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 from an independent boarding and day school in Ontario participated in semi-structured interviews to explore this topic. Data were analyzed using a qualitative approach. The 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. Through this investigation, the present study aimed to precipitate awareness and to provide better understanding about gender and identity in relation to video game playing.
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CHAPTER ONE: OVERVIEW AND BACKGROUND OF STUDY

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, Sarda, Gentile, Bry, & Roché, 2017). According to the Global Games Market Report, games and related products were projected to generate a total of $99.6 billion in revenues worldwide in 2016, which would be an increase of 8.5% in comparison to 2015 (González-Piñero, 2017). A recent publication by the Entertainment Software Association (2017) reported that sales within the United States video game industry reached $30.4 billion in 2016, with 65% of U.S. households home to at least one individual who plays 3 or more hours of video games a week. Furthermore, 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, the potentially negative cognitive and social impacts of playing video games has garnered heightened awareness among the general public and social scientific communities.

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, Custers, & Van den Bulck, 2015; Gabbiadini, Andrighetto, & Volpato, 2012; You, Kim, & No, 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, Riva,
Andrighetto, Volpato, & Bushman, 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, Mahood, & Linz, 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 more mature adolescents and adults.

This study explores 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. Simultaneously, the study investigates whether adolescents identify with specific video game characters and examines the gender socialization and identity development in relation to gender representations they have encountered in video games. The chapter begins with the contextual foundation for the investigation, followed by the purpose of the present research study, and the primary research questions that will guide this investigation. A discussion of the rationale and theoretical framework is then presented, followed by the proposed research methods. The chapter concludes with a discussion of researcher reliability and limitations that impacted the present research study.

**Study Context**

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
Previous literature has identified a relationship between video games use and stereotypical, potentially harmful effects on gender identification and socialization among youth. In particular, the researchers expressed concern that the gender representation in video game content may influence beliefs about gendered roles in society and may foster unhealthy views pertaining to gender identification (Dill, Brown, & Collins, 2008; Klimmt, Hefner, & Vorderer, 2009).

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. In video game magazines, Bègue et al. (2017) exposed how female characters predominantly use three figure templates: scarcely clothed, a rendition of beauty, or overtly lustful. More than one-fourth of these female portrayals satisfied all three stereotypes. These characterizations of women in games are frequently further generalized into two formulaic exaggerations of temperament: the vamp and the virgin. These representations dominate in media, and as such, Fox and Bailenson (2009) highlighted how they can ultimately distort individuals’ apprehension of acceptable gender related suppositions, as women will become associated with these two stereotypes. Reinforcement of these sentiments can perpetuate perceptions of women existing solely within a sexual context and foster unseemly behavioural inclinations, particularly towards women, 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 (Scharrer, 2004). Martins, Williams, Ratan, and Harrison (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) considered links between masculine norms and authoritative societal positions conventionally assigned to males. They examine the potential degenerative effect on modern healthy social development brought on by the promotion of traditional masculinity customarily associated with hostility and establishing supremacy. The findings from various studies showcase how video games can contribute to the major social issues, such as patriarchal social structures, that continue to persist in the 21st century (Anderson et al., 2010; Sylvia, King, & Morse, 2014).

The majority of research often focuses on how these virtual spaces can be utilized in educational contexts, as these forms of media provide opportunities to redefine and rethink the educational system as a whole, allowing young people to engage with technological, symbolic, and economic dimensions in complex social contexts that can impact all aspects of everyday life (Aguilera & Mendiz, 2003). Of the research available, few studies afford similar attention to the prospect of video games eliciting change with respect to social intelligences and the solidification of video game players’ identity. Games marketed as simulation experiences or real-world representations can be particularly damaging where there is difficulty identifying boundaries within reality and virtual encounters that account for increasingly high portions of their learning encounters (Aguilera & Mendiz, 2003). Attention should be apportioned towards understanding the fluctuating state of adolescent learning processes in order to appreciate the extent to which
video games may impact social development in adolescents. The virtual worlds navigated in video games permit players to exercise complete agency within specifically tuned domains while remaining intrinsically connected to their identities in the material world (Klimmt et al., 2009). For the purpose of this study, the term adolescents will refer to individuals ages 12-13 unless otherwise defined within the context of referenced studies.

**Problem Statement**

Drawing on previous research conducted on the possible effects of video games adolescent and young adult behaviours, attitudes, and beliefs (Anderson et al., 2010), there is a possibility that video game exposure might produce negative effects on early adolescents’ attitudes, understanding of roles, and identity in specific relation to gender. Therefore, the goal of this study was to determine the possible influence of video game representations on notions of gender, gender socialization, and self-identification in adolescents.

**Purpose of Study**

This research study aimed to explore adolescents’ perception and attitudes towards gender representation in video games, and the degree to which these depictions may influence their notions on gender and identification. 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 experiences.

**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?

**Rationale**

In today’s technologically driven society, media facilitates many of adolescents’ social experiences. Video games have become one of the most prevalent sources in the delivery and tailoring of communications to individuals. These platforms can influence behaviours, values, and beliefs, ultimately imposing social change through direct repetition (Bandura, 2001). As a result, there are increasing concerns that parents and educators are failing to understand and meet the technological demands of the 21st century, allowing students to easily fall victim to targeted corporate campaigns which
wield the power to shape minds and identities, but ultimately prioritize profit over social responsibility (Ziegler, 2007). As video games continue to grow in popularity, it is recommended that parents acquaint themselves with games their children are engaged in to establish appropriate guidelines for supervision and restrictions to the access of virtual spaces when necessary. However, parents are frequently expressing their fears brought on by a lack of knowledge and awareness in regards to what games their children are playing and the influence these games can have. Thus, there is a major emphasis on the level of awareness parents must have in knowing what types of video games their children are engaging with and the amount of time spent on them in order to have opportunities to discuss the game, set limitations, and more fully comprehend the games they play.

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 women prompts both interim and prolonged consequences. The schemas of individuals 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.

Furthermore, it is important that educators also maintain a level of awareness regarding the types of games that are easily attained by students, their subject matter, and the possible impact of these games on the attitudes and behaviours of students in order to recognize how to shape these experiences into learning opportunities (Shaffer, Squire, Halverson, & Gee, 2005). Educators are a crucial component in mitigating the power media has to negatively manipulate cultural cornerstones through the inclusion of media literacy, which was established in the 2006 revised *Ontario Curriculum Grades 1-8: Language*:

Media literacy is the study of the art and messaging of various forms of media texts. Media texts can be understood to include any work, object, or event that communicates meaning to an audience. Media literacy explores the impact and influence of mass media and popular culture by examining texts such as films, songs, video games…and websites. (Ontario Ministry of Education, 2006, p. 13)

It is imperative that proper education and detection skills of harmful media naturalization be administered throughout the adolescent population to ensure they possess means of defense against harmful media (Zieglar, 2009). In order to do so, students need to understand how media texts are fabricated and why they are produced, enabling both proactive and retroactive responses in an informed and socially responsible manner. In order for students to develop heightened awareness and sensitivity to mass media, they must be able to distinguish between fact and opinion, identify bias, keenly isolate derogatory or stereotypical depictions of individuals and groups, and question the
representations of violence and crime (Ontario Ministry of Education, 2006). The emphasis is not to instil within youths a predefined socio-moral agenda, but rather to allow adolescents, parents, and educators to transcend beyond passive observation of messages and influences in media, thus becoming engaged inquirers capable of intelligently critiquing media (Zieglar, 2009).

A fundamental factor in media absorption preparedness is the parents’ education, as parents will struggle in understanding the power of the media if they are not actively participating and versed in its many forms. Due to the fact that parents often lack awareness of the type of information available to their children, educators may supplement or advance parental familiarity with messages and persuasions common within video games (Zieglar, 2009). When video games hold the potential to influence and shape the vulnerable developing minds of adolescents, a dilemma of educational responsibility is brought forth, an urgency to question the content of virtual spaces, distinguish between fact and fiction, and ensure that video games are not interpreted as reliable representations of reality. In particular with video game play, much of the game content rated Teen and Mature that adolescents are exposed and have access to often have stereotypical depictions of male and female characters. These inaccurate or inflated portrayals can be harmful, as this stage of their development is where they are most sensitive and susceptible to the information they are processing from all facets, especially that which is presented in the form of a game. Without the mindfulness, willingness, and opportunity to discuss the content in these games, distinguishing fact from fiction, adolescents may begin to understand these representations of gender roles as compulsory qualities to properly coalesce with society.
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. Video games remain one of the most popular forms of media consumed during adolescence (Entertainment Software Association, 2017) and as such, are capable of remarkable impression, regardless of the way in which they may be marketed. This topic is especially pertinent because it is often underappreciated how much power to enact social change long-term subjection to digital media can have. 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.

**Theoretical Framework**

In order to guide the thinking and structure of this study, social cognitive theory, gender schema theory, and cultivation theory will be 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 posits that learning occurs in a social context fashioned by direct and observational experiences. Social cognitive theory considers the way in which individuals acquire and maintain behaviour, emphasizing that human nature can be fashioned by direct and observational experience. It takes into account how social influences can impact expectations, reinforcements, and shape behaviour through cognitive developments (Bandura, 2001).

Gender schema theory proposes that children foster stereotypical notions of gender from their interactions with their immediate environment. Through these interactions, children will establish a knowledge structure that consists of gendered
definitions, attributes, activities, and interests. With this knowledge, children will be expected to exhibit attitudes and behaviours that align with the traditional roles based on their distinct gender (Bussey & Bandura, 1999).

Finally, cultivation theory suggested that media has the ability to influence individuals’ views and understandings of social reality (Fox & Potocki, 2016). Though it was first used to examine the impact of television, it is now often used in studies to examine video games, as there is a notion that video games possess a greater influence upon players than any other form of media (Kondrat, 2015). Due to the interactive and experiential nature of these virtual environments, it is suggested that adolescents are more vulnerable to the impressions of gender norms and identification processes of these virtual characters (Fox & Potocki, 2016). A more detailed explanation regarding this framework will be discussed in chapter 2.

Limitations of Study

In order to centralize collected data around areas which can be clearly and meaningfully compared, there were limitations set upon the method of data extraction. The first boundary within the study is the limitations placed upon the definition of gender. Early adolescents will only reflect upon and be shown depictions of female and male characters in video games. This is to address the far more entrenched and prevalent misleading notions of gender currently dominant throughout video game culture while mitigating ambiguity in the questioning process. Furthermore, the choice to focus on male and female genders is due not only to the lack of portrayals of transgender, gender queer, non-binary, and intersex characters in video games, but also because much of the existing literature often focuses on sexuality and rarely addresses a diverse range of
gender groups (Shaw & Friesem, 2016). Another boundary established in the study is the age range of the participants, as the study will be conducted on adolescents who are from grade 8, ranging from ages 12-13. As such, these data will not be a representation of the general population; however, it does allow the study to narrow on a particular developmental age. In doing so, these data will be valuable as it examines early adolescents at targeted stages along their developmental process and compare to other research that often focuses on adolescents in high school or young adults in college or university.

One of the research limitations was in the interview procedure. The interviews were dependant on the participants’ willingness to provide answers that were complete and accurate. However, in many circumstances participants may provide inaccurate responses due to boredom, what they think the interviewer wants, what they believe would be approved or disapproved of, faulty memory, or lack of knowledge or insight (Alshenqieti, 2014). Furthermore, video game play was not a component of the collection procedure for these data. In future research, studies could incorporate observed video game playing sessions in order to gather information pertaining to how adolescents respond to portrayals and representations in video games as they encounter them through direct video game playing.

Outline of the Remainder of the Document

This chapter introduced the study and the primary research questions that guided the investigation of the relationship between early adolescents and video game play and their perception and attitudes towards gender and identity. Chapter 2 presents a more extensive review of relevant literature that provides background information to support
the needs of this investigation. Chapter 3 provides a comprehensive discussion of the methods used throughout this research process. Chapter 4 presents the detailed results of the study and chapter 5 comprises the discussion and conclusions based on results.
CHAPTER TWO: REVIEW OF LITERATURE

This chapter presents an overview of relevant literature that will support the significance of this investigation. The chapter includes three major sections. In the first section, the theoretical framework is provided based on theories on social cognitive learning, gender schema, and cultivation theory. The second section will examine gender representation in video games, and popular violent video games are discussed. In the third section, the research on effects of video games and gender socialization and identification are analyzed.

Social Cognitive Theory

In order to understand video games’ influential role in society, it is essential to examine the cognitive mechanisms that derive from the symbolic representations that influence individual thoughts and actions (Bandura, 2001). A schema represents the mental framework of an individual’s cognitive knowledge relating to multiple concepts and features. It can be described as a mental structure of preconceived ideas and a system of organizing and perceiving new information (DiMaggio, 1997). A script is a sequence of well-rehearsed schemata that are associated with specific actions and events (Yao et al., 2010). According to Bandura’s (2001) social cognitive theory, individuals acquire social information by processing and altering new experiences into cognitive representations that function as guides for action and judgment. When exposed to new information, individuals will often view it through the lens of existing schemata; thus, through a process of comparison, individuals convey new information to existing schemata and scripts (Yao et al., 2010).

Bandura (2001) emphasized that human nature can be fashioned by direct and observational experience, and that the most external influences are able to impact
behaviour through cognitive developments rather than directly. Cognitive factors, as discussed in this chapter, play a major role in determining which environmental events and experiences will be observed, what meanings will be understood from them, the inspiring and emotional effects they will have, the potential for these events to possess lasting significance, and how acquired information will be utilized and organized for the future. Humans are able to expand their understanding and knowledge by functioning on the information conveyed from indirect and personal experiences. As a result, humans are able to produce solutions to problems, assess prospective outcomes, and select appropriate choices for specific circumstances.

One major aspect Bandura (2001) emphasized in social cognitive theory is the focus on the social factors and the significance they possess on cognitive development. Humans have developed an advanced ability for observational learning that ultimately allows them to rapidly broaden their knowledge and skills through information communicated by a variety of models. As such, the majority of all cognitive, behavioural, and emotional learning from direct experiences can be attained indirectly by observing individual actions and consequences from various forms. Observational learning consists of four sub-functions. The first sub-function concerns attentional processes, which determine what is selectively observed from the modeling influences and what information is extracted from ongoing modeled events. The second sub-function involves cognitive representational processes known as retention. This process consists of an active process of transforming and restructuring information conveyed by modeled events into rules and conceptions for memory representation. The third sub-function in modeling or observational learning entails the behavioural production process, which translates symbolic conceptions and representations into applicable series of action (Bandura,
2001). The fourth sub-function involves motivational processes. A major aspect social cognitive theory highlighted is the difference between the observation of information and performance, as individuals do not always perform everything that is learned and observed. In order to perform learned behaviour, individuals draw from three key forms of motivation: direct, vicarious, and self-produced. Modeled behaviour is more likely to be performed if the results possess positive outcomes rather than negative. The observed benefits and disadvantages experienced by others also shape the likelihood of exhibiting modeled behaviour in a comparable way as experienced directly. A further influence on motivation is individuals’ personal standards of behaviour, and individuals’ self-approving responses regulating the learned activities they are most likely to pursue. Ultimately, individuals will reject activities they personally disapprove of and pursue those that give a sense of worth and are self-satisfying (Bandura, 2001).

Bandura (2001) discussed how an immense quantity of information regarding human thinking, values, and behaviour is learned through the extensive observation and modeling of mass media. While modeling influences were previously limited to the experiences and behaviour patterns displayed in individuals’ immediate environment, the growth of technology has enabled the range and concentration of models that individuals are exposed to daily. Depictions of social realities in mass media often reflect ideological or stereotypical aspects in their representation of social relationships, human nature, and the standards and structure of society (Bandura, 2001). As such, mass media has a significant influence on viewers’ beliefs and conceptions of reality. Bandura (2001) further reflected upon the impact media possesses in both creating and altering pre-existing personal beliefs. Media has the dual capability of directly implementing ideas as
well as tailoring communications to individuals, evolving into a platform that can impose social change through targeted reaffirmation.

As a result, the media has the power to be more efficient in affecting behaviours compared to common messages resulting in the distortion of individuals’ values, standards, and judgment. Media not only has the ability to change individuals’ values and beliefs from observation but can also be socially facilitated where individuals who have exposure to media can reinforce selected messages, influencing those that lack exposure. However, the relation to stereotypes and social categorization is important to examine, as it is a significant implication of social cognitive theory (Bègue et al., 2017). Yao et al. (2010) highlighted that recent research has discovered that categorization is the process in which a stereotype or schema is retrieved and utilized in order to establish an idea or make an inference regarding certain targets or aspects. For example, humans perceive a few observable features when meeting an individual, such as gender or race, and these features would likely be associated to a social group that shares related attributes within a mental schema. Following this process, an initial idea or judgment regarding this individual is established founded on the composition of this schema. Yao et al. (2010) further argue that general information regarding certain concepts is structured in hierarchal order within a schema.

**Gender Schema Theory**

In relation to social cognitive theory, Bussey and Bandura (1999) discussed that in gender schema theory, children foster stereotypical notions of gender from what they see and hear around them. The schema is presumably shaped from interactions with the environment, and once established, the schema expands to constitute a knowledge
structure. This knowledge consists of personality and social attributes, activities and interests, and definitions about gendered activities. Once the schema is established, children are expected to demonstrate behaviours and attitudes that are consistent with traditional gender roles common in cultural expectations assigned to individuals based on their distinct gender (Williams, Consalvo, Caplan, & Yee, 2009). Gender constancy consists of the belief that gender is static and unalterable. Children who have established their gender constancy will inevitably accept and value their gender identity and seek to behave in ways that are consistent with their notion of acceptable gendered behaviours. Following gender constancy is the formation of individuals’ personal gender schema, which is the second central aspect of this theory (Bussey & Bandura, 1999).

Weisgram, Fulcher, and Dinella (2014) highlighted how young children pay particular consideration to attributes that are judged by society as appropriate for their gender. During this time, children begin to learn and frequently engage with these attributes, and as such, begin to identify with them more. Once a child accepts a gender group, the child comes to value and adopt the social role associated with their gender label. This is due to the fact that children often live in a sex-typed world resulting in the establishment of a schema that guides the choices of “sex-appropriate” knowledge and patterns of behaviour. Weisgram et al. (2014) further discussed how children are able to categorize and organize items in their environment as “for them” or “not for them” based on what society has deemed to be appropriate for each gender. As a result of these associations to gender categories, children are able to associate certain behaviour and attitudes as appropriate for their gender. It is through the process of socialization that children are encouraged to accept and develop attitudes and behaviours that are defined as masculine and feminine (Dietz, 1998).
In a study conducted by Huh (2015), six 3-year-old children were seen to understand and embrace traditional gender roles during their play with digital games. During the observations, Huh was able to illustrate the influence digital games possess in children’s ability to make sense of their gender. During an instance where Huh was selecting a game for one of the boys named Chan to play, she considered *Dora the Explorer*, which is a popular animated television series. The main story of these games is similar to the television show, which involves Dora, a young Latina girl, going on adventures around the globe with a monkey as she accomplishes various missions along the way. The game appeared to be fun and Chan had never had the opportunity to play it, thus it was given as an option. However, upon informing the other children what game was selected for Chan, two girls by the name of Jun and Ashley immediately discouraged the idea by providing their own justification.

When Huh (2015) attempted to introduce the game *Dora’s Mermaid Adventure* to Chan, the girls first emphasized that the game is “not for boys but for girls” (p. 163). Upon further examination of the website and other available *Dora the Explorer* games, Ashley laughed and stressed that the game chosen for Chan was wrong by repeatedly stating the word “really” (Huh, 2015, p. 163). In support, Jun also suggested a different game for Chan to play called *Mike the Knight*, which is also another popular animated television series containing an adventure story that consists of Mike acting as a knight. The game has many aspects that are similar to *Dora the Explorer*, as Mike goes on adventures with two dragons, whereas Dora does the equivalent with her monkey. However, as one of the girls pointed out, *Dora’s Mermaid Adventure* is too “girly” for Chan as there is a lack of male characters in the game, and the majority of the play is
associated with feminine attributes, such jewellery and stars. In turn, the other game displays Mike as a knight that demonstrates his strength and bravery as a man throughout the game with dangerous dragons as his companions. Despite the fact that Huh has seen Chan play the game numerous times, he ultimately chose to disregard *Dora’s Mermaid Adventure*, and play one of the *Mike the Knight* games following the conversation.

Similar to Ashley and Jun, Chan selected a specific game character to make sense of his gender identity. Huh (2015) argued how the process in selecting a correct game as a male or female demonstrates the self-regulating process children possess in observing their own and others’ attitudes and standards concerning gender. As such, Chan is not merely playing the game, but also understanding and making sense of his gender. Thus, digital games are no longer limited to being a form of delivering meaning to players; rather, they are the grounds for children to understand and make sense of their everyday lives by engaging with messages from games. Internalization of experiential learnings and influences during early adolescents’ impressionable developmental stages may undergo fortification through repetitious exposure and serve as foundations for understandings of gender roles in later stages of adolescence. As such, with their mounting popularity and widespread accessibility, video games and their ability to shape an audience’s attitudes, behaviours, and values regarding gender are increasingly being brought into question.

