Identifying Differential Perceptions of Video Game Players Based on Gaming Platform

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ABSTRACT

The persistence of negative, outdated categorizations of game players limit can inclusion within gaming communities by marginalizing underrepresented groups and reinforcing negative behaviors. While prior research has explored stereotype content for so-called "gamers", an open question is whether an individual's choice of gaming platform results in differential stereotypic perceptions. This study uses the Stereotype Content Model (SCM) to explore the differential impact of gaming platforms on stereotypic perceptions (warmth and competence) and emotional reactions (admiration, pity, envy, and contempt). A custom survey collected 180 responses via recruitment in social media and public university settings. The results found perceptions of warmth and competence differed by platform and, to a lesser extent, by gamer identification and gender identity. The results also show traditional perceptions of the PC/console/mobile hierarchy persist, emotional reactions differ by platform, and the role of warmth and competence in predicting these reactions is a complex phenomenon.

Keywords

gamer, gaming platform, stereotype content model, identity

INTRODUCTION

Participation in digital video games has never been higher, representing hundreds of millions of consumers in an industry generating billions of dollars each year (Yim et al. 2023). Despite the increasingly diverse community of game players and the social nature of modern gaming, research has shown that perceptions of video game players or "gamers" have been slow to evolve away from negative stereotypes (Deshbandhu 2016; Stone 2019). While the gamer/non-gamer groupings still exist, separating gaming community members into other social categories may also result in negative stereotypical perceptions and potentially limit inclusion within gaming spaces.

Social identity theory (Tajfel 1974) argues people use social categorization to differentiate from others, allowing for self-identification to specific group(s). The assignment of negative traits to out-groups increases the likelihood of stereotype formation (Tajfel and Turner 1986). Stereotypes, defined as "an overgeneralization and simplification of reality" (Jenaro et al. 2018), involve the attribution of characteristics to both social groups and individuals and are considered to have

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cognitive, emotional, and evaluative components (Fiske 2018; Kivijärvi and Katila 2022). Subjective interpersonal perception of out-groups mediates the process from environmental stimulus to behavioral response and subsequent interaction (Caprariello et al. 2009; Jenaro et al. 2018). Stereotypes can lead to prejudice, a preconceived bias commonly used to refer to contempt for out-groups, and associated behaviors (Fiske et al. 2002).

Emotional prejudices based on stereotypic attribution can have negative effects in digital social spaces, where virtual interaction provides relative anonymity and limited consequences. Prior research has identified the negative effects of stereotypic behavior within gaming communities, including harassment, sexism, and misogyny (Cote 2017; 2018). For some segments of the video game community, a player's choice of gaming platform triggers pre-existing perceptions of whether the player is a "real" player. While strict definitions are lacking, gaming platforms are commonly defined as a general category of electronic hardware upon which digital video games are played, usually encompassing PCs, console devices (e.g. PlayStation), and mobile devices (e.g. phones) (Bergonse 2017; Huang et al. 2017; Srinivasan and Venkatraman 2010). While significant research has explored stereotype content for digital video game players – "gamers" – an open question is whether an individual's choice of gaming platform results in differential stereotypic perceptions. Assigning different stereotypic traits to different gaming platforms can promote non-inclusive gaming spaces by marginalizing some platforms and players. Prejudicial attitudes towards specific platforms can divide gaming spaces by gender identity or other factors and can influence whether players explore diverse games and platforms.

This study investigates the differential influence of video gaming platform choice (Console, PC, or Mobile) on stereotype attribution for video game players using an established model of social perception – the Stereotype Content Model (SCM). This study also explores the emotional reactions associated with these stereotypic perceptions, as well as the potential role of moderating factors (gender identity, gamer identification). This study extends the existing literature on gaming identity by examining modern perceptions of video game players in the context of platform-specific stereotypes. The study furthers our understanding about the technological choices which impact stereotype formation, offering a basis for a deeper understanding of gaming identity and a basis for further research.

BACKGROUND

The "Gamer" Stereotype

A traditional means of categorizing digital game players is through the "gamer" stereotype. Derived from the early days of digital gaming, gamers were usually considered to be adolescent, white, male, heterosexual, technically proficient, and socially awkward, sharing many tenets with nerd or geek culture. Gamers were also thought to accrue social capital through their knowledge and skills obtained through large amounts of gameplay (Deshbandhu 2016; Kivijärvi and Katila 2022; Kowert et al. 2014; Stone 2019). Despite its negative connotation, gamer is often used in a colloquial sense to describe those who play digital games (Shaw 2012); concrete definitions are difficult to find (Deshbandu 2016; Stone 2021).

Though evidence shows that the gamer community is currently more diverse (Myers 2019; Williams et al. 2008), research also suggests the gamer stereotype has persisted

(Deshbandhu 2016; Stone 2019, 2021). The gamer stereotype reinforces division within gaming communities, depicting digital gaming as a space for individuals who favor complex, competitive, emotionally negative "hardcore" games for a male-centric audience (Chess and Paul 2019; Vermeulen and Van Looy 2016). This self-reinforcing perception drove the content of mass-market games while discouraging diverse participation. The male-dominated gaming space solidified in many people's minds what it means to be a gamer and what constitutes a "real" game (Dowling et al. 2020; Evans and Janish 2015; Ochsner 2019). The stereotypes surrounding gamer identity and so-called real games can serve as forms of stereotype threat. Stereotype threat posits that stereotypes can negatively impact performance on and persistence in tasks, as individuals fear confirming negative stereotypes (Steele and Aronson 1995). Prior game studies research has explored the negative impacts of stereotypes on performance, motivation, and other factors (Kaye and Pennington 2016; Kaye et al. 2018; Vermeulen et al. 2017).

Gaming Platforms

Even as gaming has become more diverse, attitudes towards players who do not fit the traditional stereotype have been slower to evolve (Cote 2017; Paaßen et al. 2017). Ideas about what a real game is drive both the types of games produced as well as the audience those games attract. Ideas about "real" gaming can be a gatekeeper, reinforcing traditional notions of both real games and gamers and impacting who participates in gaming communities (Consalvo and Paul 2019). The rise of "casual" gaming has forced a reexamination of what it means to play games and the characteristics of players. Casual games are an accessible form of gaming, with broad appeal due to low cost of entry, simplicity of gameplay, and lower hardware requirements (Cote 2020). Often associated with mobile devices, casual games are considered by some community members as less important or meaningful than traditional games (Taylor 2012). In contrast to casual games, traditional hardcore games usually involve high-end graphics and sophisticated gameplay, requiring powerful, dedicated hardware and have traditionally been marketed to adolescent males (Cote 2020). PC gamers are said to consider their platform the top echelon of gaming, with consoles at the second level and mobile gaming the lowest level due to their more limited processing power and simplified controls. This hierarchy is reflected through game forums and social media, leading to questions about whether more casual mobile games – or even games that do not involve traditional elements of combat, competition, or fantasy – are real games (Consalvo and Paul 2019).

