Early adolescents' perceptions and attitudes towards gender representations in video games

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ABSTRACT

This study investigated adolescents' perception and attitudes towards gender representation in video game covers, and the degree to which these depictions may influence their notions on gender and identification. Seventeen participants ranging from ages 12 and 13 participated in semi-structured interviews to explore this topic. This study's conceptual framework encompassed social cognitive theory, gender schema theory, and cultivation theory. Findings suggest that gender representation in video games does influence the majority of participants' notions of gender. However, there are differences between how males and females' approach, interpret, and respond to this type of media. Findings also showcased that evidence of implicit bias was detected in both male and female participants, demonstrated through inconsistencies in their responses. Finally, the findings revealed a significant lack of identification from the majority of participants with video game characters, as many participants were able to clearly distinguish between simulated and real-life experiences.

Keywords: *video games, early adolescents, gender socialization, gender representation, media literacy.*

INTRODUCTION

Media is an influential socializing agent of the modern era, with video games representing one of the most popular forms of media entertainment around the world (Bègue et al., 2017). The Entertainment Software Association of Canada (2016) reported that 57% of Canadian adults own a console, while ages ranging specifically from 18 to 34 led console ownership at 70%. With such widespread usage, concerns regarding the influence of video games on youth continue to be a prevalent issue, particularly in the wake of growing platform options and technological advancements that make the gaming industry's offerings more enticing and accessible (Bègue et al., 2017). Previous literature has identified a relationship between the use of video games and effects on gender identification and socialization among youth. Thus, the current research study aimed to explore adolescents' perception and attitudes towards gender representation in video games, and the degree to which these depictions might influence their notions on gender and identification.

Fox and Bailenson (2009) discussed how in comparison to males, female video game characters are much more likely to be depicted in an objectified or sexualized manner, and often confined to secondary or inferior roles. These characterizations of females in games are frequently further generalized into two formulaic exaggerations of temperament: the vamp and the virgin. These representations dominate in media and Fox and Bailenson (2009) highlighted how they could ultimately distort individuals' apprehension of acceptable gender related suppositions, as females might become associated with these two stereotypes. Reinforcement of these sentiments can perpetuate perceptions of females existing solely within a sexual context and foster unseemly behavioral inclinations, particularly towards females, among players that are regularly subject to games where female objectification is featured as a central motif (Bègue et al., 2017; Fox & Potocki, 2016; Yao et al., 2010).

In contrast, male video game characters are often represented as unrealistically dominant in multiple respects and hypermasculine to an extent that is likely damaging to the process of healthy self-definition (Gabbiadini et al., 2016). Martins et al. (2011) revealed the average American male's body proportions are not accurately represented by male video game characters. Male game characters were instead found to be endowed with enlarged chest, waist, and hip measurements. Fox and Tang (2014) additionally considered links between masculine norms and authoritarian societal positions conventionally assigned to males. They examined the potential degenerative effect on modern healthy social development brought on by the promotion of traditional masculinity customarily associated with hostility and establishing supremacy, contributing to problematic patriarchal social structures (Anderson et al., 2010).

Though stereotypical representations within the media are often seen as harmless or merely utilized for the purposes of entertainment, Fox and Bailenson (2009) revealed that in actuality, subjection to the sexualized and stereotyped portrayals of females prompts both interim and prolonged consequences. The sustained schemas of individuals, for example, often mirror stereotypes as the result of an effort to compress their surrounding world into manageable and easily understood categorizations (Deskins, 2013). As such, the long-established depictions of females and males within the video games adolescents play can affect their gender identities and expectations (Fox & Bailenson, 2009). Gabbiadini et al. (2016) highlighted how stereotyped gender representations must be appropriately assessed as guiding catalysts for socialization given their strong presence in prevalent youth culture. Individuals, specifically adolescents, depend on immediate environmental transpirations to formulate their templates for feminine and masculine interaction, from which they surmise expectations of gendered conduct. As such, the messages received through video games can impact the long-term formation of identity due to adolescent individuals' subconscious assimilation and retention of early exposure to gender roles.

However, much of the literature regarding the influences of playing video games focuses on the violent content found in these entertainment games. Many such studies explore the effect of violent video games on adolescents' cognitive and social development (Exelmans et al., 2015; You et al., 2015). Despite acknowledging relevant issues in the content of video games, few empirical studies have applied systematic scrutiny in the exploration of gender related and identification effects, both positive and negative. Of the studies that have explored impacts of gender socialization and identification (Gabbiadini et al., 2016; Huh, 2015), data regarding adolescents, specifically individuals ranging from ages 11-13 who attend elementary school, is less clear.

