There are limitations in the amount and scope of female protagonists in video games that are made for and marketed toward adolescent girls, and very few studies on the effects on girls when they play them. Furthermore, the games that exist are often lacking in immersive factors as compared with games marketed toward males. This research explores the role of agentic (proactively moving the game forward through choice and action) female video game protagonists in generating positive effects in gamers, investigated through the example of the Nancy Drew video game series. In this March and April of 2013, 341 fan letters were gathered from the Her Interactive website and qualitatively analysed using grounded theory principles. Open coding was used to generate categories, which were then consolidated into four core phenomena and one miscellaneous category: agency, absorption, academics, connection, and other. Players of Nancy Drew video games reported engagement with the games, resulting in positive effects in several areas including agency, academic pursuits, literacy, career choice and family closeness. Implications for this research include recommendations for the inclusion of agentic female protagonists and an increase in production of games for adolescent girls.

1. INTRODUCTION

Video games may not just be a source of fun, but a source of agency and identity. According to social cognitive theory, people learn how to interact socially through several pathways, including observational learning (Bandura, Social cognitive theory of mass communication, 2001). People observe family and friends interact, and use them as models, both imitating their behaviour as well as observing the social reactions to them, in order to ascertain proper behaviour (Bandura, 2001). However, the theory includes the possibility that media models can influence behaviours as well. This means that people observe characters in mass media for information on social behaviour, believing that mass media characters are representative of the societal beliefs about traits people should or should not have (Bandura, 2001). While any behaviour can be learned through observational learning, young people often look to media characters for information specifically on sex roles, and how to behave in a gender normative fashion for the society they live in (Bussey & Bandura, 1999).

In video games, players identify with the protagonists and avatars as they play them. If the protagonist is a game character, people take on the emotions of the character as they move through game situations, i.e. feeling scared when the protagonist is in a dangerous situation (Christoph, Dorothee, & Peter, 2009). With in-game protagonists, and also avatars that players can customize within the game, players compare the traits of the character with themselves, often identifying and even temporarily adopting the traits they identify as belonging to their ideal selves (Christoph, Dorothee, & Peter, 2009). Identification with agentic protagonists may indicate the desire for increased agency, or the reinforcement of agency within the player. This connection creates opportunities for observational learning and influence on identity.

As defined by Albert Bandura, agency is “to influence intentionally one’s functioning and life circumstances (Bandura, 2006, p. 164). Bandura’s core properties of agency are intentionality, which involves making action plans and strategies; forethought, which involves visualized futures and anticipated outcomes; self-reactiveness, which involves acting, analysing and then reacting in
order to obtain an outcome; and self-reflectiveness, which involves using self-awareness to evaluate one’s progress toward success and revise plans accordingly (Bandura, 2006).

Traditionally the video game industry has invested in creating games that appeal to male gamers, and often the games created are not the types of games that girls prefer to play. For instance, female gamers prefer non-violence and realistic locations (Heeter, Egidio, Mishra, Winn, & Winn, 2009) as well as rich character interaction (Cassell & Jenkins, 1999; Ray, 2004). Female players also shy away from games featuring hypersexualized female characters, as these are known to contribute to negative body image and decreased self-efficacy (Behm-Morowitz & Mastro, 2009; Hartmann & Klimmt, 2006; Barlett & Harris, 2008).

Games specifically created for girls, such as Diner Dash and Campus Life, often lack the richness of the games created for their male counterparts, such as BioShock and Grand Theft Auto, leaving girls with the choice to play either immersive, graphically realistic male-centric games or simplistic, non-narrative or repetitive casual games. One video game series, Nancy Drew, has a positive female protagonist and a robust, complex, narrative game environment and is promoted as a possible mass media model for preadolescent and adolescent girls. However, there is very little research on the psychological effects of these games, or casual games, on the self-esteem, agency and identity of girls who play them. This paper investigates the psychological impact of playing Nancy Drew video games on players.

1.1 Nancy Drew video games

The character.