**Cultivation Theory**

The cultivation framework proposes that media has the ability to impact and build upon people’s views and understandings of social reality (Fox & Potocki, 2016). Kondrat (2015) discussed how cultivation theory was first created to observe the long-term effects
of television consumption. In particular, cultivation theory examined the impact television had in delivering mainstream ideas of how the world and humans should behave and appear, thus potentially influencing an individual’s perception of the real world and existing moral and social values. As such, the resulting expectations children and adolescents possess regarding the real world may align with socially regressive or damaging depictions portrayed within media. Chong, Teng, Siew, and Skoric (2012) examined the two forms of cultivation judgments, which are defined as first-order and second-order judgments. First-order judgment consists of the perceptions of prevalent issues and the probability of circumstances. Shrum (2004) proposed that these judgments are memory-based, which allows individuals to form judgments and make decisions that involve focusing on one particular aspect of a complex problem, and is reliant on particular and frequent availability. Individuals will often provide a numerical assessment on particular issues, such as the percentage of students that are able to receive a university education (Chong et al., 2012). Thus, media has the ability to influence cultivation as it escalates the accessibility of examples individuals might retrieve when making judgments, and is often aided by unique and regular examples.

In comparison, Chong et al. (2012) highlighted how second-order judgments comprise attitudes or belief judgments, and reflect individuals’ attitudes, opinions, and values. Shrum (2004) suggested that these judgments are fabricated through a process where information is formed when it is encountered. This process deviates from memory-based first-order judgment, as individuals are forming these beliefs and attitudes immediately rather than recalling them. As such, media exposure can be understood as influential communication, due to the fact that particular messages can be frequently repeated and elaborated upon, impacting attitudes and beliefs following such exposure.
Chong et al. (2012) further emphasized the significance of how people process the overall narrative or story within media, as the degree of individuals’ attention and level of involvement in the narrative largely dictates the degree of cultivation. Since narrative engagement contains more developments of story-related information and less potential to contest components of a predetermined narrative, it has been associated with greater story-consistent attitudes and beliefs. Kondrat (2015) highlighted that previous research conducted on individuals who are frequent television users revealed that heavy viewers are affected much more than casual viewers. Yao et al. (2010) discussed how a study that focused on heavy viewers of a reality-dating television show demonstrate a higher likelihood to retain the genre-defining stereotypical thinking regarding women and relationships, particularly seen in young men. Though it is logical to speculate that the effect would be equivalent for heavy video game players, in reality, video games possess a greater influence upon players unlike other media forms. This is due to the fact that video games often force players to engage in repetitive and continuous actions while playing video games (Yao et al., 2010).

Video game experience is both interactive and experiential, as individuals are “engaged in actively constructing a story rather than being passively exposed to it” (Chong et al., 2012, p. 957). A major aspect of this activity is that representations in virtual spaces are behaviourally responsive, rather than being limited to simple appearances for observation purposes on the screen (Fox & Potocki, 2016). Fox and Bailenson (2009) argued how this is a major distinction from traditional media forms, as this exchange in video games establishes a new and powerful experience beyond passive consumption. For instance, as the user acts in the virtual world, a virtual character in the
game in turn reacts to the user, generating a behavioural dialogue that is more reflective to social interactions experienced in the real world. This communication between humans and virtual spaces in video games fosters an enhanced simulated experience, which can lead to images and experiences possessing a greater and more compelling influence on users’ behaviours, values, and attitudes beyond the screen.

**Gender Representation in Video Games**

In interactive media platforms such as video games and video game-related media, Fox and Bailenson (2009) highlighted how female representation, in comparison to males, are often assigned subordinate or secondary roles, and are “much more likely to appear in a sexualized or objectified manner, often solely for ornamental purposes” (p. 148). Research has revealed that women not only are lacking representation in video games but also are often portrayed in extreme gender-stereotypical depictions when they do appear. These portrayals are often characterized into forms that serve as opposing ends of the good–bad spectrum. Fox and Bailenson (2009) stressed how the contrast between good and bad leads to the notion that women are limited to two forms, which consists of the girl-next-door or the girl-who-gets-around, also known as the virgin or the vamp. The virgin is in need of male protection from the threats and hazards of the outside world, as they are shown to be pure, obedient, and innocent. In comparison, the depiction of the vamp is extremely sexualized, often portrayed as a female who seduces men, and yearns for them to use her, rather than protect and care for her. As such, the virgin affirms the stereotype that women are to assume the role of submissive beings that are secondary to men, whereas the vamp signifies the alternate stereotype of women as dominant and sexual temptresses (Fox & Bailenson, 2009).
In support of this, Davatelis (2016) highlights how benevolent sexism mirrors stereotypical virgin portrayals as it endorses traditional attitudes towards women, such as the frequent portrayal of female character as fragile beauties that are unable to defend themselves and are in constant need of rescue. In contrast, Davatelis also discusses hostile sexism, which aligns with stereotypical vamp portrayals. This is a more active form of sexism that encourages attitudes and behaviours which result in the exploitation of women and their reduction into roles as mere sexual objects through derogatory expression. Sexism of this sort has experienced heightened growth amongst video games in recent years, overtaking benevolent sexism and giving rise to a new, but still flawed, feminine stereotype. Hostile sexism permits portrayals of strong female characters which are aggressive and independent alongside other conventionally masculine attributes, so long as their aesthetic remains visually appealing to males.

As such, Fox and Bailenson (2009) discussed how individuals’ understandings of women are often associated with these two stereotypes, as these representations dominate in the media. The virgin stereotype often leads to extreme sexism, or beliefs that women are weak, inferior, and incapable of leadership, while the vamp stereotype can foster antagonistic sexism, which involves aggressive beliefs that women are overbearing and control men sexually. Within video game media, female representation often aligns with the virgin and vamp stereotypes. Dietz (1998) highlighted how the roles of female within virtual spaces are often relegated to the damsel in distress awaiting rescue from a male or merely an appealing sex object. Passive women within games are often portrayed as princesses that are ultimately rewards for male characters who achieve success and bravery, while active, more dominating women are depicted as a threat or competition,
and must be violently dealt with. Due to these dichotomized representations, female characters possess a greater chance of being portrayed in a sexualized manner than male characters in video game covers, advertisements, and within the games themselves (Fox & Bailenson, 2009).

Bègue et al. (2017) revealed how over 80% of female characters in video game magazines are depicted in accordance to three forms—scantily clad, a visualization of beauty, or sexualized—and over a quarter of these characters conform to all three categories. Other research analyses showed that women are frequently presented either partially nude or with revealing and inappropriate clothing. Beasley and Standley (2002) revealed that 46% and 70% of female characters in video games rated for Teen and Mature, respectively, were portrayed with extensive cleavage. Low and revealing necklines were also seen on 86% of female characters, and 48% of female characters were depicted wearing outfits with no sleeves. This contrasts with the 22% of male characters that were shown with no sleeves and 14% of male characters wearing clothing with low or revealing necklines. However, it is important to note that since these games are rated for Teen or Mature, sexualized content is inherently far more likely to appear, as it in itself is often a determinant for the rating. Furthermore, in many video games, particularly long-term play in massively multiplayer online role-playing games (MMORPGs), male players choose women avatars because “they like to look at them… [and] if they are going to have to look at the same avatar repeatedly they want it to be an attractive one” (MacCallum-Stewart, 2008, p. 34). As a result, MacCallum-Stewart (2008) further highlighted that analysis of avatar selection data substantiates the notion that more sexualized body forms are greater in popularity in comparison to those considered to be lacking in visual appeal or sexually inattentive.
Lynch, Tompkins, van Driel, and Fritz (2016) further emphasized that even female protagonists and heroes within video games that embody characteristics often associated with male characters, such as bravery and strength seen in *Tomb Raider’s* Lara Croft, are still ultimately sexualized and exposed to an objectifying gaze that accentuates the bodies of females. Despite the argument by various scholars (e.g., Jansz & Martis, 2007; Matthews, Lynch, & Martins, 2016) that Lara Croft represents a tough, courageous female model in *Tomb Raider*, her sexualized depiction in the video game and advertising may have served as method to increase sales by video game developers. This approach allowed developers to attract male players with the presentation of sexualized female characters, supporting the notion that video games serve male interest first (Lynch et al., 2016). Behm-Morawitz and Mastro (2009) stressed how the conflicting stereotypical and counter-stereotypical qualities in female heroines, like Lara Croft, devalue or detract from the positive influence these characters may possess for media consumers. Thus, the influential and powerful role of the female character is diminished by the attention disproportionately afforded to her physique.

With major advances in technology in the 1990s, such as 3D computer graphics and increasingly high resolutions, both the realistic features and potential for more overt sexualization of video game characters has increased (Bègue et al., 2017). However, Lynch et al. (2016) conducted a content analysis of female characters in video games across 31 years and revealed that there is a decrease seen in the frequency of sexualized female characters after 2006. This decline may be credited to the increased criticism placed upon the industry and a heightened female interest in gaming. Despite the fact that there has been a decrease in overall sexualization of female characters in recent years,
various categories of video games continue to employ overly sexualized depictions. In Lynch et al.’s (2016) content analysis, fighting games and shooter and action/adventure games were found to feature the most sexualized female characters and are marketed predominantly towards male audiences. In addition, although the choice of playable female characters has generally improved and is presented more positively, the percentage of primary female characters within games has not grown. Lynch et al.’s (2016) findings revealed that female characters continue to perform the role of secondary characters.

Games that portray females as primary characters are less sexualized than non-primary characters; however, female characters that possess non-primary roles are often sexualized to enhance their appeal due to the fact that they are often less central to the story. As a consequence, the sexualization of these non-primary characters reduces the significance of their roles to their physical attractiveness. Lynch et al. (2016) ultimately emphasized that though their study found lower levels of sexualization for primary characters, their sample revealed that more female characters continue to fill secondary roles than primary roles. Despite Lynch et al.’s (2016) findings showcasing a decrease in the overall sexualization of female characters, video games that often depict women as sex objects continue to dominate the video game market. The *Grand Theft Auto (GTA)* series is a controversial game series that continues to be one of the biggest franchises in video game entertainment. In particular, *GTA V* is one of the best-selling video games of all time. Within 3 days of its release, its revenue had reached over $1 billion, breaking six new records including the highest revenue generated by entertainment product in 24 hours (Polasek, 2014).
The diverse market penetration and record-breaking household familiarity and presence emphasized the fact that GTA V was a game played and exposed everywhere. This casts light upon the issue of responsibility, as the growth and popularity of the game has the heightened potential to reach younger audiences. In the wake of the series’ tremendous success and recognition, there have been few changes made to the recipe of severe content that garnered such acclaim. Even with the rating system in place and parents that make an active effort to shield against the inappropriate content, the widespread popularity of the game still leaves young children and adolescents vulnerable to exposure to the video game’s harmful social representations from ungovernable sources. Even if game content is limited at home, there is still a high chance of exposure to the game from peers at school, more lenient neighbouring households, and access through illegal means online.

The content for the GTA series is generally consistent despite the various versions available. Gutiérrez (2014) highlighted how the depiction of female characters is often the same pattern, where they work as prostitutes and are subject to assault and murder. Though there is an option for video game players to seduce a female rather than pay for services, prostitution remains the easiest option. Moreover, video game players are able to retrieve their money once services have been rendered and money has been paid by assaulting and even killing the female prostitutes. Rewarding video game players with money for violence is a regular feature in GTA, as the game often openly recommends that video game players kill them in order to steal the money that they are carrying. Gutiérrez (2014) showcased how video game players are informed in the GTA: San Andreas guide:
While the woman is giving you a “good job,” you can gain life points but your money reserves go down. But if you want to recover the money you’ve spent, or even gain more, kill the girl as soon as you get out of your car. (p. 62)

Furthermore, when a male character punches a female prostitute in the *Vice City* version of the *GTA* series, she does not respond with a negative response such as screaming or saying “no,” which is what would likely occur in a real world interaction, but rather is programmed to respond with, “I like it rough” (Dill et al., 2008, p. 1403).

The main male characters in *GTA* are always depicted as dominant, aggressive, and hypermasculine men, which is often the representation of male characters in video games. Scharrer (2004) defined the term hypermasculinity as performances and exaggerations of male stereotypical attitudes and behaviour, such as an emphasis on physical strength and the acceptance that physical violence is part of male nature. Male video game characters often exhibit hypermasculine tendencies, as they are often ready to engage in combat or similar activities in a physical nature, and thrive on action. Hypermasculinity is also expressed through the male body as a method to emphasize the portrayal of an ideal man. Martins et al. (2011) conducted a study to analyze representations of male bodies in 150 top-selling video games. The findings revealed that the body proportions of male video game characters did not reflect the proportions of the average American male.

Rather, the male characters in video games were systematically greater than the average American male on every element measured. In comparison to the average male, video game players will commonly engage with characters that possess chest sizes that are 6% greater, and characters with waists and hips that are 14% and 16% bigger.
Additionally, Fox and Tang (2014) considered how masculine norms often reflect the traditional dominant role males possess in society. These norms are reproduced in video games, as these virtual worlds are often established as environments that are male-dominated and reinforced as masculine spaces. According to Miller and Summers’s (2007) research findings, male characters in video games outnumbered female characters, and are expected to be portrayed in more significant roles. Males were more often playable characters in comparison to females, and were also more frequently the hero of the game. Alongside these roles, male characters were also found to use more weapons, possess more abilities, and were more muscular and powerful than female characters depicted in the games.

Matthews et al. (2016) discussed the prevalence of hypermuscular males in games, reflecting on scholarly arguments that the various depictions of strong, capable men may reflect the masculine tastes that dominate video game content and culture. This is due to the fact that male representations in games often align with heteronormative male fantasies that portray capable, strong men. Findings from Dill and Thill’s (2007) study that analyzed video game magazines rated by Amazon.com as their top six sellers revealed that 82.6% of male characters in their sample size were portrayed as aggressive. An estimated third were depicted as hypermasculine, and almost none were dressed provocatively or sexualized. Furthermore, male characters were regularly shown fighting with weapons, and were often displayed merely posing with them. A common image of this character involves a muscular male posing with a gun and possessing a hostile facial expression. These images glorify aggression, emphasizing the notion that violence is manly and cool, and weapons were impressive accessories.
**Gender Socialization**

Although many argue that the stereotypical representations in media are simply for entertainment purposes and harmless fun, Fox and Bailenson (2009) discussed the fact that scientific evidence proposes the exposure to stereotyped and sexualized depictions of women induces both short-term and long-term effects. Individuals’ schema tends to reflect stereotypes, as it is a result of an attempt to simplify and comprehend the world around them. When individuals stereotype people, they are simplifying them into groups, clustering people into fixed categories that exaggerate the similarities and differences within groups (Deskins, 2013). Thus, Fox and Bailenson (2009) highlighted how gender stereotypes such as the virgin and the vamp often prevail when processing information about women. These stereotypes also include how the sexes should or should not behave in social interactions. As the video games that adolescents play often present traditional portrayals of males and females, the gender identities and expectations among adolescents can be affected. Gabbiadini et al. (2016) discussed how the portrayals of hypermasculinity within video games convey myths about male dominance and female submission, which constructs an artificial conception of masculinity and femininity for consumers. These depictions of men as socially powerful and physically violent in virtual spaces have the potential to reinforce assumptions regarding how males should act in society, in addition to how they should treat females.

Studies conducted by Dill and Thill (2007) investigated the way gender is portrayed through video game characters and the understanding among a youth sample of these gendered messages. In the second study, participants were selected from a private, liberal arts college and consisted of 49 freshmen, with 20 being male and 29 being
female. The median age was 18, with ages ranging between the ages of 17 and 19. The students completed a survey that asked them to describe typical male and female video game characters during a freshman seminar class with voluntary participation. The results showcased that several participants described male characters as powerful, having a hostile attitude, athletic, and aggressive. Female characters were described as being thin but curvy, sexual, aggressive, and possessed “big boobs,” which was found to be the “single most stated characteristic for females” (Dill & Thill, 2007, p. 860). Furthermore, “helpless,” “victim,” “pretty,” and “bitchy” were attributes mentioned for females but not males, with participants’ depictions of female characters being rather explicit using commonly reported terms like “hooker and slut” (p. 860). In comparison, “warrior,” “superhero,” and “cool” were often referenced for males but not females. Overall, the dominant descriptions of males were associated with aggression, power, and an arrogant attitude, while the dominant characterizations of females were sexual and concerned with aspects primarily related to attractiveness, and aggression. However, though aggression was a prevalent attribute, it was often characterized as “bitchy” rather than strong, and negated by notions of weakness and submission.

The findings from the aforementioned study showcase how video game characters and their collective, stereotypical depictions of gender contribute largely to the popular culture of youth, and as a result, are agents of socialization. Gabbiadini et al. (2016) highlighted how in order to interpret interaction, adolescents rely upon expectations regarding masculinity and femininity that occur around their immediate environment in order to foster expectations for themselves and others. As these expectations are utilized to define the self, they develop into a point of reference for categorizing and organizing
the world, ultimately becoming a foundation for action. Thus, the gender roles internalized by individuals when they are young have a significant impact upon the perspective of those individuals and the role they will retain in later existence. Dietz (1998) further discussed how an individual develops an identity of self either from rejecting, accepting, or modifying a role in a given situation. Thus, identity formation relies heavily on what individuals retain amidst societal reactions to gendered roles and definitions which can be influenced by messages received through video games.

**Identification**

Video games are environments that require more than passive observation, enabling and inviting players to become an essential part of the virtual world by performing in the environment themselves (Chong et al., 2012). Klimmt et al. (2009) stated that this is due to the fact that comprehensive narratives are often featured in many video games, allocating a particular role to players such as a hero or heroine. The way in which players are able to fully embed themselves in the role influences various properties and the course of the game, which indicates that players are actively participating in the narrative rather than being observers. Through this interactivity, the distance between video game characters and video game players is reduced, as playing video games replicates the conditions of being a character or possessing a social position within the game. Virtual worlds deviate from reality in a way that offers the player tailored immersion and discrete agency within their virtual environment, while remaining fundamentally entangled between their virtual personas and the identities they maintain in reality (MacCallum-Stewart, 2008). Thus, players do not distinguish the game character as “a social entity distinct from themselves, but experience a merging of their
own self and game protagonist” (Klimmt et al., 2009, p. 354). This player–character relationship is a major aspect that aligns with the concept of identification.

Identification can be described as the temporary increased stimulation of relations between concepts that define the target media character and a player’s perception of self (Klimmt et al., 2009). Hoffner and Buchanan (2005) further suggested that wishful identification is an aspect of identification where individuals, in particular young viewers, want to be like or act like a given media character. This can be understood as viewers’ incentives to overcome the social discrepancy between the media character admired and themselves. Klimmt et al. (2009) noted that video game identification is an extremely selective process, and does not suggest a full identity substitution in the sense that players disregard every aspect of their real-life self when identifying with a protagonist within the game. The dimensions in which players can construct attributes of a media character into their momentary self-perception could be limited by technology, such as an absence of a full-body physical response reduces complete manifestation in the virtual world. However, Klimmt et al. (2009) stated that identification is more likely to occur in users of interactive virtual spaces, such as narrative-driven video games.

For instance, in first-person shooters, abundant information on the character and visual features are provided to illustrate the setting and how the player controls a character. As such, identification is more likely to ensue in first-person view, as players are able to look into the virtual world through their character’s eyes. As a result of the interactive control players possess, a strong connection will ultimately be established between the player and their character, as players will often change their self-concept to conform to the aspects of the role they embrace during the gaming experience. Fox and Tang (2014) discussed how adolescents and young adult males often explore their
identity and masculinity through the use of virtual spaces. Moreover, the abundance of video games featuring male protagonists enables the embodiment of identities that may be challenging to achieve in real life, allowing male adolescents to explore identities depicting the masculine ideal. With the exposure to sexually explicit depictions, often characterized by the objectifying or demeaning attitudes directed at females, recent research is working to uncover the influence this may possess and the association it has with concerning issues like sexual harassment and rape myth acceptance (Fox & Bailenson, 2009).

Dill et al. (2008) describe sexual harassment as a wide range of behaviours that can rank in severity from demeaning statements to unsolicited sexual advances and assault. Beck, Boys, Rose, and Beck (2012) discussed how Rape Myth Acceptance (RMA) pertains to false stereotypes regarding rape, such as the notion that women secretly enjoy rape. These attitudes and beliefs are often commonly and persistently understood and serve to refute and justify male sexual aggression against women, producing an environment that allows rape to ensue. Social hierarchy is a concept that emerges from RMA, with the most vital factor being social power, as masculinity is understood to be hegemonic. When media showcases degrading images of women, the practice of power against women is encouraged. This can include physical or sexual aggression, and sexual harassment. Many have investigated violent and sexist video game content in order to examine its influence upon sexual harassment judgments and rape-supportive attitudes (Dill et al., 2008).