Studies that investigate the relationship between video games and gender issues and identification have been conducted in greater frequency with adolescents

attending secondary and postsecondary institutions (Fox & Potocki, 2016; Gabbiadini et al., 2016; Yao et al., 2010). There remain vast opportunities to expand upon the understanding of adolescents in the context of their game playing habits in order to make meaningful comparisons to the abundance of data on older adolescents and young adults.

Purpose of study

This study explored perceptions and attitudes towards gender representation in video games through the examination of video game experiences and gender represented through video game covers among adolescents with varying levels of exposure to gaming. The discussions regarding gender representation in this study will revolve around early adolescents' perceptions and attitudes towards gender representation in video games and the analysis of video game covers. The representations will focus on male and female genders due to the lack of representations of transgender, gender queer, non-binary, and intersex characters in video games and literature (Shaw & Friesem, 2016). The present study aimed to precipitate awareness and to provide better understanding about the issues related to gender and identity in relation to video game playing. This topic is especially pertinent given the common under-appreciation for the media's ability to enact social change through long-term subjection to digital content. Therefore, it was the intent of this study to explore and build upon understandings of how video game consumption may influence notions of gender, gender socialization, and self-identification in adolescents.

Research questions

The primary research questions guiding this study will consist of the following:
1. What are adolescents' video game playing patterns and habits?
2. What are adolescents' perceptions and attitudes towards gender representation in video games?
3. What beliefs and attitudes do adolescents convey about what it means to be a particular gender represented in video games?
4. What beliefs, attitudes, and experiences do adolescents convey about what it means to be a particular gender in real life?
5. What degree of identification do participants experience in real life pertaining to portrayals in video games?

6. How do participants' video game playing patterns and habits influence their gender socialization and identification with video game characters?

Theoretical framework

To guide the thinking and structure of this study, social cognitive theory, gender schema theory, and cultivation theory were used as the theoretical framework in order to understand the relationship between adolescents and video game play, specifically pertaining to social and cognitive development. Social cognitive theory advances that social experiences, both direct and observed, comprise a significant and important portion of developmental learning. According to Bandura (2001), this theory accounts for the ability of social influences to set or alter expectations and mould behavioral cognition. Thus, defining social experiences are processed into manageable and generally applicable templates for future conduct. Gender schema theory proposes that children foster stereotypical notions of gender from their interactions with their immediate environment. Through these interactions, children will establish gendered knowledge structures with the expectation that their attitudes and behaviors will align with distinct genders (Bussey & Bandura, 1999). Finally, cultivation theory suggests that media has the ability to influence individuals' views and understandings of social reality through the interactive and experiential nature of these virtual environments. As such, adolescents may be more vulnerable to impressions of gender norms and identification processes (Fox & Potocki, 2016).

METHODOLOGY

The study utilized a descriptive study approach, which provided a relatable and comprehensive summary of an experience or event while pursuing descriptive validity, documentation, and precise accounts of the experience or event in question (Sandelowski, 2000). The 17 participants in this study consisted of grade 7 and 8 students, 12 to 13 years of age, from one independent boarding and day school in Ontario. Students in this range are transitioning from childhood to early adolescence, which is a period of significant developmental changes that establish long-term means of self-identification among youths (Eccles, 1999). Purposeful sampling was employed during participant selection in order to garner the most informative and gainful data from participants closely related to the topic

of study. This voluntary study involved the students of one participating teacher and sample size was limited by a combination of parameters. The independent boarding and day school operates with reduced classroom sizes compared to public school systems and sample size was further limited to those students who obtained parental consent, many of whom encountered complications as a result of their status as international students. Of the remaining candidates, only students that identified themselves as video game players participated.

Participants' qualitative responses were obtained through a semi-structured interview that consisted of a mix of close-ended and open-ended questions conceived to map their video game consumption patterns, attitudes towards gendered roles within video games, and perception of game depictions and themselves. Prior to the interview, participants were asked whether or not they knew what gender stereotypes were in order to ensure their understanding of the discussion topic. Examples and further clarification of terms or concepts were provided as necessary.