Women represent a larger portion of the casual game consumer segment than men, and the validity attacks on casual games marginalizes the role of women gamers, acting as a form of stereotype threat and further dividing the cultural space by gender identity, genre, and platform (Cote 2020; DiSalvo 2017; Kivijärvi and Katila 2022). Casual games are often considered feminine whereas hardcore games are considered masculine (Vanderhoef 2013), though prior research has shown that female game players use many platforms (Lewis and Griffiths 2011; Lopez-Fernandez et al. 2019). The hardcore vs. casual contrast exemplifies a negative gaming culture which reproduces gendered stereotypes (Butt and Dunne 2019) and tolerates sexism and misogyny in gaming spaces (Cote 2017; Dowling et al. 2020). Instances of discrimination within gaming environments, including but not limited to sexism and racism, serve to reinforce traditional stereotypes and a power dynamic whereby some gamers – especially hardcore gamers – are at the top of a pecking order (Cote, 2018).

The Stereotype Content Model

Social psychology has noted that social structural relationships among groups can predict stereotype content, associated emotional prejudices, and discriminatory behaviors (Caprariello et al. 2009). The Stereotype Content Model (SCM), developed by Fiske et al. (2002), posits that stereotypes about individuals and groups fall along two universal dimensions: warmth and competence. Warmth, also known as commonality, involves a combination of items focused on morality and sociability. Warmth is about the perceived intentions of an out-group; the perceived cooperativeness and competitiveness of the group – including economic interdependence and symbolic values – impacts whether out-group members are liked and whether they are seen as competitors (Fiske 2018; Jenaro et al. 2018). Whereas warmth is all about the intentions of an out-group, competence involves perception of that group's ability to carry out intentions (Kervyn et al. 2013). Competence, also known as agency, indicates the level of respect or status afforded to an out-group based on perceived skill, intelligence, and other traits (Fiske 2018; Kervyn et al. 2013). Warmth is considered the primary dimension of the SCM (Jenaro et al. 2018). The SCM has been shown to be valid in many different contexts, including across cultures (Caprariello et al. 2009; Fiske 2018).

The stereotypic dimensions of warmth and competence lead to tendencies for specific emotional and behavioral responses. The four combinations of stereotypic warmth and competence (high and low perceptions of each) are associated with four intergroup emotions – contempt (low competence, low warmth), admiration (high competence, high warmth), pity (high warmth, low competence), and envy (low warmth, high competence) (Fiske 2018). The four emotional prejudices of admiration, envy, contempt, and pity can predict discriminatory behavior (Cuddy et al. 2007; Fiske 2015; Mieczkowski et al. 2019).

Modern game platforms are a means of social interaction, as they are often used for multiplayer online gaming through platform-based, game-based, or third-party services. As social objects, use of these technologies communicates a particular group identification which in turn implies stereotypic traits. Dedicated platforms such as PCs and consoles are associated with hardcore gaming and traditional stereotypes while mobile gaming is often associated with casual or "soft" gaming; thus, it follows that perceptions of platform users will be at least partially a function of their chosen technology. Given the pecking order associated with the gamer stereotype, platform choice may convey a particular status within the larger community. Stereotypic perceptions associated with gaming platforms, such as warmth and competence, may also impact emotional reactions towards platform users.

Platform choices may impact whether players are considered "real" players, impacting emotional reactions and intersecting with pre-existing perceptions of "gamer" identification and gender-based stereotypes. These perceptions may reinforce negative behaviors and potentially inhibit inclusion within gaming spaces. Exploring whether an individual's choice of gaming platform results in differential stereotypic perceptions can deepen our understanding of gaming identity and the technological choices impacting stereotype formation. This study investigates the following three research questions:

RQ1: Do perceptions of warmth and competence among video game players differ by gaming platform, controlling for gender identity and gamer identification?

RQ2: Do emotional reactions (admiration, pity, envy, and contempt) to video game players on different gaming platforms differ by gaming platform, controlling for gender identity and gamer identification?

RQ3: Do warmth and competence significantly predict emotional reactions (admiration, pity, envy, and contempt) for different gaming platforms?

METHODS

Survey Design

An electronic survey was constructed based on the research questions and on concepts and measures from prior literature (Fiske et al. 2002; Cuddy et al. 2007). A series of questions regarding stereotypic attribution to three (3) specific groups (console players, mobile players, and PC players) were included, adapted from measures by Fiske et al. (2002) and Schwind et al. (2019). For each of the three groups, the question was phrased as "As viewed by society, how…. are video game players who play on [platform]?" Each of these three questions were accompanied by a set of nine (9) previously validated adjectives representing the SCM dimensions of warmth (tolerant, warm, good-natured, sincere) and competence (competent, confident, independent, intelligent, competitive). Participants were asked to respond to each prompt by selecting a response (1 = Not at All to 7 = Extremely) for each adjective. The order of the adjectives was varied for each group.

Participants were also asked to express their emotional response to the three groups using a similar series of questions, adapted from Mieczkowski et al. (2019). For each group, the question was phrased as "To what extent do you feel…. towards [group]?". These questions are accompanied by a set of nine (9) keywords derived from prior research (Fiske et al. 2002), representing the four emotional responses – admiration (admiration, pride), envy (envy, jealousy), contempt (contempt, disgust, resentful) and pity (pity, sympathy) – associated with the stereotype attribution arising from the four combinations of warmth and competence. Participants were asked to respond to each prompt by selecting an option (1 = Not at All to 7 = Extremely) for each emotional keyword. The order of the keywords was varied for each group. For analysis, four scales – admiration, envy, contempt, pity – were constructed for each of the three groups. These 12 scales were constructed as the average of the responses for each item in the scale.

The survey also included a set of standard demographic questions and a question regarding their average weekly time spent playing video games. To distinguish those participants who identified strongly with a gamer identity, the survey used a four-item scale adapted from prior research (Doosje et al. 1995). Participants were given four separate statements ("I consider myself to be a gamer"; "I am pleased to be a gamer"; "I identify with other gamers"; "I feel strong ties with other gamers") and were asked to respond to the level of agreement with each using a Likert scale (1 = Strongly Disagree to 7 = Strongly Agree). For analysis, an identity score was constructed for each participant using the average of the four responses.