Breuer, Kowert, Festl, and Quandt (2015) conducted a study that examined the influence of video game exposure on sexist beliefs and attitudes. After interviewing 50,012 individuals ages 14 and older, 4,500 individuals were selected from the 12,587
individuals who identified as game players for the study. Interestingly, Breuer et al. found no evidence for a cultivation effect on sexist attitudes. One major aspect identified in Breuer et al.’s study is the fact that the present study was longitudinal and looked at general beliefs about gender roles in society and overall use of video games, rather than a short-term study that focused on very specific games and types of sexism. Breuer et al. suggested that when examining the relation between video game use and sexist attitudes, factors such as personal experience and family and peer influences need to be taken into consideration. These factors have the ability to influence the development, limitation, or decline of sexist attitudes more strongly than media content. Furthermore, Breuer et al. interviewed participants who were 14 and older, and as such, these data cannot conclude whether younger players are more impressionable to cultivation effects from the media.

However, various studies have been conducted which displayed findings that showcase otherwise. Fox and Bailenson (2009) conducted a study that engaged participants in an entirely immersive virtual setting by allowing participants to view the images through a head-mounted display. Participants consisted of 43 men and 40 women who were racially diverse ranging from the ages of 18 to 34 recruited from West Coast University. Ultimately, the study revealed that exposure to the images of the conservatively dressed low gaze representation, also known as the virgin, resulted in higher RMA, with more feelings of benign sexism. This is due to the fact that the behaviour and appearance of this agent depicted attributes of weakness and submission, thus fostering the desire to protect her. At the same time, since the virgin agent is passive and sexually innocent, it educed the acceptance of rape myths, such as the notion that “many women have an unconscious desire to be raped” (Fox & Bailenson, 2009, p. 155).
In comparison, the suggestively dressed high gaze representation, known as the vamp, led to an increase in RMA. Eye contact from the vamp was also perceived as aggressive or sexually dominant, eliciting feelings of hostile sexism, as participants may have felt threatened by the sexual power conveyed. Amidst this representation of suggestive clothing and behaviour, the acceptance of rape myths was prevalent, as participants may have felt the need to put the vamp in her place or to “punish” this woman. Another explanation is that the representation in suggestive clothes may have evoked the notion that she was “asking for it” (Fox & Bailenson, 2009, p. 155). Thus, participants expressed more RMA as the appearance of the agent resulted in a negative response that she deserved to be treated poorly.

To further explore the relationship between video games and RMA, Dill (2009) conducted a study that involved 95 female and 65 male college students from general psychology classes to complete four surveys. The first survey consisted of video game habits, which was used to evaluate participants’ quantity of exposure to violent video games. The second pertained to rape beliefs, where the degree to which participants validated rape myths was assessed using the Rape Myth Acceptance Scale. The third survey contained negative attitudes toward women, where a short form was completed based on the Attitudes Toward Women Scale that assessed the level of traditional attitudes participants held toward women. Finally, the last survey consisted of aggressive personality, where the participants’ degree in responding to frustrating or aggravating circumstances with aggression is measured using the Caprara Irritability Scale.

Overall, Dill (2009) revealed that exposure to video game violence was positively associated with RMA. Individuals who play more violent games displayed an increase in RMA, and that those with more aggressive personalities also correlate with RMA. This
reveals that those with aggressive personalities possess greater negative feelings toward women, and have a higher chance of endorsing rape myths. Beck et al. (2012) argued that one rational conclusion that can be understood from these findings is the notion that increased RMA may result in less sympathy for victims of rape. If video games that demean women increase RMA as proposed from the findings in Dill’s (2009) study, and acceptance reduces victim sympathy, then there is a possibility that playing these particular violent video games may incidentally promote a growth in rape. Recent research has shown that playing violent video games may decrease feelings of empathy and desensitize individuals to the suffering and pain of others (Gabbiadini et al., 2016). This is a major concern for adolescents who play video games, as emotions such as fear and empathy are often seen as negative feelings to express. In contrast, feelings of anger and rage are encouraged, as they are often associated with power and high status. These hypermasculine norms are actively encouraged in popular games, such as the GTA series.

As such, Gabbiadini et al. (2016) conducted a study that proposed that games such as GTA would increase masculine beliefs, which in turn will negatively relate to empathy for female violence victims. Participants were 154 Italian high school students who volunteered, with 43.4% being male and ranging from 15 to 20 years old. The study investigated the short-term impact of playing violent-sexist video games on levels of empathy for female victims of violence. After gameplay, participants were asked to not only rate how sexualized female characters in the game were, but also report how involving, exciting, and violent they thought it was. Gabbiadini et al. (2016) also evaluated the extent in which participants identified with the video game characters using the Player Identification Scale. Masculine beliefs were assessed using the revised Male
Role Norms Inventory that asked questions such as “Is it OK for a guy to use any and all means to ‘convince’ a girl to have sex” (Gabbiadini et al., 2016, p. 5). Following this, one of two images of an adolescent girl who had been physically beaten by an adolescent boy was exposed to participants. Participants were to rate on a scale of 1 to 7 whether they felt particular emotions from these images, such as feelings like sympathy, compassion, disregard, or indifference. Overall, the results from the study proposed that violent-sexist video games reduce empathy for female victims of violence from both male and female participants, but particularly for boys and young men who identify strongly with the violent game character, as it increases masculine beliefs.

**Considerations of Literature Reviewed**

Upon thorough scrutiny of these data, many potential areas of improvement were identified. The research examining the relationship between video games and gender socialization and identification is quite diverse in both the method and participants utilized. The majority of the literature used surveys as a point of reference to gain necessary background information and video game use from the participants in the study. However, methods implemented for data collection were varied. For example, some studies exclusively used surveys to gather information, while others utilized responses to images or guided participants through specific gameplay scenarios to document immediate feedback. However, a general aspect that needs to be addressed in regard to research involving video games is clarification regarding what form of consumption constitutes playing video games and how individuals self-evaluate their consumption. There is a lack of explicit information in much of the research that highlight whether video games are limited or extended to games available on console, the computer, or
smart phones. This information is significant, as each platform provides a different level of accessibility that may influence the time spent playing, frequency, and degree of penetration into social development processes. In addition to honing the definition of video games, the understanding of what an “active gamer” consists of is extremely subjective and needs to be established in an easily interpretable and relatable fashion. For instance, studies should make a clear distinction between casual game players and active game players by referencing a scale to ensure consistent measurements, such as the number of hours spent on video game play per week. Along with this, studies need to ensure that there is a clear understanding of what activities gaming entails, such as whether it includes playing games on a smart phone or casual game play at peers’ homes.

For example, in Breuer et al.’s (2015) study, 12,587 individuals were identified as active video game players, and from this sample, 4,500 players were recruited for the first wave of the main study. However, there is a lack of information regarding the differences between an individual who identifies as a casual game player versus an active game player. In addition to defining the term gamer, research needs to also consider what forms of gaming are involved. The type of game, beyond mere genre selection, an individual is exposed to can influence the experience during game play, such as whether video games are often played individually, a shared experience with peers, or anonymous participants. The differences in these forms of play can ultimately influence the attitudes and types of activities involved during game play. For instance, an individual could experience a pressure or dissuasion to conform to certain behaviour when playing with peers compared to playing a game independently. Furthermore, anonymous online influences can also be a major factor in shaping individuals’ beliefs and attitudes regarding appropriate social
conduct as they may draw too heavily upon these interactions and improperly interpret real world situations. Thus, individuals may behave differently depending on the environment they are exposed to when playing a video game, which could potentially affect daily social interaction in real life.

Furthermore, many of the studies included participants in a variety of age ranges. Though a diverse age range can increase the generalizability of the study and provide a more accurate representation of the population, it is important to recognize that a greater age range means that participants will be at differing developmental stages. This is an important factor to consider if a study has the acute goal of researching development in particular, as it would be more valuable to examine individuals at targeted stages along their developmental process and compare to former states, rather than measuring a large sample group and amalgamating data collected from both young malleable and fully formed adult minds.

Another facet that was identified within the literature is the fact that the majority of investigations conducted on video games consisted of cross-sectional studies, rather than longitudinal studies. Breuer et al.’s (2015) study analyzed the influence of video game exposure on sexist beliefs and attitudes over a 3-year period, and revealed that there is no evidence for a cultivation effect on sexist attitudes, and no signs of a selection effect. These findings conflicted with the results of many previous cross-sectional and experimental findings that identified connections between sexist video game content and sexism or harassment. One feature that may contribute to these differences is the fact that Breuer et al.’s (2015) research was a longitudinal study and looked at general beliefs regarding gender roles in society and an overall use of video games, rather than specific
games and forms of sexism. However, it is important to note that Breuer et al.’s (2015) study was conducted in Germany, and as such, the results cannot be generalized to other countries and cultures. Furthermore, the method of data collection was limited to computer-assisted telephone interviews, which differs from the other studies that involved images or virtual game play to stimulate the experience for participants.

The findings also revealed that age was negatively correlated with sexist attitudes prevalent in male players, suggesting that younger male players were more likely to hold sexist beliefs and attitudes. This is significant as it indicates that younger players may be more susceptible to the depictions within the game, so this particular developmental stage might be something to further examine. Thus, despite the fact that Breuer et al. (2015) identified no prominent cultivation effect, and a lack of evidence that video games instill sexist knowledge, there is still potential to explore why the study revealed higher instances of sexism in younger males and whether video games could contribute to the reinforcement of present beliefs. In relation to the study period, it is important to recognize that the gaming industry is a rapidly evolving and advancing landscape. Longitudinal studies may fail to reflect the changes that occur during this time. Potential hurdles include shifting content driven by cultural demand or whether participants are just beginning to play video games, play sporadically, or have been exposed and playing games for years prior to the study.

**Chapter Summary**

Issues concerning video games, gender socialization, and identification are apparent, with previous research on the effects of video games on adolescent social development signalling a correlation deserving of further examination. The theories
presented in this chapter suggest that video game exposure plays a significant role in influencing the beliefs, attitudes, and behaviours of adolescents who spend a significant amount of time playing. Social cognitive theory highlighted how mass media has the potential to shape viewers’ beliefs and conceptions of reality, as it can create and alter pre-existing schemas (Bandura, 2001). Gender schema theory emphasized how children foster stereotypical notions of gender from the interactions with their immediate environment (Bussey & Bandura, 1999). Video games are a platform for children to understand and make sense of their gender by engaging with messages from games (Huh, 2015). Cultivation theory suggested that media can shape individuals’ attitudes, beliefs, and perceptions of the real world following repeated exposure (Chong et al., 2012). This theory highlighted how video games can possess a greater influence unlike other media forms because video game experience is both interactive and experiential, actively engaging players to make them feel in control of a narrative which is often predetermined to reflect a particular view or outcome.

With the growing popularity and acceptance of video games into normal culture, concerns regarding the depictions of game characters and their influence on gender values and beliefs are of increased importance. Research has revealed that female representation in video games is often sexualized or objectified, and confined to secondary roles. In comparison, male representation often glorifies violence and aggression, with similarly unrealistic physical portrayals (Fox & Bailenson, 2009). These stereotypical depictions of gender are agents of socialization, as they contribute largely to the culture of youths. The exposure to images and enhanced simulated experiences can affect the formation of adolescents’ identity, and instil prolonged consequences
pertaining to identification in real life (Klimmt et al., 2009). Research has revealed that sexually explicit depictions in video games have contributed to sexual harassment and rape myth acceptance (Fox & Bailenson, 2009). Ultimately, a variety of studies have focused on the influences of video game play on gender socialization and identification. However, there is limited research that specifically focuses on early adolescents, as much of the research has been conducted on high school, college, or older participants. The reviewed literature supported the need for research to be more multivariate in its approach in order to ensure that data are valid by accounting for any variables that might influence the study. Clear delineation of what entails interaction with video games and a player’s level of involvement will aid in identifying relationships between early adolescents’ video game interactions and their approach towards gender and identification.
CHAPTER THREE: METHODOLOGY

This chapter details the methodological approach and structure of the study. These data procured through participants’ responses was analyzed using a qualitative methodology. 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. 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. This research study aimed to explore adolescents’ perception and attitudes towards gender representation in video games, and the degree to which these depictions may influence their notions on gender and identification. Six primary research questions were addressed:

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?
Descriptive Study

Sandelowski (2000) defined descriptive studies as an approach that provides a comprehensive summary of an experience or event in relatable terminology. Researchers conducting descriptive studies pursue descriptive validity, or a precise account or documentation of experiences or events that the majority of individuals, including researchers and participants, observing the same experience or event would concur is accurate. Researchers also seek for interpretive validity, where accurate accounts or documentation of participants’ meanings attributed to those experiences or events are also accepted and agreed as accurate from those participants. Sandelowski further emphasized that descriptive studies remain closer to the data of the study, and that language is a major means of communication. Thus, participants’ responses in the present study were obtained through a semi-structured interview that consisted of a mix of close-ended and open-ended questions. The degree of interpretative activity surrounding reported or observed experiences or events is essential in understanding the meanings participants provide and communicating them in an articulate and beneficial approach. Descriptive study designs typically include a diverse approach that encompasses a “well-considered combination of sampling, and data collection, analysis, and re-presentational techniques” (Sandelowski, 2000, p. 337).

For the purpose of the study, an exploratory descriptive approach was employed, as exploratory studies “set to explore any phenomenon in the data which serves as a point of interest to the researcher” (Zainal, 2007, p. 3). In general, researchers conducting an exploratory approach will ask general questions that will allow opportunities for further examination of the phenomenon observed. An exploratory design focuses on gaining insights to better understand the research problem as it tends to examine problems that
have little or no previous research conducted (Zainal, 2007). Thus, an exploratory descriptive study allowed opportunities to intricately investigate adolescents’ exposure to video games and whether they identify with specific video game characters and how these depictions may influence their notions on gender and self-perception.

**Selection of Site and Participants**

The participants in this study were selected using purposeful sampling. Patton (2002) suggested that sampling should not be selected by random, but rather done purposefully, as Patton (2005) also stated that purposeful sampling involves “selecting information-rich cases for study in-depth” (p. 2).

**Site Sampling**

As the subject of the present study, the independent boarding and day school was purposefully selected as it is built on the International Baccalaureate (IB) continuum program developed by the International Baccalaureate Organization (IBO) that strives to develop knowledgeable, inquiring, and caring young individuals who are driven to excel more than other curricula. IB is a worldwide elevated standard wherein over 4,500 member schools commit to administering exceptional and challenging educational programs (IBO, 2018). The independent boarding and day school applies an approach to learning that fosters students’ independent thought and critical analysis of their experiences and world perspectives. As such, students at the participating school are well equipped to face potentially influential societal media and articulate their thoughts and understandings as they pertain to the present study.

**Gaining Entry**

Initial contact with the participating school was established by approaching the school to set an appointment to meet and discuss the research study with the gatekeeper.
A gatekeeper is an individual or authoritative body who will “directly decide or strongly influence the decision to allow [researchers] to conduct [their] study in that setting” (Gay, Mills, & Airasian, 2011, p. 182). Gay et al. (2011) stated that in most schools, the principal would most likely be the leading gatekeeper in determining admission into the school for research. Consent was given regarding the school from the gatekeeper, who was required to authorize the study in order to commence data collection. After the meeting with the gatekeeper during which time the school’s interest was assessed, a follow-up email containing a letter of invitation and a certificate of ethics clearance (see Appendix A) was sent. These were accompanied by a research proposal that outlined greater details regarding the study (see Appendix B).

The research proposal contained brief information regarding: (a) the aim of the research study, (b) the requirements requested from the school in relation to admission and scheduling, (c) the study’s timeline, and (d) information regarding why their school is compatible with the study. Furthermore, the research proposal included a comprehensive and thoroughly outlined explanation of the function of the researcher, additional details regarding the exact role and degree of participation of the school, how the results will be used (Gay et al., 2011), and the necessary informed consent and parental agreement for participants (see Appendix B).

**Participant Selection and Sampling Procedure**

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. The participants in the present study consisted of students in grades 7 and 8 from one independent boarding and day school located in Ontario. The school’s enrollment of
more than 700 students from over 50 countries ensures a community that is robust in its diversity and maintains the highest of social standards for its students alongside prestigious academic achievement. Funded entirely through tuition fees and the generosity of its global community, including parents, faculty, and alumni, the boarding and day school maintains its status as a non-profit institution. Students in grades 7 and 8 are in the process of transitioning from childhood to early adolescence, which is a period of significant developmental changes that establish long-term means of self-identifications among youths (Eccles, 1999). These changes include major biological, social, and behavioural changes that correlate highly with heightened social development and self-identity (Eccles, 1999; Forbes & Dahl, 2010). As such, this stage of development provides a crucial opportunity to study and understand the effects early adolescents face pertaining to their video game playing habits and patterns, understanding of gender, and self-perception.

Adolescence is a period of life that generally refers to ages 10 to 18 and is understood to be a time of major change on various levels (American Psychological Association, 2002). These changes include major psychological changes associated with advancing mental development, physical maturation, and social adjustments. Alongside these dramatic changes during adolescence grows a heightened aptitude for (a) creative thought, (b) intricate and comprehensive processing of information, (c) dynamic assessment of problems, and (d) self-reflective thought (Anderman & Mueller, 2010; Meece & Eccles, 2010; Wigfield, Byrnes, & Eccles, 2006).

**Data Collection Procedures**

The data collection procedure utilized in the present research study consisted of semi-structured interviews with participants. Gill, Stewart, Treasure, and Chadwick
(2008) highlighted that the aim of an interview is to investigate the beliefs, motivations, attitudes, views, and experiences of the interviewee within a particular context. The practise of interviewing is considered to yield an enriched comprehension of social phenomena, especially in comparison to solely quantitative data collection techniques, such as questionnaires. In particular, interviews are more suitable in circumstances where there is a lack of knowledge or information regarding the phenomenon of study, or where the specific knowledge and recollections of individual participants is a necessity.

**Interviews**

The structure of the interviews is semi-structured, which Gill et al. (2008) described as being comprised of numerous fundamental questions that first provide context and a foundational understanding of the region of study. This format also allows the researcher or participant to then deviate and elaborate on a question or response. Additionally, providing partial structure throughout the interview assists in the maintenance of focus and pace while aiding the formulation of cohesive and relevant responses that work towards accurately developing their perspectives. In comparison to structured interviews, this approach is extremely flexible as it allots opportunities for dialogue between the interviewer and interviewee to more naturally unfold, exploring insights not previously considered.

Upon collecting signed forms of consent from participants, a time was arranged that was suitable to conduct 30-minute interview sessions with participants. Since the researcher is an Ontario Certified Teacher, the participating school allowed interviews to be conducted one-on-one in an empty classroom with the door ajar to maintain confidentiality. As a result, the interviews were not only free of distractions, but also yielded the most unfiltered data from participants, as the absence of peers, teachers, and
other superiors allowed them to respond openly without fear of perception or consequences. Participants were informed about the details of the study and assured of the precautions taken to safeguard their confidentiality and anonymity. Furthermore, participants were provided a cursory review of what the interview process will entail and notified that they were allowed to withdraw from the interviews if they felt uncomfortable with the questions or tired at any point of time. The interview was guided by the interview protocol questions found in Appendix C.

The first component of the interview consisted of questions that were developed in order to ask specific, narrow questions in order to provide data that established an understanding of participants’ video game playing habits, patterns, and attitudes. Many of the questions contained yes or no answers (e.g., Do you play video games?), in addition to questions regarding their video game interests and frequency of play (e.g., What types of games do you play? How many hours do you spend on average per day playing video games?). The second component of the interview 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 open-ended questions solicited general knowledge, opinions, or sentiments of participants regarding gender stereotypes in general and their association with video games (e.g., In your opinion why do you think gender stereotypes persist or exist? Have you ever personally been involved in a real life social situation that may have been influenced by video games?). Certain questions expressly sought to determine participants’ identification, if any, to particular video game characters and ascertain the circumstances of such identification (e.g., Do you sometimes wish you were like one of
your favourite characters? Are there any traits or qualities you admire in your favourite video game characters?). 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 (Makuch, 2017). The NPD is a market research company that observes and quantifies the expenditures of consumers (NPD, 2018). 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.


*Madden NFL 18* (rated Everyone) and *NBA 2K18* (rated Everyone 10+) were both sport series video games that drew similar themes from participants. These video games strive to realistically depict and simulate the experience of National Basketball Association (NBA) and National Football League (NFL). Real-life athletes are available within the game as characters for players to play games and customize teams with, with games all following the objectives and rules and of the NBA and NFL in real life (Entertainment Software Rating Board, n.d.d, n.d.f). *Grand Theft Auto V* (rated Mature) is an action-adventure video game that is part of the *Grand Theft Auto (GTA)* series. The game revolves around three main characters, all of which are criminals, with the player working on each individual story line by changing characters. The group of characters are all working towards a common goal—to successfully complete a massive heist (Polasek, 2014).

