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"Does Gaming Create Partner Agro" Online Gamings Impact on Partner Intimacy

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"DOES GAMING CREATE PARTNER AGRO"

ONLINE GAMING'S IMPACT ON

PARTNER INTIMACY

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Abstract

This study explored the impact online gaming has on a couples relational intimacy. Gaming has become one of the most popular entertainment Medias in the United States with forty-six percent of American homes having a gaming counsel (Nielsen, 2013). Some of these games are online and gameplay cannot be interrupted and takes up much of the user's time. Therefore, this study set out to discover if this time commitment had an impact on a relationship's intimacy levels.

This study used data that had been collected in a previous study and reanalyzed it looking for any correlations between the amount of time spent gaming by either partner and the amount of intimacy reported using both the Miller Social Intimacy Scale (MSIS) and Personal Assessment of Intimacy in Relationships (PAIR). To discover the correlations both a linear regression and a quadratic regression were used.

Results from the tests found that the correlations varied dependent on which regression analysis was used with both having contradictory results. The quadratic regression showing a positive correlation and the linear regression showing a negative correlation.

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Chapter One: Introduction

Gaming has grown into one of the largest entertainment industries, not only in North American but also in the entire world, and it only continues to grow with each coming year. According to data collect by Neilsen, forty-six percent of homes in North America have a gaming console in them and many of these homes have more than one (Nielsen, 2013). While many believe that the majority of gamers are adolescents, in truth the average age of a gamer in the United States is thirty-four, with the average age of those purchasing games is 45 (ESRB, 2010). These individuals are of the age where they are likely to be in a committed relationship and possibly to have children of their own. With such a large number of adults who play video games it is reasonable to assume that video games must have an impact on couples and the dynamics of their relationships. This study is designed to attempt and find if there is any correlation between an individual's online gaming patterns, specifically involving Massively Multiplayer Online Role Playing Games, and the relational satisfaction of the couple.

Time Commitment

Any hobby that someone has is going to take time and playing video games is no different. The average gamer spends eight hours a week playing video games, with more "hard-core" gamers playing on average thirty hours a week (ESRB, 2010). This amount of time spent gaming differs from time consumed by other mediums because of the level of concentration that is needed to play these games. For many people when they watch a movie or a television show they can leave it on in the background or hold another conversation while they are watching. With online gaming this becomes more of a challenge because of the thought process that is required to control your character and the

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attention that is needed to be able to respond to the challenges within the game. With this increase in concentration that is needed to be able to play these games this will cause a decrease in concentration that they would be able to focus towards their partner.

Online gaming requires an even greater level of concentration, in comparison to offline gaming, because of the differences in how these games are played. Offline games can be played at any time without the need to be connected with anyone else and can be paused at any time during gameplay, allowing for the user to take a break. This is noticeably different than the way that online games are played, but to fully understand the difference an explanation of the world of online gaming is necessary.

The online games that this study will focus on are the ones that fall into the category of Massively Multiplayer Online Role Playing Games (MMORPG or MMO for short). MMO's are games that an individual not only has to purchase but then has to continue to pay a monthly fee to be able to play. By paying this monthly fee the user is able to connect to a server where other gamers also play, all in real time. Once they have connected to this world they create a character which will be their avatar within this world. The individual progresses through the game by fighting enemies and completing quests, which steadily become more time consuming. As an individual progresses they can reach the point where they complete quests that are referred to as "end game quests", which can only be activated once the player is a high enough level. These quests require a group of people, often referred to as a guild, which works together as a team to complete a goal. These quests can range in time from four hours to up to twelve hours and must be completed all at once, without the ability to take a break or pause the game.

With a time commitment such as these, where the user is unable to pause and other gamers are relying on the user, it has the potential to create an environment where the user may be unwilling to leave the console during this gameplay, which could potentially cause an increased disconnect from the real world. This disconnect can cause an individual to ignore their responsibilities as well as the people in the real world that surrounds them. This amount of time consumption can cause such a great disconnect from the real world that individuals who are married to one of these gamers often will refer to themselves as a "gaming widow" since they have to operate as if they did not have a partner (Ahlstrom, Lundberg, Zabriskie, Eggett, & Lindsay, 2012).

Communication in Online Gaming

Communication patterns in a child are, in part, learned from their parents and their environment but they continue to evolve, even into adulthood. Studies have shown that the way a parent talks to their child as well as the way that the parents talk to each other while around their child will not only impact the way that the child will communicate but will also impact how the child processes information and their decision making process (Schrodt, Witt, & Messersmith, 2008). These studies found that the children of parents who talked in a more positive way were more likely to react positively to negative stimuli, even when the parent was not around. As a child enters adulthood their communication patterns will continue to evolve and be impacted by the interaction they have and by the community that they surround themselves with. A prime example of this is that individuals who are in the military will have their patterns of speech, as well as the phrase that they use, change as they progress through training (Mcllroy, Stanton, &

Reminton, 2012). With this in mind, one would assume that online gaming would also impact the communication patterns of the users.

In the beginning of online gaming the only form of communication between players was through a chat room like setting that allowed them to type to each other. This limitation in communication between users created an environment where in-depth conversations were rare and instead people would only send information that was needed to complete the quest they were working on. This simple exchange of information can impact both the communication patterns of the gamer in the real world as well as how they report the quality of their real world relationships. Bonetti, Campbell, and Gilmore (2010) found that individuals who communicated primarily through online means labeled themselves as feeling lonelier and more disconnected from the people within their real life.

Communication in gaming has evolved and now individuals are able to use programs that allow them to communicate with other gamers in deeper ways than before, some of these programs being built into the games themselves. For those games that do not have the software built in, individuals will use programs similar to Skype to be able to talk with each other using a microphone and headset. While this change in communication within games has the potential to improve vocal communication patterns it comes with its own unique consequences. One of these consequences is that with the ability to talk directly with other gamers and individual will be more absorbed into the game, which could cause them to ignore the real world and their real world companions.

The ability to communicate with other gamers in this advanced way has the potential to decrease an individual's use of body language while they communicate. Body

language is one of the main ways in which people communicate with those around them. Studies have shown that body language makes up sixty-five percent of communication, with verbal communication making up the remaining thirty-five percent (Birdwhistell, 1970, as cited in Matsumoto et. al, 2010). If an individual spends the majority of their time communicating in a way that does not utilize their non-verbal skills they will begin to lose the ability to communicate through these ways. If someone is unable to communicate through non-verbal communication they are going to have a marked difficulty in conveying their feelings to someone else as well as an increased difficulty in their ability to read other's emotions (Kunecke, Hildebrandt, Recio, Sommer, & Wilhelm, 2014; Tanaka, Wolf, Klaiman, Koeenig, Cockburn, Herligy, & Schultz, 2012) as difficulty in being able to form a bond with someone else, which are both necessary skills for forming and maintaining a relationship (Capella & Greene, 1982).

The negatives of online and digital communication has been explored to greater detail than the positives, but that does not mean that there are not any positives. Online gaming has such a large social component that many groups are formed within these games, more commonly called guilds. In 2012, Trepte, Reinecke, and Juechems found that if an individual who played online games stayed connected with their guild through other means (social media, forums, etc.) the individual would have stronger social ties with individuals they met through the game as well as through other means. Also Henline & Harris (as cited in Hawkins & Hertlein, 2013) found that partners who interacted through online means, not specifically online gaming, had enhanced communication patterns.

Addiction

Addictions can destroy families and tear apart relationships. For the majority of time the only addictions that were recognized by society were ones involving a substance of some form. As technology continues to impact society new addictions are being recognized by the medical community. One addiction that studies have shown to exist, but that the current edition of the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-V) does not recognize, is internet addiction. Since internet addiction is not stated in the DSM it does not have a set definition within the medical community. One definition that is commonly used, though, is "an inability of individuals to control their internet use, resulting in marked distress and function impairment of general life" (Han, Hwang, and Renshaw, 2010, p. 297). Using this definition studies have tried to determine how large of impact internet addiction has, but because there is no set diagnosis researchers have had trouble determining its prevalence within the United States. Researchers in China estimate that between two to twelve percent of adolescents within their country have an internet addiction (King, Delfabbro, Griffiths, and Gradisar, 2011). Although there is not a number for how many within the United States are impacted, with such a large impact in other countries it is safe to say that there must be a similar impact within the United States.

Within internet addiction there are different forms of how it is portrayed. These can range from addiction to pornography to addiction to online gaming. The form that is relevant to this study is that of the addiction to online gaming. It is difficult to define what constitutes addiction with online gaming since it is seen as an acceptable hobby to spend large amount of times playing, unlike pornography use. Utz, Jonas, and Tonkens

(2012) coined the term "obsessive passion" with regards to gaming addiction and defined it as someone who can no longer freely choose to play or to not to play and, therefore, leads to the neglect of other activities. They found that those who showed patterns of "obsessive passion" had fewer offline friends and a decreased quality of life than those who had what they had termed "harmonious passion" (Utz, Jonas, & Tonkens, 2012). Another study conducted by Lemments, Valkenburg, and Peter (2011), supported this when they found that after six months of pathological online gaming test subjects rated having lower levels of social competence, lower self-esteem, and were significantly lonelier.

Conclusion

Online gaming is an entertainment medium that continues to grow and to impact even more people. It comes with its own unique challenges like time constraints and the potential for addiction. With this great of impact on an individual's life it is bound that have just as much of an impact on an individual's relationship and the level of intimacy that is experienced within it.

Chapter Two: Literature Review

As a relationship progresses it goes through different developmental stages. These developmental stages have many different names and definitions depending on the theory. One theory, developed by Connolly and Goldberg (1999), labels the stages of adolescent relationship development as initiation, affiliation, intimate, and committed. In the initiation stage, attraction towards and desire for a partner are felt, but contact is limited at this point. During the affiliation stage, individuals will interact in group settings which will also give them the opportunity to interact with potential partners. In the intimate stage, couples form and begin to distance themselves from the larger groups so that they can focus their attention and emotions on the dyadic relationships. In the committed stage, couples will share emotional and physical intimacy, form strong attachments, and exhibit caregiver behaviors.

Another theory, developed by Carter, McGoldric, & Garcia-Preto (2011), describes the stages experienced by a heterosexual married couple with children. Stage one is "Leaving Home: Emerging Young Adults" which is defined by the individual leaving their home and having to take on stressors of emotional and financial responsibility. The next stage is "Joining of Families through Marriage/Union" which is defined by a commitment to a new system, comprised of the individual and their new partner. The next stage is "Families with Young Children" which consists of the couple accepting the new members, the children, into the system. Next is the "Families with Adolescence" stage, which consists of a need for increased flexibility of family boundaries to permit children's independence. This is followed by the "Launching Children and Moving on at Midlife" stage, which involves the couple accepting several

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exits from and entries back into the system as the children move out and the grandparents need more care. The second to last stage is "Families in late Middle Ages" which involved the shifting of generational roles and the exploration of new social options. The last stage is "Families Nearing the End of Life" which involves the accepting of their limitation and the death they will experience.