Sample and Data Collection

The custom survey was delivered through Penn State's Qualtrics server between August 2022 and August 2023. The survey was available to adults 18 years and older.

All study methods and procedures were deemed exempt by Penn State's Office of Research Protections and generally accepted ethical research principles were applied. Recruitment efforts were intended to increase the diversity of the sample. Recruitment messages were posted via social media outlets (Facebook, Reddit, and Twitter) and readers were encouraged to share the message with others. As a secondary convenience sample, students from multiple campuses of Penn State were recruited through email requests from course instructors. The courses included in recruitment efforts involved general education, computing, engineering, humanities, and social science courses.

The survey collected 229 partial and complete responses. After removing empty responses and responses from those who did not complete at least 90% of the survey questions, a total of N=180 responses were analyzed. Of the 49 responses that were removed, 36 (73.47%) did not complete the survey. The 90% criterion was applied to lessen the impact of incomplete responses. The mean age of participants was 26.65 years (N=177; SD=7.98) with a range of [18-57] years. Participants reported playing video games a mean of 12.26 hours/week (N=178; SD=13.49). Reliability of the gamer identification scale was established ($\alpha = 0.86$). Additional demographics are presented in Table 1.

	Percentage
Gender Identity (N=180)	
Man	56.11
Woman	41.11
Non-Binary	2.22
Prefer Not to Answer	0.56
Race/Ethnicity (N=180)	
White/Caucasian	73.89
Latino or Hispanic	10.00
American Indian or Alaska Native	10.00
Asian or Pacific Islander,	6.67
Middle Eastern or North African	6.11
African American or Black	5.56
Other	0.56
Prefer Not to Answer	1.67
Selected Multiple Race/Ethnicity Choices	8.89

Table 1: Participant Demographics

Procedures and Data Analysis

SPSS was used to investigate the research questions. For RQ1, a repeated measures multivariate analysis of variance (MANOVA) model was used to determine whether combined warmth and competence scores differed by gaming platform, controlling for gamer identification and gender identity. To investigate RQ2, a separate MANOVA model was used to determine whether combined emotional reaction scores (admiration, envy, pity, and contempt) differed by gaming platform, controlling for gamer identification and gender identity. For RQ3, a series of multiple linear regressions were performed to determine whether warmth and competence – along with gender identification and/or gender identity – predicted the emotional reaction

scores (admiration, envy, pity, and contempt) for players on the three gaming platforms.

RESULTS

Factor Analysis

Three principal components analyses with varimax rotation were conducted to confirm the two-dimensional structure (warmth, competence) found in prior SCM studies. Each of the three analyses – one per platform – replicated the two-dimensional structure, with all rotated factors falling into their respective warmth and confidence dimensions. For the PC platform, sampling adequacy was verified using the Kaiser-Meyer-Olkin (KMO) statistic (0.81) and Bartlett's test of sphericity was found to be significant, $\chi^2(36) = 548.36$, $p < 0.001$, suggesting sufficiently large correlations. The analysis resulted in a two-factor solution representing 60.16% of the overall variance. For the console platform, sampling adequacy was verified (KMO = 0.85) and Bartlett's test of sphericity was significant, $\chi^2(36) = 607.33$, $p < 0.001$, with a two-factor solution representing 62.09% of the overall variance. For mobile devices, sampling adequacy was verified (KMO = 0.83) and Bartlett's test of sphericity was significant, $\chi^2(36) = 606.08$, $p < 0.001$, resulting in a two-factor solution representing 61.87% of the overall variance. See Tables 2-4.

Adjective*	**1 (Warmth)**	**2 (Competence)**
Confident	0.27	**0.59**
Competitive	-0.26	**0.72**
Independent	0.44	**0.59**
Intelligent	0.14	**0.79**
Competent	0.27	**0.65**
Good-Natured	**0.84**	0.10
Warm	**0.87**	0.15
Tolerant	**0.84**	0.11
Sincere	**0.69**	0.20
Eigenvalue	3.06	2.36
% Variance	33.95	26.21

Table 2: Factor Loadings for Principal Component Analysis (PC)

Adjective*	**1 (Warmth)**	**2 (Competence)**
Confident	0.09	**0.71**
Competitive	-0.28	**0.67**
Independent	0.47	**0.53**
Intelligent	0.51	**0.62**
Competent	0.49	**0.57**
Good-Natured	**0.85**	-0.00
Warm	**0.84**	0.14
Tolerant	**0.84**	0.32
Sincere	**0.79**	0.23
Eigenvalue	3.57	2.01
% Variance	39.72	22.37

Table 3: Factor Loadings for Principal Component Analysis (Console)

Adjective*	1 (Warmth)	2 (Competence)
Confident	0.22	**0.81**
Competitive	-0.15	**0.80**
Independent	0.23	**0.71**
Intelligent	0.41	**0.68**
Competent	0.37	**0.63**
Good-Natured	**0.81**	0.16
Warm	**0.80**	0.13
Tolerant	**0.76**	0.11
Sincere	**0.62**	0.44
Eigenvalue	2.67	2.90
% Variance	29.61	32.26

Table 4: Factor Loadings for Principal Component Analysis (Mobile)

For subsequent analyses, the two scales – warmth and competence – were implemented as the average of the responses for each item in the scale for each of the three groups. Reliability and descriptive statistics for the scales are reported in Table 5.

	α	Mean	SD	N
Mobile Device Players				
Warmth	0.79	4.52	1.00	176
Competence	0.82	4.75	1.11	174
Console Players				
Warmth	0.88	4.29	1.34	177
Competence	0.70	5.01	0.95	169
PC Players				
Warmth	0.85	4.29	1.30	174
Competence	0.73	5.27	0.97	172

Table 5: Descriptive Statistics for Warmth, Competence

Warmth, Competence, and Platform Differences

A repeated measures MANOVA model was used to determine whether combined warmth and competence scores differed by gaming platform, controlling for gamer identification and gender identity. Pre-analysis data screening was performed to ensure normality, linearity, and the absence of outliers. To facilitate analysis for this and all subsequent research questions, adjustments were made in the between-subjects factors. The distribution of average scores for the gamer identification scale indicated an almost even split between an average response of disagreement/neutral (less than 5.00) and varying levels of agreement (5.00 or greater) (M=4.81, SD=1.46, N=179). The gamer identification scale variable was therefore recoded as a dichotomous variable. The dichotomous gamer identification scale variable included 51.40% (N=179) who fell into the gamer category, whereas 48.60% were non-gamers. Similarly, the distribution of gender identity responses indicated a dichotomous

measure would be most appropriate. The dichotomous gender identity variable included 56.42% (N=179) who identified as man and 43.58% who identified as other.

