

CHRISTIAN WOMEN'S PORNOGRAPHY USAGE:  
THE ROLE OF PERCEIVED ADDICTION, SOCIAL ANXIETY, SHAME, AND GRACE

by

Kathryn Ellen Bohannon

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences

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## ABSTRACT

For decades, researchers have examined the relationship between pornography use, anxiety, and depression. The emotional component of shame has also been explored in connection with pornography use and other addictive behaviors. Recently, scholars have started to consider how the pornography user's moral values and religious beliefs influenced their usage and outcome behaviors (Baltazar, Helm, H. W., McBride, Hopkins, & Stevens, J. V., 2010; Bradley, Grubbs, Uzdavines, Exline, & Pargament, 2016; Hook et al., 2015). Extensive resources have been dedicated to investigating the male gender's usage of pornography both in solitude and relational settings (Hald, 2006; Manning, 2006; Twohig, Crosby, & Cox, 2009). Significantly less research has aimed to increase the knowledge surrounding the female gender's consumption of pornography (Borgogna & McDermott, 2018; Gola et al., 2017; Grubbs, Exline, Pargament, Hook, & Carlisle, 2015). To rectify this shortage of knowledge, the present study draws attention to the female user and how her pornography usage negatively impacts her self-concept and her relationships through an examination of the variables perceived addiction, social anxiety, and shame, moderated by grace. The inclusion criteria for this study specified age over 18 years old, classification as female gender, proficiency in English, an identification of the Christian faith, and use of pornography within the previous week. Four hundred and seventy participants completed assessments addressing perceived addiction for pornography use, shame as an internal and external emotion, social anxiety distress, and the religious aspect of grace. Quantitative analysis used both Pearson's Correlation Analysis for relationships between variables and linear regression with mediation and moderation to test for effects. Results suggested that perceived addiction to use is associated with increased global shame and social anxiety and increased external shame and social anxiety. Grace was found to be significantly negatively associated

with all research variables. However, the findings of this research study did not support the moderated mediation of grace for perceived addiction to shame to social anxiety.

*Keywords:* pornography, perceived addiction, social anxiety, shame, grace

**Copyright Page**

## Dedication

To my God - Thank You for loving me, leading me, and correcting me in ways I will never be able to fathom. Thank You for always knowing ‘exactly’ where I am.

To my Jack – You are my ‘always and forever’ love! Thank you for being the one to say “hello” that Monday at Free Chapel. My life journey forever changed that night!

To my kids – Elijah, Jana, Rebekah, Ella, and Jude, thanks for loving me unconditionally as your mother. You have each motivated me to be a better person, a better mom, and a better friend in ways you may never understand. You make me so proud to be your mom!

To my parents – Mom and Dad, thanks for housing us, feeding us, providing for us, and loving us through this thing called life. I love you both!

To my friends – Dearest Candy and Kathy, thank you for believing in me even in the ‘meanwhile’.

To my family – thanks for being the right mixture of backbone and crazy!

To my church home – Free Chapel, thank you for the billboard in Oakwood, Georgia so many years ago that directed our paths toward home. Thank you for the fast of 2014 – *Clean Slate: Time to Get it Right.*

This dissertation is dedicated to all of you!

Love,

Kate

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### **List of Abbreviations**

Acceptance, and Commitment Therapy (ACT)

Body Dysmorphic Disorder (BDD)

Compassion-Focused Therapy (CFT)

Cyber Pornography Use Inventory (CPUI)

Female Sex and Love Addicts (FSLA)

Generalized Anxiety Disorder (GAD)

Human Intelligence Task (HIT)

Internet Pornography Use (IPU)

Institutional Review Board (IRB)

Non-Suicidal Self-Injury (NSSI)

Obsessive-Compulsive Disorder (OCD)

Other as Shamer Scale (OAS)

Pornography Craving Questionnaire (PCQ)

Post-Traumatic Stress Disorder (PTSD)

Problematic Internet Use (PIU)

Self-Perceived Pornography Addiction (SPPA)

Sexual Addiction Screening Test (SAST)

Sexual Behavior Sequence (SBS)

Sexually Explicit Material (SEM)

Social Anxiety Disorder (SAD)

Traditional Masculinity Ideology (TMI)



## CHAPTER ONE: INTRODUCTION

Pornography usage not only affects men, but also women who choose to use solely and in partnered relationships (Ashton, McDonald, & Kirkman, 2019; Shaw, 1999; Wright, Bae, & Funk, 2013). The use of pornography, like sexual behavior, has been researched and discussed primarily as a man's issue for several decades (Baumeister, Catanese, & Vohs, 2001; Gola et al., 2017; Manning, 2006). This current knowledge, surrounding the usage of pornography, reveals both positive and negative effects regardless of gender (Borgogna & McDermott, 2018; Campbell & Kohut, 2017; Zillmann & Bryant, 1988). Positive effects for usage include increased knowledge about sex (Bridges, Sun, Ezzell, & Johnson, 2016), reducing stress (Baltazar et al., 2010), relationship satisfaction (Borgogna, Lathan, & Mitchell, 2018), and a liberating freedom of attitudes and behaviors (Short, Black, Smith, Wetterneck, & Wells, 2012). Documented negative effects for usage consist of depression (Levin, Lillis, & Hayes, 2012), anxiety (Bradley et al., 2016), relationship dissatisfaction (Clarkson & Kopaczewski, 2013), marital distress (Manning, 2006), and loneliness (Yoder, Virden, & Amin, 2005). Psychosocial problems, such as guilt (Griffiths, 2012), shame (Gilliland, South, Carpenter, & Hardy, 2011), anger (Wilt, Cooper, Grubbs, Exline, & Pargament, 2016), scrupulosity (Borgogna, Duncan, & McDermott, 2018), experiential avoidance (Borgogna & McDermott, 2018), and sexual shame (Volk, Thomas, Sosin, Jacob, & Moen, 2016) have all been associated with compulsive sexual behaviors. Pornography use also carries a potential for addiction, heightened by extended access on the internet (Clarkson & Kopaczewski, 2013; Gola et al., 2017; Roller, 2004). Scholarly attention has now been placed upon the female gender and their potential for problematic internet pornography use (Baranowski, Vogl, & Stark, 2019; Borgogna, Lathan, et al., 2018; Laier, Pekal, & Brand, 2014).

The following chapter will define pornography from social, religious, historical, and theoretical foundations. Attention will be brought to the fact that pornography usage, linked to perceived addiction, can become problematic for all populations regardless of age, gender, or religion (Bradley et al., 2016). Current research highlighting social anxiety (Asher, Asnaani, & Aderka, 2017), shame (Cândeia & Szentágotai-Táatar, 2017), and the religious concept of grace (Bufford, Sisemore, & Blackburn, 2017) will be presented. The empirical literature gap for female-gendered research will be addressed (Carroll et al., 2008a; Senn, 1993; Wright et al., 2013). As a theoretical framework, Sexual Behavior Sequence will be introduced concerning internet pornography and this study (Byrne, 1976; Fisher & Barak, 2001). Research questions are formulated to build upon the current knowledge surrounding women's usage of pornography and their perceived addiction. Hypotheses are presented along with conceptual models for study. The chapter concludes with assumptions and limitations, term definitions, and a significance of study summary.

### **Background**

There is trouble within the world of pornography for both male and female users of sexually explicit material, or SEM (Albright, 2008; Weinberg, Williams, Kleiner, & Irizarry, 2010; Wright et al., 2013; Zillmann & Bryant, 1988). Pornography, in the form of text, pictures, or visual material, is known for its nude images and sexual exploitations (Campbell & Kohut, 2017). Typically, the pornography user will experience short-term gratification with long-term negative consequences (Duffy, Dawson, & das Nair, 2016). A tendency toward addiction, with numerous symptoms, is only the beginning of the documented negative outcomes when one uses pornography regularly (Grubbs, Sessoms, Wheeler, & Volk, 2010). In the last ten years, problematic pornography usage has been documented as most likely to occur through the internet

(Grubbs et al., 2010). Researchers continue to strive in their efforts to prove that the addictive nature of pornography for men and women is worthy of documentation and inclusion in a future edition of the *Diagnostic and Statistical Manual of Mental Disorders, DSM* (Duffy et al., 2016). Most researchers agree internet pornography usage has pathological characteristics of both internet addiction and sex addiction (Griffiths, 2012). Yet, there are still those who believe the problematic behaviors of pornography do not qualify as addictive even after years of research (Kraus, Voon, & Potenza, 2016). Because a clear diagnostic framework does not exist, the terminology for perceived addiction to pornography was birthed out of a need to establish addictive behaviors for pornography users without medically labeling those behaviors (Grubbs, Stauner, Exline, Pargament, & Lindberg, 2015).

Socially acceptable, pornography is often used as a coping mechanism for life's daily stressors (Cooper, Delmonico, Griffin-Shelley, & Mathy, 2004; Paul & Shim, 2008; Young, 2008). In particular, internet pornography has been described as a sexually liberating outlet for women and other minority demographics (Griffiths, 2012). As the internet increased accessibility to pornography (Cooper, Scherer, Gordon, & Boies, 1999), the number of clients in counseling with problematic sexual behaviors began to gain the attention of therapists and researchers (Duffy et al., 2016). When online sexual behaviors become excessive, the behaviors may be perceived as problematic with addictive qualities (Griffiths, 2012). Perceived addiction is a self-diagnosis of addiction to pornography, where the user becomes aware of their feelings of dysregulation and starts to experience compulsive behaviors (Grubbs, Wilt, Exline, Pargament, & Kraus, 2018). The pornography user's attitude or feelings toward addiction are more determinate of perceived addiction than their actual daily usage of sexually explicit material (Grubbs, Stauner, et al., 2015).

Research continues to document negative outcomes for the internet pornography user including psychological mental health problems (Kraus et al., 2016), financial hardships (Clarkson & Kopaczewski, 2013), legal issues (Griffiths et al., 2014), and occupational consequences (Cooper et al., 2004; Schneider, 2000). Primarily, relationship dissatisfaction variables, linked with marriage and family therapy, are the leading effect consequence continuously reported in the literature (Manning, 2006). In their systematic review of peer-reviewed journal articles, Duffy, Dawson, and das Nair, (2016) noted isolation due to self-perceived pornography addiction, or SPPA, contributes to the breakdown of relationships for users. The researchers also recognized how partners of SPPA experience the negative effects of shame, isolation, and betrayal based on the addict's behaviors (Duffy et al., 2016). A spouse or partner who believes their inadequacies contribute to the SPPA of the user will experience even more emotional distress (Duffy et al., 2016). The third-party effect, or perceived harm of others, is one way the female gender is considered valuable to pornography use research (Hald & Malamuth, 2008).

In the early 2000s, pornography research shifted when the disciplines of theology and psychology started to examine the relationships between spiritual beliefs, religious practices, and human sexual behavior (Grubbs & Hook, 2016). The emerging knowledge greatly added to the area of sexual addiction leading to the recognition of perceived addiction to pornography use as a separate and distinct construct (Grubbs & Hook, 2016). Defined by Grubbs, Stauner, et al., (2015), perceived pornography addiction is the feeling of being addicted to pornography which incorporates self-diagnosis or an individual's interpretation of their reality. Perceived addiction to pornography is strongly correlated with religiosity, moral disapproval, and psychological

distress for men and women (Bradley et al., 2016; Grubbs, Wilt, et al., 2018; Wilt, Cooper, et al., 2016).

Grubbs and colleagues (2018) defined moral disapproval as a violation of deeply held religious beliefs. For the pornography user, moral disapproval is continued usage despite believing pornography is wrong (Grubbs, Wilt, et al., 2018). Moral disapproval is highly correlated with emotional distress and will predict a pornography user's score on the Cyber-Pornography Use Inventory, or CPUI-9, created to measure internet pornography usage (Fernandez, Tee, & Fernandez, 2017; Grubbs, Volk, Exline, & Pargament, 2015; Wilt, Grubbs, Exline, & Pargament, 2016). A declarative belief in God can contribute to an increase in moral disapproval, directly increasing perceived addiction to pornography (Bradley et al., 2016; Grubbs, Wilt, et al., 2018). Therefore, religiosity can create a heightened awareness of an individual's repeated behavioral patterns which are contrary to their acceptable moral behavior (Wilt, Grubbs, et al., 2016). Grubbs, Exline, Pargament, Hook, and Carlisle, (2015) were among the first researchers to suggest future studies be conducted to evaluate a woman's perspective on pornography use, moral disapproval, and perceived addiction.