Nancy Drew, the character, became an unlikely feminist icon (Dyer & Romalov, 1995), renowned for her courage in the midst of chaos: She is independent, courageous, confrontational, and ambitious, but also compassionate and with good morals. Because of that, she has been cited as an inspiration by several powerful women such as former United States Secretary of State Hillary Clinton, and United States Supreme Court Justice Sandra Sotomayor (Murphy, 2009). Nancy Drew was given an independent spirit, which was atypical of female book protagonists of the day, (Dyer & Romalov, 1995).

The games.

Nancy Drew’s character moved to video games in 1998 as a result of research that revealed that girls did not play video games at the same rate that boys did (Cassell & Jenkins, 1999). The research showed that video games provided mental stimulation as well as a gateway into the field of information technology, in which females were underrepresented. However girls would not get these benefits because they didn’t play video games. This research also revealed that girls had different preferences in video games than boys, representing not only a gap in female players, but a gap in female-preferred games. Several companies were started in order to fulfill the need for games marketed toward girls, one of which is ‘Her Interactive’, started by Megan Gaiser (Cassell & Jenkins, 1999). Her Interactive released several video game titles, but their most enduring series is based on the Nancy Drew books. As of this writing, Her Interactive has released 29 video games (herinteractive.com) and has built the series around a release schedule of one game every 6 months (Kafai, Heeter, Denner, & Sun, 2008).

The character of Nancy Drew in the games is closely modelled after the book character, meaning that images of her are not eroticised. For instance, the cover art for the games features a logo of a silhouetted girl in a dress, holding a microscope as if she is looking for a clue. Furthermore, the video game play is first-person, so the player “is” Nancy Drew, and never sees her. The lack of visualizations of her throughout the game may enhance the player’s ability to immerse themselves into the game, and the identity of Nancy Drew (Christoph, Dorothee, & Peter, 2009).

The games, like the books, are highly formulaic. They begin with an introduction of the case and a brief tutorial of how to move through the game. The games have two modes: Junior Detective and Senior Detective. Junior Detective mode includes more obvious hints using either the questions that Nancy asks the suspects and/or Nancy’s journal, which automatically fills up with hints as Nancy moves around and interviews suspects, or finds out more information. In Junior mode, the journal is the place to go to remember what mission needs to be accomplished next. In Senior mode, the puzzles are the same style as in junior mode, but at an increased difficulty level. Also, the journal is not as detailed, forcing the player to remember some aspects of the mission on her own.

Characters in Nancy Drew games are realistically designed to look like everyday people, as opposed to fantasy-designed with unrealistic proportions. Although many of them are attractive, they are not eroticised. There are also a variety of ages, races, and personas in the Nancy Drew games. For instance, ‘Warnings at Waverly Academy’ features a girl with a “Goth” style of dress, as well as girls representing Jewish, Spanish and African-American heritages. In ‘The Phantom of Venice’, which takes place in Italy, although there are no racial minorities represented, there are a variety of ages, with Nancy being younger than many of the characters.
As in the books, educational content is presented in the games. In ‘Warnings at Waverly Academy’, which is set in a boarding school, the player must create a DNA model, reconstruct a map of the United States, use Roman Numerals, and learn about the poems of Edgar Allen Poe in order to solve the case. In the ‘Phantom of Venice’, the player travels through Venice, learns about the various characters in L’academia, and deciphers writings in both Italian and German on the way to uncovering the mystery. ‘The Deadly Device’ features the history of Nikola Tesla, his inventions, and his conflicts with Thomas Edison along with an opportunity to reproduce some of his work.

Conflict in the Nancy Drew games primarily consists of confronting suspects with the information she finds, and challenging them when they try to misdirect her. However, Nancy often finds herself in dangerous positions as well. In ‘Warnings at Waverly Academy’, she is locked in a room with a swinging sword. In the Phantom of Venice, she has to dodge a falling ceramic vase that was pushed from a balcony above her. Later in that same game, she is locked in a basement as it slowly fills with water. In ‘The Deadly Device’, she is locked in a room and must manoeuvre her way through an airshaft to get out. However, if the player does not succeed in saving Nancy, she isn’t forced back to the beginning of the game. There is a “second chance” feature where the game screen displays “Fatal Error: Try Again?” and the player is returned to the section of the game at the point just before the error, with time to choose a different strategy. In addition to the Fatal Error screen, the game is able to be saved at any point, so the player can control at which point he or she will return after exiting.