The MANOVA results showed a significant effect of platform on the combination of warmth and competence when controlling for other factors, Pillai's Trace = 0.16, F(4, 588) = 12.41, $p < 0.01$, partial $\eta^2 = 0.08$. Follow-up Univariate results with Greenhouse-Geisser correction showed a significant effect of platform separately on both warmth [F(1.77, 268.92) = 8.87, $p < 0.01$, partial $\eta^2 = 0.06$] and competence [F(1.70, 250.17) = 21.29, $p < 0.01$, partial $\eta^2 = 0.13$]. Post hoc analysis with Bonferroni adjustment indicated warmth was significantly higher for mobile device players (M=4.54, SE=0.08) compared to console players (M=4.27, SE=0.011) and PC players (M=4.21, SE=0.11) (both $p \leq 0.01$). Competence means were significantly higher for PC players (M=5.28, SE=0.08) compared to console players (M=5.04, SE=0.08) and mobile device players (M=4.78, SE=0.09), and for console players compared to mobile device players (all $p < 0.01$).

The MANOVA results also showed a significant effect of the interaction between platform and gender identity on the combination of warmth and competence, Pillai's Trace = 0.03, F(4, 588) = 2.39, $p < 0.05$, partial $\eta^2 = 0.02$. Follow-up Univariate results with Greenhouse-Geisser correction showed a significant effect for the interaction of platform and gender identity on competence [F(1.70, 250.17) = 4.59, $p < 0.05$, partial $\eta^2 = 0.03$]. Post hoc analysis with Bonferroni adjustment showed that the interaction between gender identity and platform only had a significant effect on competence for those identifying as man [F(4, 144) = 11.05, $p < 0.01$, partial $\eta^2 = 0.24$]. All pairwise comparisons for men were significant at the ($p > 0.01$) level, with PC players having the highest mean (M=5.25, SE=0.11), followed by console players (M=4.91, SE=0.10) and mobile device players (M=4.52, SE=0.12).

Follow-up Univariate results with Greenhouse-Geisser correction showed a significant effect for the interaction of platform and gamer identification on competence [F(1.70, 250.17) = 3.32, $p < 0.05$, partial $\eta^2 = 0.02$]. Post hoc analysis with Bonferroni adjustment showed that the interaction between gamer identification and platform was significant both for gamers [F(4, 144) = 9.15, $p < 0.01$, partial $\eta^2 = 0.20$] and non-gamers [F(4, 144) = 3.11, $p < 0.05$, partial $\eta^2 = 0.08$]. Among those identifying as a gamer, all pairwise comparisons were significant, with PC players having the highest competence mean (M=5.56, SE=0.11) and mobile device players having the lowest (M=4.87, SE=0.13). For those identifying as a non-gamer, pairwise comparisons were not significant at the ($p < 0.05$) level.

The gamer identification factor was found to have a significant main effect across platforms on both warmth [F(1, 147) = 5.13, $p < 0.05$, partial $\eta^2 = 0.03$] and competence [F(1, 147) = 7.34, $p < 0.01$, partial $\eta^2 = 0.05$]. Post hoc analysis with a Bonferroni adjustment found that means were significantly higher for those identifying as a gamer (M=4.54, SE=0.13) as compared to those identifying as non-gamer (M=4.14, SE=0.13) for warmth ($p < .05$). Means were also significantly higher for those identifying as a gamer (M=5.23, SE=0.10) as compared to those identifying as non-gamer (M=4.85, SE=0.10) for competence.

The gender identity factor was found to have a significant effect across platforms on competence, F(1, 147) = 4.01, $p < 0.05$, partial $\eta^2 = 0.03$. Post hoc analysis with a Bonferroni adjustment found that competence means were significantly higher for

those identifying as other (M=5.18, SE=0.11) as compared to those identifying as man (M=4.89, SE=0.09) ($p < 0.05$).

Platforms and Emotional Reactions

A second MANOVA model was used to determine whether combined emotional reaction scores (admiration, envy, pity, contempt) differed by gaming platform, controlling for gamer identification and gender identity. Reliability and summary statistics are reported in Table 6.

	α	Mean	SD	N
Mobile Device Players				
Admiration	0.85	3.56	1.82	178
Pity	0.70	3.27	1.73	179
Envy	0.81	2.78	1.77	179
Contempt	0.86	2.88	1.76	179
Console Players				
Admiration	0.74	3.85	1.68	179
Pity	0.70	2.99	1.66	180
Envy	0.79	3.03	1.80	180
Contempt	0.88	2.83	1.72	179
PC Players				
Admiration	0.69	3.99	1.66	180
Pity	0.74	3.02	1.70	179
Envy	0.78	3.03	1.77	178
Contempt	0.84	2.88	1.70	180

Table 6: Descriptive Statistics for Admiration, Pity, Envy, and Contempt

Pre-analysis data screening was performed to ensure normality, linearity, and the absence of outliers. The MANOVA results showed a significant effect of platform on the combined set of emotional reactions when controlling for other factors, Pillai's Trace = 0.07, $F(8, 652) = 2.89$, $p < 0.01$, partial $\eta^2 = 0.03$. None of the interactions between platform and the between-subjects factors (gamer identification, gender identity) were found to be significant. Follow-up Univariate results with Greenhouse-Geisser correction showed a significant effect of platform separately on admiration [$F(1.85, 303.99) = 7.00$, $p < 0.01$, partial $\eta^2 = 0.04$], envy [$F(1.91, 313.84) = 4.29$, $p < 0.05$, partial $\eta^2 = 0.03$], and pity [$F(1.96, 321.39) = 3.99$, $p < 0.05$, partial $\eta^2 = 0.02$]. No significant effect of platform on contempt was found, $F(1.84, 301.54) = 0.29$, $p = 0.73$, partial $\eta^2 = 0.00$. Post-hoc analysis with Bonferroni adjustment found that admiration means were significantly higher for PC players (M=4.07, SE=0.12) as compared to mobile device players (M=3.63, SE=0.14) ($p < .01$). Envy ratings were significantly higher for console players (M=3.08, SE=0.14) as compared to mobile device players (M=2.80, SE=0.14) ($p < 0.01$). For the pity measure, pairwise comparisons were not significant at the ($p < 0.05$) level.

The gamer identification factor was found to have a significant main effect across platforms on admiration, $F(1, 164) = 18.76$, $p < 0.01$, partial $\eta^2 = 0.10$. Post hoc analysis with a Bonferroni adjustment found that admiration ratings were significantly higher

for those identifying as a gamer (M=4.35, SE=0.16) as compared to those identifying as non-gamers (M=3.40, SE=0.16) ($p < .01$).