Historically, pornography usage has been viewed as a man's issue (Gola et al., 2017; Hald, 2006; Twohig et al., 2009). Since the 1970s and 1980s, investigations surrounding pornography have been researched with male populations, designed for male-gendered discussions (Amoroso & Brown, 1973; Griffin-Shelley, 2003). Male consumption has never been debated, as empirically documented, the male gender consumes enormous amounts of pornography (Hald, 2006; Hald & Malamuth, 2008; Schneider, 2000a). Yet, historically women's consumption and negative effects have practically been ignored (Ciclitira, 2004; Senn, 1993; Shaw, 1999). Great attempts have been made by researchers to convince the public and

medical community that pornography will never be problematic for women, repeatedly quoting consumption rates (Paul & Shim, 2008). However, during the last 50 years, few researchers have solely explored the female gender and their relationship to pornography usage (Paul & Shim, 2008; Senn, 1993).

The 1970s and the free-spirited generation for women's rights saw a rise in the small percentage of women who viewed pornography both alone and with sexual partners (Decarlo, McGlennon, Tait, Brennan, & Garcia, 1984; Mann, Sidman, & Starr, 1973; Mosher, 1973). Women were finally sexually liberated to explore sex and sexual behaviors beyond the constraints of a marriage in the new sexual revolution (Birenbaum, 1970). During the decade of the 1980s, both sides of the pornography controversy claimed their viewpoints (Ciclitira, 2004; Cowan, Chase, & Stahly, 1989; Jelen, 1986). Fundamentalists believed the use of pornography violated God's principles and destroyed marriages (Jelen, 1986), while the feminist movement insisted pornography violated the rights of women through objectification and dehumanizing practices (Cowan et al., 1989). Interestingly, both sides of the pornography issue agreed on the industry's negative propaganda toward women (Shaw, 1999) though neither side impacted production or consumption of the material (Ciclitira, 2004).

Later in the 1990s, the internet changed pornography consumption beyond the printed page and into households across America and the world (Boies, 2002; Cooper, Scherer, et al., 1999; Griffin-Shelley, 2003). Playboy's centerfold models were replaced with amateur housewives (Leiblum, 2001). Ordinary women slowly started to explore the world of pornography in different ways such as chat rooms, live feeds, and amateur videos (Cooper, Scherer, et al., 1999; Leiblum, 2001; Weinberg, Williams, Kleiner, & Irizarry, 2010). The everyday housewife now had a world of pornographic material at her fingertips, with total

anonymity (Döring, 2000; K. S. Young, 2008). Research, around the same time, linked the invisibility of the internet with social distress, including social anxiety (Shepherd & Edelman, 2005). From the middle 1900s, the internet began to fuel another sexual revolution, this time a digital one, with millions of users and billions in revenue each year (Cooper, Griffin-Shelley, Delmonico, & Mathy, 2001). Thirty years later it becomes difficult, almost impossible, to find a woman past her twenties who has never viewed internet pornography or used pornography with a partner.

### **Theoretical Framework**

The early internet sex addiction and compulsivity research of Cooper (1998) and Young (1998) allowed two different theoretical views of sexuality to emerge among professionals, counselors, and even the medical community. First, a pathological theoretical framework with its emphases on the addiction process, perceived addiction, and psychological outcomes such as depression and anxiety became apparent and continue to be heavily researched (Griffiths, 2012; Grubbs, Exline, Pargament, Volk, & Lindberg, 2017; Kor et al., 2014; Voros, 2009). This viewpoint has been divided over the last twenty years debating addiction or compulsivity. Yet, the pathological framework remains the leading model for most sexual behavior studies. Researchers are now introducing the conceptual variables of religiosity, perceived addiction, moral disapproval, shame, and guilt in various attempts to manipulate the outcome of psychological distress for the pornography user (Grubbs, Stauner, et al., 2015; Murray, Ciarrocchi, & Murray-Swank, 2007; Volk et al., 2016)

A second more relaxed theoretical framework developed which embraced the ideas of sexual expression (Weinberg et al., 2010), sex education (Ashton et al., 2019), relationship satisfaction (Maas, Vasilenko, & Willoughby, 2018), and relationship enhancement (Kohut,

Balzarini, Fisher, & Campbell, 2018). The sexual expression theoretical framework examines how marriages and relationships experience both positive and negative outcomes with the usage of pornography (Daspe, Vaillancourt-Morel, Lussier, Sabourin, & Ferron, 2018; Doran & Price, 2014; Poulsen, Busby, & Galovan, 2013). Researchers who have incorporated a sexual expression type of framework have sought to normalize pornography usage over the last twenty years. Weinberg and colleagues (2010) followed such a theory when reporting on 245 college students using script-theory interviews, concluding that pornography use is liberating and empowering. The scholars also concluded the normalization of pornography has greater mediated effects on the female gender as they are more likely than males to expand into new sexual behaviors based on their pornography consumption (Weinberg et al., 2010). A recent study, conducted in Australia, continued the sex education theoretical framework by interviewing 27 women about their experienced pleasure from viewing pornography (Ashton et al., 2019). Results indicated women are motivated to use pornography based on the idea of increased knowledge about sex (Ashton et al., 2019). The researchers considered their efforts to be an extension of sexual health for the modern woman (Ashton et al., 2019).

In both framework areas, researchers have started shifting focus toward the female gender's consumption of pornography (Baranowski et al., 2019; Borgogna, Lathan, et al., 2018; Lewczuk, Szmyd, Skorko, & Gola, 2017). Research on pornography use for women is now moving beyond a sexual addiction or sexual deviant perspective (Ashton et al., 2019; Laier et al., 2014). Pornography use for the female gender does exist with problematic negative outcomes (Albright, 2008; Cooper, Scherer, et al., 1999; Senn, 1993; Wright et al., 2013). Yet, the woman of faith with a religious background continues to be ignored in the literature.



As a theoretical framework for pathological studies, the Sexual Behavior Sequence, or SBS (Figure 2.1), connects to internet pornography usage and allows this study to analyze the behavior, affect response, cognitive response, and consequence of social anxiety in a defined way (Byrne, 1976; Fisher & Barak, 2001; Gould, 1992). The chief author of SBS, Donn Byrne (1976) developed the social psychological theory as a way of studying the antecedents and consequences of sexual behavior. Later Fisher and Barak (2001), translated the model's use to include sexual behavior with internet usage.

Sexual Behavior Sequence states that following unconditioned and conditioned erotic cues, an individual will experience sexual arousal, affective responses, and cognitive responses (Fisher & Barak, 2001). According to SBS, cognitive responses to stimuli result in the three forms of imaginative, informational, and expectative responses (Fisher & Barak, 2001). Imaginative responses are based on script-like influences while informational responses are based on the individual's belief system (Fisher & Barak, 2001). Expectative responses are subjective to the sexual experience of the user and determined by their informational responses (Fisher & Barak, 2001). Those responses will motivate preparatory or overt sexual behaviors leading to positive and negative outcomes (Fisher & Barak, 2001). Consequences from sexual behavior will influence the internet pornography user to continue in the feedback loop again (Fisher & Barak, 2001). This current research study finds theoretical stability in the Sexual Behavior Sequence (Byrne, 1976; Fisher & Barak, 2001).

### **Psychosocial and Emotional Variables**

Social anxiety is commonly referred to in the literature as social phobia or SAD, social anxiety disorder (Alkis, Kadirhan, & Sat, 2017; M. Asher et al., 2017; Căndea & Szentágotai-Tătar, 2017). SAD is prevalent more for the female gender than the male; typically, due to social

interactions being perceived as fearful for women (Asher et al., 2017; Turk et al., 1998). Social anxiety can manifest itself as behavioral, physical, and cognitive symptoms (Rapee & Heimberg, 1997). Cognitive symptoms of social anxiety can appear as ruminations that interfere with concentration levels (Rachman, Grüter-Andrew, & Shafran, 2000). The negative emotion of shame plays an important role in the activating and maintaining of social anxiety symptoms through post-event rumination (Cândeia & Szentágotai-Tătar, 2017). Future research is needed to further connect the relationship of social anxiety with shame (Cândeia & Szentágotai-Tătar, 2017).

The emotion of shame is a negative evaluation of the self; it is an affect, or affective response (Clark, 2012; Kim, Thibodeau, & Jorgensen, 2011; Tracy & Robins, 2004). As a self-conscious emotion, shame is directly linked to social and relational functioning (Kim et al., 2011). Shame can be divided into internal shame or judgment of self, and external shame or judgment from others (Cândeia & Szentágotai-Tăta, 2018; Gilbert, 2000; Kim et al., 2011). External shame carries a stronger association with social anxiety symptoms than internal shame (Cândeia & Szentágotai-Tăta, 2018; Gilbert, 2000). Results from research indicate shame and shame proneness are stronger in women than men when associated with depressive symptoms, social acceptance, and interpersonal relationships (Kim et al., 2011; Tangney, Wagner, & Gramzow, 1992). Shame predicts post-event rumination, or PER, and is a mediator between PER and social anxiety (Cândeia & Szentágotai-Tătar, 2017). Therapeutic keys to unlocking the self-conscious emotion of shame are self-acceptance and love (Clark, 2012; Lund, 2017).

Grace is a multidimensional faith concept, commonly grouped with forgiveness and compassion in research studies (Bufford et al., 2017). Spiritually, grace is a gift from God through His Son, Jesus Christ, to all mankind (Bufford, McMinn, Moody, & Geczy-Haskins,

2018; Bufford et al., 2017). Scientifically, Christ is the mediator of grace from God to an individual (Judd, Dyer, & Top, 2018). A high assessment of grace is correlated with low measures of anxiety, depression, and shame (Judd et al., 2018). Grace interventions through individual practices and small group therapies can increase a pornography user's comprehension of grace to self, grace from others, grace to others, and God's grace (Bufford et al., 2018). Future research is needed to develop a stronger connection between grace and mental health for spiritual well-being (Bufford et al., 2017; Judd et al., 2018).

The calls for future pornography research with female-gendered populations are too numerous to count (Borgogna & McDermott, 2018; Carroll et al., 2008a; Cooper et al., 2004; Gola et al., 2017; Manning, 2006; Paul & Shim, 2008; Prizant-Passal, Shechner, & Aderka, 2016; Senn, 1993; Twohig et al., 2009; Wright et al., 2013). There are future research requests for women and problematic pornography viewing, or PPV, and problematic pornography usage, or PPU (Borgogna & McDermott, 2018; Gola et al., 2017). Research is also needed to establish women's consumption rates with specific genres of pornography (Manning, 2006; Senn, 1993; Wright et al., 2013). Next, scholars are asking future researchers to establish empirical data beyond the male college-aged populations with a direct focus on women of all ages (Carroll et al., 2008a; Cooper et al., 2004; Paul & Shim, 2008; Twohig et al., 2009). Finally, there is an urgency for research connecting social anxiety beyond problematic internet use, or PIU, to internet pornography usage (Prizant-Passal et al., 2016).

### **Statement of the Problem**

The problem is that Christian women who consume internet pornography can experience perceived addiction, social anxiety, and shame which may negatively impact their self-concept and their relationships. This may be moderated by the variable of grace. Internet pornography

use is related to perceived addiction, social anxiety, and shame for all women, regardless of faith (Baltazar et al., 2010; Borgogna & McDermott, 2018; Erez, Pilver, & Potenza, 2014). Research has established that sexually explicit material consumption, including IPU or internet pornography use, results in outcome consequences for the user (Baumeister et al., 2001; Boies, 2002). The prevalence rate of consumption for women has accelerated with each passing year since the introduction of the internet (Kuss, Griffiths, Karila, & Billieux, 2014). Affect responses from pornography use have been documented as shame, guilt, anger, and sexual shame (Gilliland et al., 2011). Cognitive responses, such as perceived addiction to pornography, are still being explored (Volk et al., 2019). Research has also successfully established women who use the internet, in addictive patterns, are vulnerable to increased social anxiety (Prizant-Passal et al., 2016).