Nancy Drew games provide an opportunity to role-play an agentic female protagonist who makes decisions and guides the story, eventually solving the case and saving the day. This may provide an observational learning model (Bandura, 2001) and a possible way for players to practice agency and try on an empowered identity.

2. METHODS

This study used a purposeful sampling method, in which the researcher focuses on the data most likely to yield information related to the research focus (Teddlie & Yu, 2007). In this case, Her Interactive, the company that publishes Nancy Drew video games, includes publically accessible letters from fans on their website. There are advantages and disadvantages to this method. Advantages are that the authors of these letters are familiar with the games in focus and are forthcoming about their experiences. A disadvantage is that the letters may be biased toward positive comment. While negative letters may exist, it is possible that the company did not publish them. This research is concerned the role of agentic female video game protagonists in generating positive effects in gamers. These effects are psychological reactions to the games, beyond merely liking or disliking them; and entrenched fans may provide a range of reactions that can be explored in further research.

The study examined 341 letters posted for public view on the Her Interactive website. Their website includes a section called “Fan Testimonials” and the page includes an introductory paragraph and two sample letters (Figure 1). Letters were gathered from the website in March of 2013 and analysed through April 2013. The first letter is from the boyfriend of a player, who wrote to the company and described how the Nancy Drew video games have impacted his girlfriend, as well as how the games have become a tradition in her life, and a part of their relationship via gifting. This letter mentions tradition, but also well-being markers such as letting the player “be herself”, and allowing her to question and explore. The second letter is from a long-time player who reminisces about the fun she had while playing Nancy Drew video games, and implies that the games influenced her interest in a career in video game design, for which she is now studying (Figure 1). The letters that Her Interactive received in response are posted continuously after the sample letters.

An open coding structure was used in order to obtain major categories from the documents. Several categories overlapped or appeared to be part of a more substantive category. In accordance with Straussian grounded theory, literature can be used to provide descriptive data without contributing to interpretation (Corbin & Strauss, 2008). As such, the Northwestern University method for coding themes of agency and communion (McAdams, Kaplan, Machado, & Huang, 2013) was used to consolidate categories into the core phenomenon of agency. According to the agency coding system, agency encompasses the concepts of self-mastery (new goals or increased feelings of control over one’s destiny; feelings of strength and capability), status / victory (formalized prestige in the form of awards or special recognition from others), achievement (mastering a task or achieving a goal), and empowerment (enhancement via association with role model, mentor or respected other). Other categories were consolidated into core phenomena based on the Strauss and Corbin method, which includes finding causal conditions, intervening conditions, strategies and consequences to relate the categories around a core. Categories that appear relevant but do not seem to fit into a core phenomenon or are possibly core phenomenon themselves were categorized as Other.
The Strauss and Corbin approach involves visiting and revisiting multiple series of theoretical samples in order to saturate the model, with each series involving 20-30 cases (Cresswell, 2007). However, in this case, all letters were coded over the course of several days, providing model saturation via the discovery of categories as coding progressed. Once model saturation was achieved, the categories and core phenomena were consolidated into a codebook, which will be used to evaluate similar testimonial data from subsequent studies, providing a consistent framework for evaluation and comparison of the impact of video games on girls.

3. RESULTS

Several concepts were found, including role model, immersion, generations, gifts, competence, career aspiration, achievement and complexity. The categories were then consolidated into four core phenomena: agency, absorption, academics, and connection. Notable categories that did not fit into a core phenomenon were placed into a miscellaneous category called “other.”

