a 31 on the attribute **unpoised**. How **unpoised** would you rate yourself to be?

17. Your partner rated that he [she] was a 38 on the attribute **boastful**. How **boastful** would you rate yourself to be?

18. Your partner rated that he [she] was a 46 on the attribute **strict**. How **strict** would you rate yourself to be?

19. Your partner rated that he [she] was a 41 on the attribute **conforming**. How **conforming** would you rate yourself to be?

20. Your partner rated that he [she] was a 49 on the attribute **forgetful**. How **forgetful** would you rate yourself to be?
Appendix Q

Partner Evaluations

Please indicate the degree to which you agree or disagree with each statement using the following scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

1. My partner and I will work well together.
2. I think my partner will be good at the game.
3. My partner will bring down my performance.
4. My partner will be helpful in completing our goals.
Appendix R

Partner Similarity

Please indicate the degree to which you agree or disagree with each statement using the following scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

1. I have a lot in common with my partner.
2. My partner and I are very similar.
3. I am very different from my partner.
4. My partner and I share common interests.
Appendix S

Character Avatar Choices
(presented in random order within gender)

MALE:
FEMALE:
Appendix T

Competence, Warmth, and Specific Gamer Stereotypes

(Fiske, Cuddy, Glick, & Xu, 2002; Kowert, Griffiths, & Oldmeadow, 2012)

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Extremely</th>
</tr>
</thead>
</table>

[Each item was asked twice, once for own view and once for social view, and in reference to either male gamers or female gamers]

As viewed by society [In your view], how ___________ are female [male] gamers?

1. Competent
2. Confident
3. Capable
4. Efficient
5. Intelligent
6. Skillful
7. Friendly
8. Well-intentioned
9. Trustworthy
10. Warm
11. Good-natured
12. Sincere
13. Well-groomed
14. Fashionable
15. Popular
16. Athletic
17. Attractive
18. Overweight
19. Solitary
20. Obsessive
21. Young
22. Underachieving
23. Isolated
24. Pale
25. Socially inept
26. Lazy
27. Reclusive
28. Introverted
Appendix U

Feelings about Gamers
(Fiske, Cuddy, Glick, & Xu, 2002)

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Extremely</th>
</tr>
</thead>
</table>

[Each item was asked twice, once for own view and once for social view, and in reference to either male gamers or female gamers]

As viewed by society [In your view], how do female [male] gamers make people like yourself feel?

1. Disappointed
2. Fearful
3. Sympathetic
4. Envious
5. Uneasy
6. Proud
7. Angry
8. Disgusted
9. Respectful
10. Pitying
11. Hateful
12. Frustrated
13. Jealous
14. Admiring
15. Resentful
16. Inspired
17. Contemptuous
18. Compassionate
19. Tense
20. Ashamed
21. Comfortable
22. Fond
23. Anxious
24. Secure
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2016 – Ph.D., Psychology and Women’s Studies
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Dissertation: “The Role of Masculinity in Male Gamers’ Exclusionary Treatment of Women”
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Instructor, The Pennsylvania State University, University Park:
LER 312: Research Methods in Labor Studies and Employment Relations
PSYCH 479 / WMNST 471: The Psychology of Gender

Instructor, The Pennsylvania State University, World Campus:
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