Despite the knowledge gained over the last 50 years, there continues to be a need to learn more through a study with a female population and their consequences from use. Researchers do not know how prevalent the consumption of pornography is within the Christian community for women (Manning, 2006). The affect response of shame for women who use pornography has also not been faithfully studied (Gilliland et al., 2011). Social anxiety in connection with pornography use has not been studied extensively for men or women (Prizant-Passal et al., 2016; Shepherd & Edelman, 2005; Zlot, Goldstein, Cohen, & Weinstein, 2018). There is also limited research on the religious component of grace and its cultural significance for therapeutic purposes (Bufford et al., 2018). Researchers also do not know if perceived addiction to pornography has a direct effect on women and their consequences of use (Grubbs, Exline, et al., 2015; Grubbs, Volk, et al., 2015).

Today's scholars are seeking advanced research in the following three key areas: consumption prevalence (Borgogna & McDermott, 2018; Manning, 2006), negative consequences of use (Albright, 2008), and perceived addiction (Grubbs, Exline, et al., 2015). Manning (2006) asked future research to consider how consumption is different for men and women. Borgogna and McDermott (2018) wrote how future research needs to include problematic pornography viewing, or PPV, for women. Albright (2008) specifically suggested that negative mental health outcomes such as anxiety be extensively studied in samples of women. Finally, Grubbs and colleagues (2015) asked for perceived addiction to be studied with the female gender as differences of use for men and women have appeared in previous studies (Hald, 2006). This study examined the Christian woman's consumption of pornography as it related to perceived addiction, social anxiety, and shame with the moderating variable of grace.

### **Purpose of the Study**

The purpose of this non-experimental quantitative research study was to examine the Christian woman's usage of internet pornography as it related to perceived addiction, social anxiety, and shame, also examining the spiritual concept of grace as a moderator to decrease the negative outcomes associated with use. This research study utilized an Amazon Mechanical Turk survey sample to measure the Christian woman's perceived addiction to pornography use directly from the internet. The research study bridges the gap in current literature regarding the female gender's pornography use, perceived addiction, social anxiety, shame, and the religious component of grace. In addition, the new data strengthens the empirical connections which already existed between perceived addiction and shame, social anxiety and shame, and pornography use with perceived addiction. Therefore, the results obtained in this study fill

several literary gaps and provides insight into the pornography use of Christian women, as well as their experienced levels of perceived addiction, social anxiety, and shame.

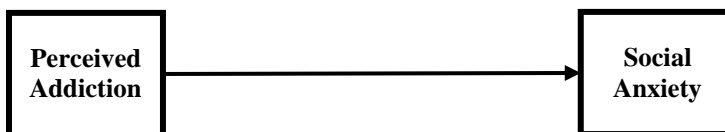
### Research Questions

The research questions for this study critically examined the relationship between perceived addiction to pornography use and social anxiety. Each question was formulated to retrieve qualitative data to easily document such a relationship. The first research question asked, “What is the relationship between perceived addiction to pornography use for women and social anxiety?” Figure 1.1 demonstrates research question one in a pictorial representation. In question one, perceived addiction was identified as the independent variable while social anxiety became the dependent variable. This research question, in alignment with SBS theory, was designed to verify if social anxiety was experienced as an outcome by women who frequently use pornography and felt as if they have addiction based tendencies (Fisher & Barak, 2001). Therefore, the first hypothesis stated there would be a positive relationship between perceived addiction to pornography use for women and social anxiety.

**RQ1:** What is the relationship between perceived addiction to pornography use for women and social anxiety?

**Figure 1.1**

*Conceptual Model of Research Question One*



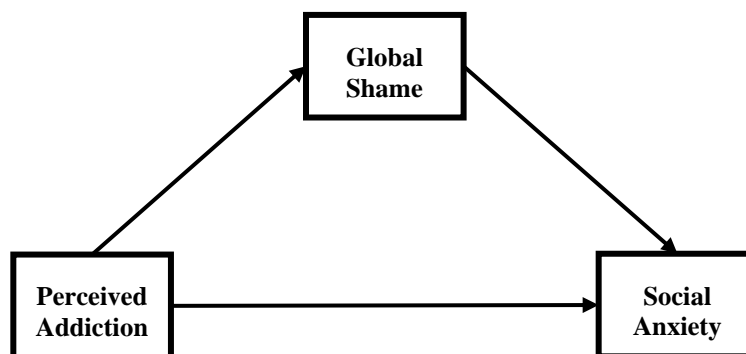
Research question two became a continuation of question one and explored the following: “Is the relationship between perceived addiction and social anxiety mediated by the

negative emotion of global shame?” The model for research question two is displayed in Figure 1.2. Question two was formulated with the mediation of global shame to further explain the hypothesized relationship between perceived addiction and social anxiety in question one. A mediation model will attempt to explain the “how” or “why” for the two variables of perceived addiction and social anxiety (Bolin, 2014). Mediation also provided a therapeutic layer to the research questions. This question continued to expand on the research formulated by Căndea and Szentágotai-Tătar (2017) which reported shame as a mediator between rumination and social anxiety. Following the SBS theory, shame becomes an emotional response to pornography use with perceived addiction (Fisher & Barak, 2001). The mediation of shame provided the research with a target for counseling interventions. Therefore, the second hypothesis stated the relationship between perceived addiction and social anxiety would be mediated by the negative emotion of global shame.

**RQ2:** Is the relationship between perceived addiction and social anxiety mediated by the negative emotion of global shame?

**Figure 1.2**

Conceptual Model of Research Question Two.



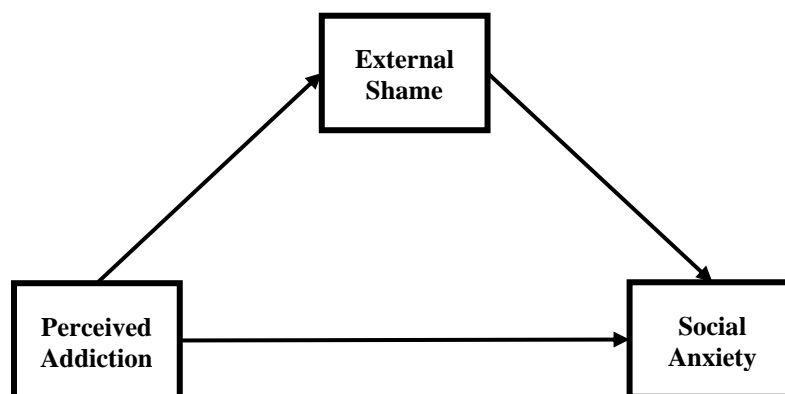
The third research question asked if the relationship between perceived addiction and social anxiety was mediated by external shame. This question continued to expand on research question one by separating external shame from global shame as a potential mediator. Mediation by external shame attempted to develop another layer of understanding between the relationship of perceived addiction and shame. Figure 1.3 displays the model for this research question.

Does external shame increase social anxiety separate from global shame? The third hypothesis stated the relationship between perceived addiction and social anxiety would be mediated by external shame. For clinicians, this question attempted to provide empirical support for perceived addiction and its association with external shame.

**RQ3:** Does external shame mediate the relationship between perceived addiction and social anxiety?

**Figure 1.3**

*Conceptual Model of Research Question Three*



The fourth research question added the spiritual component of grace as a moderator to global shame and social anxiety. Model representations for research question four is provided in Figure 1.4. The hypothesis stated that grace moderates the previously mentioned relationships by allowing the woman who uses pornography a greater sense of well-being, through the

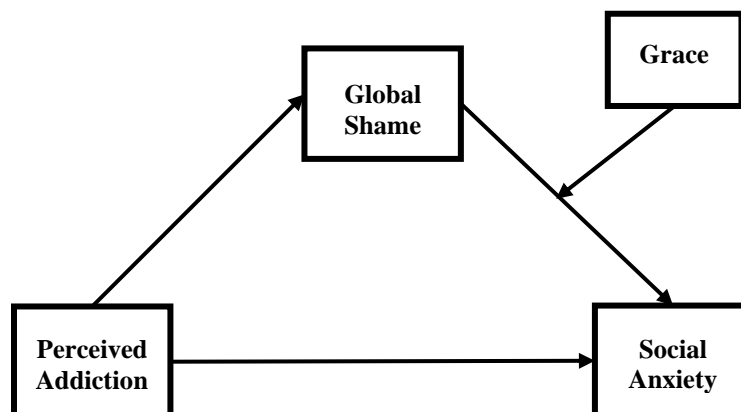


workings of Christ. Does grace alleviate the global shame experienced by women who use pornography? Are social anxiety symptoms reduced when the spiritual component of grace is understood by women who use pornography? If grace changes or moderates the overall relationship between global shame and social anxiety, then both clinicians and pastoral counselors have a direct therapeutic target when assisting women who use pornography. Hypothesis four stated the interaction of global shame and grace would transmit an effect on social anxiety.

**RQ4:** Does the spiritual aspect of grace moderate the relationship between global shame and social anxiety for women who have used pornography?

**Figure 1.4**

*Conceptual Model of Research Question Four*



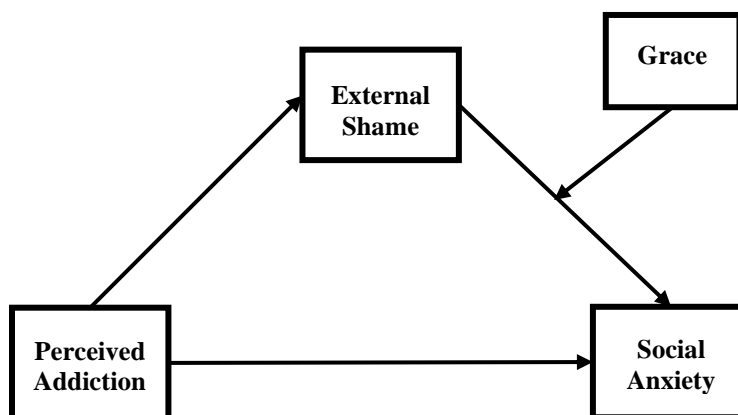
The fifth research question added the spiritual component of grace as a moderator to external shame and social anxiety. Model representations for research question five is provided in Figure 1.5. Does the Christian woman's understanding of grace serve to alleviate the external shame she experiences after pornography use? Does the spiritual concept of grace work to change how the female pornography user views the judgment of others through her external

shame? Hypothesis five stated the interaction of external shame and grace would transmit an effect on social anxiety.

**RQ5:** Does the spiritual aspect of grace moderate the relationship between external shame and social anxiety?

**Figure 1.5**

*Conceptual Model of Research Question Five*



The final research question introduced the spiritual component of grace to the mediation model of perceived addiction, shame, and social anxiety. This question asked if the indirect effect of perceived addiction on social anxiety through both global shame and external shame would be moderated by grace. Therefore, the sixth hypothesis stated that the indirect effect of perceived addiction to social anxiety would be mediated through global and external shame and moderated by grace.

**RQ6:** Is the relationship between perceived addiction and social anxiety mediated by global and external shame and moderated by grace?

### **Nature of Study**

The research method selected for this study is a non-experimental quantitative study used in reference to the SBS theory originated by Byrne (1976). Perceived addiction would be

considered a cognitive or imaginative response from previous pornography usage. Social anxiety was analyzed as a negative outcome of behavior. Shame as an affect response was tested in mediation analysis as contributing to the perceived addiction and social anxiety relationship. Finally, the spiritual component of grace was tested in moderation analysis as a therapeutic agent of change. This research provided the therapeutic community critical insight into how Christian women are directly influenced by their pornography use and perceived addiction to that usage, potentially breaking the negative cycles of use.