3.1 Agency

In this research, the McAdams model of agency (McAdams, Kaplan, Machado, & Huang, 2013) was used as an organizational aid in order to consolidate the categories found in the data. The McAdams model of agency incorporates four overarching elements: self-mastery, achievement, victory/status, and empowerment (McAdams, Kaplan, Machado, & Huang, 2013). In the McAdams (2013) model, self-mastery refers to situations that foster a greater sense of control over one’s destiny, or feelings of increased strength or power. As such, the categories of personal growth, career aspirations, autonomy, competence, and perseverance were subsumed into the category of self-mastery. Achievement and victory / status differ in McAdams’ view based on the element of competition. Victory / status refers to formalized recognition of a win situation that involves others (i.e. an award for best performance, or highest score) while achievement refers to self-congratulatory goal attainment, without involving competition with others and not requiring recognition by them. However, for this study, both of those conditions were coded as Achievement, as Nancy Drew games do not incorporate a scoring mechanism to formally mark competitive achievements.
The empowerment category consists of sub-categories of role model, when the player named Nancy Drew as a role model; identification, when the player identified qualities that she and Nancy Drew had in common; respect, when the player identified qualities she admired in Nancy Drew even when she didn’t identify them in herself; and confidence, in which the player said she felt more confident as a result of playing the game or identifying with Nancy Drew. Self-efficacy involves the player stating beliefs about being able to perform better because of the games; courage indicates that the game was scary but the player kept playing or that the game assisted the player in dealing with fear; and self-esteem is when the player indicates that she felt better about herself due to game play.

Examples of statements reflecting the construct Agency are below:

Your games came into my life at the perfect timing. Back then, I was struggling with my self-esteem, realizing that I was maturing at a faster pace than the girls in my class and teased for being a “smarty teacher’s pet.” Nancy taught me never to be ashamed of my wit. Playing your games, I became immediately aware of Nancy’s positive character traits, some I believe to have instilled upon myself from her example. – Letter 222
Nancy Drew has become a permanent part of my life, and it has even inspired me to be in the forensic science class at my school – Letter 211

I am planning on majoring in computer tech at college. I credit part of these things to the fact that instead of watching TV, I read about Nancy, who could do ANYTHING if she set her mind on it. And instead of playing silly games, I used thinking and good 'ole logic, playing Nancy Drew mysteries. :) – Letter 112

Because of this passion, it has lead me to realize my love for solving mysteries and I hope one day to be involved in solving real life mysteries. I plan to pursue a college major in Forensic Science and Scientific Research. I am currently working on my own case of analysing the presence of lead in children's toys, also known as "The Case of the Toxic Toys". Thanks to Nancy Drew and the Nancy Drew series, I am on my way to solving true to life mysteries and nabbing real-life villains. – Letter 216

Before I knew about the games, I was afraid of everything. But after playing the games, I started to become less and less afraid, so instead of hiding under the blankets when I hear a bump in the night, I would go and see what it is. – Letter 108

Nancy Drew has taught me that being yourself is a wonderful thing. And that if you try hard enough, and think fast enough, you can get anything done. ... They are not simply just 'a game'. They have molded me as a person, and without them I would not be who I am today. – Letter 322

3.2 Absorption

The state of flow is when one is so engaged in an activity that time seems to stop and the person has no cognitive energy to focus on anything else (Seligman, 2011). In video games, the immersive environment, along with progressive challenges, can facilitate this state. In our study, flow is part of the absorption core phenomenon, along with the elements immersion (the player feels like she has entered the game world), engagement (absorption into an experience such that one seems to merge into it, temporarily losing the “self”), escapism (a feeling that one has escaped the real world and the stresses associated with it), positive affect (feelings of happiness or pleasure associated with the activity), and longevity/replay (indicating a continual voluntary return to the activity).

Examples from letters reflecting the elements of absorption:

I can say with absolute sincerity that these games make me happy, and offer me an escape from the, at times, harsh realities of the real world. – Letter 308

With the bad weather I am stuck inside, but I can go to many different places through your games. – Letter 200

In 2012, I will have been playing these games for 10 years. I was 9 when I started playing... You can't say that most games are just as entertaining at 19 years old as they were at 9 years old. – Letter 195

Every time I play a new Nancy Drew game, I feel like I was back in the days when life was simple (no mortgage yet, that's for sure) and the only hard part was figuring out how to save Nancy from a timed puzzle. – Letter 270

Everything looked so real, and it was just so darn cool. – Letter 8

Meeting all the suspects and questioning them felt so real! I loved being the girl from the stories solving the mystery! – Letter 203

3.3 Academics and Literacy

There are two categories in the core phenomenon of Academics. One is school/academics, in which players indicate that one or several games included content they used in order to complete their schoolwork. The other is games-to-books, indicating that the player took interest in reading the books based on their game play. This indicates that contact with the games may lead to the encouragement toward and improvement of literacy. However, what is not known is if the girls who indicated games-to-books were already heavy readers before playing the games.