The first component of the interview consisted of questions that were developed in order to establish an understanding of participants' video game playing habits, patterns, and attitudes. The second interview component encompassed more open-ended questions that offered an opportunity for participants to provide deeper answers and further contributed to a better comprehensive understanding of participants' perceptions of gender and identity with characters from video games. The final component of the interview utilized cover images retrieved from the top 10 best-selling video games of 2017 in the United States reported by the NPD Group Incorporated (Makuch, 2017). Selecting gaming media from a verified list of recent best-selling titles was considered a reasonable means of maintaining a discussion that was relevant amongst the current adolescent populace. Participants examined the following game covers: *Madden NFL 18*, *NBA 2K18*, *Grand Theft Auto V* (*GTA V*), *Destiny 2*, *Horizon: Zero Dawn*, *Tom Clancy's Ghost Recon: Wildlands*, *Legend of Zelda: Breath of the Wild*, and *Mass Effect: Andromeda*.

DATA ANALYSIS AND RESULTS

As the research study employed an exploratory descriptive approach aimed to "explore any phenomenon in the data which serves as a point of interest to the researcher" (Zainal, 2007, p. 3), general questions were asked that allowed opportunities for

further examination of the phenomenon observed. This allowed opportunities to intricately investigate adolescents' exposure to video games and their influence on notions of gender and self-perception. The study made use of an inductive research approach where relevant data was collected that aligned with the research topic and responses to qualitative questions were entered into NVivo, a qualitative data analysis software. The data was coded and sorted by its modules and then applicable patterns were determined through cross-comparison of the organized data, giving rise to themes and theories. The research conducted in the study achieved triangulation through semi-structured comprehensive interviews, member checks, and field notes.

Video game frequency

Based on the results, 17 out of 17 participants (100%) declared that they played video games; six were female and 11 were male. Therefore, all participants declared that they played video games. In order to determine the amount of time participants played video games, participants were asked to provide an estimate of the number of hours they played video games per day. Participants categorized their playing time into two groups, which consisted of hours spent playing on the weekday and hours spent playing on the weekend. Overall, all 17 participants declared playing at least within 1 hour of video games every day of the week, while the majority of participants (76%; nine male, four female) reported playing over 1 hour every day of the week.

Favorite games

In order to determine what video games participants were interested in and actively played, participants were asked to list two or three of their favorite video games. These games were later categorized based on their genre in order to identify the video gaming environments that participants were spending the most time in. The data are presented in Table 1. These presented data revealed that males (82%) most often reported playing Shooter games, while the most frequently played games for females were mobile games played by 4 of 6 (67%) female participants. Furthermore, the majority of male participants (82%) reported most frequently playing video games rated *Mature*, while all female participants reported most frequently playing video games rated *Everyone*. Overall, males and females reported distinct

preferences with respect to their favoured games and games played by males were not games played by female participants.

Gender representation in video games

Participants were asked to explain what gender stereotypes were and were provided a definition for clarity if participants were unable to. Gender stereotypes were defined as personal beliefs and standardized representations of gender within a culture which highlight differences between sexes, often focused on physical appearance, behaviors, traits, and occupations (Chandler & Munday, 2011). Eleven of 17 participants (65%; 9 males, 2 females) stated that they knew what gender stereotypes were and provided a definition or example. In order to determine participants' pre-existing notions of gender stereotypes in video games, participants were asked to reflect upon their video game experiences. According to the results, 8 of 17 participants (47%; 4 males, 4 females) stated that they had heard or seen gender stereotypes in video games. There were two most common answers for what participants had seen or heard regarding gender stereotypes in video games. These answers consisted of female characters being weaker than male characters, and the lack of representation of female characters in video games. In response to the cover for *NBA 2K18*, a participant stated:

> They don't have a girl's league. Like in NBA, they could include the girls' national team or something, which could get girls more involved in it. But maybe not all, I don't know if anyone wants to play all women, because it's usually a man's sport. It's called NBA. It's the men's league. But they should maybe put women on their own teams in there. (Male; video game player)

Gender representation in real life

In order to address research questions regarding participants' perceptions and attitudes towards gender representation in real life, participants were asked to elaborate about society and their own ideals of what males and females should look and act like in order to establish their pre-existing beliefs and attitudes. *Strong* was the most reoccurring word used to describe society's accepted ideal for what males should look and act like (41%; 4 males, 3 females). *Pretty* was the most reoccurring word used to describe society's accepted ideal for what females should look and act like (53%; 4 males, 5 females). Fourteen of 17 participants (82%; 8 males, 6 females) did not identify specific personal

ideals to which males and females should be expected to adhere to.