The majority of family development models are based on couples with children. For a family without children only the first couple's stages of other theories apply. One developmental theory based on couples without children was developed by Hertlein and Pelton (2011). Stage on is "The Decision-Making Process" which involves the couple making a conscious decision that they do not want to have children. Stage two is "Managing Stigma and Pressure" which involves the couple learning how to cope with the pressure from society on them to have children and any judgment that may come with it. Stage three is "Defining and Identity" which consist of creating their adult identity. This is based off the fact that many individuals consider the moment they have children as the point where they become adults, but for couples who choose not to have children they have to create this transition in a different way. The final stage is "Building a Support System and Leaving a Legacy" which involves building a support system to decrease loneliness that can occur with couples who do not have children as well as finding a way for them to leave a mark in the world.

The advancement of technology has altered the way relationships develop and the work that is needed to be done to maintain them (Hertlein, 2012). Even though it is clear that the internet has had a large impact on relationships, very few studies have been conducted on its impact and even fewer on how it influences the stages of relationships.

One theory that has been developed is the Couple and Family Technology Framework (CFT) developed by Dr. Katherine Hertlein (2012). This framework explains that as technology evolves and the ways in which we use it involves it will impact the family by changing the structure of the family as well as the process by which family members connect with one another.

The increase in technology within relationships changes how families need to structure their rules, including the boundaries around both the couple and family system, as well as the roles of each member within the family. The first one to be explored is the changes that a family needs to make to the structure of their family rules. Some of the rules that need to be looked at are what is acceptable to share with someone outside of the family as well as how much time can be sent using apps or playing games. If the family does not discuss these things they could end up committing cyber-infidelity while thinking that their behavior is acceptable.

Another structural change that needs to be changed are the boundaries within the relationship. One of these boundaries that need to be changed are what information is acceptable to share with people outside of the relationship. If this topic is not discussed and defined boundaries are not created conflict can be created within the family when information is shared. This includes what details about their life can be shared on social media sites or through online videos (Ward, 2006). These boundaries also affect how parents want to raise their children. The internet has made it exceedingly easy to access sexual content without needing to prove a person's age (Freeman-Lono, 2000). This makes it so minors can very easily access internet pornography and if parents do not address this it can go on without them ever knowing.

The last section of how the structure of the family needs to change is around the defined roles of each member of the family. Often children are more adept with technology than their parents are. This can create an environment where the child needs to help the parent's with anything involving a computer (Aarsand, 2007). Parents need to recognize this and adapt so that it will not take away their title of being the educator to their children. A discussion around roles also needs to occur amongst couples so that their relationship can survive. Often when couples have fights about online gaming what they are arguing about is the time it takes and how it prevents one partner from taking care of their house hold responsibilities (Klein, Izquierdo, & Bradbury, 2007; Van Rooji, Schoenmakers, Van De Eijinden, & Van De Mheen, 2010). If a couple does not discuss how much time spent gaming is appropriate as well as what responsibilities around the house belongs to each member there is a high chance of conflict.

The process of forming and keeping a relationship is also affected by the development and incorporation of the internet. The different processes are altered altered are the redefinition of intimacy, how relationships are formed and initiated, as well as how relationships are maintained. These changes will be discussed next except for how relationships are formed and initiated, which will be explored in a later section of this study.

The first changed process that will be explored is the re-definition of intimacy. The changes to intimacy caused by the internet can both be positive and negative. A positive aspect of it is that with the increased ability for someone to communicate with their partner, even when they are separated by large distances (Bargh & McKenna, 2004; DiMaggio, Hargitti, Neuman, & Tobinson, 2001). The effect of online communication on

relationships will be explored in greater detail in a later section. Another aspect of intimacy that is changed is sexual intimacy. Individual who compulsively participate in online sexual activity have a decreased desire for sex and have reduced sexual satisfaction (Bergner & Bridges, 2002; Bridges, Bergner, & Hesson-McInnis, 2003). If a couple does not discuss what online sexual behavior is acceptable and how much of it is, the relationship can suffer.

How a couple maintains the intimacy and passion in a relationship has a large impact on the success. The internet is changing the ways in which couples achieve this. As mentioned before, couples are spending more time keeping in contact with each other during the day. A study conducted by Kennedy et al. (2008) found that 70 percent of couples used their cellphones, as opposed to other forms of technology, to keep in contact with their significant other throughout the day. Surprisingly, couples report that this increase in opportunities to connect throughout the day has not improved their relationship (Czechowky, 2008). In fact, couples where one member had a Blackberry reported that the phone negatively impacted their relationship because of how heavily it was used by their partner (Czechosky, 2008). If a couple does not discuss how technology can be used within their relationship as well as what is acceptable technology use while they are together, the relationship can suffer.

Online Romance Initiation

The landscape of relationship initiation has changed drastically with the introduction of the internet and online dating. Parks and Roberts (1998) found that 93.6 percent of internet users had online relationships and that 26.3 percent of those relationships were romantic. The romantic relationships within their study were not

always continued within the real world, but a large portion of people do continue their relationships into the real world. The current numbers show that nine percent of all relationships were formed over the internet (Spreecher, 2009; Sullivan, 2002). With such a large change in the way that individuals are meeting their partners, it is changing how people view the internet and its uses.

As the internet continues to grow and the ways in which you can access it continue to expand (computers, smart phones, tablets, etc.) it is becoming steadily more available and user friendly (Watson, McCarthy, & Rowley, 2013). With such ease of access, the general population's ability to use the internet is increasing. A study conducted by Ryan and Rao (2008) found that those who used the internet frequently had more confidence in their ability to use the Internet and were more efficient in their use of it. This also occurs within online dating. Anderson (2005) found that individuals who had higher levels of internet affinity had higher levels of satisfaction with the romantic relationships they formed online. The same went for individuals who had a moderate level of internet affinity, they reported having only moderate levels of satisfaction with the romantic relationships they formed online.

The Next Stages of Romance

Adolescents are often on the cutting edge of technology. This makes them prime study samples to test how different forms of internet communication can impact an individual. Blais, Craig, Pepler, and Connolly (2008) found that adolescents who used instant messengers to keep in contact with their romantic partners had increased levels of intimacy. They also found, though, that adolescents who regularly talked on chat rooms with strangers had increased levels of feeling alienated from their peers, as well as

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decreased levels of intimacy with their partner. This is of particular interest to this study considering how communication in online gaming is very similar to these chat rooms.

Online communication can also have positive impacts for those with social anxiety. In the past if someone had social anxiety it could prevent them from being able to form even the simplest of friendships and could potentially prevent them from having any romantic relationships form. The advances in online communication has changed this. Individuals with social anxiety now, not only, use the internet to help them form relationships but also to help them maintain them. Ward and Tracey (2004) found that individuals with social anxiety were able to form and develop relationships online at a much quicker pace compared to their face-to-face counterparts. It was also found that they were seventeen times more likely to use a webcam to communicate with someone they were dating, compared to individuals without social anxiety (Stevens & Morris, 2007). This increase in communication should, in theory, increase both emotional and sexual intimacy. Montesi et al (2013) found that couples who had social anxiety had trouble creating emotional and sexual intimacy because they had trouble opening up and sharing personal information with their partner. It is believed that using the internet to communicate with someone gives individuals with social anxiety a buffer that helps to curb their anxiety and allows them to open up to potential partners.

Development of Intimacy in a Relationship

Before the development of intimacy can be explored an operational definition of intimacy is necessary. This study will be using the focusing on several of the seven forms of intimacy defined by Olson (1975). The different forms of intimacy discussed by Olson are: (1) emotional intimacy – a feeling of closeness with another person; (2) social

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intimacy – having common friends and a similar social network; (3) intellectual intimacy – sharing ideas with another person; (4) sexual intimacy – sharing general affection or sexual activity; (5) recreational intimacy – having similar hobbies or interests; (6) spiritual intimacy – sharing similar spiritual beliefs or practicing the same religion; and (7) aesthetic intimacy – the closeness that results from the experience of sharing beauty.

Intimacy in Online Interactions (Computer-Mediated Communication)

The effect of the growth of the internet has been explored in many ways throughout this study. One way that has been explored is how communication patterns within gaming can effect a person's real world communication patterns. Something that has not been explored yet is how computer mediated communication can impact the formation of intimacy as well as how it is used by couples to navigate key points in their relationship as well as being used during arguments. The first step, though, is understanding what exactly computer mediated communication is.

Computer mediated communication (CMC) is defined as "any human symbolic text based interaction conducted or facilitated through digitally based technologies… that requires actual people engaged in a process of message interchange in which the medium of exchange at some point is computerized" (Spitzberg, 2006, p. 630-631). This can range from text messaging, emails, and even Facebook messages. With 93 percent of the teen population using the internet in 2009, with that number growing more each year, it is clear that CMC's must play a heavy role in relationships (Jones & Fox, 2009).

Online relationships are formed and maintained mainly through CMCs. For many of these relationships they see their beginnings happen through an online dating site. With online dating sites and individual will make a profile and wait for someone to

contact them. Once the initial contact is formed they chat through the website until they feel comfortable meeting in person. This brings up the question of how long they should talk before they meet in person. There are several studies that explore this but what the consensus seems to be is that the sooner that a couple meets in person the more successful their relationship will be and adversely the longer they stay communicating through CMCs the less likely their relationship is to succeed (Ramirez & Zhang, 2007). It has also been found, though, that if a couple never meets in person they are more likely to have successes in their relationship than either of the previous two couples (Mckenna, 2008).

As was discussed earlier, 70 percent of couples used their phones to talk with their partner when they are apart (Kenedy et al, 2008). Couples aren't just using their phones for casual conversations but also longer more indepth ones. A study conducted by Leenhart (2010) found that half of adults have long, personal text message conversations. Within these text conversations there is the potential for some very important relational topics to be discussed. Perry and Werner-Wilson (2011) found that not only are couples using text messaging to discuss important topics and have arguments but they also find that using text messaging can help make the arguments less heated. Perry and Werner-Wilson (2011) assume that this is because the couple has time to think about everything they are going to say before they say it, allowing for less knee jerk reactions and more honesty.