*Destiny 2* (rated Teen) is an online multiplayer, first-person shooter video game. Players experience the interactive world through the eyes of a Guardian, where their goal is to defend humanity from encroaching alien foes alongside their cohorts. Players use a
variety of weapons to battle enemy alien creatures, traveling across futuristic planets and landscapes (Entertainment Software Rating Board, n.d.a). *Horizon: Zero Dawn* (rated *Teen*) is an action/role-playing game that immerses the player in a post-apocalyptic world where they survive, uncover secrets, and come to understand a foreign world through the huntress character of Aloy. Players guide Aloy as she learns to hunt robotic creatures and animals in the wild (Entertainment Software Rating Board, n.d.b). *Tom Clancy’s Ghost Recon: Wildlands* (rated *Mature*) is an open-world tactical shooter wherein players take active measures to suppress and eliminate a Bolivian drug cartel, assuming roles as military special forces operatives (Entertainment Software Rating Board, n.d.g). *Legend of Zelda: Breath of the Wild* (rated *Everyone 10+*) is an open-world adventure game centered around foraging, crafting, exploration, and melee combat in a fantasy world threatened by a malevolent force (Entertainment Software Rating Board, n.d.c). Finally, *Mass Effect: Andromeda* (rated *Mature*) is an action role-playing game that pushes players to expand humanities galactic frontiers while overcoming hostilities with alien races and diplomatic obstacles (Entertainment Software Rating Board, n.d.e).

This component asked participants questions regarding the characters seen on these cover images (e.g., How would you describe this character? Is there something you would change about this character? Can you identify any similar or different qualities within this character to yourself?). These questions expressly sought to understand participants’ initial perceptions of characters, determine participants’ identification, if any, to particular video game characters and ascertain the circumstances of such identification. The interviews were audio recorded in order to ensure the attentive capture of verifiable information, and any necessary brief notes were taken during the interviews in order to highlight any impromptu, involuntary, or nonverbal responses. Upon
collection, all interviews were transcribed and these interview data were condensed, coded, and logically ordered using the Ethnograph (Ethnograph v5.0 Software for Text Based Qualitative Analyses) software program for analysis.

These transcriptions were then returned to the participants in a method known as member checking. Member checking involves enhancing the accuracy of the findings by taking the drafts back to participants and determining whether the participants feel that these data collected is accurate, ultimately establishing credibility (Birt, Scott, Cavers, Campbell, & Walter, 2016; Creswell, 2013). In the study, participants received a copy of their interview transcript and were asked to verify the transcription to determine if these data that were collected accurately portrayed their opinions and thoughts, in addition to asking if there is anything that the participant would like to add, reconstruct, or delete from their narrative (Birt et al., 2016). The transcriptions were returned and no revisions were necessary.

Field Notes

Researchers use field notes in qualitative studies in order to record activities, events, behaviours, and other aspects of the research site or setting being observed (Creswell, 2013). Creswell and Plano Cark (2007) maintained that field notes harbour a layer of nuanced understanding available upon review by the researcher. While in the field, the researcher wrote brief observational sentences or short-form notes of marked occurrences to facilitate the recollection of significant observations that have transpired during this particular time. Following the completion of the field notes, the researcher conducted a preliminary analysis to promptly detect materializing trends amongst these data from interviews conducted. The field notes were coded manually, and the content was analyzed and added to the study.
Data Analysis

Analyzing qualitative data in its most simple form is the “activity of making sense of, interpreting, or theorizing the data” (Schwandt, 2001, p. 6). Schwandt (2001) discussed how data analysis involves a variety of processes that facilitate working in an oscillatory fashion between ideas and data. The preliminary stages of analysis consist of cataloging, condensing, and describing the data, concluding with the proposal of interpretations and formulation of conclusions. Analysis refers to the concept of thoughtfully deconstructing a whole into its defining components to observe their inter-connectivity in relation to the whole upon reconstitution. Thus, the qualitative analysis strategically and diversely simplifies the entire quantity of data by coding and sorting its modules and then attempts to determine an applicable pattern through cross-comparison of the coded and categorized data. For the purpose of the study, content analysis and triangulation of data were utilized in order to analyze the data. The next sections provide a more comprehensive discussion of how data analysis will occur.

Content Analysis

In broad terms, content analysis pertains to the diverse means of textual analysis that “involve comparing, contrasting, and categorizing a corpus of data to test hypotheses” (Schwandt, 2001, p. 34). Statistical procedures for extracting samples and ensuring the integrity of intercoder reliability are often, but not always, relied upon for the analysis. Schwandt (2001) stated that the fundamental stages to this procedure include:

a) creating a set of codes; b) systematically applying those codes to some set of textual data; c) establishing the interrater reliability of coders when more than one
coder is employed; d) creating a matrix of variables from the texts and codes; and e) analyzing the matrix by means of some univariate, bivariate, or multivariate statistical procedure. (p. 34)

The researcher often employs the use of coding in order to commence the process of analyzing data of great volume. Coding is a method that logically decompresses and separates the collected information into practicable divisions, while appropriately identifying and labeling those divisions. The acts of continuously cross-examining and collating various sequential elements of data and their ensuing categorization are necessary for coding. Qualitative data can be coded for the means of testing hypotheses, in addition to producing concepts and theories.

For the research study, qualitative data based on the questions of varying complexity from the semi-structured interview were analyzed alongside field notes. All responses to qualitative questions were entered in NVivo, a qualitative data analysis software program. This computer program is versatile and is designed to help analyze, organize, and find insights in qualitative and unstructured data such as interviews and open-ended survey responses. The qualitatively crafted inquiries were coded and analyzed for themes and descriptions.

**Triangulation**

Triangulation is a process that encompasses numerous practices and perspectives in order to "establish the fact that the criterion of validity has been met" (Schwandt, 2001, p. 257). Schwandt (2001) discussed how researchers will put forth conclusions in response to the data with the intent to present sets of data and hypotheses that are in alignment with one another. Triangulation is a process of careful cross-examination and
comparison to discern the solidity of any inferences posited by researchers through the course of their study. The essential aspect of the procedure is to analyze conclusions under the consideration of multiple outlooks, the intention being to provide findings with credibility by confirming and vindicating the results. As such, triangulation provides researchers with numerous openings to beneficially advance the acceptance and implementation of their research (Yeasmin & Rahman, 2012).

First, triangulation allows researchers to gain more confidence in their results, which can foster ingenuity during method creation, promote innovative data capture techniques, and aid efforts to uncover elusive aspects of phenomena. Triangulation also addresses the shortcomings of single-source research. The impact of bias can be reduced as two sources found to be in agreement can be mutually substantiating. This offers more comprehensive information for researchers to share with greater forthrightness and confidence to independent third parties. Stake (2006) suggested that throughout the research process including analysis, triangulation should be evident, as it consists of “being redundant and skeptical in seeing, hearing, coding, analyzing, and writing” (p. 77). As such, the research conducted in the study achieved triangulation through semi-structured comprehensive interviews, member checks to further refine the quality and validity of the collected participant data, and field notes.

**Ethical Considerations**

The following section will provide an overview of the ethical considerations of the study. The researcher submitted an application of the research proposal including letters of information and consent forms to Brock’s Research Ethics Board to receive study approval. Informed consent, confidentiality, and the benefits and risks of the study will be discussed below.
Informed Consent

The participating school was provided a letter of informed consent (see Appendix D). Once approval from the Brock Research Ethics Board was granted, the principal and grade 8 teacher in the participating school were contacted to assist in the determination of a suitable time frame to conduct the research. The letter of information and consent form (see Appendix D) were distributed by the classroom teacher to prospective participants from the participating classrooms for parents/guardians to sign. In the letter, all research requirements including time required to complete the questionnaires, student and school confidentiality, interview procedures, and the voluntary nature of this study were precisely outlined. Participants in the study were also made aware that the results of the study may be potentially published in various journals. The principal issued a complete summary of the final report following closure of the research process.

Compensation for Participants

The participating subjects were not awarded any monetary or material compensation for their involvement in the study. Nevertheless, participants appreciated the benefit of the educational and engaging research process. Their involvement may, for example, instigate the realization of worthwhile connections between their personal experiences and elements of the Ontario Curriculum related to media literacy (Ontario Ministry of Education, 2006).

Confidentiality

Participants’ personal information, responses, and interview transcripts remained undisclosed, with their identities aliased. Information regarding the visited school in general was similarly shielded in the interest of confidentiality. Creswell (2008) defined
confidentiality as the preservation of personal data beyond minimal contextual details or a necessitated degree of disclosure required by a study’s specific needs. Creswell further referred to gathered research material as privileged information, accessible to only the researcher and corresponding participant. As such, participants were assigned pseudonyms in the study in order to avoid disclosing personal information and ensure that their identities remain confidential.

Benefits and Risks

Benefits of the study include that the results in the final report may emphasize the importance of media literacy in classrooms, promoting early adolescents, parents, and educators to engage more fully with passive media messages and equip them with the knowledge to judiciously critique media consumer content. The study also helped to bridge a void in germane research texts regarding this particular age group and topic. The study posed minimal risk for participants, as the degree and likelihood of damage or discomfort expected in the proposed research is not greater than that which is assumed throughout the daily routines of the general populace. Possible risks for participants may include psychological harm, as participants were shown video game cover images that may have sexualized video game characters, and were asked questions regarding these characters. As a result, feelings of stress or embarrassment may arise from thinking or discussing their own attitudes and behaviour towards this topic.

In order to address these risks prior to the interview, participants and teachers were repeatedly informed of the possible exposure to depictions of video game characters that may be interpreted as sexualized. During the introduction of the study, participants were made aware that a few characters on the video game covers may be depicted as
sexualized based on their clothing or physical appearance. This information is again emphasized on the consent forms were signed by parents or guardians. When conducting the individual interviews, participants were once again informed about the potential risk of interpreting certain depictions as sexualized before the interview questions commenced. Following the interviews, I was available to address any concerns or questions they may have regarding the study. However, if participants were to express feelings of distress in any form, I would remind them that they could withdraw at any time and I was prepared to direct them to individuals qualified to discuss content and feelings in relation to potentially sexually interpreted images. These qualified individuals included teachers and access to the school counsellors to provide the necessary resources and support regarding their concerns or feelings.

**Chapter Summary**

This chapter outlined the methodology and procedures that were utilized in exploring the perception and attitudes towards gender representation in video games, and whether adolescents who play video games identify with specific video game characters and how these depictions may influence their notions on gender and self-perception. The description of the research methodology, procedure, participants, data analyses, and study limitations are detailed to generate an appreciation for how this study explored the connectedness of these ideas. The results of these data that were collected using the described methodology are presented in chapter 4.
CHAPTER FOUR: PRESENTATION OF RESULTS

The purpose of the study was to explore adolescents’ perception and attitudes towards gender representation in video games, and the degree to which these depictions may influence their notions on gender and identification. There were 17 participants (11 males, six females) consisting of students in grades 7 and 8, ages 12 and 13 mean age (M=12.3), from one independent boarding school from Ontario. Six primary questions were addressed:

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?

This chapter groups and presents findings, following content analysis, from the semi-structured interviews. After collecting participants’ signed consent forms, one-on-one interviews were coordinated and carried out in vacant classrooms to preserve confidentiality. The interview protocol included as Appendix C outlines the procedure and questions that guided the interviews. The onset of interviews contained closed questions that were specifically developed to ascertain participants’ video game playing
habits, patterns, and attitudes. Interviews then transitioned into the second, more open-ended, component of questioning. During this section, participants were able to provide answers in a less structured and more personalized manner, which aided in the understanding of their perceptions of gender and identification with respect to video game characters.

The open-ended nature of the questions within the second interview component allowed the researcher to garner broader knowledge and perspectives of participants concerning gender stereotypes, both in general and as they relate to video games. The third interview component centered participants’ focus and their answers around the inspection of video game cover images gathered from the top 10 best-selling video games of 2017 (up to the month of September) in the United States. The referenced list was published by the NPD group (Makuch, 2017). Following the initial collection and recording of interviews, all data were transcribed and submitted into Ethnograph (Ethnograph v5.0 Software for Text Based Qualitative Analyses), a software program for analysis. Through the process of coding, which entails the interpretation of these collected data in raw forms and conversion to codes, the interview data were evaluated to detect notable trends and themes (Gibbs, 2003). Common coded participant responses were detected and sorted into relevant major categories. Five categories were identified using the process of coding and categorizing detailed by Creswell (2003): (a) video game patterns, habits, and attitudes; (b) gender representation in video games; (c) gender representation in real life; (d) identification with video game character portrayals; and (e) influence of video game play on gender socialization and identification.
In order to determine participants’ video game playing patterns and habits, descriptive statistics were employed aiming to quantitatively summarise these data (Creswell, 2003, 2008; Creswell & Plano Clark, 2007). A frequency count was used to summarize how often different scores occurred within a sample of scores. The first component of the interview consisted of closed questions that asked specific, narrow questions to facilitate the collection of these data. Many of the questions contained yes or no answers, along with questions regarding their video game interests and frequency of play (e.g., Do you play video games? Approximately how many hours would you say you played video games per day?). Open-ended questions then provided participants with a platform to express their answers and rationales in a more personalized and detailed manner, equipping the researcher with a heightened comprehension of participants’ video gaming patterns, habits, and attitudes (e.g., What are your favourite video games? Why do you like these games the best?). The following questions from the semi-structured interview with participants were analyzed at this stage in order to determine participants’ video game playing patterns and habits:

1. Do you play video games?
2. Approximately how many hours do you play video games per day?
3. What are your favourite video games?
4. What are the ratings on the video games you most frequently play with?
5. Why do you like these games the best?

**Video Game Play Frequency**

Participants were asked at the beginning of the interview whether they play video games, and were informed that video games included games played on consoles,
computers or laptops, and smart phones. Based on the results, 17 out of 17 participants (100%) declared that they play video games. Among those who declared, 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 play 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. The results are presented in Tables 1 and 2. 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.

**Favourite Video Games**

In order to determine what video games participants were interested in and actively playing, participants were asked to list two or three of their favourite 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 3. These presented data revealed that males (82%) most often reported playing Shooter games (*Fortnite, Grand Theft Auto V, Call of Duty*), while the most frequently played games for females were mobile games (*Piano Tiles, Catch Up*) played by 4 of 6 (67%) female participants. 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.

Participants were asked to list the ratings of the games that they most frequently play in order to determine a general sense of the content within the games they routinely
engage with. These data are presented in Table 3. According to these data, the ratings that are most frequently played by participants consisted of *Mature*, *Teen*, *Everyone 10+*, and *Everyone*. 


Table 1  

*Video Game Play Frequency (Weekday)*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 hour</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>1 to 2 hours</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>3 or more hours</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 2  

*Video Game Play Frequency (Weekend)*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 hour</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1 to 2 hours</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3 or more hours</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>
Table 3

*Video Games and Ratings by Participant*

<table>
<thead>
<tr>
<th>Participant no.</th>
<th>Gender</th>
<th>No. of hours</th>
<th>Genre</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Weekday</td>
<td>Weekend</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>1–2</td>
<td>3–4</td>
<td>MOBA&lt;sup&gt;a&lt;/sup&gt;; Mobile games</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>2–3</td>
<td>4–4.5</td>
<td>Shooter games; Action RPG&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>3</td>
<td>M</td>
<td>0.5</td>
<td>0.5</td>
<td>Shooter games</td>
</tr>
<tr>
<td>4</td>
<td>F</td>
<td>1</td>
<td>1</td>
<td>Mobile games</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>2</td>
<td>3–3.5</td>
<td>Mobile games; Fighting</td>
</tr>
<tr>
<td>6</td>
<td>M</td>
<td>1</td>
<td>3</td>
<td>Driving; Sports; Sandbox</td>
</tr>
<tr>
<td>7</td>
<td>F</td>
<td>0.50</td>
<td>0.75</td>
<td>Racing; Sports</td>
</tr>
<tr>
<td>8</td>
<td>M</td>
<td>2</td>
<td>2</td>
<td>Driving; Shooter games; Action; Adventure; Action RPG</td>
</tr>
<tr>
<td>9</td>
<td>M</td>
<td>1</td>
<td>2</td>
<td>Shooter games; Sports</td>
</tr>
<tr>
<td>10</td>
<td>M</td>
<td>1–2</td>
<td>2–3</td>
<td>Shooter games; Sports</td>
</tr>
<tr>
<td>11</td>
<td>M</td>
<td>2</td>
<td>2</td>
<td>Driving; Shooter games; Action; Adventure</td>
</tr>
<tr>
<td>12</td>
<td>M</td>
<td>4–5</td>
<td>9–10</td>
<td>Shooter games; Action; Adventure</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>1–2</td>
<td>4</td>
<td>Driving; Shooter games; Sports</td>
</tr>
<tr>
<td>14</td>
<td>F</td>
<td>2–3</td>
<td>5–6</td>
<td>MMO&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>15</td>
<td>M</td>
<td>3</td>
<td>5</td>
<td>Sandbox; Shooter games; Battle Royale</td>
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<tr>
<td>16</td>
<td>F</td>
<td>1</td>
<td>1</td>
<td>Mobile games</td>
</tr>
<tr>
<td>17</td>
<td>M</td>
<td>0.5</td>
<td>1</td>
<td>Sandbox; Sports</td>
</tr>
</tbody>
</table>

<sup>a</sup>Multiplier Online Battle Arena  
<sup>b</sup>Role-playing Game  
<sup>c</sup>Massively Multiplayer Online
The nine participants (53%) who reported playing Mature content consisted entirely of males and included nearly all male participants (82%; 9 of 11). Of the 4 of 17 participants (24%) who declared Teen, 3 of 11 (27%) consisted of males and 1 of 6 (17%) were female. For the rating Everyone 10+, 9 of 17 (53%) reported frequently playing, with 6 of 11 (55%) being males and 3 of 6 (50%) being female. Of the 7 of 17 participants (41%) who declared Everyone as the rating they most frequently play with, 1 (9%) was male and 6 (100%) were females. Therefore, games rated Mature are the most frequently played games from male participants, while games rated Everyone were the most frequently played games from female participants.

Following the question regarding participants’ favourite video games, participants were asked to describe why they like these games the best. Of the 11 male participants who were asked, the most common reoccurring words used to describe why they preferred these games consisted of “fun,” “exciting,” and “intense.” Fun was the most reoccurring word with 5 of 11 males (45%) declaring it to be the reason why they like their games the best. Exciting was the next reoccurring word reported by 4 of 11 males (36%), with the word intense declared by 3 of 11 males (27%) as a reason why they like their games the best. In comparison, of the six female participants who were asked, the most common reoccurring words used to describe why they prefer these games consisted of “fun,” “playing with others,” and “challenging.” Fun was the most reoccurring words with 4 of 6 females (67%) declaring it as a reason for why they like their game the best. Playing with others was the next reoccurring words reported by 3 of 6 females (50%), and challenging was the next common phrase reported by 2 of 6 females (33%) as a reason for why they prefer their games the best. According to these data, fun was the
most reoccurring word cited for why participants liked their video games the best for both males (45%) and females, (67%) despite referencing divergent genres.

Following the question regarding why they like their favourite games the best, participants were asked if they had any games that they disliked. Of the 11 male participants who were asked if they had any video games that they dislike the most, 5 of 11 males (45%) reported to not have any games they dislike. All other male participants cited a wide array of disinterests, such as games that are boring, too simplistic, difficult to manoeuvre, and RPG games. For example, participant 2 stated, “I don’t like boring games like Skyrim, it’s just too much story mode for me” (male; video game player).

Participant 6 emphasized, “I don’t like those games where it’s so simple, where they make it really easy or obvious. I like having challenges” (male; video game player).

In comparison, of all the female participants who were asked, 2 of 6 (33%) declared that they did not dislike any video games. All other female participants reported varying disinterests, such as violence, horror, and games that have no objective and first-person perspective. For example, participant 1 stated, “I don’t like first-person point of view games, I’m just really bad at aiming and just kind of running around. I find it more difficult for me. I like games I can tell where the players are.” Participant 5 further stated, “I don’t like scary games, when things pop out and creatures. It kind of freaks me out a little bit” (female; video game player). According to these data, the majority of participants (59%; 6 males, 4 females) declared having a type of game they disliked, however they provided a variety of deterring elements.

Gender Representation in Video Games

In order to address research questions regarding participants’ perceptions and attitudes towards gender representation in video games, participants were asked to
elaborate about female and male representation and possible gender stereotypes within video games. This was done in order to establish participants’ pre-existing beliefs and attitudes regarding gender stereotypes and gender representation in video games. Participants were asked whether or not they knew what gender stereotypes are in order to ensure that they understood the topic that they would be discussing and examining throughout the interview. Students were asked to explain what gender stereotypes are.

Eleven of 17 participants (65%; 9 males, 2 females) stated that they knew what gender stereotypes were and provided a definition or example. Participant 2 stated, “It’s like say one person thinks differently or like about a specific thing for a specific gender” (male; video game player). Participant 9 also suggested, “women are the nurses, men are the software engineers” (male; video game player). Participant 16 further stated, “I think that people assume because you’re a girl they think maybe you can’t throw well and stuff” (female; video game player). Six of 17 participants (35%; 2 males, 4 females) stated they did not know what gender stereotypes were.