Participants were asked to elaborate on their real-world experiences with gender stereotypes and describe any instances where they had seen gender stereotypes in real life. Eight of 17 participants (47%; 2 males, 6 females) reported seeing gender stereotypes in real life. A participant recalled an observation, "I'm a competitive dancer and there was this boy in my dance studio. He's really good, but he had to leave because he was getting physically bullied because he was a dancer" (female; video game player). Following this, participants were asked to describe their personal experiences with gender stereotypes in real life. Five of 17 participants (29%; 0 males, 5 females) reported experiencing gender stereotypes in real life. A participant discussed her experiences with gender stereotypes and shared:

> Yeah, cause I play hockey right? And [boys are] all like, "You're a girl and you're gonna be a lesbian." They say things like that just because I'm a girl and I play hockey […] I also use to play with boys but I didn't like it as much. They were really rough and they would always be like, "Aww I'm with a girl, aww I want to be with boys." So if we were doing stuff with partners, I would never get a partner because I was the only girl and they always wanted to be with boys. (Female; video game player)

Overall, male participants were adamant about never experiencing gender stereotypes in real life.

Identification with video game character portrayals

In order to determine the degree of identification with video game characters, participants were encouraged to draw upon past experiences to discuss connections between self and video game characters. Overall, the majority of participants reported no level of identification with video game character portrayals (88%; 10 males, 5 females) or admirable traits (82%; 9 males, 5 females), no pressure to conform to stereotypes as a result of playing video games (88%; 10 males, 5 females), and did not experience a real life social situation influenced by video games (82%; 8 males, 6 females). This lack of identification was highlighted by a participant who stated, "They're controlled by the person playing so they have to do what the person does so it's kind of hard to relate to a video game character" (female; video game player). Furthermore, fifteen of 17 participants (88%; 10 males, 5 females) reported no experience with feeling pressured to conform to gender stereotypes in real life when playing video games. A

participant emphasized, "Not really. I like the way I am right now, and I like life the way it is" (male; video game player).

DISCUSSION

Video game playing patterns and habits

Past research have shown that there are gender-distinguishing patterns of participants, where studies have identified a trend of female aversion to violent or competitive gaming atmospheres that males are more likely to seek out and enjoy (Assunção, 2016; Loebenberg, 2018; Vermeulen & Van Looy, 2016). The results of the present study align with this research, as these data revealed that after categorizing participants' favorite video games into genres, male and female participants' favorite video games greatly contrasted one another. The most popular games for the majority of male participants consisted in shooter games rated *Mature*, while the most popular games for the majority of female participants were casual mobile games rated *Everyone*. According to Shaw (2011), part of the reason for gendered game preferences may be a result of the marketed games for males and females. Hartmann and Klimmt's (2006) study examining females' game style preferences found that females preferred to play video games that had less violence, a non-sexualized role for female characters, and lots of opportunities for social interaction. As a result, endorsement of female media preferences, rooted in stereotypical notions, have resulted in the development of games specifically targeting female audiences and reinforcing presumed proclivities relating to relationships, fashion, and appearance management. Previous findings confirmed this and indicated that females prefer games that concentrate on social, collaboratively rooted, interaction and non-linear, or goal driven modes of exploration (Vermeulen & Van Looy, 2016). Marginalization of females in games may be the unsavory byproduct of perpetuation of the notion that gender specified categories should be observed and affirmed by targeted groups (Shaw, 2011). Existing research has uncovered that violent video games are perceived as a gendered space, where first-person shooter games in particular are predominantly masculine arenas (Assunção, 2016).

Gender representation in video games

Participants were first questioned to determine whether or not they knew what gender stereotypes were

and if they had ever heard about or seen gender stereotypes from video games. Results revealed that more than half of the participants reported that they knew what gender stereotypes were; and almost half of the participants declared that they had heard or seen gender stereotypes in video games. Participants were also asked what they thought were society's accepted ideals of what males and females should look and act like, as well as their personal ideals of what males and females should look and act like. These questions were asked in order to establish participants' pre-existing beliefs and attitudes regarding ideals about gender. These data revealed that both male and female participants reported *strong* as the most common reoccurring word to describe society's accepted ideals for what males should look and act like. For society's ideals regarding what females should look and act like, the common reoccurring word reported by male and female participants consisted of *pretty*. Results further revealed that the majority of participants did not identify specific personal ideals of what males and females should be expected to adhere to.