Intimacy Maintenance and Shared Hobbies

Having a hobby not only gives you a passion that helps you pass time but it also has great mental health benefits. A study conducted in 2009, found that individuals who

had a hobby had decreased levels of depression and reported having higher levels of life satisfaction (Hirosaki et. al., 2009). This increase in life satisfaction can also translate to higher levels of relational satisfaction when a couple has a hobby they share. Several studies have found that when a couple shares a hobby they have an increase in relationship satisfaction as well as an increase in their feeling of "togetherness" (Kennedy, Smith, Well, and Wellman, 2008; Lutz-Zois, Bradley, Mihalik, and Oorman-Eavers, 2006). The trend of couples sharing hobbies and spending more free time together has increased within the last thirty years. A study conducted by Voorpostel, Lippe, and Gershuny (2009) found that couples have increased how much of their free time spent with each other, from 53 percent to 68 percent. With such a large amount of time spent together it should be no surprise that a couple could benefit from playing online games together. While this may be true, if only one of the individuals in a relationship plays online games there is a chance that the relationship could suffer. Peters and Malesky (2008) found that some online gamers reported that they felt a lower quality of interpersonal relationships than their peers, but this study did not look into partnerships.

With the growth of online gaming and the wealth of knowledge on the impact of hobbies on relationships, one would think that there would already be a plethora of studies on how online gaming can impact a relationship and on how to help couples working through these complications. Regrettably the majority of articles that have been published are about how online gaming impacts individual's offline friendships, not their romantic relationships (see Chen, Tu, & Want, 2008; Cole & Griffths, 2007; Snodgrass, Lacy, Fancois Dengah II, & Fagan, 2011). The only one that does stand out is an article

constructed by Hertlein and Hawkins (2013). This study uses CFT to develop issues that may come up in these relationships and how to treat these problems. The issues that may come up are 1) online addiction's negative impact on intimacy, 2) perceived neglect felt by the non-gamer, and 3) jealousy felt from the non-gamer based off of the time spent gaming instead of being intimate. The study goes into how to treat each of these problems but since this is not a quantitative study there is not any hard data on how exactly gaming impacts the intimacy in a relationship.

Relational Boundaries

One of the boundaries in a relationship that can have one of the largest impacts, when broken, is the boundary broken with infidelity. Infidelity is the leading reported reason for divorce around the world and is one of the three main presenting problems in couples' therapy (Buss, 2000; Lerner, 1989). Recent studies have shown that around twenty-seven percent of couples in therapy report infidelity as their main reason for seeking therapy, either physical or emotional (Atkins, Marin, Lo, Klann, and Halweg, 2010). With the development of the internet these boundaries are becoming "increasingly blurred… between offline and online social relationship as individuals interact using multiple channels of communication" (Mesch & Talmud, 2007, p. 585). These blurred boundaries come into play regularly for online gamers. A study conducted by Utz in 2000 found that 77 percent of online gamers interacted socially with other online gamers and that 39 percent of those gamers would share sensitive information with their online friends that they would not share with real world friends, which is a key component of developing intimacy (Wei, Chen, Huang, & Bai, 2012).

These blurred lines also play into a couple's sex life and how they define infidelity. Cyber-sex and internet infidelity are becoming more and more prominent in society. Greenfield (1999), found that 57 percent of compulsive internet users used the internet to flirt with other users and 42 percent said they engaged in an online affair. It's also been found that those who would seek sex online had more sexual partners and 65 percent of them had sexual intercourse with their online partners (Reitmeijer, Bull, & McFarlane, 2001).

This behavior also occurs in online gaming. For example, the online game *Second Life* is very commonly used to have online sexual encounters. These sexual encounters often would be defined as cyber-infidelity, participating in cyber-sex with someone other than your primary partner. Ashley Croft (2010) found that half of the users surveyed in *Second Life* were not only participating in online sexual activity but that they were married in the real world to someone other than their online partner. This cyber-sex that occurs in game can cause real life consequences, even when the relationship does not become physical. Schneider, Weiss, and Samenow (2012) found that when an individual in a relationships committed cyber-infidelity their partner viewed this infidelity as just as damaging as a physical infidelity would be.

These online relationships that are formed have the potential to cross past digital infidelity to physical infidelity. Dew, Brubaker, and Hays (2006) found that 78 percent of married men who had a history of online sexual behavior had had at least one face-to-face sexual encounter, with someone other than their spouse, within the last year. This gets even more blurred within online gaming since MMO players often will behave in

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ways that they would not be willing to offline when they are in-game (Yee, 2006 as cited in Steinkuehler & Williams, 2006).

Purpose of Study

This lack of data on the impact online gaming can have on a relationship is a detriment to the field of Marriage and Family Therapy and prevents therapists from being able to practice with all the knowledge they need to be effective. That is why this study is designed to discover the impact online gaming has on intimacy within romantic relationship, if there is any at all. This information gained will be able to help practitioners have a better understanding of the effect of online gaming, but for this data to be able to reach its fullest potential it will need to be utilized in the creation of interventions.

Chapter Three: Methodology

This study will conduct a secondary analysis of data that was already collected by Dr. Katherine Hertlein at the University of Nevada, Las Vegas. The data was collected using an online survey that was custom created by Dr. Hertlein and was distributed on the UNLV campus as well as through social media sites (Survey attached in appendix A). The survey was directed towards individuals who were a) above the age of eighteen, b) were in a committed a relationship, and c) played online games.

Survey Structure

The survey was constructed of four parts that were all filled at the same time by the participant. The first part was created by Dr. Hertlein to be able to gather data on the gaming habits of the individual taking the survey. This section included questions about what games the individual plays, how often they play, and how comfortable they feel expressing themselves through online means. The second section is about the participant's partners gaming habits. The questions in this section are the same as the first section, with the only changes being that the questions are about the participant's partner rather than the participant themselves. This allowed for a very thorough report on the style of gaming, how much time they spent gaming, as well as how they self-defined their gaming patterns.

The survey's third section consisted of a slightly modified version of the Miller Social Intimacy Scale (MSIS), modified to be more inclusive of all sexual preferences and gender identities, as well the Personal Assessment of Intimacy in Relationships (PAIR). MSIS uses a seventeen question survey that measures both the frequency of intimacy between partners as well as the intensity of said interactions (Miller & Lefcourt,

1982). Throughout the years that the MSIS has been used it has gone through numerous tests to ensure both its reliability and its validity. Downs and Hillje (1991) found that the MSIS had a reliability ranging from α .87 to .95 and was found to be just as effective working with same-sex couples as it did working with heterosexual couples. Additionally, many other researchers have used the MSIS to effectively analyze intimacy with different groups, including children of alcoholics (see, for example, Mahalick, Locke, Theodore, Cournoyer, and Lloyd, 2001; Martin, 1995; Hook, Gerstein, Detterich, and Gridley, 2003). The PAIR inventory is a 36 question survey that assess a couples intimacy levels as they are at the present moment and where they would like them to be (Schaefer & Olson, 1981). This survey has been mostly used within the medical community to be able to help couples that are experiencing a traumatic diagnosis be able to have an understanding of the level of intimacy within their relationship as well as how they could improve on it (Walker, Hampton, & Robinson, 2014). Walker, Hampton, and Robinson (2004) also found that the reliability of the PAIR inventory ranged from α .70 to .96. The current literature that is available states that there are several different subscales within this survey that are believed to be the most consistent but for this study we left in all questions so we could analyze this for ourselves.

The final section of the survey collected demographic information about the participant. This included standard information such as age, gender, and income. It also included more detailed information about the participant like if there were children within the home, who within the relationship played video games, and if the couple had met though an online game.

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Secondary Analysis

Secondary analysis is the process of taking pre-existing data and reanalyzing it from a different perspective than the original experimenter intended. By reusing already established data a researcher can not only be able to answer a new question than the original researcher but also can be more efficient with their research as well as preventing researcher fatigue (Greenhoot & Dowsett, 2012, p. 4). Secondary analysis allows the researcher to dedicate more time to accurately interpreting the data that they have than they would if they also had to collect the data. It has also been found that when data is shared openly it ensures that the data is accurate and that it is vetted carefully before being published (Trzensniewki & Donnellan, 2001).

Secondary analysis is much more commonly used in biological sciences than it is in psychological sciences, which is a shame since it allows for so much more to be discovered with data that already exists (Duncan, Engel, Claessens, and Dowsett, 2011). Some of the studies that have been conducted with the use of secondary analysis include Kalapatapu, Dulucchi, Lasher, Vinogradov, and Batki's work reanalyzing data on veterans with Posttraumatic Stress Disorder (PTSD) and alcohol dependency (2013). They were able to re-use a study that was originally collected to be able to measure the chemical differences within the brain for those who had both PTSD and alcohol dependency and use it to be able to tell the differences in cognitive performance for veterans who have an alcohol dependence. By re-analyzing data that was already available they were able to save these veterans the trouble having to be re-analyzed when they are already experiencing enough difficulty within their lives.

This re-use of data also allows individuals to analyze data that has to be conducted over long periods of time, without having to wait for the entirety of the time to be able to analyze the data. In 2013 Dao et al., were able to do just that when they analyzed data from a twelve month study that analyzed change in body mass of elderly women who participated in different exercise programs. The original study not only measured body mass but also measured the cognitive state and depression level of the individuals participating in the study. Since the originally study was so thorough with its data collection Dao et al. were able to analyze this same data to see how a change in body fat mass impacted executive functioning in elderly women.

Psychological researchers do not use secondary analysis as much as other fields, as previously mentioned, but that does not mean that it is never used within this field. In 2013, Weck, Richtberg, Esch, Hofling, and Stangier re-analyzed a study that had collected data on clients with recurrent depressive disorder who were undergoing maintenance cognitive therapy. They were able to use this data to be able to analyze how the competency of the therapist effected the client's compliance with doing homework. With such stellar results from secondary analysis the researcher of this paper feels confident in conducting a secondary analysis on the data collected from Dr. Hertlein's survey.

Data Analysis

The program Statistical Product Service Solutions 20 (SPSS 20) will be used to analyze the data that has been collected. We will be exploring two hypotheses:

Hypothesis 1: There will be a difference in the level of intimacy, as measured with the PAIR and MSIS depending on whether one in the relationship plays online games and time spent playing.

Hypothesis 2: There will be a negative correlation between the level of intimacy, as measured with the PAIR and MSIS, and the amount of time spent playing online games by someone within the relationship.

The first hypothesis will be tested by conducting a MANCOVA analysis to determine the effect of online gaming on intimacy. The second hypothesis will be tested by finding the Pearson's Correlation Coefficient between the two subscales.

Chapter Four: Results

Demographics

The survey that was used for this study was hosted online so that it could be completed remotely by survey takers from their own homes or schools. The link to the survey was distributed by professors in different classes at UNLV, on flyers throughout the campus, as well as through several online forums. The survey was started by 389 people but was only completed by 240 of them. As a result the analysis utilized 61.6 % of the entries that we received.

The analysis included a total of 90 (37.5%) males and 150 (62.5%) females. Participant ages ranged from 18 to 55 years, with a mean age of 24.87. The majority of the respondents were students, 76.7%.