Examples from letters reflecting the academic/literacy construct:

... in physical Science, they asked us about clouds and I knew all the answers because of Trail of the Twister! – Letter 67

135
A story I often tell is how the information from Secret of the Scarlet Hand (specifically about the Maya ball game) helped me get a question right on a history quiz that almost no one else did. – Letter 84

They teach me about different subjects, like tornadoes, Morse code, Braille, the Mayans, Marie Antionette, and teach it so it all seems fascinating and makes me want to learn more about it (I'm learning Morse code now because Scarlet Hand made me interested in being a HAM radio operator). – Letter 195

It was the Nancy Drew games that helped to inspire my love of history, teaching us things about Marie Antionette and other greatly important people years before we discussed it in school. – Letter 261

Figure 2: Core phenomena and categories derived from fan letters

Around 3rd Grade I was put into special ED classes until 5th Grade and because of this I thought I wasn't smart enough to do most things, and I was no good at math, and reading seemed impossible at the time, till my mom bought me some Nancy Drew Games... These really helped me through school. They tested my mind and made me think outside of the box, in ways I hadn't before. – Letter 276

I impressed my ancient languages teacher by saying the Nahuatl word for snake. Real world uses for Nancy Drew there. – Letter 304

Nancy Drew games have given me the love of books. After learning about the games, I wanted to read the books. I was not a book reader because I never found a book that I liked, until I started reading the Nancy Drew books. Now, I love so many more books. I am now working at a library, and going to get my first book published in several months. – Letter 108

You guys have actually inspired me to write my own book about my own character! Of course it has to do with sleuthing!! – Letter 67

3.4 Connection

Connection is when players report the game being used as a way to connect with others. In some cases, teachers, grandparents and parents gift the game to the player. In other cases, the player actually plays games with a parent or sibling. Play with parents is particularly important because there is evidence that parental co-play of video games is linked to decreased aggression and internalizing, and increased connection and prosocial behavior when parents play with girls (Coyne, Padilla-
Walker, Stockdale, & Day, 2011). Identity was also found, in that players identified with Nancy Drew, compared her attributes with their own and noted the similarities, or even referred to her as a role model and mentor.

Examples from letters reflecting the connection construct:

I immediately shared the game with my son and my cousin, both Nancy Drew fans, and have now shared with other family and friends. We all love them, proving that Nancy Drew and Her Interactive games transcend different ages, genders and backgrounds. – Letter 190

My brother and I have always played the games together and have become a great mystery solving team. I am now almost 23 years old and he is 19...Even when I was away at college we would wait until I came home to play the fall release. These games have helped us form a special bond and it is something we both plan on sharing with our children someday. I'm not sure what we'll do when we both move away from home and cannot play together. But for now we will continue to enjoy these great games that have helped us bond with each other. – Letter 198

This game, still my favourite to this day, really brought my family together. Instead of lying around, silently watching television all weekend, the four of us gathered around the computer making plot predictions and playfully bickering about who the culprit could be... My sister and I are in our teenage years now, but that has not changed our deep adoration for the series of Nancy Drew PC games. Though we are older and we no longer need our mother and father to help us all the way through each game, I am always secretly pleased when we find ourselves stuck and the four of us are once again grouped around the computer laughing as we try to solve the puzzle. – Letter 199

I also have Asperger's, which was only diagnosed when I was fifteen. I have always found social things difficult, but analysing Nancy's interaction with the various suspects in each of her cases has definitely helped me to understand why people think the way they do. – Letter 310

I have saved all the games for when I have a daughter I can pass them down to. – Letter 317

3.5 Other

This category includes themes that were commonly mentioned, but did not fit into the core phenomena above. For instance, some players commented on the complexity of the puzzles in the games, while others used the games as inspiration for creative endeavours such as offline clue-based games. Others indicated that the games were wholesome and appropriate for all ages.