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 have heard or seen gender stereotypes in video games. Of the eight participants who stated that they have heard or seen gender stereotypes in video games, the most common answers for what they have seen or heard regarding gender stereotypes in video games consisted of female characters being weaker than male characters and the lack of representation of the female characters in video games. Five of 8 participants (63%; 2 males, 3 females) stated that they often see female characters being weaker than male characters. Participant 1 discussed how she played a mobile game and noticed, “When
it’s a girl they would usually make it more like a healer or something friendly, not as powerful as the guys. When I use my girl characters they seem to always get killed first” (female; video game player). Participant 1 further provided details regarding her video game play emphasizing that,

I have defense and attacking characters. My attacking characters were all guys, and buff and strong looking [while] defense were all girls. They were there to support my attackers, to heal them, and give them power ups and stuff. (female; video game player)

Participant 2 stated that, “There is generally not as much girl characters as boy characters. I’ve noticed that for most of the games I play” (male; video game player). Participant 2 further discussed one of his current favourite video games titled Overwatch that he perceived as having disparity in representation. He stated that, “about 80% of the characters are men. …The females don’t look as strong as the men characters, and don’t have as much firepower. That’s why it leads you to play as men more than women because they have stronger abilities” (male; video game player). Participant 5 stated that, “All the girls have really long hair…and they’re all wearing dresses…none of them really have swords or something that goes like boom! The boys have swords, they have armour, all this different stuff” (female; video game player). Participant 6 emphasized that he “feels like in general woman [are] weaker in some video games. They’ll make them so they’re not always the main character, more on the side kind of thing. They usually make men always tough and like the biggest” (male; video game player). In similar fashion, participant 14 stated that, “Mario. He’s super strong and he has to go save Peach. She’s
always getting kidnapped by big Bowser. I disagree with this. Girls can do so much more” (female; video game player).

Three of 8 participants (38%; 2 males, 1 female) stated that there are often not as many female video game characters as male character. Participant 3 stated that, “Call of Duty…You don’t see as many girls in the game as you do boys” (male; video game player). Participant 7 also discussed that in particular with the video games involving sports, “There’s always more boys. When I play hockey, it’s always boys’ hockey. It’s never girls” (female; video game player). Participant 7 further highlighted how the lack of gender representation, “Makes me feel less confident because I play hockey and I’m a girl, so I feel like girls are being put down. I wish I had more choice of girls. Some games don’t even have girls” (female; video game player). Further discussion regarding the topic of sport games is seen from participant 10 as he voiced that, “they don’t have a girls league. Like in NBA, they could include the girls’ national team or something, which could get girls more involved in it” (male; video game player). However, participant 10 further highlighted that, “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).

Seven of 17 participants (53%; 5 males, 2 females) stated they have not heard or seen gender stereotypes in video games. Two of 17 participants (12%; 2 males) from this group changed their responses upon further discussion prompted by questioning, such as asking participants to recall any small details regarding the video games they play (e.g., Please take a moment to really think about the possible gender stereotype behaviour you may have heard or seen in video games). Once participants expanded on their answers,
both participants’ answers align with the most common reoccurring stereotypes identified in video games. Participant 3 initially stated that he did not see any gender stereotypes in video games, but later stated, “Not the games I play. …Except for Call of Duty because you don’t see as many girls as you do boys. Also, maybe GTA because you never see any women. Everybody is just a male and that’s basically it” (male; video game player).

Participant 11 also identified gender stereotypes after further reflection, as he declared, “I don't think so. …It’s usually males that I see. There’s more boys than girls. Oh, actually the guys are all buff and big, while the women are just there. The girls are more silent and smaller than the boys” (male; video game player). Overall, the majority of participants (65%; 9 males, 2 females) were able to convey an understanding of what gender stereotypes were. Less than half of the participants (47%; 4 males, 4 females) stated that they have heard or seen gender stereotypes in video games.

In the second part of the interview, series of questions were asked to participants regarding their perceptions of the video game covers presented. Participants were shown each cover one at a time and asked questions that related to differences in gender representation on the cover images, descriptions of video game characters, and gender stereotypes. The video game covers consisted of Madden NFL 18, NBA 2K18, GTA V, Destiny 2, Horizon: Zero Dawn, Tom Clancy’s Ghost Recon: Wildlands, Legend of Zelda: Breath of the Wild, and Mass Effect: Andromeda (see Appendix C). A common difference noticed by participants in the representation of male and female video game characters was that male characters were depicted more frequently than female characters. The strongest examples of different gender representations were identified on the covers of Madden NFL (100%; 11 males, 6 females), NBA 2K18 (100%; 11 males, 6
females), GTA V (88%; 10 males, 5 females), and Tom Clancy’s Ghost Recon: Wildlands (100%; 11 males, 6 females). Participant 9 identified for Madden NFL that, “It’s only males because I don’t think there’s a football league for females” (male; video game player). Participant 12 stated for NBA 2K18 that, “There’s 3 boys on the front and mostly a lot of boys on the back” (male; video game player). For the cover of GTA V, participant 4 highlighted, “The boys look more like they own this game. …The boys all look main character-ish” (female; video game player.) Finally, participant 9 identified asymmetry in gender representation on the cover of Tom Clancy’s Ghost Recon: Wildlands and stated, “By looking at everything and all the photos, I don't see any women in this. I only see male” (male; video game player).

A prevailing description for the portrayals of male characters on the examined video game covers consisted of male characters appearing to be tough. This description of male characters was identified on the covers of Madden NFL 18 (59%; 6 males, 4 females), NBA 2K18 (59%; 6 males, 4 females), GTA V (76%; 8 males, 5 females), Destiny 2 (47%; 5 males, 3 females), and Tom Clancy’s Ghost Recon: Wildlands (65%; 6 males, 5 females). Participant 6 stated for Madden NFL 18 that, “For this one they [are] obviously making the guy on there look more tough just because I guess it’s football and they got to be strong” (male; video game player). For NBA 2K18, participant 11 highlighted, “They make them look exactly like how their real life players are. Paul George looks buff. Lebron James, they made him tough…like what they are in real life” (male; video game player). For the video game cover GTA V, participant 2 stated, “The males look tough and fearless and have guns (male; video game player). Participant 13 further emphasized, “On the cover it’s like all the guys are, you know, tough with their guns and stuff” (male; video game player). Participant 15 stated for Destiny 2 that the
male characters, “Look kind of the same. The two males on the right. They look tough and like they’re attacking” (male; video game player). Finally, for the cover *Tom Clancy’s Ghost Recon: Wildlands*, participant 8 stated that the male characters were, “A lot bigger and tougher than normal men” (male; video game player). Participant 13 further highlighted, “The guys are all tough, they all have weapons and armour” (male; video game player). Participant 14 also stressed that, “The guys look super tough, they have a huge vehicle and huge guns. They give off the bad kind of impression. They seem tough and mean” (female; video game player).

A prevalent description for the observable female characters on the examined video game covers consisted of female characters possessing a secondary or non-essential role. This description of female characters was identified on the covers of *GTA V* (65%; 7 males, 4 females), *Destiny 2* (53%; 5 males, 4 females), *Legend of Zelda: Breath of the Wild* (82%; 8 males, 6 females). For the game cover *GTA V*, participant 7 stated that one of the female characters was “Just wearing a swim suit and she kind of looks like she’s modeling with lots of makeup. She doesn’t really look like she’s fighting, while the boys do” (male; video game player). Participant 9 further highlighted that the female characters, “Kind of just look like a filler for the cover” (male; video game cover). Participant 13 suggested that, “There just aren’t any girl role models, it’s just guys. Girls are doing nothing on here” (male; video game player). Finally, participant 15 reflected that the female characters, “Are just not doing anything. …I think it’s just really putting girls down. This game at least” (male; video game player).

For the video game cover *Destiny 2*, participant 13 emphasized that, “The guys seem to be fighting more on this cover, and the girl seems to be just standing back and watching again” (male; video game cover). Participant 14 further noted, “The girl’s in the
back so if I weren’t searching the cover I would probably barely see her. It looks like the
guys are trying to protect the girl” (female; video game cover). Participant 17 discerned
that, “The boys look more aggressive and the girls are more in the back” (male; video
game cover). Finally, for the video game cover Legend of Zelda: Breath of the Wild,
participant 3 stated, “The male looks like he’s fighting, but the female looks like she’s
cheering for him or supporting him” (male; video game cover). Participant 4 further
highlighted, “The girl just looks like she’s admiring him or something. She’s not really
doing anything” (female; video game cover). Participant 13 further noted, “In this one,
the guy is fighting and the girl is not doing anything, just standing or watching” (male;
video game cover). Participant 16 stated that the female is, “Kind of just on the side,
cheering him on or something while he’s fighting” (female; video game cover).

Participants associated stereotypical attributes, such as the character being
muscular and possessing an imposing stance, with masculine qualities. In the video game
cover Mass Effect: Andromeda, all 17 participants (100%) identified the character on the
cover as a male despite not being able to see the character’s face. Participant 2 stated, “It
looks like a male because of the strong armour, muscles, and gun on the back. It’s your
typical male” (male; video game player). Participant 4 noted, “I think it’s a boy because
he looks big and muscular. I think they wouldn’t make girls super muscular so I feel like
they would make this a boy” (female; video game player). Participant 13 reasoned, “It’s
probably a guy because they’re all standing tough and by themselves like the same shot
as all the other games” (male; video game player). Participant 14 further emphasized,
“The way he’s standing…looks like he just conquered something” (female; video game
player).
Implications that were frequent amongst participants’ responses as a result of the portrayals on the video games covers included notions that certain games were intended for a particular gender or would not appeal to a particular gender. Another implication was that aggressive or combative roles were reserved for males. Video game covers that prompted responses implying that a video game may be intended for a specific gender consisted of *Madden NFL 18* (35%; 2 males, 4 females), *NBA 2K18* (35%; 2 males, 4 females), *Horizon: Zero Dawn* (24%; 2 males, 2 females), and *Tom Clancy’s Ghost Recon: Wildlands* (41%; 4 males, 3 females). For the game cover *Madden NFL 18*, participant 4 highlighted how, “Girls probably like playing football games, and they may not buy this one because it’s just a game for boys” (female; video game player). Participant 6 further stated, “These [games] look like they would be more for boys. It looks really rough…although girls can also be rough, but just like, the way there’s also five pictures here and they’re all boys too” (female; video game player). Participant 9 discussed how, “It’s a little bit consequential. Makes it look like girls don’t play these sports” (male; video game player).

For the video game cover *NBA 2K18*, participant 11 stated, “They make it look like girls can’t play basketball. …But you don’t really see a lot of that. Maybe NBA is for boys and there’s a different league for girls, that’s probably why” (male; video game player). Participant 14 stressed, “It’s crushing female dreams because some girls want to play these sports. If they see this, when there’s only guys on there, they’re going to think that they can’t because they’re a girl” (female; video game player). For the video game cover *Horizon: Zero Dawn*, participant 4 stated, “I guess this one has more girls. So I guess now the boys may not feel like they can play this game, even though they want to” (female; video game player). Upon further reflection, participant 4 also commented, “If a
guy has this game and boys come over and they want to play this, they may make fun of him for wanting to be the girl in this game and he might get laughed at” (female; video game player). Participant 13 further suggested, “There might be some consequences because if there’s a guy he might be like, ‘no, I’m not playing this,’ cause guys would rather see other guys with guns and armour rather than a girl fighting” (male; video game player). Participant 14 also highlighted that, “I think guys would feel left out because if there was no guys, they’d think this game is only for girls. ...When I play games that are all boys I feel like I shouldn’t play them, but I still do” (female; video game player). Participant 15 stated, “I think there should be a boy character. Because it’s not like there should only be girls in this game. I don’t want to be a girl even if it’s just in a video game. I want to be a boy” (male; video game player).

For the game cover *Tom Clancy’s Ghost Recon: Wildlands*, participant 4 highlighted, “[Girls] might not want to play because they will have to be a boy. They might want to be a girl to fight in this game. They don’t want to be a boy to make them stronger” (female; video game player). Participant 7 discussed how “Many girls may not want to play this game because it looks kind of like a boy game” (female; video game player). When asked to define what boy games and girl games were, participant 7 stated, “Like, shooting, wrestling, stuff like that. Boys do that a lot, they like to wrestle, and play shooting games and stuff. Girl games are kind of shooting, but not shooting games. Like not as violent” (female; video game player). Participant 15 also suggested that, “Maybe if a girl was playing it, they would like I’m not brave enough for the army. They didn’t put any girls in the game, [it’s] only a boys game, because I’m pretty sure this is a war game” (male; video game player).
Another implication resulting from the portrayals of characters on video game covers was that aggressive or combative roles were reserved for males. This was identified on the video game covers *Tom Clancy’s Ghost Recon: Wildlands* (59%; 7 males, 3 females), *Destiny 2* (47%; 5 males, 3 females), and *Legend of Zelda: Breath of the Wild* (47%; 4 males, 4 females). For the video game cover *Tom Clancy’s Ghost Recon: Wildlands*, participant 6 stated, “I think it shows that they’re representing that men would usually go to war and women should stay behind” (male; video game player). Participant 8 highlighted, “I mean it just shows males so I think if a girl were to see this, they’ll think it’s a warfare game, and they’re not showing any females, so that means we shouldn’t be in war” (male; video game player). Participant 16 (female; video game player) also emphasizes that the game, “Shows that girls can’t fight in the army or be brave like that. …Use big truck and guns” (female; video game player).

In the video game cover *Destiny 2*, participant 4 stated that, “The boys are in the front and they’re the ones shooting, while the girl is in the back just holding a gun” (female; video game player). Participant 8 also noted how the female character appeared to not “Be full on head on the war. I guess [she’s] not as tough” (male; video game player). Participant 10 further highlighted, “I feel like they’re just saying that girls are not made to be in the front lines and shooting everyone” (male; video game player). For the video game cover *Legend of Zelda: Breath of the Wild*, participant 1 stated, “It makes it seem like boys are the ones doing all the work and the girl is just standing there and not really doing anything” (female; video game player). Participant 3 emphasized, “Basically main character in front, as per usual. The male looks like he’s fighting” (male; video game player). Participant 4 highlighted that, “The boy looks like he’s owning and
fighting for the world or something” (female; video game player). Participant 14 (female; video game player) further stated that the cover suggested, “Boys can only save girls, girls should always be in trouble, girls should stay home” (female; video game player).

Participants also identified inequality of gender representation for the video game covers *Madden NFL 18* (65%; 7 males, 3 females), *NBA 2K18* (65%; 7 males, 3 females), *Destiny 2* (35%; 3 males, 3 females), and *Horizon: Zero Dawn* (76%; 9 males, 4 females). For the video game covers *Madden NFL* and *NBA 2K18*, more than half of the participants did not find the absence of female characters within the video game cover to be problematic. For the video game cover *Madden NFL 18*, participant 3 stated, “I wouldn’t think this is really gender stereotypical because sport games are the most realistic games. They have the boys as players, and they have the girls as cheerleaders ‘cause they usually are. In real life it’s like that” (male; video game player). Participant 8 further noted, “Well, there are no females in the league so…I don’t really think there’s that much of a problem” (male; video game player). For the video game cover *NBA 2K18*, participant 5 highlighted, “It’s all boys so it’s just regular, it’s what we see on TV. If they had females I don’t think a lot of men would play this game…I think they should just keep it with how it is with men” (female; video game player). Participant 10 further emphasized, “I mean they could include the girls’ national team or something [but] I don’t know if anyone is going to want to play all women cause it’s usually a man’s sport. Like, it’s called NBA” (male; video game player).

For the video game cover of *Destiny 2*, despite the female character being described as more weak or secondary to male characters, participants accepted the video game cover, as they did not find it overtly problematic due to the portrayal of a
participating female character. Participant 4 stated, “I guess it’s a little bit bad. ...But, there is a girl so it’s not that bad” (female; video game player). Participant 6 further noted, “Well, they’re giving her a tiny weapon and they make her stay back, while men get much bigger weapons…but they’re putting a woman in battle, which usually doesn’t happen so.” Participant 7 also discussed how, “Since there is a girl, they’re kind of challenging stereotypes. But also, they can be reinforcing them because the men look stronger. ...But at least there is a girl so it’s fine” (female; video game player). For the video game cover of Horizon: Zero Dawn, despite the exclusive portrayal of a female character, the majority of participants did not see the portrayal as problematic. Participant 7 stated, “It shows that girls are strong and we can fight back. It’s good because a lot of games just have men in it and this one has girls in it so we can play this game too” (female; video game player). Participant 15 emphasized, “To be honest, I don’t really have a complaint…I’m pretty sure this is the main character so it doesn’t really matter.” Participant 17 also mentioned that the gender difference on the cover would not be an issue because, “Guys would just play the game because they like the game so” (male; video game player).

Participants identified certain video game covers that they would change in order to establish a more positively influential portrayal by either including more female characters or female characters that appear more capable. The video game covers that participants would change include GTA V (76%; 8 males, 5 females), Destiny 2 (88%; 10 males, 5 females), and Tom Clancy’s Ghost Recon: Wildlands (82%; 8 males, 6 females). Participant 7 suggested for the video game cover GTA V that, “We could also have a girl like this guy with a baseball bat fighting with mud on her face. Things like that, to know
that we can fight too” (female; video game player). For the video game cover of *Destiny 2*, participant 2 stated, “Make the girl look like males more and give them bigger weapons” (male; video game player). Participant 7 suggested that, “We can add another girl in the front fighting. In this cover it’s all men fighting, you could add a girl fighting against whatever the enemy is” (female; video game player). Participant 13 further highlighted that he would, “Put one of the girls up front so they both have equal fighting chance” (male; video game player). Participant 14 also stated that, “I think she should have the same size gun as the other guys and I think she should be beside them fighting” (female; video game player). For the video game cover of *Tom Clancy’s Ghost Recon: Wildlands*, participant 8 suggested, “Just add one or two females on the cover. They should be working with the men” (male; video game player). Participant 9 stated, “Maybe have a way that you can have a woman version and a male version, but have a mixed group. Not just all men” (male; video game player). Participant 14 further suggested, “Put girls in there! I just want to put girls in everything. In one picture, they’re posing on the truck I’d put a couple of girls there too. But they’d be wearing clothing, not just freaking swimsuits or something” (male; video game player).

Participants identified certain video game covers that they deemed acceptable and do not require change. These covers consisted of *Madden NFL 18* (59%; 9 males, 1 female), *NBA 2K18* (59%; 9 males, 1 female), *Horizon: Zero Dawn* (88%; 9 males, 6 females), and *Legend of Zelda: Breath of the Wild* (59%; 8 males, 1 female). For the video game covers of *Madden NFL 18* and *NBA 2K18*, participants did not express a need to change as these video games were based off real life. Participant 10 stated for *Madden NFL 18* that, “You can’t really [change], like there’s no women in the NFL in real life”
Participant 11 stated for NBA 2K18 that, “I mean, this is based off real NBA players. …Girls’ basketball isn’t really popular. You don’t really see a lot of that” (male; video game player). For the video game cover of Horizon: Zero Dawn, participant 4 contemplated, “I think it’s fine. …Maybe they could add one boy so the boys might want to play this game? But I would be fine if it was like this because it shows that girls can do what they want to do” (female; video game player). Participant 7 (female; video game player) also discussed how, “I could see boys being mad at this just because a girl is on the cover of this. They could be like girls can only play this game, but she’s a really good role model for girls and boys too” (female; video game player). For the game cover Legend of Zelda: Breath of the Wild, participant 17 stated, “I would leave it as is because it’s just showing his adventures, him swimming, or him riding a horse, or at a campfire. Just pictures of the game” (male; video game player).

Overall, throughout participants’ responses regarding gender representation in video games, there were perceptible trends in participants’ acknowledgement of gender representational discrepancies, gender stereotypes, implications, passive recognition of asymmetrical gender portrayals, and the possible need for changes with video game covers.

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 from participants (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 from
participants (53%; 4 males, 5 females). Fourteen of 17 participants (82%; 8 males, 6 females) did not identify specific personal ideals of what males and females should be expected to adhere to. For example, participant 5 emphasized, “I think they should look like what they want to look like. Like, how short or long they want their hair, what they want to wear, and all that” (female; video game player). Participant 11 also stated, “I don’t really have any ideals, they can look anyway they want I don’t really care” (male; video game player). Participant 13 further highlighted, “Well, I really don’t follow stereotypes. Everyone shouldn’t be the same, they can be different” (male; video game player).