Table 1: Who Plays Online Games

Sex: * Who plays massively multiplayer online role playing games in your relationship (MMORPG)? Crosstabulation

			Who plays massively multiplayer online role playing games in your relationship (MMORPG)?				Total
			You	Your partner	Both you and your partner	Neither you or your partner	
Sex:	Male	Count	42	2	13	33	90
		% within Sex:	46.7%	2.2%	14.4%	36.7%	100.0%
		% within Who plays massively multiplayer online role playing games in your relationship (MMORPG)?	73.7%	5.1%	44.8%	28.7%	37.5%
		% of Total	17.5%	0.8%	5.4%	13.8%	37.5%
	Female	Count	15	37	16	82	150
		% within Sex:	10.0%	24.7%	10.7%	54.7%	100.0%
		% within Who plays massively multiplayer online role playing games in your relationship (MMORPG)?	26.3%	94.9%	55.2%	71.3%	62.5%
		% of Total	6.2%	15.4%	6.7%	34.2%	62.5%
Total		Count	57	39	29	115	240
		% within Sex:	23.8%	16.2%	12.1%	47.9%	100.0%
		% within Who plays massively multiplayer online role playing games in your relationship (MMORPG)?	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	23.8%	16.2%	12.1%	47.9%	100.0%

Respondents were asked who within the relationships plays online games. Table 1 reflects who played within the relationship compared to the gender of the individual taking the survey. The majority of men who took the survey were the ones who play online games within their relationship, 46.7%, while the majority of women who took the survey were in a relationship where neither their partner nor they themselves played an online game, 54.7%. The amount of respondents where both members of the relationship played online game was higher than the researcher expected at 12.1%.

Table 2: Participant Relationship Status

Sex: * Current relationship status: Crosstabulation

			Current relationship status:					Total
			Not dating anyone	Casually dating multiple partners	Seriously dating one partner	Engaged	Married	
Sex:	Male	Count	19	10	40	5	21	95
		% within Sex:	20.0%	10.5%	42.1%	5.3%	22.1%	100.0%
		% within Current relationship status:	61.3%	55.6%	30.8%	41.7%	36.2%	38.2%
		% of Total	7.6%	4.0%	16.1%	2.0%	8.4%	38.2%
	Female	Count	12	8	90	7	37	154
		% within Sex:	7.8%	5.2%	58.4%	4.5%	24.0%	100.0%
		% within Current relationship status:	38.7%	44.4%	69.2%	58.3%	63.8%	61.8%
		% of Total	4.8%	3.2%	36.1%	2.8%	14.9%	61.8%
Total		Count	31	18	130	12	58	249
		% within Sex:	12.4%	7.2%	52.2%	4.8%	23.3%	100.0%
		% within Current relationship status:	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	12.4%	7.2%	52.2%	4.8%	23.3%	100.0%

Table two reflects the current relationship status of all respondents and compares that data to the gender of the respondent. The majority of respondents, of both genders, reported that they were either in a serious relationship with one partner (52.2%) or that they were married (23.3%).

Table 3: Relationship Status Compared to Who Plays

Current relationship status: * Who plays massively multiplayer online role playing games in your relationship (MMORPG)? Crosstabulation

			Who plays massively multiplayer online role playing games in your relationship (MMORPG)?				Total
			You	Your partner	Both you and your partner	Neither you or your partner	
Current relationship status:	Not dating anyone	Count	13	0	2	11	26
		% of Total	5.4%	0.0%	0.8%	4.5%	10.7%
	Casually dating multiple partners	Count	6	1	1	10	18
		% of Total	2.5%	0.4%	0.4%	4.1%	7.4%
	Seriously dating one partner	Count	21	21	16	71	129
		% of Total	8.7%	8.7%	6.6%	29.3%	53.3%
	Engaged	Count	4	3	2	3	12
		% of Total	1.7%	1.2%	0.8%	1.2%	5.0%
	Married	Count	14	14	8	21	57
		% of Total	5.8%	5.8%	3.3%	8.7%	23.6%
Total		Count	58	39	29	116	242
		% of Total	24.0%	16.1%	12.0%	47.9%	100.0%

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Table three reflects the relationship status of respondents and how that compares to the data on who within the relationship plays massively multiplayer online role playing games. The majority of respondents who are married have either themselves being the one who plays (5.8%) or their partner being the one who plays (5.8%). In contrast the majority of respondents who reported that they are seriously dating one partner but not married reported that neither they nor their partner played online games (29.3%).

The majority of individuals who participated in the survey had at least one individual within the relationship who played online games (52.1%). This allows us to have a large collection of data on individuals who are in a relationship while still being able to have a large enough control group, the individuals who are not in a relationship with someone who plays online games (47.9%). The majority of respondents were also in a serious relationship with one exclusive person (52.2%). This large of percentage of individuals who are in a committed relationship allows the researchers to analyze the impact online gaming has on those who are in a more committed relationship rather than for those who are in a short term relationship where there is not exclusivity.

Table 4: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
PAIR2.0	190	40.00	95.00	78.8421	6.87040	-1.016	.176	4.884	.351
MSIS	201	17.00	167.00	130.1095	22.07686	-1.504	.172	4.499	.341
Valid N (listwise)	70								

Table four reflects the skewness and kurtosis of the data collected for each scale. Both the

P.A.I.R and the Miller Intimacy Scale had an appropriate distribution of data with the

P.A.I.R. receiving a -1.016 for the skewness and a 4.884 for the Kurtosis, while the

Miller Intimacy Scale received a -1.504 for the skewness and a 4.499 for the Kurtosis.

Hypothesis 1: There will be a difference in the level of intimacy, as measured with the PAIR and MSIS, and depending on whether one in the relationship plays online games and time spent playing.

To test the first hypothesis, we used a MANCOVA as there were two dependent variables (PAIR and MSIS), and two independent variables (who in the relationship played online games and time spent playing online games). We used two variables to measure time spent online: one was a Likert-type self-report variable asking individual how often they spent playing games online (1 = seldom, 6 = frequently). The second was a continuous variable asking how many hours one played online per week. For reporting on the partner's time online, we asked how many hours the partner spent online (again, continuous). The MANCOVA was not significant (df = 17, MS = 649.525, F = 1.503, p = .119).

Table 5: General Linear Model

Between-Subjects Factors

		Value Label	N
FrequencySelf How frequently do you play massively multiplayer online role playing games (1= seldom, 6= frequently)?	1.00	seldom	35
	2.00	2.00	7
	3.00	3.00	14
	4.00	4.00	8
	5.00	5.00	6
	6.00	Frequently	18
WhoPlaysMMORPGInRelationship Who plays massively multiplayer online role playing games in your relationship (MMORPG)?	1.00	You	32
	2.00	Your partner	11
	3.00	Both you and your partner	22
	4.00	Neither you or your partner	23

Table 6: MANCOVA

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	PAIR2.0 PAIR2.0	1090.119[a]	17	64.125	1.489	.124
	MSIS MSIS	11041.921[b]	17	649.525	1.503	.119
Intercept	PAIR2.0 PAIR2.0	132317.519	1	132317.519	3073.293	.000
	MSIS MSIS	363886.964	1	363886.964	841.942	.000
FrequencyAdjusted	PAIR2.0 PAIR2.0	5.945	1	5.945	.138	.711
	MSIS MSIS	785.677	1	785.677	1.818	.182
Hours2	PAIR2.0 PAIR2.0	39.303	1	39.303	.913	.343
	MSIS MSIS	614.843	1	614.843	1.423	.237
FrequencySelf	PAIR2.0 PAIR2.0	305.929	5	61.186	1.421	.227
	MSIS MSIS	1772.344	5	354.469	.820	.539
WhoPlaysMMORPGInRelationship	PAIR2.0 PAIR2.0	92.647	3	30.882	.717	.545
	MSIS MSIS	632.602	3	210.867	.488	.692
FrequencySelf * WhoPlaysMMORPGInRelationship	PAIR2.0 PAIR2.0	495.780	7	70.826	1.645	.137
	MSIS MSIS	5083.651	7	726.236	1.680	.128
Error	PAIR2.0 PAIR2.0	3013.779	70	43.054		
	MSIS MSIS	30253.977	70	432.200		
Total	PAIR2.0 PAIR2.0	546853.000	88			
	MSIS MSIS	1472611.000	88			
Corrected Total	PAIR2.0 PAIR2.0	4103.898	87			
	MSIS MSIS	41295.898	87			

a. R Squared = .266 (Adjusted R Squared = .087)

b. R Squared = .267 (Adjusted R Squared = .089)

After we ran the MANCOVA, we wondered about the effect of including two measures of time for the respondent (one Likert type and one continuous) and another continuous measure regarding the perception of the perceived partner online. In addition, we noticed there was a significant disparity in the number of participants in the groups of those who played online, those whose partners played online, those who both played, and those who didn't play at all. Therefore, we reorganized the groups into three: those who did not play at all, those with one partner playing, and those with both playing. We then ran separate ANOVAs with the PAIR Scale. Tables 10-11

Table 7: Self-Reported Hours ANOVA with PAIR as Dependent Variable

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	45.069	1	45.069	1.163	.282
Residual	6895.131	178	38.737		
Total	6940.200	179			

The independent variable is Hours2.