An interesting finding was that 12.75% (n=44) of the letters written indicated male players, with either the authors indicating that they were male, or female authors indicating playing the game with brothers, fathers, and male friends.

Examples from letters reflecting themes in the Other category:

3.5.1 Male Player

Ever since then, my 20 year old brother and I have been obsessed, (him a little more secretive about it, ha!) – Letter 141

I have introduced all the games to my high school friends (even the boys) and a ton of them love them. – Letter 231

Let me start off by saying that I’m a guy and I have always loved ND games since I first saw CAR (The Haunted Carousel) on the shelf at my local library. – Letter 132

3.5.2 Quality /Complexity

With the games, I like having to think instead of some games where it's all shoot-em-up and no puzzles. I love puzzles! I usually play the new games twice in a row because there are so many different ways you can talk to people that will get you new conversations you hadn't unlocked before. You have never truly conquered a Nancy Drew game - there's always something else to try! – Letter 189
3.5.3 Creativity

My love for the game progressed into organizing mysteries for the neighborhood kids, whether it was to find “The Lost Bike” or “The Case of the Missing Cookies”, we always had a lot of fun. – Letter 216

Nancy Drew games have also sparked the artistic side of me. I never really did that much artwork in the past, but one day I decided that I wanted to draw the entire cover of Warnings at Waverly Academy. After that I drew the phantom horse from the cover of The Secret of Shadow Ranch, and the hand from the cover of The Captive Curse. – Letter 52

I drew up a design for my room that included a piece of every game that if put in the correct order would open a secret door to the bathroom in the hall. – Letter 113

3.5.4 Wholesome

It’s great to have a series of games that are literally just good, clean fun; I never have to worry about seeing something gory, or hearing a character say something foul. – Letter 195

This game is for me, truly made for the people who want adventure but not having to deal with guns or fight scenes...I will always be grateful of having a game made for the likes of me. – Letter 270

My brother is Autistic, so these games are great for him to recite the stories, because they aren’t foul, but not like Sesame Street either, (because you can only do so much of that)! – Letter 984.

Discussion

The purpose of this study was to explore the role of agentic female video game protagonists in generating positive effects in gamers. The research used thematic analysis of fan letters to Her Interactive in regards to their Nancy Drew series to discover the themes of impact. Several themes were found, and smaller categories were consolidated into four core phenomena: agency, flow, academics, and connection.

The widest variety of categories represent agency, with players attributing the games with helping them grow, discovering new careers, being more courageous, and standing up for themselves. A few players reported redemptive stories in which they started out being shy, or felt socially awkward because they were in a new school or a new city, but learned to accept themselves and gained the courage to socialize with others through their experience with Nancy Drew video games.

Some of the agency experienced by the players might be attributable to the association with the character Nancy Drew. As a book character, Nancy Drew has inspired agency and leadership in several prominent women (Dyer & Romalov, 1995; Murphy, 2009). The letters indicate that she is also inspiring as a game character. However, the game experience differs from the reading experience. As such, the transfer of agency may be due to factors beyond the character.

Unlike the books, which are written in third-person, the games are experienced largely in first-person. Nancy’s voice narrates the player’s actions, but it may be possible to be so immersed in the game that Nancy’s view becomes the player’s view. Also, the interactivity inherent in video games results in the player acting on objects and solving puzzles. While the players may imagine themselves as Nancy, they are more than mere observers of Nancy’s behaviour. Nancy performs all described actions in the books, while the reader simply observes her doing so. In the games, Nancy doesn’t really do anything. The player drives the action.

One hypothesis for this study is that the mechanism of agency transfer from Nancy Drew to the player is identity. The player identifies with Nancy Drew by respecting her values and seeing her as a positive character, seeing attributes in her that they already have, or would like to have. Finally, they take on those characteristics while playing her in the game. Having become familiar with these attributes and practicing them within the game, players may feel comfortable continuing to hold those characteristics in real life.

The game also allows the player to practice certain skills, such as non-violent confrontation. While many games have puzzles to solve, the Nancy Drew games also involve questioning suspects and confronting them when conflicting information is found. This game mechanic may assist players in handling real social situations in which they have to confront a wrong or stand up for themselves.