While the majority of female participants reported seeing and hearing gender stereotypes in video games, less than a quarter of the male participants identified gender stereotyped content in video games. A possible explanation for this trend is outlined by Fisher and Jenson (2017), who discuss how mainstream digital gaming culture habitually replicate stereotypes attributed to a particular sex, which frequently indulges an asserted masculine governance. This ultimately results in a struggle for females to be considered at parity with their male peers, often facing ridicule as a presumed inferior or disadvantaged "girl gamer" (Fisher & Jenson, 2017, p. 88). These effects highlight the hegemony of play, which pertains to interwoven structures of culture, technology, and commercialism that serve to advance gender-oriented power structures in the production of digital games. This achieves normalization and passive acceptance of entrenched presuppositions about sexual disparities, which tend to skew favourably towards males. Thus, there may be a lack of male awareness regarding gender stereotypes in video games owing to the predominance of masculinity within gameplay culture.

Analysis of response congruency

Inconsistencies of varying intensity and complexity surfaced among participants' initially established beliefs and attitudes and their responses to the questions asked

during the interview. The first major inconsistencies were seen during the analysis of video game covers for *Madden NFL 18* and *NBA 2K18*. Despite all participants identifying a difference in gender representation on the covers of these games, the majority of male participants and half of the female participants declared that there were no implications as a result of the gender differences. The main reason for this lack of negative implication identified by participants is that the portrayals of these games strive to depict and stimulate the real experiences of the NFL and NBA. As such, these realities include little to no significant female representation within the environments they seek to recreate.

The results showcased that the majority of male participants were complacent with this asymmetric representation of gender and failed to recognize possible issues with the exclusivity of masculinity in both the video games and real life. In contrast, half of the female participants identified potentially problematic implications regarding the lack of female representation on these covers and within the games themselves. Many female participants emphasized how the lack of female representation may discourage females from both playing football in real life and simulated game environments as these activities appear to be marketed pre-dominantly as a masculine game for male consumption.

Statements from female participants resonate with Deskins's (2013) discussion regarding how issues of hypermasculine spaces, sexism, and negative responses by male gamers to the involvement of female identity encourages the privileging of masculinity over femininity, ultimately discouraging females from engaging with gaming communities.

Furthermore, the majority of male participants reported that they would not change the game cover because it was based on real life, while the majority of female participants declared that they would change the cover and game to include female characters. A rationale for the differences in participants' attitudes can be provided by Fisher and Jenson (2017) in their evaluation of how the asymmetric assignment of power within the culture and industry of video games is wielded to deploy and empower commanding imagery. A prominent example of this practice is the widespread relegation of female game characters to non-playable or decorative roles, quest givers, or tokens of affection and triumph. Harvey and Fisher (2013) further emphasized how the video game workforce remains predominately comprised of a masculine collective at all levels of game production. This unvaried developer base of video games is closely associated with a relative lack of diversity and innovation in video game representation.

This persistence of a video game development workforce with a narrowed perspective is closely associated with a respective deficit in diversity among video game representations. Therefore, games of this nature may perpetuate the depiction of mainly male primary characters, controlled predominantly by male players, marketed by an industry that appears to narrow its focus on male audiences. This set of circumstances hampers female participation in gaming domains by designating restrictive expectations and perpetuating norms that make "social injustices appear natural, normal, and inevitable" (Fisher & Jenson, 2017, p. 89), ultimately marginalizing females from video game culture.

When examining the cover of *Mass Effect: Andromeda*, there were inconsistencies with participants' ideals, as the majority of male and female participants reported a lack of personal ideals concerning what males and females should be expected to adhere to. However, when analyzing this particular cover, all participants assumed that the character on the cover was a male despite the lack of gender distinguishing features. This is presumably based on stereotypical ideals of what a male should look and act like in the context of the exploratory and combative atmosphere conveyed through the cover images. All participants immediately identified the character on the cover of *Mass Effect: Andromeda* as a male despite not being able to see the character's face. When asked why the participants identified the character as male, the common reoccurring words used to explain their reasoning were the character's *muscles* and *stance*.