Coefficients					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Hours2	-.044	.041	-.081	-1.079	.282
(Constant)	79.318	.506		156.784	.000

Table 8: Self-Reported Hours ANOVA with PAIR as Dependent Variable

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	47.648	2	23.824	.612	.544
Residual	6892.552	177	38.941		
Total	6940.200	179			

The independent variable is Hours2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Hours2	-.027	.078	-.049	-.347	.729
Hours2 ** 2	.000	.001	-.037	-.257	.797
(Constant)	79.277	.531		149.299	.000

Figure 1.
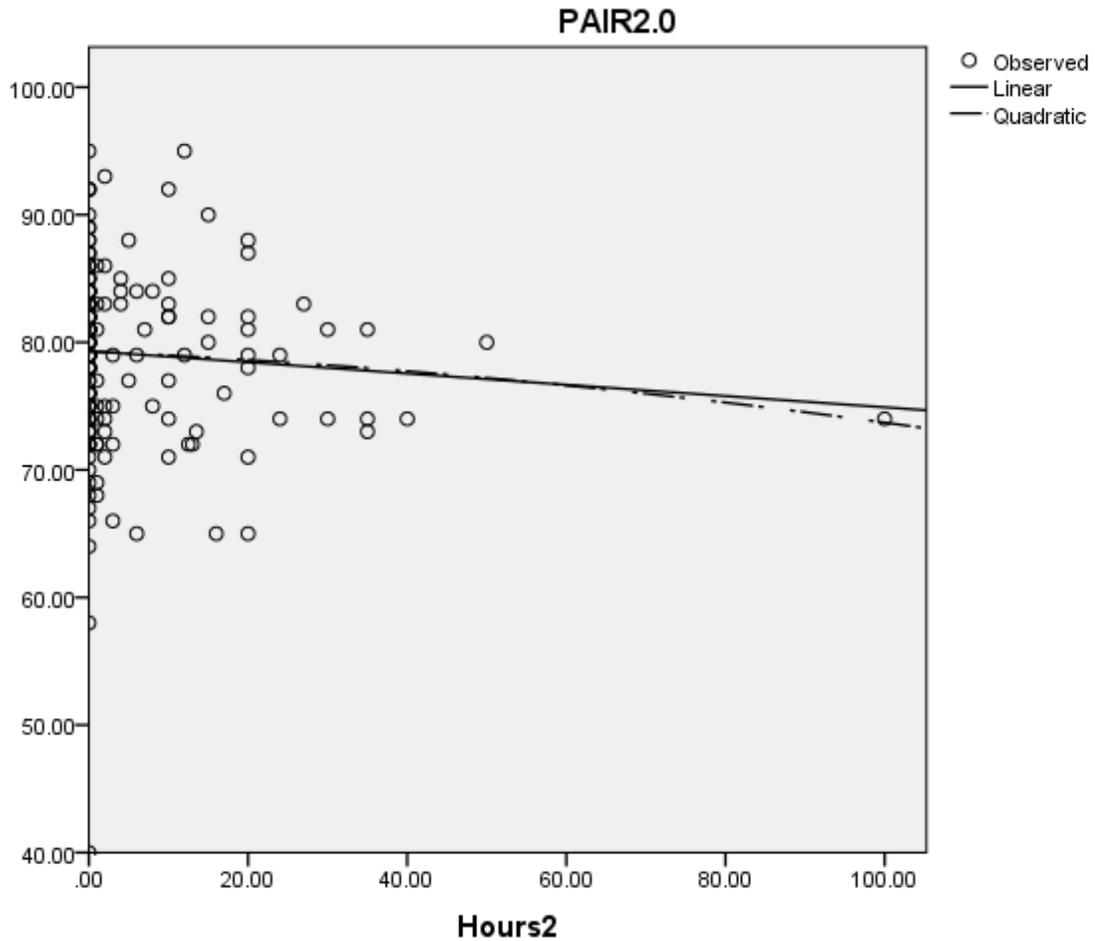
Table seven reflects the results from running a linear regression comparing the
self-reported hours spent playing online games by the participant in the survey to their
intimacy levels as ranked by the PAIR scale. The results show that there is a negative
relationship between the amount of self-reported hours played and the intimacy level of
the participant, but that the relationship was not statistically significant (F = 1.163, df = 1,
178, p = .282).

Table eight reflects the results from running a quadratic regression comparing the self-reported hours spent playing online games by the participant in the survey to their intimacy levels as ranked by the PAIR scale. These tests were not originally proposed as part of the initial study but due to the poor results from the proposed questions these were ran as well. The results show that there is a negative relationship between the amount of self-reported hours played and the intimacy level of the participant, but that it was not statistically significant ($F = .612$, $df = 2, 177$, $p = .544$).

Table 9: Self-Reported Hours Linear ANOVA with MSIS as Dependent Variable

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	2935.805	1	2935.805	6.274	.013
Residual	83285.995	178	467.899		
Total	86221.800	179			

The independent variable is Hours2.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Hours2	-.356	.142	-.185	-2.505	.013
(Constant)	131.724	1.758		74.917	.000

Table 10: Self-Reported Hours ANOVA with MSIS as Dependent Variable

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	3072.355	2	1536.177	3.270	.040
Residual	83149.445	177	469.771		
Total	86221.800	179			

The independent variable is Hours2.

Coefficients					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Hours2	-.480	.271	-.249	-1.773	.078
Hours2 ** 2	.002	.004	.076	.539	.590
(Constant)	132.018	1.844		71.582	.000

Figure 2.

MSIS

Legend:
- ○ Observed
- —— Linear
- — · Quadratic

Hours2

Table nine reflects the results from running a linear regression comparing the self-reported hours spent playing online games by the participant taking the survey to their intimacy level as determined by the MSIS scale. The results show that there is statistically significant negative relationship between the amount of self-reported hours played and the intimacy levels ($F = 6.2$, df = 1, 178, $p = .013$).

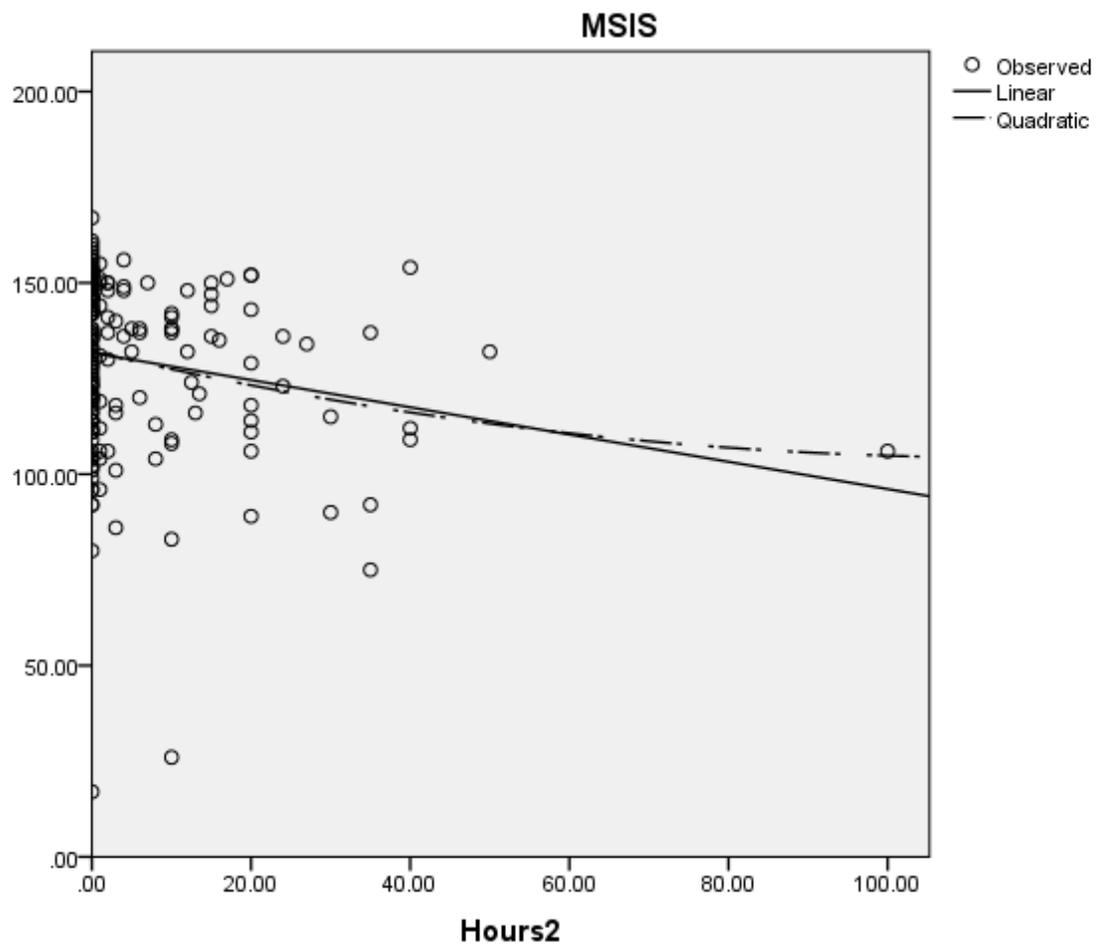Table ten reflects the results from running a quadratic regression comparing the self-reported hours spent playing online games by the participant taking the survey to their intimacy level as determined by the MSIS scale. The results show that there is a statistically significant positive relationship between the amount of self-reported hours played and the intimacy level ($F = 3.2$, df = 2, 177, $p = .040$).

Table 11: Hours Partner Plays ANOVA with PAIR as Dependent Variable

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	124.068	1	124.068	3.267	.072
Residual	6418.120	169	37.977		
Total	6542.187	170			

The independent variable is FrequencyAdjusted Frquency adjusted.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
FrequencyAdjusted Frquency adjusted	-.082	.045	-.138	-1.807	.072
(Constant)	79.739	.529		150.677	.000

Table 12: Hours Partner Plays ANOVA with PAIR as Dependent Variable

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	525.690	2	262.845	7.339	.001
Residual	6016.497	168	35.812		
Total	6542.187	170			

The independent variable is FrequencyAdjusted Frquency adjusted.

Coefficients

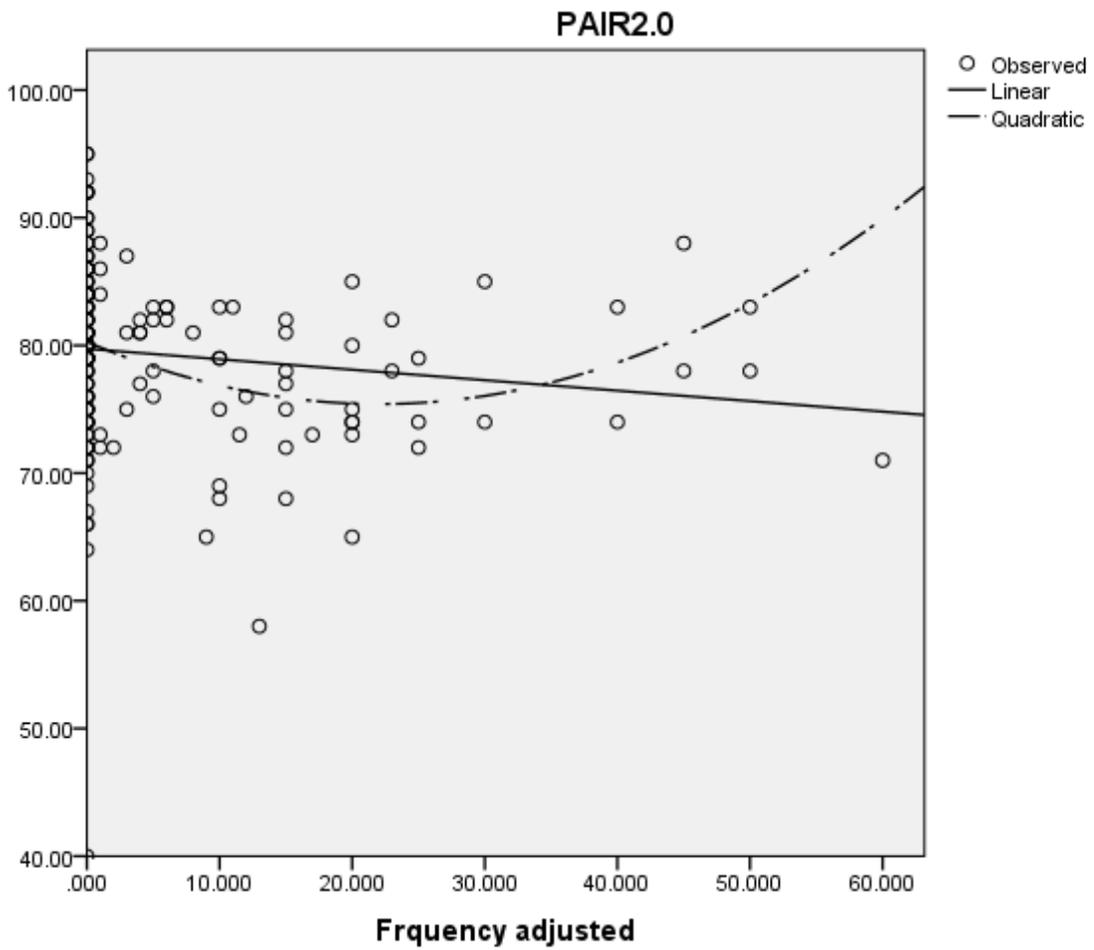|	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
FrequencyAdjusted Frquency adjusted	-.443	.116	-.744	-3.804	.000
FrequencyAdjusted Frquency adjusted ** 2	.010	.003	.655	3.349	.001
(Constant)	80.286	.539		148.890	.000