Participants were asked to elaborate on their real-world experiences with gender stereotypes and to describe any instances where they have seen gender stereotypes in real life. Eight of 17 participants (47%; 2 males, 6 females) reported seeing gender stereotypes in real life. Participant 2 stated, “Sometimes people are like. …Say a girl joins a server they will be like, ‘Wow, finally, a girl joins the server! I’ve never seen one’” (male; video game player). Participant 4 recalled, “We were in New York and my friend, a boy, bought a pink shirt. Then my other friends were making fun of him because it was pink and they were like, ‘Oh you’re gay’ and stuff” (female; video game player). Participant 5 discussed how, “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). Participant 6 further reflected, “People say you can’t do this because of your gender. People do that pretty much wherever you go. When we play soccer at school and someone’s not athletic, everyone will be like, ‘You kick like a girl’” (male; 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. Overall, male participants were adamant about never experiencing gender stereotypes in real life. For example, participant 10 stated, “No. Not really. I don’t really see anything” (male; video game player). Participant 13 also commented, “No, never” (male; video game player). In contrast, female participants were more willing to share their experiences. Participant 1 stated:

I play *League of Legends* and when a girl [does] really bad at one time, just like that one time, all the guys would be like “You’re so bad, you’re such a noob,” and start smack talking even though the girl did like one thing wrong. When a guy messes up they don’t get as much, but when you’re a girl I guess you get more. That’s why I used to show my gender in the game but now I don’t because I’m scared of people who talk bad when I do something bad by accident. If I had a lower rank or got something that’s like worse than one of the guys, like if my kills were less than my death points, guys would just smack talk and tease me. (Female; video game player)

Participant 5 also discussed her experiences and highlighted:

Because I’m a competitive dancer, people are always like “Oh, dancing, you just prance around. You do nothing.” Kids in my class are always saying stuff too like, “Girls are like this.” And when that kind of happens there’s girls that stand up for each other, but sometimes they step back and laugh. Like, it depends who’s with you. We have one girl, she’s really nice and she stands up for everyone.
Sometimes I stand up for them too, but sometimes I feel afraid that they will say something to me. (Female; video game player)

Participant 7 also discussed her experiences with gender stereotypes and shared:

Yeah, cause I play hockey right? And they’re 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. They’re all like only boys play hockey. So a lot of it has to do with playing hockey or different sports too that they just think that boys are strong, they look different, things like that. 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)

Participant 14 considered her experience playing video games:

My brother, he’s 8 now. Awhile ago he was playing this game and he said, “Oh you won’t like this game because you’re a girl.” Turns out I was better at it and couple play it better than he could. I’ve also seen like load of people online…I was playing Roblox one day and there was a guy and he was the manager of a store cause we were playing a tycoon type of game. I went up to him and asked if I could get a pay raise, or if I could be employee of the day, or be a manager, and he was like no because you’re a girl. (Female; video game player)

Participant 16 recalled an experience and stated:

Yes, for my soccer team we had an exhibition game and we were against some boys. I’m in an all girls league so we’re not usually against boys. But they were 2
years younger than us, and the organizers kind of assumed they were our level I
guess because they’re boys. I disagree with that, we did win. I don’t like that they
assumed they were the same level as us. Even though they may be a really good
team, but letting them play us because they’re boys and younger than us, I think
that’s not fair. (Female; video game player)

Overall, the results showcased that less than half of the participants reported
seeing gender stereotypes in real life (47%; 2 males, 6 females). The majority of male
participants reported not seeing gender stereotypes in real life, while all female
participants did. Furthermore, less than half of the participants declared experiencing
gender stereotypes in real life (29%; 0 males, 5 females). All male participants declared
not experiencing gender stereotypes in real life, while the majority of female participants
declared that they did.

**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 (e.g., Are there any traits or qualities you admire
in your favourite video game characters? Do you sometimes wish you were like one of
your favourite characters? Why or why not?). Participants reflected upon their favourite
video game characters and 14 of 17 participants (82%; 9 males, 5 females) declared that
they did not have any traits or qualities they admire within their favourite characters. For
example, participant 4 highlighted, “No because they’re controlled by the person playing
so it’s like. …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). Participant 5 further emphasized,
“No, I usually just pick boy characters because all the girl ones don’t have good skills and stuff like that” (female; video game player). Participant 6 also noted, “No, I just really like the Legend of Zelda storyline” (male; video game player).

Following this, participants were asked if they ever wished to be like one of their favourite video game characters. Fifteen of 17 participants (88%; 10 males, 5 females) reported never wishing to be like one of their favourite video game characters. Participant 1 stated, “Not really. My favourite character is pretty and all, but I’m the type of person whose like…I may like your style, but I don’t want to be like that because I like myself too” (female; video game player). Participant 6 reflected, “Not really. I like the way I am right now, and I like life the way it is” (male; video game player). Participant 11 stated, “No, no. Cause like, these people [from GTA V] are like psychopaths, they’re not really things that I look forward to” (male; video game player).

Participants also reflected upon whether video games have ever made them feel pressured to conform to gender stereotypes in real life. Fifteen of 17 participants (88%; 10 males, 5 females) reported not feeling pressured to conform to gender stereotypes in real life when playing video games. Participant 11 highlighted, “No, I don’t really get inspired by [these characters] or look forward to them” (male; video game player). Participant 12 further emphasized, “I don’t really get involved in the video game. I don’t really care like what happens” (male; video game player). Participant 14 also noted, “Not really. I usually just play with my friend and we’ll just play together” (female; video game player). Finally, participants were asked to elaborate on whether they have personally been involved in a real life social situation that may have been influenced by video games. Fourteen of 17 participants (82%; 8 males, 6 females) declared to have
never personally been involved in a real-life social situation that may have been influenced by video games. Participant 14 stated, “No, actually I haven’t” (female; video game player). The three participants (18%) who reported being personally involved in a real-life social situation that may have been influenced by video games consisted of all male participants. Participant 6 stated, “Yeah, one thing I love is paintball and airsoft because I can go and kind of do the same thing in video games in real life. So sometimes we act out missions and stuff” (male; video game player). Participant 10 also reflected, “Yeah, sometimes. I played the hunger games like in Fortnite before in real life. We used like Nerf Guns or whatever to fight each other” (male; video game player). Participant 15 further stated, “A bit. Like challenges and stuff. Like running through and jumping over obstacles like in different games in Sonic” (male; video game player).

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).

Field Notes

Field notes are a method of qualitative research where the researcher records the behaviour, events, and activities of individuals at the research site being observed with the ambition of supplying potentially useful contextual information (Creswell, 2013). During time at the research site, I concisely documented observations for later reflection. A portion of time, closely following each data collection session, was allotted to refine what was personally surveyed and perform rudimentary identification or analysis of
budding themes. During the interview process, I observed common patterns of behaviour and attitudes from participants. All female participants consistently demonstrated a high degree of comfort in regards to the discussions about gender issues. In particular, during the video game cover analysis they were especially expressive about the gender differences identified. During discussions regarding personal experiences, female participants were extremely vocal about their experiences with gender stereotypes in real life. For example, all female participants were eager to discuss this topic as the majority of the participants started to discuss and share their experiences before I even began asking them specific questions. Female participants more acutely highlighted instances of gender inequality and were adamant about implementing positive change. The female participants regularly made full use of the time allotted for individual questions regarding their personal experiences and opinions on the topic of gender issues and were only interrupted when time constraints required progression in order to collect the necessary data.

In contrast, some of the male participants displayed discomfort during the interview when asked to speak on the topic of gender issues. In particular, some of the male participants would often fidget with their hands and feet, shrug their shoulders, and avoided eye contact when they communicated about their experiences with gender stereotypes. Another recorded observation was that the male participants often required more time and clarification of questions before providing more than single word or short phrased responses. Some male participants also tended to rephrase or adjust from their initial answers when a line of questioning was furthered or they were given the opportunity to reflect. The male participants’ discussion times on gender issues were
extremely short in comparison to female participants who provided detailed responses immediately after being asked an initial question and did not often require the same level of further prompting as males.

Another difference that was noticed in regards to female and male participants’ interview responses was that all female participants displayed a greater degree of passion regarding the necessity of gender equality and change with perceptible investment in the issue, whereas male participants’ responses appeared to carry a tone of conformity and seemed driven by a societal script of expectations rather than personal investment. For example, there were many occasions where male participants discussed how there should be more gender equality, proceeding to end their statements with shrugged shoulders implying lack of knowledge or a sense of disinterest in the conversation. Furthermore, the male participants did not generally show an interest in carrying the discussion beyond simple and non-specific expectations for change in gender equality.

My interactions and overall experiences in the field were altogether agreeable, with my presence being well received by students and staff members alike. The involved staff demonstrated an investment in my research and student participants were cooperative, respectful, and intent to contribute to the best of their abilities at all times. The salient theme that emerged from the gathered field notes was the sizable discrepancy in the tone and content of answers collected from male and female participants.

**Chapter Summary**

This chapter presented the results based on the analyses of six research questions. Five categories were identified, which included: (a) video game patterns, habits, and attitudes; (b) gender representation in video games; (c) gender representation in real life;
(d) identification with video game character portrayals; and (e) influence of video game play on gender socialization and identification. Pertaining to video game patterns, habits, and attitudes, the results revealed that all participants reported playing video games, with all participants playing video games every day. Female and male participants differed in responses to video games and real-life experiences. The results revealed that the most favourite games by males were of the shooter variety, while mobile games were the most popular amongst females. The most common rating for video games played by male participants consisted of Mature, while Everyone was the most common rating for females. Male participants declared playing video games because they were fun, exciting, and intense, while female participants reported playing video games because they were fun, they were able to play with others, and they were challenging.

For the theme regarding gender representation in video games, more than half the participants stated that they knew what gender stereotypes were and provided a definition. About half the participants declared seeing or hearing gender stereotypes in video games, with the most common gender stereotypes consisting of female characters being weaker than male characters and not as many female characters as male characters in video games. Results also revealed that both male and female participants considered tough to be society’s ideals for what males should look and act like. For society’s ideals regarding what females should look and act like, both male and female participants considered pretty. More than half the participants reported that they did not identify specific ideals that males and females should be expected to adhere to. These data revealed differences between female and male participants in their perception and experiences with gaming media. The results also revealed that there were inconsistencies
between participants’ interpretations or reasoning and their endorsement of gender equality.

Pertaining to gender representation in real life, less than half the male participants reported seeing gender stereotypes in real life, while all female participants reported seeing gender stereotypes in real life. No male participants reported experiencing gender stereotypes in real life, while more than half the female participants reported experiencing gender stereotypes in real life. For the theme regarding identification with video game character portrayals, there was also a lack of identification seen across participants during the interview. The majority of participants stated they did not have any traits or qualities they admire in their favourite video game characters. More than half the participants reported not wishing to be like one of their favourite video game characters. The majority of participants declared that video games did not make them feel pressured to conform to gender stereotypes in real life. More than half the participants reported never being personally involved in a real life social situation that may have been influenced by video games. The results will be further examined in the next chapter and related to the present literature and research on gender and identification in relation with video games. Implications for theory, practice, and future research are provided.
CHAPTER FIVE: SUMMARY, DISCUSSION, AND IMPLICATIONS

Following a brief summary, this chapter presents a discussion of collected data in the context of the proposed research questions. This research’s relevance to 21st century pedagogical applications will be explored while seeking to provide answers to these questions. Finally, the implications of this study’s findings will be assessed with the overall goal of providing a beneficial basis for future research.

Summary

The major purpose of this study was to explore adolescents’ perception and attitudes towards gender representation in video games, and the degree to which these depictions may influence their notions on gender and identification. The accumulation of primarily qualitative data from adolescent participants’ replies to the research questions was achieved while implementing a exploratory descriptive study methodology.

Qualitative data were derived from a semi-structured interview, which consisted of three components. The first component was designed to measure participants’ video game playing, attitudes, habits, and patterns. The second component explored participants’ perceptions and experiences of gender stereotypes in video games and real life, in addition to identification with video game characters. The third component was an analysis of a variety of video game covers that were derived from the best-selling video games of 2017 within the United States. Field notes were made during the research and data collection process. In the present study, six primary research questions were addressed:

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?

**Discussion**

The ensuing discussion will reflect upon the six guiding research questions with answers informed by the analyses of obtained data. This discussion will be presented within five identified categories: (a) video game patterns, habits, and attitudes; (b) gender representation in video games; (c) gender representation in real life; (d) identification with video game character portrayals; and (e) influence of video game play on gender socialization and identification. Resulting implications for pertinent theory, practice, and future research will be addressed in developmental, educational, and social contexts. Parents, educators, and future researchers will be left with recommendations for their approach to ideas of gender and identification, and how they pertain to video game media.

**Video Game Playing Patterns and Habits**

Over the last years, video game play has become an important part of the daily routine of children, adolescents, and adults (Drugaș & Ciordaș, 2017; Olson, 2010). This
trend is showcased in the present study, as the findings revealed that all participants declared that they played video games. Engagement with video games is undoubtedly among the most popular pastimes across the studied group of adolescents, which agrees with past research (Bègue et al., 2017; Soutter & Hitchens, 2016). Delving further, one can address the 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’ favourite video games into genres, male and female participants’ favourite video games greatly contrasted one another. The most popular games from the majority of male participants consisted of shooter games, while the most popular games for the majority of female participants were simplified media-accessible games on mobile platforms. 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 prefer 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 (Vermeulen & Van Looy, 2016).

Past research also indicates 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 women in games may be the unsavoury 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). A male participant expressed the belief that there was a lack of “girl games,” and that all shooting games were “boy games” based on a general perceived perception of female disinterest in playing shooting games. These data further displayed that male and female participants consumed video game content of distinctly contrasting ratings.

According to these data, the video games that were most frequently played by the majority of male participants were rated Mature, while the video games that were most frequently played by all female participants were rated Everyone. The results of the present study align with previous research. Homer, Hayward, Frye, and Plass (2012) explored the relation among different characteristics of preadolescents and their video game habits and preferences. The study revealed that middle-school-aged males’ favourite game types consisted of first-person shooter, fighting, and sport games, with the majority of males of this age favouring first-person shooter games. These data showcased how preadolescent males prefer violent games, which are rated Mature. Yee (2017) conducted a survey that reported a list of video game genre groups that females played based on percentages. These data revealed that the genres that are most likely to be played by females consisted of matching games and family/farm simulation games, which are games that are rated Everyone. In comparison, the video genres that are least likely to be played by females consisted of tactical shooter and sports games.
Research has shown that video games are a typical component throughout modern stages of childhood and adolescence (Drugaş & Ciordaş, 2017; Olson, 2010). According to Olson (2010), much of the allure attributed to video games stems from their ability to provide opportunities for players to spend time with and make new friends, fostering an intensely social experience. Video games also contain new challenges that motivate competition among players, encouraging continuous play. Other reasons include the rise in popularity of a variety of games through various platforms, such as social media and smartphones, which propelled the appeal of casual games with less daunting learning curves and flexible engagement durations (Assunção, 2016). Olson’s (2010) study that collected data from 1,254 students attending grades 7 and 8 revealed self-reported reasons for playing video games. Data in Olson’s study showcased that the strongest motivators for playing video games for males consisted of video games being fun, competitive, challenging, and exciting. The strongest motivators for females consisted of video games being fun, something to do when bored, challenging, and exciting.

The present study demonstrated similar findings in why males and females like the games they play the best. When asked why they like the games that they play, participants provided a variety of reasons. The most common reoccurring reasons for why male participants prefer the games they engage with consist of fun, exciting, and intense. The most common reoccurring reasons for why female participants prefer the games they engage with consist of fun, playing with others, and challenging. These findings may hold value for educational practice, as discovering children’s and adolescents’ motivators for playing games can be translated to valuable motivational tools in classroom engagement and learning. Educators can incorporate video games in the classroom that are designed to be fun, collaborative, and challenging, but also
encompass clear educational goals and a variety of learning principles. These learning principles highlight essential features of what constitutes a good game that results in more potent, feedback driven, learning with components, such as customization, interactivity, and well-ordered problems (Gee, 2007). Furthermore, Qian and Clark (2016) outlined the immediate relevance of game-based learning to 21st century classrooms, citing the aid games can provide in the tuned acquirement of skills or knowledge. Honing and practically assessing the modern skills that are core to 21st century academic advancement, including coherent, critical, creative, and collaborative thinking, is proficiently achieved in video game environments where game-based learning already necessitates the rapid adoption of these skills (Qian & Clark, 2016).

**Gender Representation in Video Games**

Past literature has examined gender representation in video games and revealed that in comparison to males, female representation are often assigned secondary roles or appear in a more sexualized manner (Fox & Bailenson, 2009). Fox and Bailenson (2009) further discuss how women are often restricted to two forms: the virgin or the vamp. The virgin is in need of male protection and shown to be innocent and obedient, while the vamp is portrayed as an extremely sexualized and dominant female. According to Miller and Summers’s (2007) research findings, male characters in video games outnumbered female characters, and were often more playable characters and portrayed in important roles in comparison to females. Matthews et al. (2016) highlighted the prevalence of hypermuscular males in games, discussing how male characters in video games were often depicted as strong, capable men. Findings from Dill and Thill’s (2007) study revealed that that 82.6% of male characters in their sample size were portrayed as
aggressive; furthermore, male characters were regularly shown fighting with weapons, and were often displayed posing with them.

The majority of the gender representation depicted on the video game covers used in the present study aligns with past literature. The majority of female characters on the video game covers were often relegated to secondary roles in comparison to males, as seen on the video game covers of *Destiny 2* and *Legend of Zelda: Breath of the Wild*, or portrayed in a sexualized manner, as seen on the video game cover *GTA V*. In particular, the female character on *Legend of Zelda: Breath of the Wild* aligns with the virgin stereotypes, as the female character is relegated to the role of damsel in distress in the form of a princess, seen admiring or awaiting rescue by the male character. However, there was no female character on the video game covers that fulfilled the criteria for the vamp stereotypes. In these video game covers, female characters were often portrayed as either one aspect of a vamp or the other, such as being sexualized or being dominant, not both. Furthermore, male characters on the video game covers outnumbered female characters, as video game covers such as *Madden NFL 18*, *NBA 2K18*, and *Tom Clancy’s Ghost Recon: Wildlands* did not even include depictions of female characters. In relation with the prevalence of hypermuscular males in video games, the majority of male characters were depicted as strong, capable, and aggressive. Male characters were also regularly displayed fighting with weapons and posing with them.

**Pre-existing beliefs and attitudes.** In order to address the research questions, participants were first asked to establish their pre-existing beliefs and attitudes regarding gender stereotypes and gender representation in video games. Participants were questioned to determine whether or not they knew what gender stereotypes are 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. According to the results, almost half of the participants declared that they have heard or seen gender stereotypes in video games, with the most common gender stereotypes consisting of female characters being weaker than male characters and not as many female characters as male characters.

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 tough 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 were able to identify seeing or hearing 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 indulge 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. This can be supported by previous literature that examined the service of male interest first in video game development and consumption. For example, despite the argument that Lara Croft represents a courageous and tough female model in the video game Tomb Raider (Jansz & Martis, 2007; Matthews et al., 2016), her sexualized depiction may have been motivated by a desire to increase sales and attract male players (Lynch et al., 2016). As such, male participants in the present study may not have reported seeing or hearing gender stereotypes in video games because they are rarely the objects of exclusion or poorer representation in modern gaming media. This discussion aligns with Case, Hensley, and Anderson’s (2014) examination of male privilege and how, despite an acknowledgment of oppressive imbalance which would seem to coincide with an acceptance of privilege, students may miss this association and retain skewed perceptions about the existence of unmerited status benefits.

**Inconsistencies amongst responses.** 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 women from engaging with gaming communities.

Furthermore, the majority of male participants reported that they would not change the game cover because it was based off 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.

During participants’ assessment of the Destiny 2 video game cover, inconsistencies were seen with the acceptance of stereotypes they previously condemned. This acceptance comes from participants’ willingness to forgive depictions of gender that are merely less marginalizing, despite their lingering potential to negatively impact social
structures. Vermeulen and Van Looy (2016) highlighted that within video game culture, gender stereotyping is a common practice as female gamers are constantly reminded of their unequal and irregular position within the community. Women engaging in video game play also experience regular comments and banter concerning their identified presence, regardless of virtual setting, public environment, or domestic space. These issues also cultivated the stereotypical belief by both women and men of video game play being a predominantly masculine activity. Furthermore, it is argued that women experience a “double stereotyping” (p. 288) while engaging in video game culture. They not only face discrimination as a result of their gender but also suffer from general discrimination as a result of their participation in virtual spaces. Amidst such persistent and varied stereotypically patterned encounters, selective management of the most apparently injurious experiences can be seen as a reasonable and less exhaustive means of subsistence.

A prevalent description for the female character on the video game cover of Destiny 2 was that the female character was portrayed in a secondary or non-essential role, reported by more than half of the participants. Notwithstanding participants’ description of the female character portrayal as weaker or secondary to that of male characters, they were accepting of the cover in its presented state and cited the mere presence of female portrayals in a shared space with males as having provided sufficient representation of the sexes. Many participants appeared to accept the stereotypes they previously criticized, as the depictions of the characters were seen to be less marginalizing than the mainstream stereotypes that are frequently present on game covers. Specifically, the female character was identified by some participants as less marginalizing due simply to their inclusion or presence in a less passive capacity.
A component of the possible explanation for their complacency is brought forth by the findings in Kaye, Pennington, and McCann’s (2018) research that supports the concept that video gaming remains, in the view of males and females alike, a primarily masculine pursuit. In congruence with these findings, it is not uncommon that marginalized female gamers preserve gender anonymity or represent themselves as male in online game environments to evade stigmas. Findings also revealed that females are confronted with negative reactions or outright ridicule not only in competitive gaming landscapes but also in casual gaming domains in which male and female participation is relatively equal. Kaye et al. additionally brought into focus research that indicates routine uncontested exposure to images and attitudes guided by gender stereotyped notions may influence gameplay habits and overall participation, specifically in females. Negative gender-gaming stereotypes potentially can hinder females’ gameplay performance and related self-perceptions, such as the confidence in their own abilities. Thus, amidst the current gaming landscape, which heavily favours male participation, players who partake in social gaming endeavours seem to more readily excuse less obtuse gender-based stereotypes they may face.