A possible explanation for the participants' assumptions can be explained by Near's (2013) discussion regarding how masculine domains shape video game culture. The typical characterization of video gaming environments as masculine spaces that appeal more strongly to males by design. The realm of video games remains as one of the few social domains where male privilege is openly exercised and associated with masculine stances, which are largely uncontested. As such, it is unsurprising that both male and female participants would make the assumption that the character with no distinguishing gender features would be a male, due to the dominant masculine circumstances enveloping the gaming industry. Media possesses the capacity to steer cultivation since it is situated as a readily accessible repository of examples that would

seem to represent the popular consensus. Further, Chong et al. (2012) expand on how ensuing second order judgments, relating to attitudes and beliefs, are indicative of an individual's core opinions and value structures. As such, due to the selective nature and controlled frequency of messages in the media, it is wise to recognize its influence over broadly retained attitudes and beliefs.

Varied responses to degrees of sexism

Trends that mirrored the foundations of social cognitive theory were present among responses of participants, which demonstrated their perception of surrounding social structures that informed their gender-linked knowledge foundation. This was seen during the discussion regarding the video games *Madden NFL 18* and *NBA 2K18* where participants deemed the lack of equal gender representation in these video games acceptable due to the notion that they were reflective of real life. Inconsistencies among participants' responses, particularly among male participants, stemmed from their acknowledgement of unequal gender portrayal and their subsequent opinion that these portrayals were not deemed problematic enough to warrant change on the cover.

A possible explanation for why the *Legend of Zelda: Breath of the Wild* video game cover did not elicit a call for change from the majority of male participants was that while hostile sexism frequently evoked a disdainful or corrective response given its often-apparent abrasion towards females, the identified portrayals seen on the video game cover were much subtler (Barreto & Ellemers, 2005).

In comparison, the majority of female participants not only identified implications but also promoted changes on the cover that would portray the female character as equally capable and important as the male character. A possible explanation for why the majority of female participants would change the video game cover was provided by Rasinski et al. (2013) and their discussion on confronting acts of sexism. In their discussion, Rasinski et al. (2013) showcased how females often reported more negative self-directed affects, such as guilt, discomfort, or more obsessive thoughts, when not confronting perceived acts of sexism. Fear of these consequences or experiences with stereotypes that participants could relate to might have served as factors that motivated females to voice disapproval when encountered.

Gender representation in real life

In order to understand participants' beliefs and attitudes regarding gender representation in real life, participants were asked to reflect on their level of familiarity with gender stereotypes. Participants were asked if they had ever seen gender stereotypes and if they had ever experienced gender stereotypes in real life. Less than a quarter of male participants declared seeing gender stereotypes in real life, while all female participants declared seeing gender stereotypes in real life. None of the male participants reported ever experiencing gender stereotypes in real life, while the large majority of female participants reported experiencing gender stereotypes in real life (29%; 0 males, 5 females). Results revealed major discrepancies between male and female reported experiences regarding gender stereotypes in real life, both observed and personal.

Only two male participants declared seeing gender stereotypes in real life and their gender specific examples were skewed towards negative female stereotypes. In comparison, female participants were able to reflect on observed experiences of stereotypes that affected both genders. Male participants were unwavering in their declarations of personal inexperience regarding gender stereotypes in real life. In contrast, the majority of female participants adamantly discussed their observed and personal experiences regarding gender stereotypes in real life, stressing what they perceived as an extreme burden of inequality.

One of the possible reasons for the noteworthy difference between responses from male and female participants could be due to a lack of emotion expressed among some male participants. Affleck et al. (2013) highlighted how it is not uncommon for researchers to encounter unforthcoming male participants that are problematically brief or reticent when their emotional experiences are called upon. The prevailing explanation for such emotional inexpression during research interviews was that male participants acted in defense of their masculinity, fearing judgment in a more vulnerable, emotionally infirm, or feminine light. Thus, stoicism encountered amongst males may commonly be a tactic to uphold the semblance of an unwaveringly rational, efficient, and unemotional individual, likely with the prospect of assuming a more dominate stance during intimate situations.

Another possible explanation for the difference between male and female participants' experiences could be a result of the possible privileges of males.

Case et al. (2014) discussed how privilege referred to advantages that were bestowed gratis upon individuals recognized as belonging to a socially identifiable group that was perceived to be of above average standing. In the context of male privilege, the central exploit remains the historical and deeply ingrained androcentrism, which continues to benefit from reinforcement through social structures that lean in favour of patriarchies. Despite the male participants' ability to identify the existence and implications of gender stereotypes, they might not have been able to make meaningful connections between the privilege they might have possessed and the influence it might have had on their experiences or responses.