### **Significance of the Study**

This study continued to build on the current knowledge surrounding the usage of pornography, by drawing attention to the female user and how her pornography use negatively impacts her self-concept and may destroy her relationships by an examination of the variables of perceived addiction, social anxiety, and shame, moderated by grace. The study further developed the SBS theory related to internet pornography. Results and discussion will increase the academic dialogue surrounding perceived addiction to pornography use, the negative emotion of shame, and the resolute working of grace in a believer's life. The current research established a connection from perceived addiction of use to social anxiety for women. A greater understanding of the constructs used in the study will prove beneficial for many audiences including pastors, pastoral care, researchers, counselors, clinicians, and the general public for years to come. Pastors and pastoral care will benefit from the proceeding current study of grace as a moderating effect on mental and spiritual well-being. This study leads to an increased correlation of data for researchers investigating the usage of pornography with perceived addiction, possibly the first time for a female-gendered only study. For counselors and clinicians, a deeper enrichment of the constructs of shame and social anxiety adds to mental

health awareness. Finally, the current study wanted to bring insight to the general public about the struggles of pornography usage for women, highlighting the damaging addictive nature of pornography use.

### **Assumptions and Limitations**

Assumptions and limitations for the current study were based on the following: Amazon MTurk survey, time frame for collection, self-reporting of data, and Christian religious preference. Survey data from Amazon MTurk was biased toward those who use the internet and not a truly random sampling of the general population (Erwin, Turk, Heimberg, Fresco, & Hantula, 2004). The internet data from Amazon MTurk did not allow for the authenticity of submission to be confirmed (Erwin et al., 2004). Follow-up assessments cannot determine if variables would have changed given the longevity of the study (Erwin et al., 2004). The data were collected with reference to the time period allotted for the year 2020, after the coronavirus pandemic and with weeks spent in housed quarantines (Erwin et al., 2004). Higher religious participation can contribute to lower pornography use (Butler, Pereyra, Draper, Leonhardt, & Skinner, 2018). Self-reporting of pornography use by women is subject to distortion and represented by type one errors (Butler et al., 2018). Finally, the largest assumption made by this research study is that all participants answered truthfully to all responses.

### **Definitions**

*Addiction*, as defined by Young (2004), was understood as continued behavior despite identifiable problems associated with use along with a preoccupation to use, uncontrollable urges, and loss of control. Roller (2004) described addiction as high-risk behavior or self-destructive actions that caused feelings of shame and repeated interpersonal and intrapersonal problems. Hall (2011) suggested addiction is a commonly used term referring to any pattern of

repeated behaviors. For this study, addiction was defined as continued behavior that results in consequences of those behaviors.

*Internet Addiction* was defined by Young (2004) as an excessive behavior with characteristics of an impulse-control disorder despite the use of any intoxicants, drugs, or other chemical dependence. The definition for this study is stated as follows: excessive use of the internet which results in consequences from the usage.

*Pornography* has numerous definitions, which alludes to problems for researchers in the collection of data and correlation of studies. Hald and Malamuth (2008) suggested the definition of pornography be stated as the material aimed at creating or enhancing sexual thoughts or feelings which includes description or exposure of the genitals or explicit sexual acts. Döring (2009) defined pornography as photos, videos, films, clips, or text which contains explicit sexual activity. Pornography was defined by Levin et al., (2012) as explicit materials used for sexual satisfaction or erotic arousal. Campbell and Kohut (2017) defined pornography as audio-visual, pictorial, or written media that depicts nudity or sexual behavior. Pornography, for this study, was defined as written text, picture images, videos, or other sexually explicit material that contains nudity or sexual activity resulting in sexual arousal through thoughts or feelings.

*Internet Pornography* is also commonly referred to as online sexual activity, OSA, or cybersex. Shaughnessy, Byers, and Walsh (2011) defined OSA as the use of the internet for sexual pleasure, sexual arousal, or sexual information seeking. Cooper and colleagues (2004) defined OSA as involving the internet for sexual purposes in any media format. Döring (2000) defined cybersex as a collective term where computer-mediated interactions occur for those seeking sexual arousal and satisfaction. Hereafter, pornography, and internet pornography will be collectively referred to throughout this dissertation as “pornography” unless otherwise stated.

*Problematic pornography use* was defined in this study as the use of pornography that causes emotional distress, is perceived as addictive, and creates interpersonal, vocational, or personal difficulties for the user (Grubbs, Volk, et al., 2015). The definition suggested by Grubbs, Volk, and colleagues (2015) describes problematic pornography use as unrelated to time spent. Other researchers have explained problematic pornography use involved a wide range of negative outcomes (Twohig et al., 2009), desired thinking, and craving (Allen, Kannis-Dymand, & Katsikitis, 2017), with excessive engagement (Kor et al., 2014).

*Frequency of pornography use* was defined for this study as a minimum of one use in the previous reporting week. Regnerus, Gordon, and Price (2016) analyzed four national surveys to determine the range for women reporting frequency of use as once per week could be as low as 16% or as high as 40% depending on the variables researched. As the use of internet pornography becomes more commonplace for women, frequency rates of once per week will be reported by at least 20%, or one in five women (Regnerus et al., 2016).

*Perceived Addiction to Pornography* was defined as the feeling or belief that one is addicted to pornography usage without a medical diagnosis. Grubbs, Stauner, and colleagues (2015) define perceived addiction as the level to which a person feels they are addicted to pornography use. Volk and colleagues (2019) stated that perceived addiction involves the conflict which surrounds the desire to quit pornography, despite consistent use.

*Social Anxiety*, for this research, was defined as an intense fear of the negative evaluation of others from social situations. Commonly referred to as social anxiety disorder, SAD, or social phobia in research, social anxiety's key characteristic is fear of social situations that cause functional impairment (Aderka et al., 2012; R. Asher & Brissett, 1988; Heimberg, Brozovich, & Rapee, 2014). Individuals with social anxiety have a reduced quality of life, as the mental illness

transfers into all areas of their lives including: social, relational, educational, and vocational (Aderka et al., 2012).

*Shame* was defined for this study as the painful moral emotion which results from self-reflection or self-evaluation. Gilbert (2002) defined shame as a painful affect from the perceptions of self and others. According to Kim and colleagues (2011), shame is a self-conscious emotion directly tied to social and relational functions. Shame often has been defined as a negative evaluation of self or the flawed-self which involves feeling unworthy (Hall, 2011; Kim et al., 2011; Wiechelt, 2007). Global shame is often a measurement of both internal shame and external shame combined. Hereafter, shame, and global shame will be collectively referred to throughout this dissertation as “shame” unless otherwise stated.

*External shame* is typically defined as shame that is ‘others’ focused (Gilbert, 2000; Goss, Gilbert, & Allan, 1994; Kim et al., 2011). This type of shame is based on the exposure of oneself to others, the evaluation of others, or the negative view of self from others (Cândeia & Szentagotai-Tăta, 2018; Gilbert, 2000; Kim et al., 2011). The Other as Shamer scale, OAS, was developed out of the need to separate the self-evaluation part of shame from the beliefs about judgment from others (Gilbert, 2000; Goss et al., 1994; Kim et al., 2011). For this study, external shame was defined as the painful feeling that concerns how other people feel about you.

*Grace* was defined as a gift from God, mediated by Jesus Christ (Judd et al., 2018). Spiritual grace is often referred to as a healing or an enabling power even strength for suffering (2 Corinthians 12:9, HCSB). For this study, grace was defined as an unconditional gift from God, through Jesus for mankind which provides healing and strength in times of need.

## Summary

Pornography usage has been researched and documented for years as problematic, with addiction tendencies (Carroll et al., 2008a; Manning, 2006; Roller, 2004; Twohig et al., 2009). Internet pornography increased usage and associations with negative outcomes, resulting in new research recognizing perceived addiction to pornography (Bradley et al., 2016; Grubbs, Wilt, et al., 2018; Wilt, Cooper, et al., 2016). The everyday woman now uses pornography, including those who identify as religious (Borgogna, Lathan, et al., 2018; Lewczuk et al., 2017; Wright, 2013). Pornography use, as erotic stimuli, results in affect responses, cognitive responses, and negative outcomes of behavior as defined by the SBS theoretical method (Byrne, 1976; Fisher & Barak, 2001). Future research focused on women is now required (Carroll et al., 2008a; Ciclitira, 2004; Wright et al., 2013). This non-experimental quantitative research study examined the Christian woman's usage of internet pornography with the relationships of perceived addiction, social anxiety, shame, and grace in the year 2020.



## CHAPTER TWO: LITERATURE REVIEW

Pornography usage is not an unknown research topic as the impact (Duffy et al., 2016; Manning, 2006; Patterson & Price, 2012; Shaw, 1999), effect (Campbell & Kohut, 2017; Shope, 2004; Staley & Prause, 2013; Zillmann & Bryant, 1988), and addiction (Clarkson & Kopaczewski, 2013; Gola et al., 2017; Grubbs, Exline, et al., 2015; Hall, 2014; Voros, 2009) of pornography continues to be studied across the world. However, the impact of pornography usage for women and exclusively women of the Christian faith has yet to be extensively researched where the gender of females is a practical variable (Ciclitira, 2004; Manning, 2006; Senn, 1993). Numerous reasons for a lack of empirical research stem from stated opinions that pornography use for women is not a singular action and only occurs within the context of a romantic partnership (Hook, Worthington, Hook, Miller, & Davis, 2011; Shaughnessy et al., 2011; Shaw, 1999; Wright et al., 2013). Previous researchers have included women in their surveyed participants, implying in their discussions a commonality between use and gender (Boies, 2002; Grubbs et al., 2010; Yoder et al., 2005). Recently, an increase in female only surveys have occurred, indicating researchers now recognize the importance of investigating women as consumers of pornography (Basson, 2002; Borgogna, Lathan, et al., 2018; Wright et al., 2013)

The purpose of this non-experimental quantitative research study was to examine the Christian woman's usage of internet pornography as it related to perceived addiction, social anxiety, and shame, also examining the spiritual concept of grace as a moderator to decrease the negative outcomes associated with use. Specifically, the first research question explored the relationship between perceived addiction and social anxiety as a negative psychological outcome. The second question examined whether the variable of global shame mediates the

relationship between perceived addiction and social anxiety. Next, the mediation of external shame allowed for another dimension to be added to the dynamic relationship between perceived addiction and social anxiety. In alliance with the SBS theory, social anxiety was evaluated as a negative outcome, shame as an affective response, and perceived addiction as a cognitive or imaginative response (Fisher & Barak, 2001). Finally, a religious understanding of grace was hypothesized to moderate the relationship between shame and social anxiety following perceived addiction to pornography use.

This chapter includes an overview of previous research conducted on pornography, internet pornography, a comparison of usage for male and female genders, social anxiety, shame, and perceived addiction. The spiritual aspect of grace will be explored as components of grace to self, grace from others, grace to others, and grace from God. Next, a lack of empirical research for women will be established along with suggestions for future research focused on the female gender. Finally, research hypotheses with conceptual models will be presented and outlined.

### **Pornography**

Explicit sexual behavior has been viewed throughout history in large areas of worship to pagan gods, movie theater screens, in pictures of famous “pin-up” girls on college dorm walls, and the ever-popular magazines (Paasonen, Nikunen, & Saarenmaa, 2007). The term pornography has been used to describe a visual form of sexually explicit material that included nudity and sexual behavior for sexual arousal or fantasy (Reid, Li, Gilliland, Stein, & Fong, 2011). The display of genitalia has also been used to describe pornographic material by some researchers including Short, Black, Smith, Wetterneck, and Wells, (2012). The history of research surrounding pornography usage includes the areas of pre-internet or erotica material

(Morokoff & Heiman, 1980), social acceptability (Winick & Evans, 1994), opposing sides of controversy (Ciclitira, 2004), and the quest to determine addiction diagnosis as compared to compulsive behavior (Voros, 2009).