Warmth, Competence, and Emotional Reactions

A series of twelve multiple linear regressions were performed to determine whether warmth and competence – along with gender identification and/or gender – predicted the four emotional reaction scores for the three gaming platforms. All regression results indicate the overall models significantly predicted each emotional reaction, though the individual predictors which significantly contributed to the models varied. Summaries of regression coefficients are presented in Tables 7-10.

Admiration

Regression results indicated the overall model significantly predicts admiration for console players, $R^2=0.23$, $R^2_{adj}=0.21$, $F(4, 159)=11.86$, $p < 0.01$. The model accounted for 21.0% of the variance in admiration scores. Competence and gamer identification (both $p < 0.01$) were significant predictors.

Regression results indicated the overall model significantly predicts admiration for PC players, $R^2=0.25$, $R^2_{adj}=0.23$, $F(4, 161)=13.44$, $p < 0.01$. The model accounted for 23.2% of the variance in admiration scores. Warmth ($p < 0.01$), competence ($p < 0.05$) and gamer identification ($p < 0.01$) were significant predictors.

Regression results indicated the overall model significantly predicts admiration for mobile device players, $R^2=0.21$, $R^2_{adj}=0.19$, $F(4, 162)=10.58$, $p < 0.01$. The model accounted for 18.8% of the variance in admiration scores. Competence was the sole significant predictor ($p < 0.01$).

Platform	Factors	B	β	t	*p*
Console Players	Warmth	0.17	0.14	1.73	0.086
	Competence	0.47	0.27	3.35	0.001**
	Gamer Identification	0.87	0.26	3.55	< 0.001**
	Gender Identity	0.05	0.02	0.21	0.831
PC Players	Warmth	0.39	0.32	4.18	< 0.001**
	Competence	0.26	0.16	2.00	0.047*
	Gamer Identification	0.72	0.22	3.07	0.003**
	Gender Identity	-0.13	-0.04	-0.58	0.565
Mobile Players	Warmth	0.070	0.04	0.44	0.660
	Competence	0.69	0.42	5.06	< 0.001**
	Gamer Identification	0.36	0.10	1.36	0.177
	Gender Identity	-0.13	-0.04	-0.50	0.620

**. Significant at the p < .05 level. **. Significant at the p < .01 level.*

Table 7: Summary of Regression Coefficients (Dependent Variable, Admiration)

Envy

Regression results indicated the overall models significantly predict envy for console players, $R^2=0.13$, $R^2_{adj}=0.10$, $F(4, 160)=5.70$, $p < 0.01$, and for PC players, $R^2=0.16$,

R^2_{adj}=0.14, F(4, 160)=7.06, p < 0.01. The model accounted for 10.3% and 13.9% of the variance in envy scores, respectively. In both cases warmth was the sole significant predictor (p < 0.01).

Regression results indicated the overall model significantly predicts envy for mobile device players, R^2=0.22, R^2_{adj}=0.20, F(4, 163)=11.61, p < 0.01. The model accounted for 20.3% of the variance in envy scores. Warmth (p < 0.05) and competence (p < 0.01) were significant predictors.

Platform	Factors	B	β	t	*p*
Console Players	Warmth	0.45	0.34	4.06	< 0.001**
	Competence	0.01	0.01	0.09	0.929
	Gamer Identification	0.14	0.04	0.50	0.618
	Gender Identity	-0.11	-0.03	-0.40	0.690
PC Players	Warmth	0.55	0.41	5.12	< 0.001**
	Competence	-0.19	-0.11	-1.26	0.208
	Gamer Identification	0.31	0.09	1.14	0.256
	Gender Identity	-0.38	-0.11	-1.43	0.156
Mobile Players	Warmth	0.30	0.17	2.10	0.037*
	Competence	0.61	0.38	4.64	< 0.001**
	Gamer Identification	-0.05	-0.01	-0.20	0.842
	Gender Identity	-0.28	-0.08	-1.06	0.291

**. Significant at the p < .05 level. **. Significant at the p < .01 level.*

Table 8: Summary of Regression Coefficients (Dependent Variable, Envy)

Platform	Factors	B	β	t	*p*
Console Players	Warmth	0.38	0.31	3.63	< 0.001**
	Competence	-0.08	-0.05	-0.55	0.584
	Gamer Identification	0.13	0.04	0.49	0.629
	Gender Identity	0.04	0.01	0.15	0.884
PC Players	Warmth	0.61	0.47	6.05	< 0.001**
	Competence	-0.51	-0.30	-3.69	< 0.001**
	Gamer Identification	0.51	0.15	2.01	0.046*
	Gender Identity	-0.22	-0.07	-0.92	0.360
Mobile Players	Warmth	0.44	0.26	2.91	0.004**
	Competence	-0.01	-0.00	-0.03	0.974
	Gamer Identification	0.26	0.08	0.96	0.340
	Gender Identity	-0.38	-0.11	-1.40	0.164

**. Significant at the p < .05 level. **. Significant at the p < .01 level.*

Table 9: Summary of Regression Coefficients (Dependent Variable, Pity)

Pity

Regression results indicated the overall model significantly predicts pity for console players, R^2=0.09, R^2_{adj}=0.07, F(4, 160)=3.91, p < 0.01. The model accounted for 6.6% of the variance in pity scores. Warmth was the sole significant predictor (p < 0.01).

Regression results indicated the overall model significantly predicts pity for PC players, R^2=0.21, R^2_{adj}=0.19, F(4, 160)=10.32, p < 0.01. The model accounted for 18.5% of the variance in pity scores. Warmth (p < 0.01), competence (p < 0.01), and gamer identification (p < 0.05) were significant predictors. The coefficient for competence was negative.

Regression results indicated the overall model significantly predicts pity for mobile device players, R^2=0.09, R^2_{adj}=0.07, F(4, 163)=4.01, p < 0.01. The model accounted for 6.7% of the variance in pity scores. Warmth was the sole significant predictor (p < 0.01).

Contempt

Regression results indicated the overall model significantly predicts contempt for console players, R^2=0.09, R^2_{adj}=0.07, F(4, 159)=4.13, p < 0.01. The model accounted for 7.1% of the variance in contempt scores. Warmth was the sole significant predictor (p < 0.01).

Regression results for PC players indicated the overall model significantly predicts contempt, R^2=0.11, R^2_{adj}=0.08, F(4, 161)=4.76, p < 0.01. The model accounted for 8.3% of the variance in contempt scores. Warmth (p < 0.01) and competence (p < 0.05) were significant predictors. The coefficient for competence was negative.