Male participants' responses which conveyed possible disinterest or lack of awareness pertaining to stereotypes emphasized the notion that privilege typically remains invisible to those possessing it (Case et al., 2014). Furthermore, similar to female participants' ability to recognize gender stereotypes in video games, female participants also possessed heightened awareness and sensitivity when identifying gender stereotypes in real life. This might be due to personal experiences with exclusion from male groups of privilege throughout different stages of their lives.

Components of gender schema theory were present within these data, as all participants immediately identified the character on the cover of *Mass Effect: Andromeda* as a male despite the lack of gender distinguishing features and not being able to see the character's face. This was presumably based on stereotypical ideals of what a male should look and act like in the context of the exploratory and combative atmosphere conveyed through the cover images. When asked why the participants identified the character as male, the common reoccurring words used to explain their reasoning was the character's *muscles* and *stance*. A possible explanation for the participants' assumptions can be explained by Near's (2013) discussion regarding how masculine domains shape video game culture and work to cultivate masculine spaces that appeal more strongly to males by design. Video game spaces are still largely perceived as social domains of male privilege where masculine stances are largely uncontested. In this context, it is unsurprising that both male and female participants would make the assumption that the character with no distinguishing gender features would be a male due to enveloping masculine circumstances. Notions such as these are significant since they suggest characteristics like strong, muscular, and physically capable are androcentric. The *Mass Effect: Andromeda*

cover analysis highlighted the extent to which unconscious bias regarding gender could manifest from interactions with adolescents' immediate environments and media.

Identification

The results revealed that there was a significant lack of identification from the majority of participants with video game characters, as many participants were able to clearly distinguish between simulated and real-life experiences. In similar context, a study conducted by Lin and Wang (2014) made use of an online survey to investigate primary motivations during character creation in digital environments. Their findings unveiled that possessing a multitude of varied avatars was common and that participants did not necessarily seek to create models that were representative of their appearance in reality. Additionally, results were mixed and inconclusive when assessing the degree to which personalities of constructed avatars echoed those of their creators. This study yielded similar results to the findings in the present study, as the majority of participants did not identify any traits or qualities they admired in their favorite video game characters and did not wish to be like one of their favorite video game characters with respect to physique or personality. The majority of the participants in the present study did not identify similarities between themselves and game character portrayals. Rather, the majority of participants voiced a strong desire to remain distinct from characters in video games. Many participants expressed satisfaction with themselves and their own lives, citing this as a reason for not feeling the need to pursue differentiated expression in an alternative digital environment. From this, and in light of past research, it can be inferred that little to no identification occurred given participants' level of awareness and ability to distinguish between themselves and characters in video games.

Video games influence on gender socialization and identity

Elements of cultivation theory were presented amongst participants' responses. For *Madden NFL 18* and *NBA 2K18* in particular, participants showcased how media influenced their understandings of social reality. More than half of the participants declared that the characters on these sport games did not present negative implications as their characters were derived

from reality. The repetitious enforcement of male predominance observed in reality sports was outlined within responses provided by participants. Some participants' responses showcased passive acceptance of what they perceived to be the current state of societal norms, as cultivation theory posits that media affects individuals' assumptions regarding their surrounding world more so than their attitudes and opinions (Fox & Potocki, 2016).

A possible explanation for why the majority of participants in the present study who did not identify and experience gender stereotypes in real life could be due to their frequent participation with video games of the non pro-social form. Engagement with non pro-social games could result in the lack of opportunity to meaningfully engage in social activity and develop beneficial social behaviors, such as an ability to express empathy or to recognize behavioral and societal issues in their personal lives or the lives of others (Anderson et al., 2010; Gabbiadini et al., 2016). This is reflective of the participants in the present study, as the majority of the participants who lacked the ability to identify and experience gender stereotypes in real life often lacked the ability to recognize stereotypical struggles in their immediate environment and did not express empathetic or sensitive perspectives to other individuals and did not identify specific struggles from their own lives. In contrast, the majority of participants who did recognize gender stereotypes in real life and shared experiences of these struggles showcased a high degree of empathy to other individuals, demonstrating an ability to reflect on broader societal issues.