Early research for pornography, or sexually explicit material, SEM, established roots around the 1970s, with the first surveys reporting and documenting sexual arousal (Decarlo et al., 1984; Morokoff, 1985; Morokoff & Heiman, 1980). These surveys, or session studies, measured sexual arousal for both genders influenced by erotic content in story form (Decarlo et al., 1984), audiotape (Heiman, 1977), and videotape (Morokoff, 1985). Females reported more arousal than males, by nontraditional sex roles in the three-session study by Heiman (1977). Similarly, Decarlo et al., (1984) reported female sexual arousal increased when the dominant character of the SEM was same-gendered, or female. Early SEM research confirmed exposure to erotica increases sexual arousal for all women, especially those considered sexually inhibited (Morokoff, 1985)

The second wave of SEM research, during the '70s and '80s, took full advantage of pornography as a social issue and introduced to research attitudes toward acceptance (Birenbaum, 1970; Herrman & Bordner, 1983; Scott, 1991; Winick & Evans, 1994). A sexual revolution started to change American society; pornography or SEM was silently influencing the moral values and standards of each citizen (Birenbaum, 1970). Personal standards compared with community standards started to fluctuate, especially in Southern states, where personal standards still held a direct connection to demographic characteristics such as age, sex, race, religion, and education levels (Herrman & Bordner, 1983). Pornography in the media forms of written, audio, and visual grew in consumption as SEM was deemed acceptable throughout much

of the country (Scott, 1991). The pornographic magazine once considered obscene was now tolerated as moral rigidity declined (Herrman & Bordner, 1983; Scott, 1991).

Some of the new research on SEM allowed negative outcomes to start slowly appearing in the form of sexual behavior changes (Schmidt & Sigusch, 1970), affect responses (Griffitt & Kaiser, 1978), and sex guilt (Griffitt & Kaiser, 1978; Morokoff, 1985). Several studies, including Schmidt and Sigusch (1970), failed to connect an increase in pornography consumption with an increase in deviant sexual behaviors 24 hours past viewing. However, the German researchers are credited with being some of the first to study behavioral reactions to erotic films, as previous studies had only used pornographic pictures or text (Schmidt & Sigusch, 1970). Sex guilt, a term coined by Mosher (1973), refers to a self-medicated punishment for violation of personal standards that may occur after viewing erotic material. High sex guilt was found to have a direct association with an increase of arousal and fantasy for women (Griffitt & Kaiser, 1978; Morokoff, 1985; Mosher, 1973). For women alone, sexual guilt was also associated with more negative effects after viewing and a decrease in self-reported sexual arousal (Morokoff, 1985; Mosher, 1973). The control group study of Griffitt and Kaiser (1978) determined women with high sex guilt view SEM as punishment instead of a reward behavior like most men. High sex guilt became the most referenced negative outcome of the research presented in the 1970s and 1980s.

### **Opposition to Pornography**

The heightened awareness of sex guilt for consumers could have been one reason opposition to pornography became fierce in the 1980s and 1990s with both feminists and fundamentalists proclaiming their disgust and disapproval of the product, the industry, and the men who participated (Ciclitira, 2004; Cowan et al., 1989; Jelen, 1986). During this time, many

researchers found both the voices of morality and legality dictated their focus of study. Books were published such as those by Andrea Dworkin (Spongberg, 2006). Protests were staged at SEM retailers, while marchers displayed signs to promote their political campaigns (Ciclitira, 2004). Yet, the two sides, feminist and fundamentalist, equal in their opposition against the violence and harm of women, never united (Cowan et al., 1989; Jelen, 1986).

Fundamental conservatives always viewed pornography as a moral issue documenting the breakdown of social values, marriages, and the family (Cowan et al., 1989; Jelen, 1986). The group defined pornography broadly as anything with nudity, in any form of media such as magazines, books, and movies (Cowan et al., 1989). Supported by religious politicians, conservatives wanted total censorship of the production of pornography with legal mandates for violations. According to Jelen (1986), fundamentalists promoted an imitation model for behavior. Those who viewed pornography would act against their true nature committing rapes and unspeakable harmful sexual acts against their wives and others (Jelen, 1986).

The feminist movement quickly divided into the two agendas of anti-pornography and anti-censorship (Ciclitira, 2004; Cowan et al., 1989). Cowan et al., (1989) describe the disagreement over pornography production control by the government as pro-control and anti-control. Feminists were always stricter with their definition of pornography and what they deemed as pornographic material, which could have led to the split over production controls (Cowan et al., 1989). The pro-control or anti-pornography side viewed pornography as degrading and harmful for women, always aiming for equality in the industry (Ciclitira, 2004; Cowan et al., 1989). Anti-control feminists believed in a catharsis model for behaviors, allowing freedom of expression and repressed impulses to be displayed in pornographic material (Jelen,

1986). The disagreement amongst the feminists led to a complete disenchantment with their viewpoints of the pornography controversy for their demographic (Ciclitira, 2004).

Politically, all voices in the pornography controversy plunged to a whisper as the 1990s gave way to other issues such as political wars, climate change, and poverty (Ciclitira, 2004). Jelen (1986) predicted how the opposition to pornography would dissipate due to a lack of mobilization and incompatibility preferences between the two political parties. Because there were so many disagreements over other issues such as abortion and gun rights, the two groups never solidified their disapproval of pornography and the victimization of women (Ciclitira, 2004; Jelen, 1986). The resistance to pornography failed; consumption increased as well as empirical research. One must ask, would pornography issues even exist today had more revolutionary tactics against the media taken place in the 1970s to the 1990s? A question for future investigation: Is the sex slave industry of 2021 a by-product of the explosive pornography industry of the early 2000s?

### **Advancement of Pornography Research**

With the political resistance of pornography pushed aside, researchers and religious leaders searched for new ways to combat the expanding moral issue. Soon, addiction to pornography (Carnes, 1999), couples' therapy (Shaw, 1999), and family values (Zillmann & Bryant, 1988) took center stage in assessment instruments and survey questions. Sexual addiction, including pornography use, was first defined by Carnes (1999) as an inability to control sexual behaviors (Gold & Heffner, 1998). The psychologist also credited the feminist movement with addressing a connection between abuse of women and an addiction to pornography (Carnes, 1999). Researchers established open conversations debating healthy sexuality at the expense of oppression of women (Carnes, 1996, 1999; Gold & Heffner, 1998).

Sexual addictions, whether a medical diagnosis or censorship propaganda, continues to be debated even years later (Voros, 2009).

Another avenue of study for pornography use branched into couples' therapy both viewing together (Mann et al., 1973) and separately (Bergner & Bridges, 2002; Shaw, 1999). Couples who viewed erotic films together in the twelve-week study by Mann et al., (1973), increased their sexual activity. Interestingly, so did the other couples in the "nonerotic film" group and the "no films" group based on the daily tasks of completing a checklist for the survey (Mann et al., 1973). This study failed to connect pornography viewing with deviant behavior change for either men or women (Mann et al., 1973). Other researchers looked to answer the questions surrounding a man's pornography usage impacting or affecting his wife and their marriage relationship (Bergner & Bridges, 2002; Shaw, 1999). Women are often devastated by the discovery of pornography use (Bergner & Bridges, 2002; Shaw, 1999). Research from the paradigm case study reported women viewed their husband's pornography use as a violation of their intimacy, a damaging reflection of his character, and a criticism of her worth and desire (Bergner & Bridges, 2002). It was then discovered that marital instability due to pornography use creates a direct impact on the family unit (Manning, 2006).

Research on pornography use in the marriage contributed to further studies into the negative impact for the entire family unit, including children (Manning, 2006; Schneider, 2000b; Zillmann & Bryant, 1988). Pornography use first creates a distorted view of normal or healthy sexuality for the couple, which is then transferred into the moral values passed down to their children (Zillmann & Bryant, 1988). According to Manning, (2006) & Schneider (2000), children are affected in both direct ways, with increased risk of exposure to SEM, and indirect ways, such as increased parental conflict with decreased time and attention from parents.

Overall, family and marriage research concluded pornography use by the couple or an individual partner caused a devaluation of the marriage relationship with a significantly higher risk for separation or divorce (Manning, 2006; Schneider, 2000b; Zillmann & Bryant, 1988).

### **The Debate Surrounding the Definition of Pornography**

The definition of pornography varies as much as the strategies used to research the major social issue (Amoroso & Brown, 1973; Basson, 2000; Campbell & Kohut, 2017; Duffy et al., 2016; Hald, 2006; Manning, 2006). A general definition set forth by Campbell and Kohut, (2017) stated pornography is a material of visual, audio, pictorial, or written form which includes sexual behavior or nudity. This broad definition of pornography includes many different forms of media which would be eliminated by previous studies (Campbell & Kohut, 2017). This is the greatest challenge faced by all pornography researchers, contrasting definitions that exclude certain types of media formats (Manning, 2006; Short et al., 2012). Female researchers, Ashton, McDonald, and Kirkman (2019) define pornography as a material with sexual content produced and distributed for the primary intent of consumer arousal. Hald and Malamuth (2008) define pornography across their studies as material aimed at creating or enhancing sexual thoughts or feelings which includes descriptions or exposure of the genitals or explicit sexual acts. Without a common definition, Amoroso & Brown (1973) explained years ago the assessment instruments were not of importance for comparable results. Instead, the type of pornography investigated is where researchers failed to connect or correlate their studies (Amoroso & Brown, 1973; Short et al., 2012).

Extended definitions of pornography make the boundaries of pornography undefinable (Basson, 2000; Duffy et al., 2016; Manning, 2006; Shaw, 1999). In her research with 32 Canadian women, the average age of 40 years, Shaw (1999) documented how the women found



soft-core materials to be erotic and enjoyable entertainment. In the same study, pornography deemed hardcore, which included violence against women, was received with negative reactions from the women interviewed (Shaw, 1999). The strict or relaxed definition of pornography used by the researchers can determine endorsement levels and therefore translate inconsistency across cross-study comparisons (Hald, 2006; Short et al., 2012). Differing prevalence rates of usage may well be attributed to the definitions used, creating a lack of consistency among all previous pornography research (Short et al., 2012). Caution must be applied when correlating male-based studies to female pornography usage directly based on definition variations alone (Duffy et al., 2016; Hald, 2006). Future research should start focusing on a new operational definition, specifically tailored for how females interpret pornography usage (Basson, 2000).

### **Normalizing Effect of Pornography Usage**

An unclear definition for pornography continues to blur the boundaries between the SEM industry and mainstream media; shifting attitudes toward normalization of nudity and explicit sexual acts (Blais-Lecours, Vaillancourt-Morel, Sabourin, & Godbout, 2016; Weinberg et al., 2010). The normalization effect of pornography occurs when SEM is viewed so frequently that a variety of sexual behaviors becomes normal with a decreasing capacity of offense or shock (Weinberg et al., 2010). A normalizing effect on the usage of pornography also creates difficulty in adequately measuring total consumption (Weinberg et al., 2010). The advent of the internet and cyber pornography has increased the rate at which normalization has occurred (Blais-Lecours et al., 2016; Weinberg et al., 2010). In a convenience sample, Blais-Lecours et al., (2016) recently documented usage rates at 90.2% for men and 51% for women where rates included at least one viewing of SEM over the previous month by the internet. Be it paper or

pixel, pornography usage changed into a normal and acceptable social activity from the early 1970s to the 2000s (Blais-Lecours et al., 2016; Weinberg et al., 2010).

### **Internet Pornography**

Pornography was an ancient issue, advanced by the invention of modern technology (Fisher & Barak, 2001; Griffin-Shelley, 2003; Regnerus et al., 2016; Short et al., 2012; Yoder et al., 2005). The internet for electronic devices exploded the connection of pornography to homes and phones across the world. Internet pornography immediately increased to include chat rooms, direct messages, and live webcasting from the original forms of written text, pictures, videos, and games (Short et al., 2012; Regnerus, Gordon, & Price, 2016). Pornographic materials once only available at select 'adult' theaters, sex shops, or 'adult' book stores are now anonymously accessed 24/7 across the internet creating a multi-billion dollar industry (Fisher & Barak, 2001). Basic principles of economics dominate the internet pornography world where attention is placed on profits by increasing quantity and decreasing quality (Dines, 2012). The internet revolutionized the pornography industry allowing pornography to be consumed as an entertainment product, available to anyone at the click of a mouse button (Dines, 2012).