Regression results for mobile device players indicated the overall model significantly predicts contempt, R^2=0.09, R^2_{adj}=0.07, F(4, 163)=3.99, p < 0.01. The model accounted for 6.7% of the variance in contempt scores. Warmth was the sole significant predictor (p < 0.01).

Platform	**Factors**	**B**	**β**	**t**	***p***
Console Players	Warmth	0.44	0.34	3.99	< 0.001 **
	Competence	-0.22	-0.12	-1.41	0.161
	Gamer Identification	-0.26	-0.08	-0.95	0.343
	Gender Identity	-0.12	-0.03	-0.42	0.674
PC Players	Warmth	0.46	0.35	4.27	< 0.001**
	Competence	-0.30	-0.18	-2.05	0.042*
	Gamer Identification	-0.13	-0.04	-0.50	0.618
	Gender Identity	-0.24	-0.07	-0.95	0.346
Mobile Players	Warmth	0.47	0.27	3.04	0.003**
	Competence	0.11	0.07	0.79	0.429
	Gamer Identification	-0.24	-0.07	-0.86	0.390
	Gender Identity	-0.09	-0.03	-0.32	0.751

**. Significant at the p < .05 level. **. Significant at the p < .01 level.*

Table 10: Summary of Regression Coefficients (Dependent Variable, Contempt)

DISCUSSION

Warmth and Competence Differences Based on Platform

The analyses show platform matters when it comes to perceived warmth and competence, both in combination and separately. The results suggest these stereotypic perceptions reinforce the idea that mobile game players are perceived as less competent than console or PC players. The results indicate significant differences in terms of perceived competence, with the traditional order (PCs first, mobile devices last) still present. Perceptions of warmth were significantly higher for mobile game players compared to players on console and PC platforms. These results suggest that while perceptions of skills among mobile device players may still be considered inferior, perceptions relating to the threat posed by mobile gamers to the traditional gaming order may be lessening. While research has suggested that prejudice against casual gamers results in marginalization or harassment due to a defensive traditionalist posture (Chess and Paul 2019; Consalvo and Paul 2019), these results suggest that warmth towards mobile device players outpaces other platforms. Increased warmth is associated with increased perceptions of commonality and decreased perceptions of threat, resulting in mixed and paternalistic stereotypes (Fiske at al. 2002). Platform differences such as interface design (e.g. touch screens vs. gamepads) or popular game genres (e.g. puzzle games vs. first-person shooters) may impact these perceptions. These results offer hope that mobile/casual games are becoming more accepted, and that the accessibility of the platform can continue to attract new players and motivate the gaming industry to produce diverse games.

These results are tempered by the interaction effects of platform with both gamer identification and gender identity, especially as it applies to perceptions of competence. The analysis showed that the interaction of platform and gamer identification had a significant impact on perceptions of competence for all platforms, though the traditional order – PC players the most competent, mobile game players the least – was reinforced for self-identified gamers. Examined separately, identifying as a gamer resulted in significantly higher means for both warmth and competence compared to non-gamers, suggesting gamer identification tends to inflate perceptions of both dimensions. This result is expected, as in-group (game players) association necessarily impacts perceptions of that group (Fiske et al. 2002).

The interaction effects of platform and gender identity had a significant impact on competence perceptions for all platforms, though deeper analysis only found significant impacts for those identifying as a man. The significant impacts on competence for those identifying as a man again reinforced the traditional order, with PC players as the most competent, followed by console and mobile device players. The interaction results suggest that platform plays a role in perceived competence for men, which aligns with the traditional perspective of male gamers and the preference for hardcore gaming. However, when examining the role of gender identity separately, identifying as other resulted in significantly higher perceptions of competence as compared to those identifying as a man. This result suggests that, regardless of platform, there exists a greater perception of gaming skills across platforms among those not identifying as a man. While it can be hypothesized that those not identifying as a man have a greater level of respect due to an increase in the number of active women game players, more research is needed to uncover the reasons behind this differential as well as moderating factors. Future research should

consider the role that other intersecting forms of identity may have in these interactions.

Platforms and Emotional Reactions

The analysis results showed that platform matters for the combined emotional reactions (admiration, envy, pity, and contempt) and, separately, for three of the four emotional reactions (admiration, pity, and envy). Deeper exploration found that perceptions of admiration were significantly higher for PCs as opposed to mobile game players, and perceptions of envy were significantly higher for console players as opposed to mobile players. Gamer identification played an important role for only one emotional reaction; perceptions of admiration were found to be significantly higher among gamers compared to non-gamers.

These results suggest further investigation may help determine causal factors which impact differential emotional responses. While the admiration results can be said to reflect the traditional perception of PC players as the top of the gaming respect hierarchy, the fact that admiration in general was higher among those identifying as a gamer begs the question as to how and why more casual game players – in terms of platform, relative valuation, and time invested, among others – respond emotionally to platforms, game genres, and other gaming factors. For self-identified gamers, the emotional investment in gaming is likely higher than non-gamers, and the self-concept of gamers should naturally be reflected in pride and admiration towards the in-group and its technologies. The envy results may result from the prominent role that consoles play in the consumer market, with regular technology/platform rollouts, title exclusivity, and integration with other media platforms. Future research may do well to consider using more qualitative research methods to explore specific platform stereotypes and associated emotional responses. Future studies may also wish to incorporate secondary data such as chat streams from gaming outlets.

Predicting Emotional Responses

The regression analyses verified the important role that warmth and competence play in predicting specific emotional reactions, though not necessarily as outlined by SCM theory. All regression models were significant, though the amount of variance explained by the models was small in some cases. Warmth was a significant predictor of pity, envy, and contempt across all platforms, while competence was a significant predictor of admiration across platforms. In only four of the 12 regressions were both warmth and competence significant predictors, suggesting that one of these predictors plays a primary role in predicting specific emotional responses for most platform/emotion combinations. Gender identity was not a significant predictor in any model. Gamer identification was only significant in three cases. For PC players, gamer identification significantly predicted both admiration and pity; for console players, gamer identification significantly predicted admiration.

While SCM theory ties higher levels of warmth with a greater tendency towards more paternalistic stereotypes (i.e., pity), the warmth results regarding envy and contempt are at odds with SCM theory. Additional research is needed to uncover the intricacies of the relationships found here, which indicate a greater perception of independence and commonality among game players predicts both envy and contempt. This may result from prejudicial tendencies towards specific platforms (and their players), but more research is needed to determine why this prejudice may exist despite a non-

threatening perception. It is worth noting that competence was a significant negative predictor for PCs – suggesting that lesser perceptions of the competence of PC gamers would lead to greater feelings of both pity and contempt. The positive warmth / negative competence predictors for pity aligns with the cognition-emotion reactions from the SCM, which suggests that pity results from a combination of higher perceived warmth and lower perceived competence but does not align with expectations for contempt (low warmth, low competence). Warmth was only a significant predictor for admiration for one platform – PC players, which found both warmth and competence to be significant positive predictors. This result, suggesting higher levels of both warmth and competence lead to a greater tendency towards admiration, is comparable to the corresponding SCM mapping (high warmth, high competence).