During discussions regarding the video game cover of *Legend of Zelda: Breath of the Wild*, inconsistencies arose between participants’ identification of gender differences and their eventual dismissal of a need to take action to remedy these implications. A prevalent description for the observable female characters on the video game cover for *Legend of Zelda: Breath of the Wild* was that female characters were portrayed in a secondary or non-essential role reported by the large majority of participants. Many participants emphasized how the male characters appeared to be a strong primary protagonist, whereas the female character was portrayed with a passive and less crucial
role. Despite participants’ acknowledgment of unequal gender portrayal on *Legend of Zelda: Breath of the Wild*, more than half of the participants deemed the video game cover as acceptable and not requiring change.

As such, inconsistencies among participants’ responses, the majority being 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 is that while hostile sexism frequently evokes a disdainful or corrective response given its often-apparent abrasion towards women, 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 is provided by Rasinski, Geers, and Czopp’s (2013) discussion on confronting acts of sexism. In their discussion, Rasinski et al. 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 can relate to may serve as factors that motivate females to voice disapproval when encountered.

The participants’ discussion regarding the covers of *GTA V* and *Tom Clancy’s Ghost Recon: Wildlands* showcased various inconsistencies between participants’ initial responses to the questions regarding their perception of and exposure to gender
stereotypes and their implications. In particular, when establishing participants’ pre-existing beliefs and attitudes, less than half of the participants reported seeing or hearing gender stereotyped content in video games. However, during the analysis of video game covers, particularly with *GTA V* and *Tom Clancy’s Ghost Recon: Wildlands*, participants showcased heightened awareness of gender stereotypes and implications. For the cover of *GTA V*, the large majority of participants reported a difference in gender representation on the video game cover. In addition, it was frequently remarked that females on the cover of *GTA V* appeared in a perceptibly secondary or non-essential role, reported by the majority of participants. For the cover of *Tom Clancy’s Ghost Recon: Wildlands*, all participants reported a difference in gender representation on the video game cover, which was the lack of female characters. An implication identified by the majority of participants with respect to the character portrayals on the cover of *Tom Clancy’s Ghost Recon: Wildlands* was that aggressive or combative roles were reserved for males.

This contrasts with their initial response where more than half the male participants reported not seeing or hearing gender stereotyped content in video games. According to Near (2013), findings demonstrated that female characters made fewer appearances on game cover art and were less likely to be at the focal point when compared to males. A rationale for this state is that producers aim to deliver a product that does not deviate from the perceived demand in the market, with video games widely deemed to be a masculine pursuit catering to male tastes. Thus, such targeted approaches to audience cultivation and retention may provide a basis to better understand the discrepant processes of passive and active stereotype identification by male gaming participants. In comparison, female participants have stayed consistent in their responses, as the majority of female participants reported seeing and hearing gender stereotypes, and continued to identify differences, implications, and propose changes to the covers to
make them more positively influential. A possible explanation for this is because video
game culture consists of masculine spaces so females are less susceptible to the targeted
forms of conditioning that may result in the lack of awareness observed in males.

There were inconsistencies present in the majority of participants’ observations
for Horizon: Zero Dawn compared to other covers that present a single character of
focus. Both male and female participants often identified implications and proposed what
they believed to be positive additions when examining game covers which featured
depictions of dominant male characters. However, for the video game cover for Horizon:
Zero Dawn that exclusively features a female character, the large majority of participants
deemed the cover acceptable and not requiring change. Leone, Parrot, Swartout, and
Tharp (2016) highlighted the idea of masculine gender role stress (MGRS) and discussed
the negative cognitive and physical consequences of concentrated exposure to
unattainably set gender standards, where males may experience both short- and long-term
distress when deviating from their gendered conventions or expectations. As such,
masculine gender roles and stereotypes do contain the potential to impede healthy social
development in males and are deserving of concern equal to that which is applied to
damaging female stereotypes. However, results of the present study revealed that male-
specific stereotypes and implications were frequently dismissed or altogether
unaddressed during participants’ proposals for positive change, often overshadowed by
the attention paid to implications for females.

These findings are indicative of a possible double standard, whereby issues of
lacking female representation were immediately brought into question but an absence of
male representation on covers was routinely overlooked. This practice is reflected in past
research of Martins et al. (2011), where it was highlighted how research has often been
devoted to the examination of video game character portrayals and their impacts on females, such as body dissatisfaction. However, there is a gap in the literature with respect to how males are affected by similarly impactful video game portrayals, despite the growing body of evidence to support shared male concerns and dissatisfactions.

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 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. 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 few social domains where male privilege is openly exercised and associated masculine stances 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. Cultivation theory suggests that an individual’s concepts of social realities are susceptible to varying degrees of influence throughout media (Fox & Potocki, 2016). 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, a useful tool to individuals making judgments. Further, Chong et al. (2012) expanded on how ensuing second order judgments, relating to attitudes and beliefs, are indicative of an individuals’ core opinions and value structures. As such, due to the selective nature and controlled frequency of messages in the media and media-provided examples, it is wise to recognize its influence over broadly retained attitudes and beliefs.

Elements of cultivation theory were presented amongst the responses. In particular, for Madden NFL 18 and NBA 2K18, 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 these characters are based off real life. The repetitious enforcement of male predominance observed in reality sports outlined by the participants provided examples in gaming content indicated their retention of beliefs and attitudes conveyed alongside gender-stereotyped depictions. Some participants’ responses showcased passive acceptance of what they perceive 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 (Kondrat, 2015).

Gender schema theory posits that during the impressionable early stages of childhood and adolescence, individuals accrue and maintain stereotypical gender notions from numerous facets of their immediate environment. Through this sustained
developmental interaction, children come to understand and assemble concepts of gender, utilizing superficially observed gendered definitions, attributes, and interests. Children rely on these knowledge structures to navigate social situations and define themselves according to perceived expectations bound to a particular gender (Bussey & Bandura, 1999). According to Ter Bogt, Engels, Bogers, and Kloosterman (2010), media which propagates stereotypical portrayals can accelerate and intensify the adoption of schemas with analogous stereotypical characteristics. Selected media for consumption typically corresponds with existing consumer preferences and, with consumers actively curating their uniquely appealing media environments, attention should be allotted to the observance of adolescent inclinations with respect to media. Video games, in particular, necessitate involvement beyond passive spectatorship and this added level of experience crafting calls the relationship between consumer preference and media influence into sharper focus.

Possible examples of the described method of schema adoption were seen during the interviews. In particular, all participants assumed that the character on the cover of Mass Effect: Andromeda was a male despite the lack of gender distinguishing features. Participants demonstrated stereotypical notions of gender during their explanation for why they assumed that the character was male. For example, participants described the character with conventionally male traits, such as greater muscle mass and physical stature accompanied by more aggressive or intimidating stances. These and other similar notions are significant, as it suggests how characteristics such as strong, muscular, and physically capable are characteristics of a typical male. The Mass Effect: Andromeda cover analysis highlights the extent to which unconscious bias regarding gender can manifest from interactions with adolescents’ immediate environments and media.
Another instance that showcased participants exhibiting attitudes and behaviours that align with their knowledge structure of gender is during the discussion of the cover for *Horizon: Zero Dawn*. Some male participants demonstrated gender constancy which involves the presence of rigid, or altogether fixed, identities tethered to a specific gender, motivating behaviour which is believed to be appropriate and consistent with their gender (Bussey & Bandura, 1999). This was detectable in several male participants’ responses that emphasized unwillingness or discomfort when assuming the role of a character in a video game outside of their own gender. Responses such as these are indicative of a desire to adhere to what the participant considers to be acceptable or comfortable gendered behaviour, which is males playing male characters in video games. Subjection to purposefully engineered media content directed towards developing youth audiences may play a significant role in the schemas they embrace and result in limiting gendered conduct informed by stereotypes (Ter Bogt et al., 2010).

Overall, common themes in adolescents’ perceptions and attitudes towards gender representation are that in the context of certain games, such as *Horizon: Zero Dawn* and *Tom Clancy’s Ghost Recon: Wildlands*, there were varying degrees of acceptance regarding representation of gender based on which gender is represented more dominantly. Participants were much more accepting of the predominance of female characters on covers, though they applied harsh scrutiny when solely male characters were present. Another theme is that participants were able to identify both male and female stereotypes within the cover and video games; however, they often further discussed ensuing implications for females while neglecting to address implications for males. Common beliefs and attitudes conveyed about what it means to be a particular gender represented in video games by participants was that in video games, female
characters are often depicted in a secondary or non-existent role, while male characters were often portrayed as tough and more suitable for leading roles. Another common belief conveyed was that video games that were intended to simulate real life garnered uneven responses between genders, as male participants excused the inequality given its foundation in real life, while at least half of female participants took issue with the lack of female representation.

**Gender Representation in Real Life**

Past research has showcased the prevalence of both males and females being portrayed in stereotypically gendered roles globally across various forms of media (Collins, 2011). In order to understand participants’ beliefs and attitudes regarding gender representation in real life, participants were asked to reflect their level of familiarity with gender stereotypes. Participants were asked if they had ever seen gender stereotypes and if they have 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. 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. The experiences female participants shared highlighted how harmful stereotypes are unrelenting and persist both within and beyond the bounds of activities stereotypically associated with a particular gender. For example, one female participant engaged in dance, which has traditionally been viewed primarily as a feminine activity and worthwhile pursuit among young females that males are often dissuaded from (Holdsworth, 2013). Another female participant played hockey, a sport that has been historically dominated by males, where opportunities for females remain relatively limited (Adams & Leavitt, 2018). Despite the female participant who pursued what is typically considered a gender-appropriate activity and another female participant partaking in a sport as an extreme gender minority, both participants remained the target of gender-specific stereotypical remarks.

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, Glass, and Macdonald (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 is that male participants act 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.

Furthermore, whereas some males withhold information about their emotional experiences out of a fear of revealing their vulnerabilities, others may be unable to adequately verbally articulate them. Gender socialization may also contribute to emotional inexpression, where being emotionally communicative was regarded as less important than prevailing masculine gender norms that are deeply socialized by parental, peer, and community influences (Affleck et al., 2013). Another possible explanation for the difference between male and female participants’ experiences can be a result of the possible privileges of males. Case et al. (2014) discussed how privilege refers to advantages that are bestowed gratis upon individuals recognized as belonging to a socially identifiable group that is 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 may not be able to make meaningful connections between the privilege they may possess and the influence it may have 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 possess heightened awareness and sensitivity when identifying gender stereotypes in real life. This may be due to personal experiences with exclusion from male groups of privilege throughout different stages of their lives. These experiences of exclusion are outlined in Case et al.’s (2014) study, which detailed many of the daily privileges held by
males that materialize at the individual level. Examples of such routine privileges which may benefit male groups and detract from female experiences consist of wage inequality, expectations of feminine beauty ideals, and heightened freedoms bestowed upon males during adolescence and early adulthood.

Social cognitive theory advances that social experiences, both direct and observed, comprise a significant and important portion of developmental learning. The theory accounts for the ability of social influences to set or alter expectations and mould behavioural cognition (Bandura, 2001). According to Bandura (2001), this theory details how defining social experiences are processed into manageable and generally applicable templates for future conduct. Bussey and Bandura (1999) discussed how gender development is promoted by three major modes of influence, with the first mode referencing pervasive forms of gendered modeling laden with messages pertaining to gender role adherence. This is mirrored in trends among responses of participants, which demonstrate their perception of surrounding social structures that inform their gender-linked knowledge foundation. This is 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 are reflective of real life.

The second mode of influence occurs through the observance of linkages between social conduct and perceived reception or response. The sanctioning of gendered conduct is practiced throughout the world and reflecting on the social reactions individuals receive is an instrument crucial to the formulation of gender concepts and how they are applied to the self (Bussey & Bandura, 1999). This is displayed from participants’ personal experiences and observations regarding gender stereotypes and how individuals
who deviate from socially sanctioned gendered activities experience ridicule and negative social ramifications. The third mode of influence is through direct instruction, where individuals are transferred knowledge from people in their lives about the formation of a gender identity and what behaviour should be expected of the sexes (Bussey & Bandura, 1999). This can be seen by an anecdote provided by a female participant that described a coordinated competitive soccer event in which a younger male team was matched against a higher-level female team, under the assumption that males played with an inherent advantage or higher skill level. In this particular case, the coordinator exercised unequal assessment of ability based on gender and age, in a manner that was perceived to perpetuate the stereotype that male athletes are inherently superior to females.

Overall, though examples were provided regarding stereotypes of both genders, a consistent theme across all participants was a heightened fixation of the impeding stereotypes females are faced with. The participants’ responses yielded evidence that indicates the presence of a more comprehensive set of difficulties faced by females in their day-to-day lives with respect to stereotypes associated with their gender, whereas participants identified fewer and less damaging male specific stereotypes confronted in their realities. The lack of discussion regarding male stereotypical encounters reported by male participants could be a result of the fear of being perceived as feminine, vulnerable, not in control, lacking in knowledge, or due to gender socialization (Affleck et al., 2013). In contrast, female participants’ ability to recognize and discuss gender stereotypes in video games may be a result of personal experiences with exclusion from daily privileges, fostering a sense of heightened awareness and sensitivity to these issues (Case et al., 2014).
Identification With Video Game Character Portrayals

Video games are platforms that require more than passive observation, as players are able to fully embed themselves and become active participants of a virtual world (Chong et al., 2012; Klimmt et al., 2009). As a result of the interactive control players retain, a strong connection may be established between the player and their character. These connections could ultimately lead to adolescents and young adults exploring their identity through the use of virtual spaces, resulting in exposure to gender stereotypes that may influence identification (Fox & Bailenson, 2009; Fox & Tang, 2014).

In the present study, participants were asked a variety of questions regarding video game characters and their level of identification with them. When asked to identify personally admired traits or qualities, if any, within their favourite video game characters, the large majority of participants stated they held no admiration of particular game character qualities. Participants were then asked if they held any desire to be more like any of their favourite game characters, to which the large majority of participants reported never wishing to be like one of their favourite video game characters. With similar objection, the large majority of participants asserted that they felt no feelings of pressure to conform to gender stereotypes in real life as a result of their interaction with video games. Finally, when asked to reflect on instances where their social interactions in reality may have been subject to the influence of video games, the large majority of participants expressed no personal involvement with social scenarios which had been appreciably influenced by video game exposure.

The results revealed that there is 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 favourite video game characters and did not wish to be like one of their favourite video game characters with respect to physique or personality. In affirming contrast, Soutter and Hitchens (2016) discovered that where individuals do demonstrate identification with their avatars, they also tend to bear qualities and features of greater correspondence (Trepte & Reinecke, 2010). The present study’s findings contrasted with previous research that discussed how elementary and high school children, when subject to media influences, appropriate observed aspects of characters and their identities as they envision themselves in the position of particular media characters (Klimmt et al., 2009). Thus, despite the present study revealing a lack of identification from the majority of participants, previous research could suggest that children that are more susceptible to identifying with characters from media.

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.

Furthermore, the majority of participants did not divulge any scenarios where they felt their real life social situations had been influenced by video games to any significant extent. However, the three male participants that did report real-life social situations where moderate video game influence may have been present clarified that these gaming influences did not guide or dictate their cognitive or social behaviour. These gaming experiences merely inspired minor superficial changes to their normal activities or routines and did not impact the participants’ overall sense of well-being. These findings support previous research conducted regarding the impact of video games on identification and behaviour. Ferguson (2015) conducted a meta-analysis of video game influences on children’s and adolescents’ aggression, prosocial behaviour, mental health, and academic performance. The results of the study showcased that, regardless of violent or non-violent video games, there was minimal influence on children’s well-being.

**Influence of Video Game Play on Gender Socialization and Identification**

When analyzing participants’ experiences regarding gender representation in real life and identification with video game character portrayals, a correlation was identified between participants’ video game patterns and habits and their lack of identification and ability to identify gender representation in real life. According to these data, across the board regardless of frequency or level of engagement with video game play, the majority of participants did not experience identification to video game character portrayals. The three male participants who did report real-life social situations being influenced
moderately by video games emphasized that these gaming influences did not guide or dictate their cognitive or social behaviour. Rather, superficial components of the gaming media influenced participants’ social activities; such as referencing to particular competitive styles of game play to real life activities like paintball. However, in regards to acknowledging and perceiving gender representation in real life, there was a positive correlation between the lack of ability to identify and experience gender stereotypes in real life with frequent participation and high engagement of video games.

According to these data, the majority of participants who declared not identifying or experiencing gender stereotypes in real life consisted of predominately males. All these participants also actively engaged with video games daily and the majority of the participants played games of the shooter genre that were rated either Teen or Mature. On the other hand, the majority of participants who declared identifying and experiencing gender stereotypes in real life consisted of mainly females. Though these participants engaged with video games daily, the majority of these participants often played video games that were rated Everyone and of the casual mobile variety. Greitemeyer and Mügge (2014) conducted a study that aggregated data from 98 independent studies with 36,965 participants; the study demonstrated that participant engagement with pro-social video games and violent video games had a significant association with social outcomes. While consumption of violent video games tended to heighten variables relating to aggression and diminish pro-social results, video games which promoted pro-social behavior had the opposite outcome. Building upon the reliability of these behavioural effects were experimental, correlational, and longitudinal studies that denoted a causal relationship between videogame exposure and short- or long-term changes to social interactivity and outcomes. As such, Greitemeyer and Mügge’s study revealed that
engaging with aggression-based video games and pro-social video games appear to influence those that consume either type of content to a similar negative or positive magnitude, respectively.

Thus, this study highlights the potential for video games to influence social outcomes for individuals who actively participate and engage with video game play. As a result, 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 behaviours, such as an ability to express empathy or to recognize behavioural and societal issues in their personal lives or the lives of others (Anderson et al., 2010; Fraser, Padilla-Walker, Coyne, Nelson, & Stockdale, 2012; 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.

**Implications for Practice**

This section discusses the implications that these findings have for 21st century pedagogical practice. The growing requirement for adolescent students and parents alike to build knowledge and skills for the interpretation, assessment, and balanced
consumption of video games will be addressed. Moreover, the potential evolution of educators’ contributions, with respect to how they may prepare students against harmful or socially disruptive video game content, will be discussed.

**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, behaviours, and value structures (Silverblatt, Miller, Smith, & Brown, 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). As established from the Ontario Ministry of Education (2006), the Ontario curriculum defined media literacy as education in the practices of conveying messages or artistic expression through diverse modes of media. This is achieved by studying popular media and culture to identify benefits, risk, and overall influence across primarily digital media forms. Media literacy education can play a major role in the development of students’ heightened awareness and sensitivity to mass media, allowing students to grasp an understanding of how and why media texts are fabricated and question the various representations within.

Silverblatt et al. (2014) discussed 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 have to
actively manipulate or heavily influence attitudes, values, and even behaviours. Silverblatt et al. (2014) performed a study that asked participants to gauge the extent to which media can have an altering effect on society, where 80% responded that they strongly agreed the media affects all aspects of society; however, among the same group of participants, merely 12% were in strong agreement that they were personally susceptible to the very same media affects.

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 may 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 can still emerge in beliefs and attitudes. Payne, Vuletich, and Lundberg (2017) defined the process of implicit bias as the possession of attitudes or feelings, which may 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. This process begins
with teachers and other educators first equipping themselves with a firm grasp of what it means to be media literate. Taking part in professional development that transitions towards learner-centered education, away from teacher-centered, will be a beneficial step for teachers who acknowledge their evolving role in the administration of media literacy. In order to prepare students for the future, it is essential for them to understand how media are produced and how to create their own media, developing important skills towards lifelong learning. Alagaran (2013) proposed that media literacy is an integral element of successful outcome-based education (OBE) implementation. OBE is an educational approach where curricular decisions are made with end learning goals at the forefront of all design processes in order to achieve particular learning outcomes recognizable in students by the end of a course.

OBE therefore employs an inverted approach to education design that defines from the onset, and constantly refers to, intended learning results. To this effect, incremental measures of success which are anchored to the established end goals can be dynamically organized to assist and promote progression. Alagaran (2013) highlighted how incorporation of media literacy to the framework of OBE is essential, emphasizing the potential to become more proficient and ethically guided digital citizens once they attain the skills to detect, assess, and create their own valuable information. Central to this framework is the need for students to learn outcomes as producers and outcomes as consumers of media messages. The learning outcomes fall within three fundamental thematic regions: sociopolitical dialogues guided by thorough cognizance of media and information, rigorous appraisal of media texts and their sources, and the responsible production and application of information and media.
Students who proactively assess outcomes as participants in the production of media messages will be able to effectively apply their understandings of media and its function in the shaping of culture, opinions, and attitudes. They would be allowed to garner additional appreciation for the impacts of media on culture, politics, economics, and other complex societal arenas and how they could embolden constructive social participation in these fields (Alagaran, 2013). Similarly, students approaching learning outcomes as consumers will be able to exercise their comprehension of media practices and dissect media decisions as well as functions to interpret motivations and goals. Through a consumer lens, greater emphasis is placed on the evaluation of media utility and accuracy, with an instilled desire to appropriately challenge and correct information that directly impacts them. Effective inclusion of media literacy teachings into OBE methods will satisfy the objective of generating both practically and theoretically knowledgeable students who are culturally adept, possessing the faculties required for children and adolescents to thrive in a predominantly digital atmosphere.