Those mouse clicks sparked an internet sexual revolution that set off an avalanche of research for pornography also known as Online Sexual Activities (Shaughnessy et al., 2011), Cybersex (Döring, 2000), and Cyber pornography (Blais-Lecours et al., 2016). Online Sexual Activities, or OSA, has been defined as the use of the Internet for sexual pleasure, sexual arousal, or sexual information seeking (Shaughnessy et al., 2011). The three sub-categories of OSA are as follows: partnered-arousal activities, solitary-arousal activities, and non-arousal activities (Shaughnessy et al., 2011). Chat room activities (Bernardi & Pallanti, 2009; A. J. Campbell, Cumming, & Hughes, 2006; Cooper, Putnam, Planchon, & Boies, 1999), which could be

considered erotic for most women, are difficult to label based on OSA guidelines. Cybersex refers to a collective term where computer-mediated interactions occur for those seeking sexual arousal and satisfaction (Döring, 2000). When individuals participate in cybersex the goal is a sexual encounter through the internet, not solo sex or masturbation to images (Döring, 2000). Daneback, Cooper, and Månsson (2005) defined cybersex as a subcategory of OSA, adding to the discrepancy in future interpretations. Again, the difficulty for pornography researchers developed into an inefficient way of labeling or defining internet pornography use from one study to the next.

### **Pioneers of Pornography Research**

Two pioneers of internet research, Cooper (1998) & Young (1998), quickly advanced their empirical worlds with significant data on internet pornography usage and internet addiction. Cooper (1998), celebrated for his “Triple-A” analogy of anonymity, access, and affordability, continued his research with the first-ever large-scale study of OSA reporting a correlation between time spent on-line and perceived negative life events (Cooper, Scherer, et al., 1999). Internet pornography is primarily used by men for masturbation, and chat room fantasy for women (Cooper, Delmonico, & Burg, 2000). Later Cooper (1998) published with Cooper, Delmonico, Griffin-Shelley, and Mathy (2004) expanding his original large-scale study, this time looking differently at gender and reasons motivating OSA. The study reported motivation for OSA included fulfilling fantasy and stress relief (Cooper et al., 2004). Cooper and associates (2004) were some of the first researchers to indicate more attention needed to be applied to women consumers with different methods of measurement.

Intrigued by the potential of labeling internet addiction as a diagnosis, Young (1998) created a diagnostic questionnaire based on the DSM-IV (APA, 1994) requirements for gambling

addiction. Shortly after, a connection between depression and internet addiction was established (Young & Rodgers, 1998). Later, Young (1998) expanded on the established internet addiction base by noting uncontrollable urges, preoccupation, and negative consequences with behavior as supporting evidence that internet usage can have habit-forming qualities (Young, 2004). By researching internet sex addiction, Young (2008) confirmed the results of other researchers by documenting the motivations of fantasy, psychological escape, and stress-relief along with the negative outcomes of relationship distress, employment issues, and isolation. Both Cooper (1998) and Young (1998) undoubtedly contributed to internet pornography research light-years beyond their initial studies.

### **Increase of Religious Based Research**

Researchers of internet pornography continued to follow the path of problematic usage, addictive nature, and negative effect outcomes, but added religion as a variable into their measured assessments (Baltazar et al., 2010; Grubbs et al., 2010; Murray et al., 2007; Volk et al., 2016). The religious exploration into the world of pornography users increased substantially when Grubbs and colleagues (2010) introduced their Cyber-Pornography Use Inventory, or CPUI, designed in comparison to the ISST, Internet Sex Screening Test, by Delmonico and Miller (2003). The new CPUI assessment was designed to measure religiosity, guilt, and internet pornography use which immediately produced clinical promise with both religious and non-religious populations (Grubbs et al., 2010). As a 3-item measurement, the CPUI allowed emotional distress, perceived compulsivity, and access efforts to be measured (Grubbs et al., 2017). Perceived addiction to pornography usage immediately emerged as a result of the CPUI assessment (Grubbs, Exline, et. al, 2015). Perceived addiction, or perceived compulsivity, will be documented later in this literature review (Grubbs, Exline, et al., 2015).

Armed with new excitement and a new measurement, researchers urgently investigated data with the CPUI, allowing the variables of religiosity, guilt, shame, and moral incongruence to flame the morality debate of pornography usage once again. The new hypotheses circling academic literature evolved into a form of “Does religiosity and guilt affect the use and maintenance of internet pornography?” (Grubbs et al., 2017). Results of this recent attention on religiosity and internet pornography use linked the negative relationship (Short, Kasper, & Wetterneck, 2014) with moral disapproval (Grubbs, Exline, et al., 2015), sexual shame (Volk et al., 2016), depression for male users (Perry, 2018) and anxiety (Leonhardt, Willoughby, & Young-Petersen, 2018). Volk and colleagues (2016) used an Amazon MTurk survey and measured pornography use with the CPUI-9 (Grubbs, Volk, et al., 2015) to report personal religiosity to be positively related to moral disapproval which proved a direct effect on sexual shame. Similarly, Grubbs and colleagues (2017) applied cross-sectional analyses to two samples, one from Amazon MTurk, the other college students, to determine a positive link between pornography use and spiritual or religious struggles. As research moves forward developing the relationship between religiosity and pornography use to negative distress, faith will continue to be added as a cultural tool for well-being with significant empirical promise (Grubbs & Hook, 2016; Lund, 2017).

### **Other Significant Research**

While complete documentation of the pornography research for the last 50 years would require encyclopedia volumes, this literature review finds it necessary to draw attention to the direct comparison of other addictions and the links to mental health wellness already established (Bradley et al., 2016; Hall, 2011; Kuss et al., 2014; Paul, 2009). Pornography addiction is loosely referred to throughout literature as sex addiction, which is continuously linked to shame

(Hall, 2011). While the medical and therapeutic communities continue to debate what to call pornography addiction, most therapeutic clients, including husbands, wives, or family members commonly use sex addiction as a blanket term to include any undiagnosable pornography usage (Hall, 2011). Laier, Pekal, and Brand, (2014) and Roller (2004) both agree with Hall (2011) referring to pornography use as sex addiction where cybersex, internet pornography use, and extramarital affairs are among the listed pathological sexual behaviors which can lead to distress and social impairments. In a computer-based laboratory setting, Laier et al., (2014) interviewed 102 women comparing internet pornography users with non-users to investigate cybersex addiction. The results produced evidence of arousal and cravings as the two main motivations behind internet pornography usage, giving support to previously researched gratification theories and hypotheses for sexual addiction tendencies (Laier et al., 2014). Surprisingly, the questionnaires also disclosed how cybersex addiction is unrelated to real-life sexual relationships for women (Laier et al., 2014). These results suggest heterosexual women who engage in internet pornography use are not doing so as a lack of compensation for their real-life sexual contact, but in excess to their physical relationships (Laier et al., 2014).

Continuing the research of Young (1998), another connection commonly referenced in the literature is the non-substance addiction diagnosis to pornography usage of internet addiction (Griffiths, 2001; Kuss et al., 2014; Spada, 2014; Weinstein et al., 2015). In their review of 68 internet addiction studies, Kuss and colleagues (2014) discussed how core symptoms of the non-chemical addiction are commonly established as negative outcomes, compulsive use, and salience with preoccupations and cravings. These core symptoms of internet addiction (Spada, 2014) have been continuously linked with internet pornography usage as well. The college sample of men and women by Weinstein et al., (2015) confirmed internet addiction to include

the three subtypes of social networking, excessive gambling, and cybersex including the use of internet pornography. Results of the cross-sectional study produced support for the co-occurrence of internet addiction and social anxiety (Weinstein et al., 2015). The study also concluded no gender differences exist between the male and female college students when assessing for internet addiction (Weinstein et al., 2015).

What is internet pornography from a theoretical perspective? Is it sex addiction, a subtype of internet addiction, or even a behavioral addiction? The overlapping features and significant gaps in research make the classification of excessive internet pornography usage difficult (Kraus & Sweeney, 2019; Kraus et al., 2016). However, many researchers are now referring to pornography usage, including internet pornography usage as compulsive sexual behavior, or CSB, and classifying the excessive use as a behavioral addiction (Davis, 2001; Fisher & Barak, 2001; Gola et al., 2017; Kraus et al., 2016). Kraus and colleagues (2016) defined CSB as excessive or inappropriate urges, cravings, fantasies, or behaviors that cause distress and impairment to daily functioning. Davis (2001) suggested problematic usage develops from pre-existing psychopathology which is strengthened by the repeated behaviors that are the consequences, not causes of the mental health issues. Fisher and Barak (2001) documented how internet pornography usage is a self-regulated behavior with both positive and negative effects following closely to the Sexual Behavior Sequence, or SBS theory published by Byrne (1976) when applied to erotic stimuli. Overall, Kraus and Sweeney (2019) offered commentary recommending researchers and therapists to develop treatments specifically addressing the complexity of CSB, or problematic pornography usage, despite its lack of clinical diagnosis as a behavior addiction.

The complexity of internet pornography allows researchers to target multiple mental health wellness topics in their investigation into positive and negative effects associated with the usage. Depression continues to be negatively linked with use in studies for both male and female participants (Borgogna, Lathan, et al., 2018; Guidry, Floyd, Volk, & Moen, 2020; Levin et al., 2012; Volk et al., 2019). In their study of perceived addiction to pornography, Grubbs and colleagues (2015) linked usage with psychological distress a combined variable of stress, depression, anxiety, and state anger (Grubbs, Volk, et al., 2015). The psychological distress variable would be used again by Bradley et al., (2016), in their examination of religiosity to perceived addiction. Results indicated stress, depression, and anxiety were all linked to perceived addiction and pornography usage regardless of a belief in God (Bradley et al., 2016). Those with perceived addiction to pornography may be vulnerable to a greater risk of psychological distress without considering their religious association (Bradley et al., 2016). The study, an Amazon MTurk survey with a sample size of 713, included 338 women and 370 men proving women are consumers of pornography with outcomes such as psychological distress (Bradley et al., 2016).

### **Women as Pornography Consumers**

‘Just another one of the guys’ has been a common motto for researchers up until recently (Borgogna, Lathan, et al., 2018; Wright et al., 2013). In a survey for OSA, Boise (2002) gathered a sample size of 760, including 495 women, or 65% total, with 24% reporting usage. Similarly, Yoder and associates (2005) investigated internet pornography and loneliness with a survey population of 400 of which 114, or 28%, were women. The scholars reported a positive association between use and loneliness for internet pornography users. Through a questionnaire at a Christian University, Baltazar and colleagues (2010) studied religiosity and internet



pornography usage with a sample size of 751, of which 409 were women. The religious students reported viewing internet pornography with 19% of the women viewing intentionally within the time frame and 2% viewing in the previous week (Baltazar et al., 2010). Results indicated and confirmed previous research that concluded religiosity acts protectively (Stack, Wasserman, & Kern, 2004) against the use of pornography (Baltazar et al., 2010). In retrospect, the scholars (Baltazar et al., 2010) concluded the prevalence rates among those surveyed were dramatically low based on the total religiosity of the population. This survey, with others, allows future researchers to recognize that even religious women are consumers of pornography, not to be grouped in with all the men.

The rise of pornography consumption by women, of all demographics, can be directly credited to the facilitation provided by the internet (Ciclitira, 2004; Leiblum, 2001). Most research has focused attention on a woman's partnered use of internet pornography within a sexual relationship (Daneback et al., 2005; Hald, 2006; Shaughnessy et al., 2011; Shaw, 1999). The internet quickly allowed for websites to direct content specifically marketed to women by women, and at times by amateur housewives (Ciclitira, 2004; Leiblum, 2001). A move for equality in the production of SEM, advanced women of all incomes, body types, education, and relationship status to originate amateur material for quick and easy access for all consumers including male viewership (Döring, 2009; Hald & Štulhofer, 2016; Leiblum, 2001). While consumption levels of pornography increased with internet accessibility, the empirical research did not; leaving huge gaps in the literature where gender assumptions of use continue to be misinterpreted (Carroll et al., 2008b; Ciclitira, 2004; Senn, 1993; Wright et al., 2013).