The mixed regression results point to a complex relationship between perceptions of warmth, competence, and emotional reactions. This complexity suggests other factors not identified in these models may play a role and the relationship between warmth, competence, and emotional reactions may be more nuanced than is envisioned by the SCM. However, the regression results point to the primacy of the warmth dimension suggested by SCM theory (Fiske 2015). Warmth perceptions play a significant role in predicting the emotional responses in 10 of 12 models, whether those emotions are positive (e.g., admiration), negative (e.g., contempt), or something in between. Competence was found to play a lesser role in predicting emotional responses.

Limitations

The lack of data on the gaming patterns of respondents – what platforms they play or favor – is a recognized study limitation. Given that SCM theory posits that the warmth dimension is primary when judging distant individuals – and that competence becomes primary for judging oneself (Kervyn et al. 2013) – information on the gaming activities of the survey participants would have been helpful in unpacking some regression model results. Future studies should incorporate this element within their data collection, as well as striving for more diverse participants. Potential methods for gathering platform preference data include collecting qualitative data on perceptions and attitudes via interviews, focus groups, or open-ended surveys, or incorporating chat data from gaming forums or gameplay instances. A more diverse set of participants may be available through directed recruitment efforts in academia or gaming forums.

CONCLUSION

Stereotypes involving video game players, what constitutes real games, and which gaming platforms are superior, have persisted since the 1970s. These stereotypes have been shown to negatively impact gaming in terms of external perception, community-building, and the capacity for inclusion, among others (Cote 2017; Kaye et al. 2018). This study uses an established model of social perception – the SCM – to explore stereotypic perceptions of video game players based on those players' use of common game platforms. Overall, the results demonstrate the differential influence of video gaming platform choice on stereotype attribution for video game players. The study indicates that traditional perceptions of platform differences – the PC/console/mobile hierarchy – may persist among today's game players, that emotional reactions differ by platform, and that the role of warmth and competence in predicting these reactions, while a complex phenomenon, indicates the theoretical

primacy of warmth (Fiske 2015). Future research is encouraged to explore how and why these platform-specific perceptions form, as well as how these stereotypes and emotional prejudices may lead to discriminatory interactions.

REFERENCES

Bergonse, R. 2017. "Fifty Years On, What Exactly Is a Videogame? An Essentialistic Definitional Approach." *The Computer Games Journal.* 6 (4). https://doi.org/10.1007/s40869-017-0045-4.

Butt, M., and D. Dunne. 2019. "Rebel Girls and Consequence in *Life Is Strange* and *The Walking Dead*." *Games and Culture.* 14 (4). https://doi.org/10.1177/1555412017744695.

Caprariello, P. A., A. J. Cuddy, and S. T. Fiske. 2009. "Social Structure Shapes Cultural Stereotypes and Emotions: A Causal Test of the Stereotype Content Model." *Group Processes & Intergroup Relations.* 12 (2). https://doi.org/10.1177/1368430208101053.

Chess, S., and C. A. Paul. 2019. "The End of Casual: Long Live Casual." *Games and Culture.* 14 (2). https://doi.org/10.1177/1555412018786652.

Consalvo, M. C., and C. A. Paul. 2019. *Real Games: What's Legitimate and What's Not in Contemporary Videogames*. MIT Press.

Cote, A. C. 2017. "I Can Defend Myself: Women's Strategies for Coping with Harassment While Gaming Online." *Games and Culture.* 12 (2). https://doi.org/10.1177/1555412015587603.

Cote, A. C. 2018. "Writing 'Gamers': The Gendered Construction of Gamer Identity in *Nintendo Power* (1994–1999)." *Games and Culture.* 13(5). https://doi.org/10.1177/1555412015624742

Cote, A. C. 2020. "Casual Resistance: A Longitudinal Case Study of Video Gaming's Gendered Construction and Related Audience Perceptions." *Journal of Communication.* 70 (6). https://doi.org/10.1177/1555412015624742.

Cuddy, A. J., S. T. Fiske, and P. Glick. 2007. "The BIAS Map: Behaviors from Intergroup Affect and Stereotypes." *Journal of Personality and Social Psychology*. 92 (4).

Deshbandhu, A. 2016. "Player Perspectives: What It Means to Be a Gamer." *Press Start.* 3 (2).

DiSalvo, B. 2017. "Gaming Masculinity." In *Diversifying Barbie and Mortal Kombat: Intersectional Perspectives and Inclusive Designs in Gaming*, 105–17. Lulu.com.

Doosje, B., N. Ellemers, and R. Spears. 1995. "Perceived Intragroup Variability as a Function of Group Status and Identification." *Journal of Experimental Social Psychology.* 31 (5). https://doi.org/10.1006/jesp.1995.1018.

Dowling, D. O., C. Goetz, and D. Lathrop. 2020. "One Year of #GamerGate: The Shared Twitter Link as Emblem of Masculinist Gamer Identity." *Games and Culture.* 15 (8). https://doi.org/10.1177/1555412019864857.

Evans, S. B., and E. Janish. 2015. "#INeedDiverseGames: How the Queer Backlash to GamerGate Enables Nonbinary Coalition." *QED: A Journal in GLBTQ Worldmaking.* 2 (2). https://doi.org/10.14321/qed.2.2.0125.

Fiske, S. T. 2015. "Intergroup Biases: A Focus on Stereotype Content." *Current Opinion in Behavioral Sciences.* 3. https://doi.org/10.1016/j.cobeha.2015.01.010.

Fiske, S. T. 2018. "Stereotype Content: Warmth and Competence Endure." *Current Directions in Psychological Science.* 27 (2). https://doi.org/10.1177/0963721417738825.

Fiske, S. T., A. J. C. Cuddy, P. Glick, and J. Xu. 2002. "A Model of (Often Mixed) Stereotype Content: Competence and Warmth Respectively Follow from Perceived Status and Competition." *Journal of Personality and Social Psychology/* 82 (6). https://doi.org/10.1037/0022-3514.82.6.878.

Huang, V., M. Young, and A. J. Fiocco. 2017. "The Association between Video Game Play and Cognitive Function: Does Gaming Platform Matter?" *Cyberpsychology, Behavior, and Social Networking.* 20 (11). https://doi.org/10.1089/cyber.2017.0241.