The graphically rich, real-world environments in the games may also facilitate agency transfer by making the player feel as if she has gone to another country. Players who might never have considered visiting Italy, Japan, or Egypt might have a heightened interest after experiencing these places in a game. If the experience is immersive enough, the player is left with a sense that she has visited a place, and knows a little about the
language, the people and the customs. Once a place seems familiar, players may extend that into a real-world trip.

Even if players don’t actually visit the countries represented in the games, the feeling of trying new things and going new places can contribute to the quality of fortuity, which is a component of agency (Bandura, Toward a psychology of human agency, 2006). As Bandura notes, those who are more willing to try new things and have new and varied experiences, will often find themselves in fortuitous circumstances. Therefore, the games may prime players to be open to new and varied experiences, which therefore place them in fortuitous positions while giving them the agency to take advantage of those opportunities when they arise. While the research regarding girls and video games has shown that girls prefer real-world settings to fantasy ones (Hartmann & Klimmt, 2006; Kafai, Heeter, Denner, & Sun, 2008; Miller, Chaika, & Groppe, 1996), many games featuring female protagonists take place in beauty salons, restaurants, and nurseries. While these places are just as real-world as Italy, Japan and Egypt, they may not convey a sense of exploration when girls experience them. It may be important for girls to explore novel experiences through the game in order to facilitate agency.

The second most prevalent phenomenon was connection. Although Nancy Drew games are designed to be single-player, the authors mentioned playing the games with others. Some play involved taking turns directing play and/or using the mouse. Other connective play involved playing separately, but using the game as a connection point by keeping in touch with others as they played and discussing the game. This second type of play sometimes extended into competition, wherein players would play the game separately and compete to see who could solve the mystery first. While players mentioned play with siblings, they also mentioned playing with parents and other family members. While Nancy Drew is a video game marketed toward females, many authors mentioned getting fathers and brothers involved in play, usually by asking them for help in solving difficult puzzles. One girl mentioned ongoing competitive play with her uncle. Another author was a father who wrote in to say that he began playing Nancy Drew games to assist his daughter and ended up buying and playing several for himself. In other instances, authors noted that they made new friends at school through the game, with one girl having group game sessions at her house, using a projector to display the game to several friends, who strategized about the direction to take in the game as they played together. This was a significant peer bonding experience for her. There is evidence that video games increase the wellbeing of girls when they play with parents (Coyne, Padilla-Walker, Stockdale, & Day, 2011), and that closeness with peers can moderate low self-esteem when parental relationships are distant (Birkland, Breivik, & Wold, 2013), so the game’s potential as both a parental and peer bonding agent is promising.

The absorption elements were not mentioned directly, but extrapolated from words, phrases, and experiences related in the letters, as well as tone. Phrases indicating that the game let players travel to different locations, or that they played for hours, were indicative of themes such as immersion and engagement. These phrases were noted when the author used the term “I” instead of the term “Nancy”, meaning the author had immersed herself into Nancy’s world so completely that she felt she had gone there and was a part of the game, rather than seeing and experiencing herself and Nancy Drew as separate entities and remaining cognizant that she was playing a character. Many letters switched viewpoints, indicating partial immersion while still understanding that they were playing a character. Players were not expected to understand immersion, engagement, flow experience, etc., however, their inclusion of these indicative phrases signifies that they are aware that these elements contribute to their experience and enjoyment of the games, and in some cases, the facilitation of agency.

4. CONCLUSION

This research explored the role of agentic female video game protagonists in generating positive effects in gamers. Fan letters from the Her Interactive website were analysed and coded for qualitative themes. Several themes were found, including Agency, Absorption, Academics, and Connection.

As a result of this research, connections can be made between Nancy Drew video games and agency in female players, framing the video games as a positive influence on female identity. Subsequent studies will include a parallel qualitative study using data from a non-biased source, as well as an experimental design in order to discern the effects of the protagonist alone in comparison to other game elements, such as the richness of the game world, and the depth of narrative.

The combined result from this and subsequent studies will inform the game design industry on how to create games that increase agency in female players, and provide players with information about game elements that facilitate positive identity formation. Increased agency and positive identities are associated with occupational and relational success as well as a better quality of life.
REFERENCES