## **Gender Differences**

Many would state sexual gender differences originated with Adam and Eve in the Garden of Eden, Genesis 1:27 (Holman Christian Standard Bible). This is biologically correct as males and females are extremely different (Baumeister, 2000). However, sexual gender differences, or stereotypes, which have been passed down from generation to generation through religious heritage (Hook et al., 2015), social acceptance (Petersen & Hyde, 2010), or cultural adaptations (Borgogna, McDermott, Browning, Beach, & Aita, 2019) influence how researchers have processed data from pornography use. These sex scripts dictated how female consumers of pornography viewed their sexual behaviors (Sun, Bridges, Johnson, & Ezzell, 2016). Sex scripts also created a double standard of ‘by men for men’ in the world of pornography. The pornography double standard created research fixated on providing solutions for the male user, “male-centric”, while largely ignoring the possibility that women have excessive use issues as well (Bridges et al., 2016; Grubbs, Wright, Braden, Wilt, & Kraus, 2019; Marques, 2019). Women should no longer be considered outliers in a man’s pornography world (Marques, 2019). The following gender differences section will build on the knowledge of previous research to present theories of sex scripting (Baumeister, 2000), man’s priority viewpoint (Grubbs et al., 2019), noticeable differences between the genders (Blais-Lecours et al., 2016), motivation for gendered use (Hald, 2006), and conclude with gender-specific negative outcomes of use (Zitzman & Butler, 2009).

### **Sex Scripting for Genders**

This is not your grandmother’s pornography issue, but then again maybe it could be (Petersen & Hyde, 2010). Sexual promiscuity, throughout history, has been more socially acceptable for men than for women (Alexander & Fisher, 2003; Döring, 2000; Hald, 2006).

Today, pornography is included in that acceptability clause for the male gender, along with other risky sexual behaviors like extra-marital affairs, hiring of prostitutes, cohabitation, divorce, remarriage, or extra wives if he happens to live in Utah. Borgogna, McDermott, Browning, Beach, and Aita (2019) recently researched Traditional Masculinity Ideology, or TMI, with pornography use for a sample size of 779, including 469 women. Results indicated men's excessive use to be associated with acceptance of male greater dominance and avoidance of feminine ideologies (Borgogna et al., 2019). TMI also contributed to functional problems like relationship satisfaction when men accepted ideas of male greater dominance (Borgogna et al., 2019). The study described TMI as male internalized beliefs, which are culturally based, concerning how they should sexually act, think, and feel (Borgogna et al., 2019). TMI has contributed to male-centric sex scripts for pornography use.

To study female sex scripts, Baumeister (2000) reviewed past research to determine biological sex drives dictated sociocultural norms, which also influenced individual experiences. The sex drives for both men and women are a mixing of the two components of biology and sociology, with nature and culture (Baumeister, 2000). For men, biology is the predominant component (Baumeister, 2000). A woman's sex drive, however, is a mixture of social and cultural, or sociocultural norms, shaped by experience and heritage (Baumeister, 2000). The study continued to promote women's sexuality as being drawn from their meaning of life or emotions; whereas, men predominately remained physical creatures of habit (Baumeister, 2000). Women adjusted their sexual roles with higher erotic plasticity than their male counterparts with marriage, childbirth, menopause, and older age (Baumeister, 2000). Over her lifetime, a woman is more likely to change her attitude toward the act of sex, physical involvement with multiple partners, sexual preferences, and opinions on marriage faithfulness (Baumeister, 2000). If

societal standards toward sexuality need to be changed, Baumeister (2000) recommended women as the focused targets for radical sexual expectations as their sexual decision-making is more malleable than that of their male partners.

The sociocultural influence over a female's sexuality is echoed in the theoretical frameworks of Cognitive Social Learning Theory (Bussey & Bandura, 1999), Social Structural Theory (Eagly & Wood, 1999), and Sexual Script Theory (Simon & Gagnon, 1986). Cognitive Social Learning Theory states that gender differences are learned by observing, analyzing, and modeling the sexual behaviors of others (Petersen & Hyde, 2010). Social modeling occurs when women begin to imitate the sex script dictated by the pornographic material viewed (Petersen & Hyde, 2010). According to Social Structural Theory, a gender's sexuality is a result of the gender that holds power, leadership, or authority of the society (Petersen & Hyde, 2010). This theory states the inequity of power, demonstrated in pornography, significantly impacts how men and women express their sexuality (Petersen & Hyde, 2010). Finally, Sexual Script Theory argues that women follow internalized sexual scripts which have been acquired over time by observation of others and mass media (Bridges et al., 2016). An increase in sexual behavior after viewing internet pornography provides support for Sexual Script Theory, regardless of gender (Bridges et al., 2016). Although these theories offer empirical understanding for the sexuality of men and women, gender differences have continued as pornography contributed to the attitudes and behaviors of those who consumed its product (Bridges et al., 2016; Petersen & Hyde, 2010).

Why is an understanding of sex scripting important for the research of women's pornography usage? Because, sex scripts or social stereotypes directly influenced the underreporting of pornography use by women (Alexander & Fisher, 2003; Blais-Lecours et al., 2016; Petersen & Hyde, 2011). Women have underreported their sexual behaviors and

frequency of sexual encounters to levels that are socially acceptable, out of fear of gender-related judgment and labels from others (Alexander & Fisher, 2003). In the laboratory experiment examining the effects of false accommodation, women fluctuated their answers more than men based on the testing conditions (Alexander & Fisher, 2003). Results also showed support for social role theories, which proposed women would alter their responses to be socially accepting (Alexander & Fisher, 2003). Research on cyber pornography and sexual satisfaction from Blais-Lecours and colleagues (2016) echoed a similar statement when they discussed how women could be underreporting usage of internet pornography due to an association of shame and negative social stereotypes. In the year 2020, women, like their grandmothers from the past, continue to adapt their sexuality according to sex scripting and the acceptable roles of society and religion; leading to underreporting of sexual behaviors, including pornography use (Alexander & Fisher, 2003; Baumeister, 2000; Petersen & Hyde, 2011).

### **Male Gender Focused Viewpoint**

There is no denying that men are the main consumers of pornography, including internet pornography (Bridges et al., 2016; Hald, 2006; Hald & Malamuth, 2008; Paul & Shim, 2008; Shaw, 1999). Therefore, past research has proven the content of pornography is oriented to the male preference (Hald & Štulhofer, 2016), fantasy (Paul & Shim, 2008), and arousal needs (Blais-Lecours et al., 2016). It is not the intent of this study, or literature review, to debate the prominent fact that men consume more pornography than women. Consumption rates and simple economics have proven the male's viewpoint is central for all pornography being produced (Ciclitira, 2004; Döring, 2009). This literature review simply asks the following questions: Does the male viewpoint of pornography distort female consumption research? Also, if pornography consumption questions are being directed at the male consumer, does the female

gender answer become washed into the data? The answer, to these questions and many more, is to focus future research on individual genders instead of always remaining gender-neutral (Borgogna & McDermott, 2018; Gola et al., 2017; Grubbs, Exline, et al., 2015; Manning, 2006).

Rather than formulate educated assumptions with homogenous samples, researchers in the future need to target women directly as pornography consumers like Ashton et al., (2019), who interviewed 27 women in Austria, from the ages of 18 to 30, to investigate sexual pleasure. The interviews formed a narrative theory revealing that a woman's usage of pornography varies from solo viewing to partnered use (Ashton et al., 2019). Women reported experiencing both positive and negative effects related to internet pornography use (Ashton et al., 2019). An enhanced level of sex education provided positive effects for the women interviewed (Ashton et al., 2019). Sexual pleasure was reported as diminished when the SEM misrepresented natural female sexuality (Ashton et al., 2019). Internet pornography viewing both enhanced and disrupted the intimate relationships of the women being interviewed (Ashton et al., 2019). The research provided by Ashton and colleagues (2019) failed to document direct effects. However, the interviews brought added attention to women's perspectives on healthy sexuality and well-being (Ashton et al., 2019).

Next, how can direct effects of use for women be measured if the assessing instruments are created for male consumption? The next debate for the male pornography world turns to assessment issues. In their review of pornography addiction, Duffy and colleagues (2016) drew attention to both the Pornography Craving Questionnaire (Kraus, Rosenberg, & Tompsett, 2015) and CPUI-9 (Grubbs, Volk, et al., 2015) for their development with male student populations. Fernandez and colleagues (2017) explored the effectiveness of the CPUI-9 measuring compulsivity in a selected sample of 76 men, contributing to the debate for male-only

assessments. The CPUI-9 has now been documented with homogenous samples, but to current knowledge, the assessment has never been validated on a female gender-only population (Grubbs et al., 2017; Volk et al., 2016).

However, the Pornography Craving Questionnaire, or PCQ, was intentionally developed in three studies with young college males (Kraus et al., 2015). The scholars have encouraged future researchers to gather more diverse populations for study (Kraus et al., 2015). Allen, Kannis-Dymand, and Katsikitis (2017) employed the PCQ in their study on craving and problematic internet pornography. The population of 192 only included 10 women, failing to properly measure women (Allen et al., 2017). Without substantial data, the PCQ, like the CPUI-9, still falls short as an enriched valid measure for female populations (Duffy et al., 2016). It is impossible for therapists and clinicians to infer the results of Caucasian male undergraduates from these measurements onto Caucasian women in their middle 40s, let alone a woman of differing racial heritage. Insufficiencies, for assessment instruments, can create difficulties if male pornography questions are treated like female pornography questions.

Finally, a man's viewpoint for pornography research escalates the myths associated with female pornography use. The typical myths of sex drive and arousal center around the general assumption that women find no pleasure in pornography because men are the targeted benefactors (Ciclitira, 2004). Myth one assumes women lack the sex drive to enjoy pornography (Baumeister et al., 2001; Ciclitira, 2004; Petersen & Hyde, 2010). It is true, men's biological sex drives are stronger; however, women continue to report enjoyment of pornography (Baumeister et al., 2001; Ciclitira, 2004; Petersen & Hyde, 2010). The strength of a woman's sex drive should not be generalized to determine the enjoyment of or capacity for enjoyment (Baumeister et al., 2001). Myth two assumes women do not experience arousal from pornography use

(Baltazar et al., 2010; Basson, 2002; Borgogna, Lathan, et al., 2018). Women are recorded as receiving arousal from viewing pornography (Baltazar et al., 2010; Basson, 2002; Borgogna, Lathan, et al., 2018). In response to myth two, the physiological arousal of pornography for women should never be underestimated in future research (Basson, 2002).

### **Noticeable Differences between Men and Women Consumers**

There remain gender differences that are obviously recorded in the literature, new ones that have been discovered through investigation, and those which appear mysteriously. Gender differences in pornography use that are obvious to all researchers include the following: consumption (Blais-Lecours et al., 2016), impulsivity (Erez et al., 2014; Wetterneck, Burgess, Short, Smith, & Cervantes, 2012), masturbation (Hald, 2006; Hook et al., 2015), and sex drive (Baumeister et al., 2001; Hald & Malamuth, 2008). In 2016, Blais-Lecours and colleagues (2016) reported 51% of the women surveyed and 90% of the men surveyed, for their sample size of 832, viewed internet pornography in the previous six months. Sexual impulsivity is known to be higher in men than in women (Erez et al., 2014; Wetterneck et al., 2012). However, in women more than men, sexual impulsivity was found to have a stronger association with obsessive-compulsive personality disorder and social phobia among other Axis I and Axis II psychiatric disorders (Erez et al., 2014). Research has always reported masturbation and sex drive for men as higher than women and both as motivation for pornography use (Baumeister et al., 2001; Hald, 2006). Baumeister and colleagues (2001) concluded that sex drive, for men and women, is a combination of culture and biology.

Religiosity is the gender difference that appears mysteriously throughout the research data. The religious commitments of women play a much more significant role in their sexual behavior than men (Farrell et al., 2015). Hook and associates (2015) identified men spiritually



struggled when their solitary sexual behaviors are incongruent with their morals in their study of religiosity. However, women were noted as spiritually struggling when both their solitary and partnered sexual behaviors were morally incongruent to their beliefs (Hook et al., 2015).

Lewczuk, Szmyd, Skorko, and Gola, (2017) noted that religiosity is one of the top reasons women with problematic pornography behaviors will seek a therapist for treatment. The results obtained by Lewczuk et al., (2017) directly supported Grubbs et al., (2017) connecting perceived addiction to internet pornography use to religious and spiritual struggles for women.