Jenaro, C., N. Flores, and J. López-Lucas. 2018. "Using the Semantic Differential Technique to Assess Stereotypes Toward Individuals with Disabilities: The Relevance of Warmth and Competence." *Universitas Psychologica.* 17 (4). https://doi.org/10.11144/Javeriana.upsy17-4.usdt.

Kaye, L. K., and C. R. Pennington. 2016. "'Girls Can't Play': The Effects of Stereotype Threat on Females' Gaming Performance." *Computers in Human Behavior.* 59. https://doi.org/10.1016/j.chb.2016.02.020.

Kaye, L. K., C. R. Pennington, and J. J. McCann. 2018. "Do Casual Gaming Environments Evoke Stereotype Threat? Examining the Effects of Explicit Priming and Avatar Gender." *Computers in Human Behavior.* 78. https://doi.org/10.1016/j.chb.2017.09.031.

Kervyn, N., S. T. Fiske, and V. Y. Yzerbyt. 2013. "Integrating the Stereotype Content Model (Warmth and Competence) and the Osgood Semantic Differential (Evaluation, Potency, and Activity)." *European Journal of Social Psychology.* 43 (7). https://doi.org/10.1002/ejsp.1978.

Kivijärvi, M., and S. Katila. 2022. "Becoming a Gamer: Performative Construction of Gendered Gamer Identities." *Games and Culture.* 17 (3). https://doi.org/10.1177/15554120211042260.

Kowert, R., R. Festl, and T. Quandt. 2014. "Unpopular, Overweight, and Socially Inept: Reconsidering the Stereotype of Online Gamers." *Cyberpsychology, Behavior, and Social Networking.* 17 (3). https://doi.org/10.1089/cyber.2013.0118.

Lewis, A., and M. Griffiths. 2011. "Confronting Gender Representation: A Qualitative Study of the Experiences and Motivations of Female Casual-Gamers." *Aloma: Revista de Psicologia, Ciències de l'Educació i de l'Esport.* 28.

Lopez-Fernandez, O., A. Jess Williams, and D. J. Kuss. 2019. "Measuring Female Gaming: Gamer Profile, Predictors, Prevalence, and Characteristics from Psychological and Gender Perspectives." *Frontiers in Psychology.* 10. https://doi.org/10.3389/fpsyg.2019.00898.

Mieczkowski, H., S. X. Liu, J. Hancock, and B. Reeves. 2019. "Helping Not Hurting: Applying the Stereotype Content Model and Bias Map to Social Robotics." In *Proceedings of the 2019 14th ACM/IEEE International Conference on Human-Robot Interaction*, 222–29. IEEE. https://doi.org/10.1109/HRI.2019.8673307.

Myers, B. 2019. "Friends with Benefits: Plausible Optimism and the Practice of Teabagging in Video Games." *Games and Culture.* 14 (7–8). https://doi.org/10.1177/1555412017732855.

Ochsner, A. 2019. "Reasons Why: Examining the Experience of Women in Games 140 Characters at a Time." *Games and Culture.* 14 (5). https://doi.org/10.1177/1555412015610073.

Paaßen, B., T. Morgenroth, and M. Stratemeyer. 2017. "What Is a True Gamer? The Male Gamer Stereotype and the Marginalization of Women in Video Game Culture." *Sex Roles.* 76. https://doi.org/10.1007/s11199-016-0678-y.

Schwind, V., N. Deierlein, R. Poguntke, and N. Henze. 2019. "Understanding the Social Acceptability of Mobile Devices Using the Stereotype Content Model." In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*, 1–12. https://doi.org/10.1145/3290605.3300591.

Shaw, A. 2012. "Do You Identify as a Gamer? Gender, Race, Sexuality, and Gamer Identity." *New Media & Society.* 14 (1). https://doi.org/10.1177/1461444811410394.

Srinivasan, A., and N. Venkatraman. 2010. "Indirect Network Effects and Platform Dominance in the Video Game Industry: A Network Perspective." *IEEE Transactions on Engineering Management.* 57 (4). https://doi.org/10.1109/TEM.2009.2037738.

Steele, C. M., and J. Aronson. 1995. "Stereotype Threat and the Intellectual Test Performance of African Americans." *Journal of Personality and Social Psychology.* 69 (5). https://psycnet.apa.org/doi/10.1037/0022-3514.69.5.797.

Stone, J. 2019. "Self-Identification as a 'Gamer' Among College Students: Influencing Factors and Perceived Characteristics." *New Media & Society.* 21 (11–12). https://doi.org/10.1177/1461444819854733.

Stone, J. 2021. "Uncovering the Meaning: Exploring Semantic Differences in U.S. Perceptions of 'Gamer' and Game Players." *Games and Culture.* 16 (7). https://doi.org/10.1177/15554120211005234.

Tajfel, H.. 1974. "Social Identity and Intergroup Behaviour." *Social Science Information.* 13 (2). https://doi.org/10.1177/053901847401300204.

Tajfel, H., and J. Turner. 1986. "The Social Identity Theory of Intergroup Behavior." In *The Psychology of Intergroup Relations*, edited by Stephen Worchel and William G. Austin, 7–24. Chicago: Nelson-Hall.

Taylor, T. 2012. *Raising the Stakes: E-Sports and the Professionalization of Computer Gaming*. MIT Press.

Vanderhoef, J. 2013. "Casual Threats: The Feminization of Casual Video Games." *Ada: A Journal of Gender, New Media, & Technology.* 2. https://doi.org/10.7264/N3V40S4D.

Vermeulen, L., and J. Van Looy. 2016. "'I Play So I Am?' A Gender Study into Stereotype Perception and Genre Choice of Digital Game Players." *Journal of*

Broadcasting & Electronic Media. 60 (2). https://doi.org/10.1080/08838151.2016.1164169.

Vermeulen, L., S. Van Bauwel, and J. Van Looy. 2017. "Tracing Female Gamer Identity: An Empirical Study into Gender and Stereotype Threat Perceptions." *Computers in Human Behavior.* 71. https://doi.org/10.1016/j.chb.2017.01.054.

Williams, D., N. Yee, and S. Caplan. 2008. "Who Plays, How Much, and Why? Debunking the Stereotypical Gamer Profile." *Journal of Computer-Mediated Communication.* 13 (4). https://doi.org/10.1111/j.1083-6101.2008.00428.x.

Yim, B., A. Lepp, B. Dowdell, and J. Barkley. 2023. "The Gamer Identity Scale: A Measure of Self-Concept as a Video Gamer." *Computers in Human Behavior.* 138. https://doi.org/10.1016/j.chb.2022.107476.