IMPLICATION FOR PRACTICE

Media literacy

The present study demonstrates how there is a degree of disconnectedness between participants' observed and internalized media messages and their expressed views and experiences. Video games, among other forms of media, have the ability to considerably influence definition and redefinition within cultures by emanating persuasively aggregated and refined messages capable of sculpting beliefs, behaviors, and value structures (Silverblatt et al., 2014). Within this context, media literacy education is essential in shaping these media experiences and forms of communication into learning opportunities (Shaffer et al., 2005).

Silverblatt et al. (2014) discusses how media literacy stimulates critical and thoughtful interpretation of media

to make meaningful decisions about which channels of communication individuals subject themselves to. Individuals too often passively ingest unsolicited messages intertwined with their media. In the pursuit of media literacy, an early requirement is the acknowledgment of the power mass media markets, which actively manipulate or heavily influence attitudes, values, and even behaviors.

This study revealed that though participants were routinely able to identify media influence in the lives of others, they struggled to, or were incapable of, discerning areas of their lives where the media's influence over them might be present. This misapprehension of the way modern media permeates aspects of normal life leaves individuals at an even higher level of susceptibility to the media messages that inundate contemporary lifestyles. In similar fashion, the vast majority of participants in the present study expressly distanced themselves from the possession of stereotypical notions, later presenting perspectives in conflict with this stance which may signify the manifestation of implicit bias. Toribio (2018) emphasized that notwithstanding the best efforts and sincerest belief of an individual's own unprejudiced agency, nuanced signals of implicit bias could still emerge in beliefs and attitudes. Payne et al. (2017) defined the process of implicit bias as the possession of attitudes or feelings, which might accumulate in a mostly dormant state, unbeknownst to the individual they reside in. These implicit attitudes may be the consequence of repeated exposure to media delivered stereotypes, resulting in cognitive connections fixed around social categories such as gender. Thus, Wallmark (2013) emphasized the advantages and importance of integrating media literacy throughout all levels of education to confront new and emerging media landscapes with the knowledge and understanding to navigate them.

Parental awareness

Parents' education must be a key component in media literacy training. Ziegler (2007) emphasized that despite living in a digital age, many parents lagged behind or were reluctant to fully embrace certain technologies and their associated learning curves, potentially leaving children without appropriate guidance and susceptible to profit-driven entities unconcerned with social responsibility. Familiarity with any medium is central to one's understanding of its utility, limits, and drawbacks, making some form of

parental engagement with gaming media a crucial component in the teaching of adolescents to thoughtfully and responsibly respond to mediated messages concealed in entertainment media. Heightened parental counsel and instruction are a cornerstone in the process of establishing video gaming encounters as constructive emotional, social, and thought-provoking learning experiences. Nikken and Schols (2015) defined this guidance as parental mediation, which entails strategic parental intervention and supervision to instill within children the ability to interpret media sensibly and develop analytic skills alongside discerning consumption choices.

Future research

Findings may be expanded in future research through deeper investigation into individualizing variables such as character traits, socioeconomic standing, religion, and family dynamics in order to comprehensively understand the full effects of video games and the impact on notions of gender and identification. Another way to extend present findings is to interview more participants from a variety of schools with equal representation from both males and females. This would allow data to have more meaningful comparisons within the same study between genders. Another aspect that can be considered is implicit bias, and how it should be included in future targeted studies regarding adolescents' notions of gender, social development, and how they perceive or conduct themselves.

CONCLUSION

Previous research has emphasized the impact of video games on adolescents' notions of gender and their identification. The findings of the present study highlight the importance of recognizing and addressing notions of gender and how adolescent consumers perceive them. Furthermore, during the research investigation, indicators of implicit bias were uncovered, suggesting potential dissociation between the beliefs and attitudes adolescents perceived and the role they played in their perpetuation. Overall, media literacy should allocate appropriate emphasis on increased interpretive skills of adolescents and their ability to make sense of their surroundings in a way that does not rely heavily on the influences conveyed through media. Providing practical counsel and support in the dissection of media delivered messages promotes the development of students into rationally interpretive and informed democratic citizens. Establishing video game literacy is a skill of increasing importance for members of a society where the majority partake in their consumption, especially for individuals directly responsible for the care and education of adolescents. In an era of predominantly digitally transmitted information, often through media, the capacity of video games to influence cognition and social development amongst adolescents must not be overlooked. To equip the modern generation of students, educators and parents must fully comprehend existing and emerging media environments in order to fluently convey lessons to digitally native learners. Further work on effective media literacy programs, strategies, and resources are necessary in order to develop this awareness and allow children and adolescents to develop into caring, critical, and democratic individuals.

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