PAIR2.0

Table eleven reflects the results from running a linear regression comparing the number of hours that the partner of the participant spends playing online games compared to their intimacy level as determined by the PAIR scale. The results show that there a statistically significant negative relationship between the number of hours that the participants partner plays and the level of intimacy reported (F = 3.267, df = 1,169, p = .072).

Table twelve reflects the results from running a quadratic regression comparing the number of hours that the partner of the participant spends playing online games compared to their intimacy level as determined by the PAIR scale. The results show that there a statistically significant positive relationship between the number of hours that the participants partner plays and the level of intimacy reported (F = 7.33, df = 2, 168, p = .001).

Table 13: Hours Partner Play ANOVA with MSIS as Dependent Variable

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	57.945	1	57.945	.117	.732
Residual	83542.160	169	494.332		
Total	83600.105	170			

The independent variable is FrequencyAdjusted Frquency adjusted.

Coefficients					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
FrequencyAdjusted Frquency adjusted	-.056	.164	-.026	-.342	.732
(Constant)	130.192	1.909		68.188	.000

Table 14: Hours Partner Plays ANOVA with MSIS as Dependent Variable

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	514.737	2	257.368	.520	.595
Residual	83085.369	168	494.556		
Total	83600.105	170			

The independent variable is FrequencyAdjusted Frquency adjusted.

Coefficients

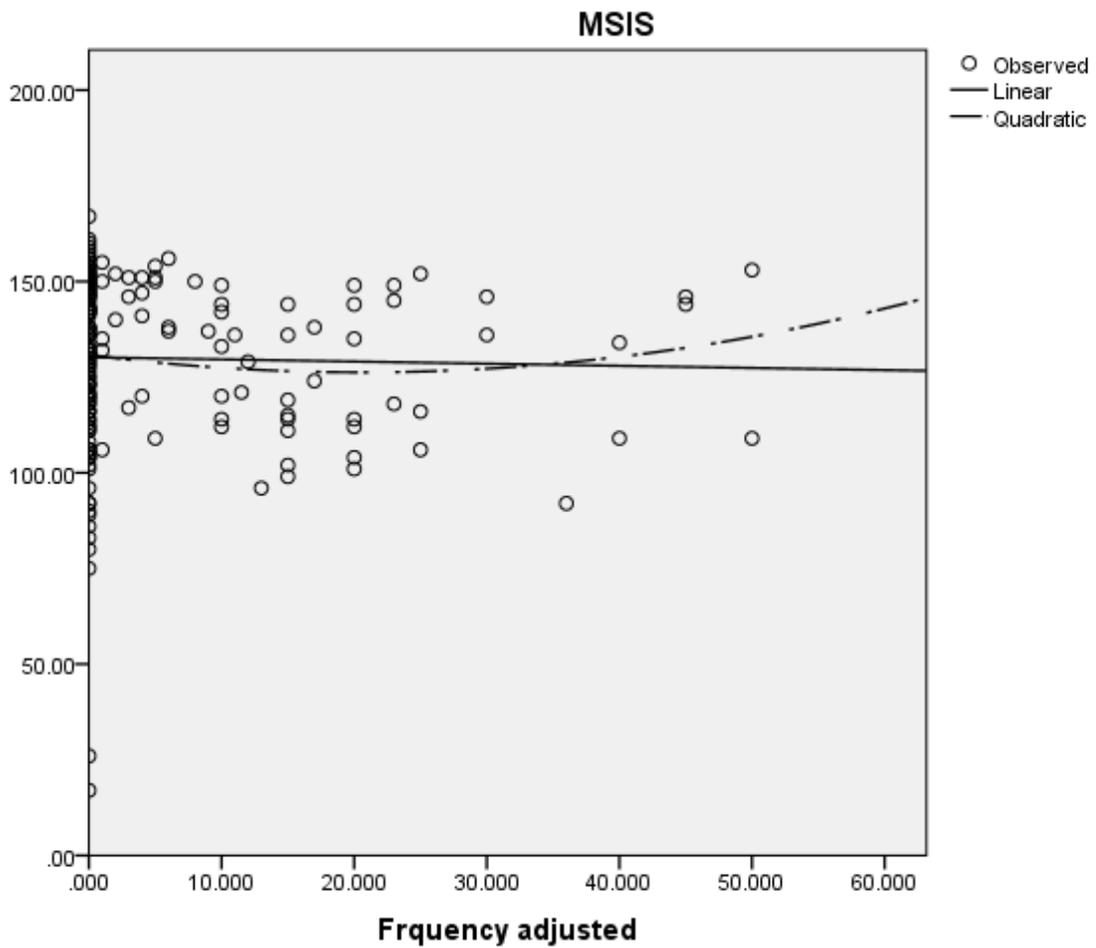|	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
FrequencyAdjusted Frquency adjusted	-.441	.433	-.207	-1.019	.310
FrequencyAdjusted Frquency adjusted ** 2	.011	.011	.195	.961	.338
(Constant)	130.775	2.004		65.262	.000

Figure 3

MSIS

Table thirteen reflects the results from running a linear regression comparing the number of hours that the partner of the participant spends playing online games compared to their intimacy level as determined by the MSIS scale. The results show that there is a negative relationship between the number of hours that the participants partner plays and the level of intimacy reported, but that it was not statistically significant (F = .117, df -= 1, 169, p = .732).

Table fourteen reflects the results from running a quadratic regression comparing the number of hours that the partner of the participant spends playing online games compared to their intimacy level as determined by the MSIS scale. The results show that there is a positive relationship between the number of hours that the participants partner plays and the level of intimacy reported, but that it was not statistically significant (F = .520, df = 2, 168, p = .595).

Finally, we elected to divide the grouping of couple type (those who pay games and those who do not) into two types: those who had at least one person playing and those who had no partners playing. We ran two t-tests with the MSIS and PAIR as dependent variables and who plays as the dichotomous independent variable (those where game playing is part of the relationship and those where there is no game playing). Results indicated that there was no significant difference between these two groups in intimacy as measured by the PAIR (t = .418, df = 188, p = .676), but there was a significant difference in intimacy as measured by the MSIS (t = 2.088, df = 199, p = .038). See Table 19.

Table 15: T-Test Descriptives

Group Statistics					
	WhoPlaysDi Who Plays Dichotomous	N	Mean	Std. Deviation	Std. Error Mean
PAIR2.0 PAIR2.0	1.00	94	79.0532	7.18476	.74105
	2.00	96	78.6354	6.57927	.67149
MSIS MSIS	1.00	95	133.5158	22.05692	2.26299
	2.00	106	127.0566	21.74652	2.11221

		Levene's Test for Equality of Variances		t-test for equality of means		
		F	Sig.	t	df	Sig. (2-tailed)
PAIR2.0 PAIR2.0	Equal variances assumed	.074	.786	.418	188	.676
	Equal variances not assumed			.418	185.797	.677
MSIS MSIS	Equal variances assumed	.467	.495	2.088	199	.038
	Equal variances not assumed			2.087	195.972	.038

Hypothesis 2: There will be a negative correlation between the level of intimacy, as measured with the PAIR and MSIS, and the amount of time spent playing online games by someone within the relationship.

To evaluate the second hypothesis, we used Pearson's r and used the continuous variables for time (i.e., hours played by the respondent and the respondent's estimation of how often their partner plays) (See Table 16). The only measure that yielded a significant correlation of any type was the relationship between estimated frequency of hours partner played and intimacy as measure by the MSIS ($r = -.179$, $p = .011$). Even then, this relationship is very weak.

Table 16: Correlations between hours online and level of intimacy

		PAIR2.0 PAIR2.0	MSIS MSIS	FrequencyAdjusted Frquency adjusted	Hours2
Correlations					
PAIR2.0 PAIR2.0	Pearson Correlation	1	.246**	-.117	-.067
	Sig. (2-tailed)		.001	.108	.359
	N	190	180	190	190
MSIS MSIS	Pearson Correlation	.246**	1	-.038	-.179*
	Sig. (2-tailed)	.001		.597	.011
	N	180	201	201	201
FrequencyAdjusted Frquency adjusted	Pearson Correlation	-.117	-.038	1	.211**
	Sig. (2-tailed)	.108	.597		.000
	N	190	201	388	388
Hours2	Pearson Correlation	-.067	-.179*	.211**	1
	Sig. (2-tailed)	.359	.011	.000	
	N	190	201	388	388

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Chapter Five: Discussion

The research hypothesis proposed in the earlier chapters of this thesis are the following: 1) there will be a negative correlation between if an individual in a relationship plays online games and the level of intimacy felt within the relationship and 2) there will be a negative correlation between the amount of time spent gaming and the level of intimacy reported.

Reliability

This study used three different intimacy scales to be able to analyze the intimacy that was reported by each individual who took our survey. Of the three scales two of them were previously used scales, the Personal Assessment of Intimacy in Relationships (PAIR) and the Miller Social Intimacy Scale (MSIS), while one of them was used for the first time in this study, the Digital Intimacy Scale (DIS). This section will compare our reliability results for each of the used scales against their previously reported reliability.