**Parental Awareness and Relevant Media Knowledge**

Parents’ education must be a key component in media literacy training. Ziegler (2007) emphasized that despite living in a digital age, many parents lag behind or are 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.

Martins, Matthews, and Ratan (2017) revealed that parents do tend to actively monitor the typical video game consumption of their children. However, it is important that parents are using a variety of mediation practices, not limiting their mediation practices to just imposing restrictions on the amount of time played for video games. Parents need to also be aware of the content and ratings of the video games played in order to actively mediate and discuss video game content with their children. In addition, parents need to be aware of the accessibility to video games, as gaming industries are becoming increasingly enticing and children are able to access this media through a variety of outlets (Bègue et al., 2017). This is seen in the present study, as the majority of male participants reported playing video games rated Mature. This prevalence of maturely rated content amongst adolescent audiences warrants thorough parental understandings of the content and influences that separate assigned game ratings.

**Implications for 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. Having a multivariate approach during data collection is valuable as participants should not merely answer questions
regarding video game use, but also a variety of questions that provide enough information regarding the participants’ background to ensure that there are no other factors other than video game use to influence these data. For example, various methods did not take into consideration social-economic status or the importance of religion in everyday life when conducting their studies.

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. With growing relevance in the study of gender dynamics, gender fluidity warrants more inclusion in the research of video game development and consumption by adolescents. Future research studies could also include video game playing in order to collect information regarding adolescents’ immediate responses to video game portrayals and representations as they encounter them through playing video games.

Finally, this research can be extended in measuring the effects current media literacy strategies possess and the potential for implementation of new strategies tailored to address specific effects identified in the present study. As Funk and Kellner (2015) emphasized, instructing media literacy in a way that encourages the application of critical thought towards one’s surroundings equips them to behave as socially conscious and responsible citizens. An appreciation for the importance of media literacy serves as a foundation from which students may exercise progressive agency by questioning existing
social structures and injustices. Students armed with an array of critical social skills and the knowledge to effectively apply them will be prepared to face, and help positively shape, media messages as participating members within a democracy.

**Conclusion**

Previous research has emphasized the impact of video games on adolescents’ notions of gender and their identification. The findings of the present study highlighted 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 play 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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doi:10.1177/003172170508700205


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Appendix A
Certificate of Ethics Clearance

Brock University
Research Ethics Office

Tel: 905-688-5550 ext. 3035
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DATE: 1/17/2018
PRINCIPAL INVESTIGATOR: BAJOVIC, Mira - Graduate and Undergraduate Studies
FILE: 17-147 - BAJOVIC
TYPE: Master’s Thesis/Project
STUDENT: Helen Liu
SUPERVISOR: Mira Bajovic
TITLE: Impact of Video Games on Gender Socialization and Identity in Adolescence

ETHICS CLEARANCE GRANTED

Type of Clearance: NEW  Expiry Date: 1/1/2019

The Brock University Social Science Research Ethics Board has reviewed the above named research proposal and considers the procedures, as described by the applicant, to conform to the University’s ethical standards and the Tri-Council Policy Statement. Clearance granted from 1/17/2018 to 1/1/2019.

The Tri-Council Policy Statement requires that ongoing research be monitored by, at a minimum, an annual report. Should your project extend beyond the expiry date, you are required to submit a Renewal form before 1/1/2019. Continued clearance is contingent on timely submission of reports.

To comply with the Tri-Council Policy Statement, you must also submit a final report upon completion of your project. All report forms can be found on the Research Ethics web page at http://www.brocku.ca/research/policies-and-forms/research-forms.
In addition, throughout your research, you must report promptly to the REB:

a) Changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;

b) All adverse and/or unanticipated experiences or events that may have real or potential unfavourable implications for participants;

c) New information that may adversely affect the safety of the participants or the conduct of the study;

d) Any changes in your source of funding or new funding to a previously unfunded project.

We wish you success with your research.

Approved: 

Ann-Marie DiBiase, Chair 
Social Science Research Ethics Board

Note: Brock University is accountable for the research carried out in its own jurisdiction or under its auspices and may refuse certain research even though the REB has found it ethically acceptable.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of research at that site.
Appendix B

Research Study Proposal:

Early Adolescents’ Attitudes and Perceptions Towards Gender Representation in Video Games

Helen Liu

Brock University

Faculty of Education
Purpose of Study

My research study aims to explore adolescents’ perception and attitudes towards gender representation in video games, and their beliefs about the degree to which identification with these depictions may influence their notions on gender and self-perception. The gender representation discussed in this study will focus only 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 aims to precipitate awareness and to provide better understanding about the issues related to gender and identity in relation to video game playing.

Video games remain as one of the most popular form of media consumed during adolescence (Entertainment Software Association, 2017) and as such, are capable of remarkable impression, regardless of the way in which they may be marketed. This topic is especially pertinent because it is often underappreciated how much power to enact social change long-term subjection to digital media can have. The intended result of this study is to ascertain the degree to which varying measures of video game presence in daily life may influence self-identification and the processes by which the identities of others are understood, perceptions of gender, and social development in adolescents. In doing so, this study will investigate whether early adolescents identify with specific video game characters and how these depictions may influence their notions on gender and self-perception.

Gap in Literature

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. Of the studies that have explored impacts of gender socialization and identification (Gabbiadini, Riva, Andrighetto, Volpato, & Bushman, 2016; Huh, 2015), the data specifically regarding early adolescents, specifically individuals ranging from ages 11-13 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 post-secondary institutions (Fox & Potocki, 2016; Gabbiadini et al., 2016; Yao, Mahood, & Linz, 2010). There remain vast opportunities to expand upon the understanding of early adolescents in the context of their game playing habits in order to make meaningful comparisons to the abundance of data on more mature adolescents and adults.

**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 and attitudes do adolescents’ convey about what it means to be a particular gender in real life?
5. What beliefs do adolescents’ describe about gender representation in video games and gender identification in real life?
6. How do participants’ video game playing patterns and habits influence their gender socialization and identification with video game characters?
Data Method

My study aims to interview 10 or more students from grade 8 classrooms. However, depending on the number of students able to consent and participate in my study, my target sample group may be amended to include consenting grade 7 participants. The method of data extraction will consist of semi-structured interviews carried out within 30-minute sessions for each student. I will ensure that the interviews do not interfere with class or teaching time, so I am flexible in establishing a suitable time to perform the interviews that works with the schedule of the classroom or teacher. The first component of the interview will consist of questions that establish an understanding of the video game habits, patterns, and behaviours of participants (e.g. Do you play video games? What types of games do you play? How many hours do you spend on average per day playing video games?).

Following these questions will consist of more open-ended inquiries that offer an opportunity to gain heightened comprehension of participants’ perceptions of gender and identity with characters from video games (e.g. Do you sometimes wish you were like one of your favourite characters? What do you admire the most in your favourite video game characters? In your opinion why do you think gender stereotypes persist or exist?). The final component of the interview will utilize cover images of the top best-selling video games of 2017 and will ask participants questions regarding the characters seen on the images (e.g. How would you describe this character? Is there something you would change about this character? Can you identify any similar or different qualities within this character to yourself?). Following the interviews, I will conduct a member check that
consists of verifying the responses participants provided in order to ensure the accuracy and integrity of the findings.

A letter of information and consent form will be sent home to prospective participants for parents/guardians to sign. Participants’ personal information, responses, and interview transcripts will remain undisclosed, with their identities being aliased. Information regarding the visited schools in general will be similarly shielded in the interest of confidentiality. Participants in the study will also be made aware that the results of the study may be potentially published in various journals. Principals of each school will be issued a complete summary of the final report following closure of the research process. Due to the fact that data collection cannot begin until Brock University’s Research Ethics Board approves of my research, I aim to start my data collection in January following approval by the board. However, my schedule is extremely flexible and I will remain fully accommodating of the teacher’s schedule and interests in order to ensure that I avoid any interference with regular class time.
References


Appendix C

Interview Protocol

The interviews will be semi-structured in format and may vary slightly from participant to participant based on the answers provided. Although a variety of prompts may be necessary, the general protocol for the interviews will be as follows:

- What is your age?
- Can you identify your gender?
- Do you play video games?
  If no: At some time in your life have you played video games before?
  (Prompt: Inform participants that games on mobile or PC are included as video games)
  Follow up with no: What was the reason for not playing video games?
- Approximately how many hours would you say you played video games per day?
  (Prompt: Inform participants that games on mobile or PC are included as video games)
- What are the ratings on the video games you most frequently play with?
  (Prompt: Rated R, Teen, E for Everyone…)
- What are your favourite video games?
  Please describe the rules or the story in these games.
  (Prompt: “If I were going to play the game tell me how to do it.”)
- Why do you like these video games the best?
  (Prompt: What makes this game better than others? Why is it your favourite?)
- What are some games that you dislike the most if any?
  Please describe the rules or the story in these games.
  (Prompt: If I were going to play the game tell me how to do it?)
- Why do you like these video games the least?
- Do you have any favourite video game characters?
  If participants only discuss one gender follow up with: Can you provide an example of your favourite video game characters that are the opposite sex from your first response?
- Are there any traits or qualities you admire in your favourite video game characters?
  If participants only discuss traits they admire from one gender follow up with: Can you describe some traits you admire in another favoured character of the gender opposite to your past examples?

- Do you sometimes wish you were like one of your favourite characters? Why or Why not?

- Have you ever heard about or seen gender stereotypes from video games?
  If yes: What specific gender stereotypes have you heard?
  Follow up: To what extent do you agree or disagree with these gender stereotypes?

- In your opinion, why do you think gender stereotypes persist or exist?

- Who or what is responsible for maintaining these stereotypes?

- How do you think we change gender stereotypes?

- Have you ever personally been involved in a real life social situation that may have been influenced by video games?

- Have you ever seen gender stereotypes in real life? Please describe.

- Have you ever experienced gender stereotypes in real life? Please describe.

- Have you ever felt that a video game has made you feel pressured to conform to gender stereotypes in real life? Explain.
  (Prompt: What games? Examples?)

**Video Game Cover Analysis Questions**

- How would you describe the character(s) on this cover image?
  (Ask this question for each cover)

- Can you identify any similar or different qualities within this character to yourself?

- Do you think there is a difference in gender representation on this cover?
  (Prompt: Do you think one gender is under represented than the other?)
  Follow up: What do you think is the implications of this?

- Do you think these characters reinforce or challenge current gender stereotypes? Why or why not?
  (Prompt: Ask them to choose specific characters to showcase)
– Do you think these characters align with society’s accepted ideals about what females and males should look and be like? Why or why not?

– Do these characters align with your ideals about what females and males should look and act like? Why or why not?

– Is there anything you would change about any of these characters or the cover to make the portrayals more positively influential? Why or why not?

Video Game Covers

Images From Top 10 Best-Selling Games of 2017

Tom Clancy’s Ghost Recon: Wildlands
Legend of Zelda: Breath of the Wild

Grand Theft Auto V
Horizon: Zero Dawn

Mass Effect: Andromeda
Madden NFL 18

Destiny 2
RUN THE NEIGHBORHOOD
The future of video games has arrived, allowing you to style the game the way you like. Build your career in NBA 2K18, hit the court in The Playgrounds, join the Hi-Topz crew, or explore the shops and venues in an all-new arena neighborhood setting. Fully utilize NBA 2K18's upgrade and enrichment systems, our biggest batch of character traits to date including NBA player types, and much more.

ELITE GAMEPLAY
The new modern-styled engine brings player controls to a new level of realism. Fresh, fluid, and off-the-ball movement are seamless driven by animation. The groundbreaking technology seamlessly creates animations to deliver the best gameplay experience possible. You are now in complete control.

SPECIAL EDITION COMMENTARY
Kings of the court and newsworthy items in sports entertainment now gain even bigger coverage. Play as Kyrie Irving and Kevin Durant join the team, 2K wants you to feel the excitement of the broadcast.

LEGENDARY TEAM
The greatest players in NBA history from all 30 teams, together in all-new team formations for the very first time. Compete at the NBA 2K18 Interface and face off at the best of your game.
Appendix D

Informed Consent

Project Title: The Impact of Video Games on Gender Socialization and Identity in Adolescence

Principal Investigator (PI): Dr. Mira Bajovic, Associate Professor
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Principal Student Investigator: Helen Liu, MEd Student
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INVITATION

Your child is invited to participate in a study that involves research. The purpose of this research project is to explore adolescents’ perception and attitudes towards gender representation in video games, and their beliefs about the degree to which identification with these depictions may influence their notions on gender and self-perception. The present study aims to precipitate awareness and to provide better understanding about the issues related to gender and identity in relation to video game character representations. Video games remain one of the most popular forms of media consumed during adolescence, and have become one of the most prevalent sources in the delivery and tailoring of communications to individuals. These platforms may influence behaviours, values, and beliefs, ultimately imposing social change through direct repetition. As such, stereotyped gender representations must be appropriately assessed as guiding catalysts for socialization given their strong presence in prevalent youth culture. As a result, the messages received through video games may have some impact on the long-term formation of identity due to adolescent individuals’ subconscious assimilation and retention of early exposure to gender roles.

Furthermore, this research connects to critical media literacy, one of the strands in the Ontario Language Curriculum that aims to explore the impact and influence of media on attitudes and behaviours of children in order to recognize how to shape these experiences into learning opportunities. This research will highlight the importance of teaching adolescents how to critically deconstruct the meanings and messages presented in video games related to gender representations.

WHAT’S INVOLVED
As a participant, your child will be asked to participate in an in-depth interview with the researcher regarding their views on gender representation within video games, and
whether they identify with specific video game characters and the degree to which identification with these depictions may influence their notions on gender and self-perception. The gender representation discussed in this study will only focus on male and female genders. The interview will consist of questions regarding your child’s video game habits and patterns, their thoughts on gender stereotypes, and an analysis of video game covers.

An example of these interview questions are:

- What are your favourite video games?
- What are some traits (character qualities, abilities) you admire the most in your favourite video game characters?
- Do you sometimes wish you were like one of your favourite characters? Why or why not?
- Have you ever heard from video games about gender stereotypes?

Your child will only participate in a single session interview that will not exceed 30 minutes. The audio recordings will be used to support observational field notes and data analyses. Any use of these materials (recordings) will be restricted to material that are relevant to the study and do not include identifying attributes of participants. The interviews will be completed during a work and study period your child is provided. This period is a time where your child is given an opportunity to work on their ongoing projects, complete any homework if they wish to do so, and clarify any questions or concerns with teachers regarding their work. Thus, the interviews will not be disrupting your child’s classroom learning.

All interview times will be arranged prior. The week before interviews begin, your child will be informed to check their emails for further details regarding the process. In the emails, your child will receive a time and location that they will go to for their interviews. There will be no risk of your child being called out, and there will be 15-minute intervals between each child’s interview period to secure confidentiality. Your child will be sent a reminder email the day before their interview day.

After the interviews, your child will be provided a copy of their transcript of the interview to confirm the accuracy of the conversation. These transcripts will be sent to your child via their school email within 5 business days following the interview, and they will be provided 10 business days to have the opportunity to review, make changes, and send back to the researcher. If there are no changes necessary, your child will just notify the researcher of their assent in the transcripts via email. If your child wishes to no longer participate in the study, all data that has been collected will be destroyed immediately.

**POTENTIAL BENEFITS AND RISKS**

Possible benefits of participation include increased knowledge and awareness about the possible effects specific media forms, in this case video games, have on the behaviour and attitude of adolescents. Understanding the source of any potentially uncovered misconceptions pertaining to social practices and gender identification is a crucial component in the process of guiding early adolescents through development. The study
also aims to fill a large gap in the literature relating to early adolescents and video games and your participants will contribute to that gap.

Possible risks for participants may include emotional discomfort, as participants will be shown video game cover images that may potentially be interpreted as sexualized depictions of video game characters, and will be asked questions regarding these characters. As a result, feelings of stress or embarrassment may arise from thinking or discussing their own attitudes and behaviour towards the topic of gendered roles and depiction. In order to reduce any emotional discomfort, participants will have discreetly arranged private interviews, without third parties present, to mitigate feelings of judgment or fear of repercussions pertaining to the responses participants provide. In order to minimize the feeling of discomfort, all students will be reminded that they can refrain from answering to the particular questions and reminded that they can withdraw from the study.

Loss of privacy may occur for the participants as the researcher will complete the study and become known in the school. Although all data will be treated as confidential, and participants will be provided with pseudonyms, it is possible that their identities will be suggested in the reporting of these data, as the research conducted will be from classes from one teacher. These risks will be mitigated by ensuring that participants will receive copies of their interview transcriptions to review. Furthermore, participants will be reassured that the information and audio recordings conducted during the interview will be confidential, and participants will be given pseudonym names in order to ensure their anonymity in the research study.

A sense of obligation may be felt to have your child participate given the approval of the teacher for the research to be conducted. However, you are under no obligation to sign the consent for your children to participate and participation is completely voluntary. Furthermore, you or your child may choose to withdraw from the study at any given time and are not obligated to complete the study. If your child withdraws from the study, any data collected prior to their withdrawal will be deleted and wiped clean from the hard drive. There are no consequences for the participants for withdrawing at any time during the study.

CONFIDENTIALITY

The information your child will provide will be kept confidential. Your child’s name will not appear in any thesis or report resulting from this study; and all participants will be assigned pseudonyms in order to avoid disclosing personal information and ensure identities remain confidential. Neither the name or key identifiers at the school will be disclosed. Once data has been completed (i.e., a pseudonym assigned to child), data records and analysis will be completed using anonymized data/pseudonyms.

All data collected during this study will be stored on a password protected hard drive. Data will be kept until the completion of the project after which time the files will be deleted and the hard drive wiped clean. All paper data collection will be stored securely in a locked filing cabinet in the principal investigator’s office to ensure that the
confidentiality of participants is upheld. All information and data in regards to the study will be kept confidential. However, I will have a responsibility in accordance with mandatory reporting laws to contact child protective services and report any disclosed or perceptible abuse to your child.

Access to this data will be restricted to Dr. Mira Bajovic, the study supervisor, and Helen Liu, the graduate student who is undertaking the study.

VOLUNTARY PARTICIPATION
Participation in this study is voluntary. If your child feels sensitive, vulnerable, or does not wish to participate, they will not be forced or coerced to participate. If your child wishes, they may decline to answer any questions or participate in any component of the study. Further, your child may decide to withdraw from this study at any time and may do so without any penalty or loss of benefits to which you are entitled.

PUBLICATION OF RESULTS
Results of this study may be published in professional journals and presented at conferences. A summarized report of this study will be available from Helen Liu (hl11az@brocku.ca) after the completion of the project at which time a summarized report will be sent to you if desired. Findings will be available by the end of 2018.

CONTACT INFORMATION AND ETHICS CLEARANCE
If you have any questions about this study or require further information, please contact Dr. Mira Bajovic or Helen Liu using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University [insert file #]. If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project. Please keep a copy of this form for your records.
PARENTAL CONSENT FORM

Title: *The Impact of Video Games on Gender Socialization and Identity in Early Adolescence*

I have read the information presented in the information letter about the project being conducted by Helen Liu from Brock University. I have had the opportunity to ask any questions related to this project, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my child to be observed, interviewed, and/or audio recorded to ensure an accurate recording of responses. I am aware that these audio recordings will be used to support observational field notes and data analyses. Any use of these materials (audio recordings) will be restricted to material that are relevant to the study and do not include identifying attributes of participants.

I am aware that some loss of privacy will occur by initially disclosing my child’s name on the consent form, and I understand that a pseudonym will be assigned to my child and that data records and analysis will be completed using anonymized/de-identified data. I am also aware that observations and/or excerpts from the audio recordings, which consist of anonymous quotations, not the audio recordings themselves, may be included in publications to come from this research. I understand that the observations and quotations will be anonymous, and all the information collected will be considered confidential.

I am aware that if I do not provided consent (or if my child does not provide assent), my child will not be participating in the interviews conducted for the study.

I am aware that the participation of my child in this project is voluntary, and that their participation will involve participating in a 30 minute interview with the researcher. I am aware that if my child decided to withdraw from this study at any time, they may do so without any penalty. If my child withdraws from the study, any data collected will be deleted and wiped clean from the hard drive. I am also aware that I have an opportunity to withdraw any data collected involving my child at any point in time.

I give permission for my child to participate in the Brock University study conducted by Helen Liu ☐ YES ☐ NO

Child’s Name: ____________________________________________
(Please print)

Parent Name: ____________________________________________
(Please print)

Parent Signature: _________________________________________

Date: ______________

(Note: The form provides options for parents to consent or not consent to their child's participation in the study, requiring parents to provide their signature and the date.)
REQUEST OF FINAL THESIS AND SUMMARY
If you would like to receive a copy of the final thesis, I will send it to your child’s school email when it is completed. Included alongside the final thesis will be a summarization of its results for those primarily interested in the findings of the study. These emails will be stored securely in a locked filing cabinet in the principal investigator’s office to ensure that the confidentiality of participants is upheld. These emails will be destroyed once results are sent. You may also access this thesis paper and summary of results by contacting the teacher of the participating class.

I would like to receive a copy of the final thesis paper and summary of results
☐ YES  ☐ NO