The PAIR scale has received a wide range of reliability results, ranging from α = .70 to .96 (Walker, Hapton, & Robinson, 2004). The reason for the wide range, as discussed in a previous chapter, is due to the many subscales that are used. For this study we used all of the original questions instead of only using some of the subscales, like many have. It seems that using all of the questions instead of the subscales was a wise decision because we received a reliability of α = .924 from our PAIR section of the survey.

The MSIS scale is a scale that has been around for over thirty years and has continually displayed how reliable of a scale that it is. Downs and Hillie (1991) found

that it has a reliability ranging from α .87 to .95 and that it is very effective at being used for more than just intimate partner relationships but also for friendships. In our use of the MSIS scale we received a very strong reliability rating of $\alpha = .926$.

The final scale that was used in this study is the DIS. The DIS was created by a professor at the University of Nevada, Las Vegas (UNLV) specifically for this study. Since this is the first time it has been used there are no other instances to be able to compare its reliability to. The DIS had a reliability of $\alpha = .213$. While this is not very high it is not that surprising considering how few questions are in the scale, there are six questions within this scale, and due to the fact that it has never been used before it has not had the chance to be refined.

Analysis Discussion

The initial plan for this study was to run a MANCOVA to compare the reported level of intimacy between a couple where at least one individual plays an online game to the intimacy level of a couple where neither individual plays an online game and then run another MANCOVA to see if there was a correlation between the amount of time and individual plays online games and the level of reported intimacy. Regrettably, when these analysis were ran there was no significant result to be found but when the data was ran through other analysis there was some very interesting and more applicable results that were found.

The final analysis that was decided on was to run both linear ANOVAs and quadratic regressions to compare certain pieces of data to the different intimacy scales. This included running both a linear ANOVA and quadratic regression comparing the self-reported hours played by the individual taking the survey to the level of intimacy as rated

by both the MSIS and the PAIR. The next analysis used a linear ANOVA and a quadratic regression to compare the reported number of hours that the participant's partner spent playing online games to the level of intimacy as rated by both the MSIS and the PAIR.

The results for any linear ANOVA that was run, whether using the PAIR scale or the MSIS, came back with a negative relationship between the variables. The difference that occurred between the results was whether it was a statistically significant relationship or not. When a linear ANOVA was ran comparing the PAIR scale to the self-reported number of hours that the participant played it came back with a non-statistically significant negative relationship, but when those same hours were compared to the MSIS the results came back as being a statistically significant negative relationship. When a linear ANOVA was ran comparing the number of hours that the participant's partner played to the PAIR it came back with a statistically significant negative relationship. When the same hours were used but ran with the results of the MSIS it came back with a non-statistically significant negative relationship.

The results from running a quadratic regression had a little more variation than the linear ANOVA but not by much. When a quadratic regression was ran comparing the number of self-reported hours that the participant played to the PAIR scale the results came back a non-statically significant negative relationship. When the same hours were compared to MSIS scale the results came back showing a significantly positive relationship between the two. When a quadratic regression was ran comparing the hours that the participants partner played to the scales they both had positive relationships but they were not both statistically significant. The results for the PAIR scales came back as

having a statistically significant positive relationship while the results for the MSIS came

back with a non-statistically significant positive relationship.

There are two patterns that can be seen within these results. The first is that, for

the most part, when the data is analyzed with a linear regression it will come out with a

negative relationship. In comparison when the data is ran through a quadratic regression

it will more often come out with a positive relationship. The other pattern that can be

seen is in relation to whose game time is being reported and the intimacy scale that was

used.

The results from the analysis showed that the only time that the MSIS had a

statistically significant result was when it was compared to the hours that the participant

reported that they themselves played. In contrast the PAIR only had statistically

significant results when it was compared to the number of hours that the participant's

partner played. The two primary theories about why this occurred are that either 1) The

way the scale's questions are phrased changes how intimacy is interpreted by the

participant or 2) that it is not possible to measure how intimacy is impacted by one factor

due to how many factors play a role in it.

Finally, because of the inequality in the group size of who participates in oneline

gaming in relationships. We created two groups and discovered the results were different

depending on what scale was used to evaluate intimacy. These theories will be explored

in this chapter.

The Complexity of Intimacy

The many stages of intimacy and how online interactions can impact intimacy and

its formation has already been explored in an earlier chapter to be able to explore what

was already known about online relationships and their impact on intimacy in the real world. This information helped shape the assumption that online gaming would have a negative impact on the level of intimacy felt within a relationship. With the opposing results from the analysis it is necessary to re-explore intimacy and its components.

The aspects of intimacy that make up a relationship are broken down in different ways depending on the study that is exploring intimacy as well as the type of intimacy that is being described. How an individual describes the intimacy needed for a friendship compared to an intimate relationship is drastically different as is the differences between the intimacy components of a couple that has lived together for ten years compared to a brand new couple. To be able to narrow the description down the components described in the MSIS and PAIR will be used.

The MSIS defines intimacy as being made up of mutual affection, mutual communication, mutual support, and unidirectional disclosure (Downs & Hillje, 1991). In comparison the PAIR defines intimacy as being made up of feeling connected to your partner, fluent exchange of ideas, and shared friendships (Walker, Hampton, & Robinson, 2014). For two surveys that are meant to analyze the same aspect of a relationship, the intimacy level, to define intimacy so differently is characteristic enough of the depth and complexity of intimacy. This complexity continues when one considers the fact that not all cultures view intimacy in the same light and so these characteristics may not be seen as important depending on where the data is collected (Marshall, 2008).

With so many different components that can impact and define a couples intimacy it challenges the idea that a study that only looks at one factor, the amount of time spent gaming, could actually have any definitive results. Well this study was able to gain

information that was statistically significant when one looks at the information on a deeper level they can see that the information that is gathered points to two differing factors impacting a relationship in different ways.

Question Phrasing

How a question is worded can change how someone responds to it in very dramatic ways. With these two scales having such different results it is important to consider that this may be caused by the wording of each scale and how it may be interpreted by the participant. In this section the wording of each scale and how that may have impacted the results will be explored.

The first scale that will be looked will be the PAIR. The PAIR's questions are primarily focused on how the participant interprets their partner's behaviors and the meaning behind them. For instance two of the questions within the PAIR are "My partner listens to me when I need someone to talk to" and "My partner frequently tries to change my ideas". It even goes into asking about the qualities of the participant's partner and how they feel about them with questions like "My partner has all the qualities I've ever wanted in a mate". With such a focus on the participants partner and how their behaviors are interpreted by the participant it makes sense that the data that this scale had a statistically significant relationship with was the data from the question about how many hours the participants partner played rather than how many hours the participant themselves played.

The next scale that will be explored is the MSIS. The MSIS focuses more on questions about how the participant feels about the relationship and how they directly feel about their partner. Examples of this are "How often do you show him/her affection?"

and "How often do you feel close to him/her?". These questions are more heavily focused on the participant themselves so it makes sense that they would have a statistically significant relationship with the data from the question on how many hours the participant themselves spends playing online games.

Each of these scales have a very distinct voice as well as an entirely separate lens that is used to understand what intimacy is as well as how to measure it. These different aspects of the scales have made it so the participant's views on whether it is their level of gaming or there partners level of gaming that impacts the intimacy can be seen clearly and forces us to consider if this is showing how gaming impacts intimacy or if it is showing how variations in how something is asked will alter how an individual interprets the question, even if the questions are looking at the same topic. For instance, several of the questions asked the individual to report on the amount of time their partner spends playing rather than having their partner report these hours themselves. By doing this we are potentially creating inaccurate data due to the individual not accurately knowing how many hours their partner plays. This inaccuracy has the potential to alter any analysis that takes into consideration how many hours their partner plays online games.

Understanding the Online Impact

The impact that online gaming has on an individual's development and its impact on some of their social circles has already been explored in great detail in an earlier chapter. While it is true that if an individual has their own hobby they will experience greater level of intimacy within their relationships there was the speculation that this would not apply to gaming due to the research that show that gamers feel that they have lower quality interpersonal relationships (Hirosaki et. al, 2009; Malesky, 2008). This

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speculation seemed to be confirmed with the phenomenon known as the "gaming widow".

The gaming widow is a term that just recently entered the world of academia but that has been used in online communities for a couple of years now. The gaming widow is used to describe someone who is married to an individual who has an addiction to online games and due to how much time they spend playing online games, rather than spending it with the family or taking care of household responsibilities, it is as if they are dead. Northrup and Shumway (2014) found that individual who were married to someone with an online gaming addiction found that their partners gradually pulled further and further away from the rest of their family. Not only would they pull further away but they would also begin to show many of the same signs as someone who has an addiction to a substance, getting defensive about their behavior and lying about how often they would use/play. This study found that there was not only a decrease in intimacy between the partners but there was also an increase in conflict and resentment felt by the "widow".

With the majority of the research pointing towards gaming having a negative impact on intimacy it was surprising to see that there was both a positive and negative correlation, depending on how you analyzed the data. When the data was looked at through a linear perspective it came back as showing a negative correlation but when it was looked at through a quadratic perspective it had a positive relationship. The question that is brought up is this difference between this study and the others due to a fluke chance that occurred or is it possible that the current research has been looking at the impact in the wrong light.

If we look solely at the results of the t-test, it is possible that the amount of hours spent in a relationships online gaming may not make a difference or who it is that's gaming – but whether gaming is present in the relationship at all. These findings suggest that there are more questions asking about why online gaming – regardless of who plays – may have an impact to intimacy in relationships.

Interpreting the Curve

The initial plan to interpret the data using a MANOVA and then with a linear regression would have both resulted in either inconclusive data or with a negative correlation for all of the surveys. By analyzing them with a quadratic regression it changed the correlation to a positive one. While it is true that the two different surveys contradicted each other it still allowed us to gain some valuable information from this study that would have been missed. Many studies seem to focus on finding only a linear correlation rather than exploring the other possibilities of their data (Trepte, Reinecke, and Juechems, 2012; Bergner & Bridges, 2002; Bridges, Bergner, & Hesson-McInnis, 2003). By focusing only on a linear correlation they limit themselves from exploring all aspects of human behavior. With this study it can be seen that by exploring the ways in which the data adjusts throughout each point you can find increasingly more data than if you were to assume that the correlation would only be able to be seen in a straight line.

Future Research

Due to the conflicting results, the study does not have a very high chance of being used within a clinical setting, yet it may be able to help those who wish to conduct research on online gaming and intimacy. Future research can be improved by making the language of the questions clear, specific and without bias, therefore leading to a more

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precise answer from the participants. This will also help to prevent shaping and altering

the opinions of the participants while being able to explore how online gaming habits

influence a couple's intimacy. Future researchers should also look at more than just how

many hours are spent gaming but also the individuals gaming habits and how that impacts

the couple's interactions and their intimacy.

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Appendix A (The Survey)

Section 1 of 4: Your Game Playing Behavior

If you play MMORPGs, proceed the questions below. If NOT, skip to Section 2.

How frequently do you play massively multiplayer online role playing games (1= seldom, 6= frequently)?
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6

When do you typically play?
1. during the week
2. on weekends
3. both during the week and on weekends

Which multiplayer online games do you play (check all that apply)?
1. World of Warcraft
2. Eve Online
3. Age of Conan
4. Everquest I or II
5. Puzzel Pirates
6. City of Heroes
7. Guildwars

8. Ultima Online
9. Final Fantasy
10. Lineage II
11. Other

How many hours a week do you play?

With whom do you play online (check all that apply)?
1. Partner/ spouse
2. Immediate family (parents, siblings)
3. Extended family (aunts, uncles, cousins, nieces, nephews, grandparents)
4. Offline friends (friends who you socialize with offline)
5. Online (friends that you have met from playing the game, but do not socialize with outside of the game)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel more comfortable expressing myself and communicating in typed chat than in real conversations.	❏	❏	❏	❏	❏
I have become more comfortable with face-to-face communication because of my MMORPG experiences.	❏	❏	❏	❏	❏
I have become more comfortable forming and sustaining relationships in real life because of my MMORPG experiences.	❏	❏	❏	❏	❏

	A lot	Quite a bit	A little	Not at all
To what extent have you flirted with another player?	❏	❏	❏	❏
To what extent have you had romantic feelings for another player?	❏	❏	❏	❏
How frequently does your partner complain about your game playing?	❏	❏	❏	❏

Section 2 of 4: Your Partners Game Playing Behavior

The next set of questions is about your primary partner's game-playing behavior. If your partner does not play these games, skip this section and go to section 3.

Which multiplayer online games does your partner play (check all that apply)?
1. World of Warcraft
2. Eve Online
3. Age of Conan
4. Everquest I or II
5. Puzzel Pirates
6. City of Heroes
7. Guildwars
8. Ultima Online
9. Final Fantasy
10. Lineage II
11. Other

How many hours a week does your partner play?

With whom does your partner play online (check all that apply)?
1. Partner/ spouse
2. Immediate family (parents, siblings)
3. Extended family (aunts, uncles, cousins, nieces, nephews, grandparents)
4. Offline friends (friends who you socialize with offline)
5. Online (friends that you have met from playing the game, but do not socialize with outside of the game)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe that my partner is more comfortable expressing him/herself and communicating in typed chat than in real conversations.	❏	❏	❏	❏	❏

I believe that my partner has become more comfortable with face-to-face communication because of his/her MMORPG experiences.	❏	❏	❏	❏	❏
I believe that my partner has become more comfortable forming and sustaining relationships in real life because of his/her MMORPG experiences.	❏	❏	❏	❏	❏

	Definitely	Probably	Unlikely, but its possible	Not at all
Do you believe your partner has flirted with another player?	❏	❏	❏	❏
Do you believe your partner has had romantic feelings for another player?	❏	❏	❏	❏

How frequently do you complain to your partner about his/her game playing?
1. A lot
2. Quite a bit
3. A little
4. Not at all

Section 3 of 4: Your Relationship

How has participation in online gaming enhanced your relationship?

How has participation in online gaming hindered your relationship?

To what extent would you consider your relationship sexual?
1. A lot
2. Quite a bit
3. A little
4. Not at all

If you believe that you have a sexual relationship, what statement describes your satisfaction with your present sexual relationship?
1. Excellent
2. Above Average
3. Adequate
4. Poor

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
My partner listens to me when I need someone to talk to.	❏	❏	❏	❏	❏
I can state my feelings without him/her getting defensive.	❏	❏	❏	❏	❏
I often feel distant from my partner.	❏	❏	❏	❏	❏
My partner can really understand my hurts and joys.	❏	❏	❏	❏	❏
I feel neglected at times by my partner.	❏	❏	❏	❏	❏
Sometimes I feel lonely when were together.	❏	❏	❏	❏	❏

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
We enjoy spending time with other couples.	❏	❏	❏	❏	❏
We usually keep to ourselves.	❏	❏	❏	❏	❏
We have very few friends in common.	❏	❏	❏	❏	❏
Having time together with friends is an important part of our shared activities.	❏	❏	❏	❏	❏
Many of my partner's closest friends are my closest friends.	❏	❏	❏	❏	❏
My partner disapproves of some of my friends.	❏	❏	❏	❏	❏

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I am satisfied with our sex life.	❑	❑	❑	❑	❑
I feel our sexual activity is just routine.	❑	❑	❑	❑	❑
I am able to tell my partner when I want sexual intercourse.	❑	❑	❑	❑	❑
I hold back my sexual interest because my partner makes me feel uncomfortable.	❑	❑	❑	❑	❑
Sexual expressions an essential part of our relationship.	❑	❑	❑	❑	❑
My partner seems disinterested in sex.	❑	❑	❑	❑	❑

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
My partner helps me clarify my thoughts.	❑	❑	❑	❑	❑
When it comes to having a serious discussion it seems that we have little in common.	❑	❑	❑	❑	❑
I feel put-down in a serious conversation with my partner.	❑	❑	❑	❑	❑
I feel it is useless to discuss some things with my partner.	❑	❑	❑	❑	❑
My partner frequently tries to change my ideas.	❑	❑	❑	❑	❑
We have an endless number of things to talk about.	❑	❑	❑	❑	❑

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
We enjoy the same recreational activities.	❑	❑	❑	❑	❑
I share very few of my partners interests.	❑	❑	❑	❑	❑
We like playing together.	❑	❑	❑	❑	❑

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
We enjoy the out-of-doors together.	❑	❑	❑	❑	❑
We seldom find time to do fun things together.	❑	❑	❑	❑	❑
I think that we share some of the same interests.	❑	❑	❑	❑	❑

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
My partner has all the qualities I've ever wanted in a mate.	❑	❑	❑	❑	❑
There are times when I do not feel a great deal of love and affection for my partner.	❑	❑	❑	❑	❑
Every new thing I have learned about my partner has pleased me.	❑	❑	❑	❑	❑
My partner and I understand each other completely.	❑	❑	❑	❑	❑
I don't think anyone could possibly be happier than my partner and I when we are with one another.	❑	❑	❑	❑	❑
I have some needs that are not being met by my relationship.	❑	❑	❑	❑	❑

Please answer the following questions using a 10 point scale. 1= Very Rarely 5= Some of the Time 10= Almost Always

	1	2	3	4	5	6	7	8	9	10
When you have leisure time, how often do you choose to spend it with him/her alone?	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
How often do you keep very personal information to yourself and do not share it with him/her?	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
How often do you show him/her affection?	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
How often do you confide very personal information to him/her?	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
How often are you able to understand his/her feelings?	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
How often do you feel close to him/her?	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑

Please answer the following questions using a 10 point scale.1= Not Much5= A Little10= A Great Deal

	1	2	3	4	5	6	7	8	9	10
How much do you like to spend time alone with him/her?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏
How much do you feel like being encouraging and supportive to him/her when he/she is unhappy?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏
How close do you feel to him/her most of the time?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏
How important is it to you to listen to his/her very personal disclosures?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏
How satisfying is your relationship with him/her?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏
How affectionate do you feel towards him/her?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏
How important is it to you that he/she understands your feelings?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏
How much damage is caused by a typical disagreement in your relationship with him/her?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏
How important is it to you that he/she be encouraging and supportive to you when you are unhappy?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏
How important is it to you that he/she shows you affection?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏
How important is your relationship with him/her in your life?	❏	❏	❏	❏	❏	❏	❏	❏	❏	❏

Is there anything else about gaming and relationships that it is important for me to know?

Section 4 of 4: Demographics

What is your age?

Sex:
1. Male
2. Female

Current relationship status:
1. Not dating anyone
2. Casually dating multiple partners
3. Seriously dating one partner
4. Seriously dating multiple partners
5. Engaged
6. Married

Are you living with your partner?
1. Yes
2. No

Number of children
1. 0
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6 or more

How many of these children live in your home?
1. 0
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6 or more

What is the highest level of education you completed?
1. Grade school
2. High School Graduate
3. Associates degree

4. Technical Training degree
5. Bachelors degree
6. Some training toward Advanced degree
7. Advanced degree

Are you currently a student?
1. Yes, full time
2. Yes, part time
3. No

If yes, do you have a job outside of your schooling?
1. Yes, part time
2. Yes, full time
3. No

(If yes to either full or part time, how many hours do you work?)

Income:
1. 0-20k
2. 21-40k
3. 41-60k
4. 61-80k
5. 81-100k
6. 101k+

Please indicate if you have ever been diagnosed with the following (check all that apply)
1. Depression
2. Anxiety
3. Bipolar disorder
4. Substance abuse
5. None of the above

Who plays massively multiplayer online role playing games in your relationship (MMORPG)?
1. You
2. Your partner
3. Both you and your partner

4. Neither you or your partner

Did you meet your partner through a MMORPG?
  1. Yes 2. No

Curriculum Vitae

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Personal Profile

- My goal is to become a Marriage & Family Therapist in order to guide, aid, and inspire couples and families in their most desperate time of need with a specific focus on families that have an adolescent with a mood disorder.

Education

University of Nevada, Las Vegas – Las Vegas, Nevada
Masters in Marriage and Family Therapy, expected Spring 2015

University of Nevada, Las Vegas – Las Vegas, Nevada
Major: Psychology, Minor: Family Studies, Spring 2012

Experience

Professional Experience

Bridge Counseling Associates, July 2014 - Present

- Staff Therapist, Running group therapy with a focus on overcoming drug addiction, individual counseling on topics ranging from abuse to mood disorders.

Professional Experience

Montevista Psychiatric Hospital, July 2012 – July 2014

- Mental Health Technician, Running coping skills groups, Verbally deescalating patients, Managing patient's schedules, Ensuring safety of patients.

Professional Experience

St. Rose Dominican Hospital – Siena Campus, March 2008 – July 2012

- Shift Lead of Environmental Services, Managing staff and delegating responsibilities, responding to needs of the hospital staff.

Volunteer

Head Research Assistant, February 2011 – April 2012

- Conduct research, Code information, Aid in construction and editing of thesis

Volunteer

Teaching Assistant for MFT 350: Human Sexuality December 2011 – April 2012

- Conduct group meetings with students, grade papers, conduct interviews with prominent local figures

Volunteer

Aid at Opportunity Village, July – July 2012

- Aided clients with projects, Assisted clients with life skills.

Awards and Certifications

- CPR Certified, 2011- Present

- Member of Delta Kappa Zeta, MFT Honor Society, February 2013 - Present

- Psychology Club Historian, January 2011 – January 2012