Interestingly, the research conducted by Carnes, Green, and Carnes, (2010), found clergy women generated higher sexual addiction screening test, or SAST, scores than the majority of the men. The researchers divided the survey population into the four groups of clergy, college, outpatient, and clinical, then separated the results by gender (Carnes et al., 2010). Results for the clergy women group were reported as an unexpected finding (Carnes et al., 2010). The clergy women outscored both the college-aged men and the outpatient men in the categories of use of the internet, preoccupation, loss of control, and affect disturbance (Carnes et al., 2010). With further investigation, the clergy women from the Carnes, Green, and Carnes (2010) survey may be determined as experiencing moral disapproval with their pornography usage leading to perceived addiction and the higher scores for the SAST (Grubbs, Exline, et al., 2015).

### **Motivation for Use**

The pornography research literature is packed with motivational reasons for uses by both genders (Baltazar et al., 2010; Cooper et al., 2004; Grubbs et al., 2019; Paul & Shim, 2008).

Paul and Shim (2008) conveniently sectioned motivation for use into the following four categories: mood management, relationship enhancement, habitual use, and fantasy. Similarly, Cooper et al., (2004) listed reasons for online sexual activity to include education, entertainment,

exploration, recreation, research, commercial shopping, and relationship enhancement. Men report stronger motivations for use of pornography including before sex arousal (Brown, Durtschi, Carroll, & Willoughby, 2017), boredom (Paul & Shim, 2008), loneliness (Yoder et al., 2005), relief of stress (Cooper et al., 2004), during masturbation (Hald & Malamuth, 2008), compulsivity (Wetterneck et al., 2012), and fantasy (Young, 2008).

Similar to men, women expressed motivations for use with arousal (Albright, 2008) and fantasy components (Leiblum, 2001) appearing in most surveys. However, women differed with motivations including curiosity (Emmers-Sommer, 2018; Paul & Shim, 2008), relationship satisfaction or intimacy (Borgogna, Lathan, et al., 2018), and liberating effects (Döring, 2000; Leiblum, 2001; Weinberg et al., 2010). The differing motivations for use have influenced media preferences for men as fantasy or hard-core erotica, and women as chat-rooms where intimate relationships can be established. Interestingly, in the research on internet addiction, Bernardi and Pallanti (2009) reported gender differences for addictions are motivationally based and not dependent on usage in hours. The internet addiction research, by Bernardi and Pallanti (2009), was also positively linked to social anxiety disorder among other clinical disorders.

Women are also biologically different than men in their sexual needs, desires for arousal, release, and requirements for nonsexual partner interactions which motivates them to use pornography differently than men (Basson, 2000). Sexual satisfaction (Stephenson, Ahrold, & Meston, 2011) for women is linked more to mental excitement and sexual arousal than to a physical orgasmic release (Basson, 2000). The curiosity factor (Emmers-Sommer, 2018) motivating pornography use for women connects them to chat-rooms, live web-cams, and fantasy role play platforms as their primary forms of viewing (Hald & Štulhofer, 2016). Live internet pornography interactions fulfill a woman's need for arousal, desire, and relational

intimacy, ultimately providing her with sexual validation (Basson, 2000). This sexual validation will prompt women to report positive attitudes toward their bodies providing strong evidence that healthy sexual encounters are powerful influencers in shaping a woman's thought process (Schooler, Ward, Merriwether, & Caruthers, 2014). While women naturally crave sexual validation, live interaction from internet pornography now provides women with new avenues for obtaining that validation. Sexual validation could be the real motivating reason women use pornography and report their usage as obtaining positive consequences from their behavior (Albright, 2008; Baltazar et al., 2010; Senn, 1993).

As previously identified, sexual arousal is one of the most investigated forms of motivation or function of use for pornography users by both genders (Albright, 2008; Ashton et al., 2019; Brown et al., 2017). The sexual curiosity of women will lead to their viewing of pornography and an increase in their sexual arousal (Emmers-Sommer, 2018; Paul & Shim, 2008). In alliance with SBS, curiosity creates the self-regulated activity of viewing pornography which increases physiological sexual arousal (Byrne, 1976; Fisher & Barak, 2001). Sexual arousal increases, from continuously viewing, leading a woman to include pornography in her sexual behavior routines or preparatory activities (Ashton et al., 2019; Byrne, 1976; Fisher & Barak, 2001). Supporters of the sex education theory of motivation consider preparatory behavior as important, liberating women to view the sexual acts of pornography as those to be explored with future partners (Ashton et al., 2019). Some researchers conclude curiosity, as arousal motivation, can lead a woman to embrace positive body image and relationship satisfaction as she is exposed to a variety of other women through her pornography use behaviors (Ashton et al., 2019; Borgogna, Lathan, et al., 2018).

## Negative Outcomes of Use

Following the SBS theory, sexual behavior will produce an outcome (Byrne, 1976; Fisher & Barak, 2001). The outcome, as a key element of the experience, provides the pornography user with feedback. Positive or negative, this outcome may occur immediately like sexual satisfaction (Bridges & Morokoff, 2011), relief of stress (Baltazar et al., 2010), guilt (Leonhardt, Busby, & Willoughby, 2019), shame (Gilliland et al., 2011), sexual shame (Volk et al., 2016), or anger (Grubbs, Stauner, et al., 2015). Often the outcomes from pornography use take time to develop such as depression (Volk et al., 2019), anxiety (Levin et al., 2012), relationship or marital distress (Zitzman & Butler, 2009), loneliness (Butler et al., 2018), and additional sexual promiscuity (Zillmann & Bryant, 1988). The outcome of pornography usage extends the user's online behaviors into their real lives. For women, the top four negative outcomes reported by Baltazar and colleagues (2010), in a survey about internet religiosity use, included distant relationship to God, increased sexual behaviors, increased emotions of shame and guilt, and a change of attitude to a more permissive outlook.

The negative outcome of increased sexual behaviors continues to be frequently researched for the female gender (Bridges et al., 2016; Carroll et al., 2008b; Cooper et al., 2001; Wright et al., 2013). Researchers Carroll et al., (2008) reported half of the women surveyed considered pornography to be an acceptable form of sexual expression, while one-third of the 500 women participants reported using pornography regularly. Those women who considered viewing pornography as acceptable were also linked to risky sexual behaviors including higher numbers of multiple partners (Carroll et al., 2008). An increased number of sexual partners and risky sexual behaviors can increase a woman's chances of contracting sexually transmitted diseases, STDs, or becoming pregnant (Roller, 2004; Wright et al., 2013). According to

Borgogna, Lathan, and Mitchell (2018), women are known to use pornography viewing as coping mechanisms for their depressive symptoms including grief, sorrow, and the negative emotion of shame. The knowledge gained from both Carroll et al., (2008) and Borgogna et al., (2018) confirms the conceptual roadmap of the SBS theory (Byrne, 1976; Fisher & Barak, 2001). Negative outcomes will directly influence a returning behavior to pornography use creating a never-ending loop of sexual behaviors and consequences (Byrne, 1976).

### **Perceived Addiction to Pornography Usage**

In the absence of official diagnostic criteria for Internet pornography compulsivity or addiction, a variety of definitions and diagnostic instruments have appeared in the research literature for self-reported feelings of dysregulated behaviors (Blais-Lecours et al., 2016; Duffy et al., 2016; Grubbs, Volk, et al., 2015; Short et al., 2012). The tendency to self-identify as a pornography addict is referred to as perceived addiction (Grubbs, Volk, et al., 2015), self-perceived pornography addiction or SPPA (Duffy et al., 2016), self-perceived problematic pornography users (Maddock, Steele, Esplin, Hatch, & Braithwaite, 2019) and self-identified female sex and love addicts, or FSLA (Corley & Hook, 2012). As detailed in chapter one, perceived addiction for this study will be defined as the feeling or belief that one is addicted to pornography usage without a medical diagnosis. Pornography users self-report their perceived addiction by agreeing with statements such as, “Even when I don’t want to view online pornography I feel drawn to it” from the CPUI-9, or Cyber Pornography Use Inventory (Grubbs, Volk, et al., 2015). Recently, Grubbs, Grant, and Engelman, (2018), gathered self-reported measurements through a two statement answer of true or false prompt, where those surveyed answered if they believed themselves to be addicted or if they would call themselves an addict.

Regardless of the term used to describe the self-assessed feelings of dysregulation, researchers all agree on the overarching characteristics of excessive use (Maddock et al., 2019), compulsive use (Twohig et al., 2009), and negative consequences with usage (Duffy et al., 2016). According to Grubbs, Volk, Exline, and Pargament (2015), research originally studying pornography as an addictive behavior may instead have been studying a perceived addiction to pornography because of the self-reporting factors. If pornography is self-reported as an addiction, or addictive behavior, the actual use of pornography will be greater than originally disclosed (Grubbs, Grant, et al., 2018). The Cyber Pornography Use Inventory, or CPUI, was first designed by Grubbs and colleagues in 2010, then updated to the CPUI-9 format by Grubbs, Volk, et al., (2015). The inventory successfully measured emotional distress, access efforts, and perceived compulsivity (Grubbs, Exline, et al., 2015). Perceived addiction to pornography use immediately emerged as a result of the CPUI assessment subscale of perceived compulsivity, (Grubbs, Exline, et al., 2015).

Although there remains a difference between diagnosed addictive behaviors and self-perceived addictive behaviors, Okoli, Richardson, Ratner, and Johnson (2009) found those with a perceived addiction exhibit higher addictive behaviors over time. The increased addictive behaviors for women have created clinical concerns, especially among those who perceived themselves to be addicted (Corley & Hook, 2012; Maddock et al., 2019). Women, who self-identify as female sex and love addicts, or FSLA, were found by Corley and Hook (2012) to have higher suicide attempts, withdrawal symptoms, and depression. In their 6-month survey with 45.3 % women participants, Maddock, and colleagues (2019) reported women with excessive use at the 3-month mark experienced an increase in depression at the 6-month mark. Those women who reported as self-perceived at the 3-month mark had a lower frequency of use

with higher depression at the 6-month mark (Maddock et al., 2019). Future pornography use for women could also be predicted from their baseline usage (Maddock et al., 2019). This prediction from the study indicated usage was stable over the 6-month survey period for the women participants (Maddock et al., 2019). Finally, a surprising result of this study was that self-perceived problems for women predicted a decrease in usage, but not for men (Maddock et al., 2019).

The clinical effects of perceived addiction to pornography have largely been studied with male populations resulting in positive relationships to psychological distress (Grubbs, Volk, et al., 2015), spiritual difficulties (Wilt, Grubbs, et al., 2016), relational difficulties (Leonhardt & Willoughby, 2018), depression (Volk et al., 2019) and sexual distress (Volk et al., 2016). These studies have also revealed a commonality of predictors for perceived addiction in religiosity (Maddock et al., 2019), moral incongruence (Grubbs, Exline, et al., 2015), and the variable of male gender (Grubbs, Grant, et al., 2018). Religiosity, at baseline for men, indicated an increase in pornography use at a 6-month survey mark (Maddock et al., 2019). Perceived addiction to pornography and religiosity also have a robust positive relationship when mediated by moral disapproval (Grubbs, Exline, et al., 2015). The gender of the user keeps reappearing as an important component of perceived addiction or self-reporting of dysregulated behaviors (Duffy et al., 2016). The male pornography user is consistently higher in perceived addiction effects regardless if actual behavior matches self-perceived cognitions (Grubbs, Grant, et al., 2018).

Regardless of how perceived addiction is termed, defined, or measured, future studies need to consider if gender is a moderator of the effects between pornography use, moral incongruence, and negative outcomes (Grubbs, Grant, et al., 2018). Could the decrease in usage reported by Maddock et al., (2019) be explained by the Sexual Behavior Sequence theory (Fisher

& Barak, 2001)? Following the SBS perspective, perceived addiction is a negative cognitive response to erotic stimuli for women (Fisher & Barak, 2001). Perceived addiction would then be cognitively translated as either an informational response, expectative response, or imaginative response. It could also be concluded that perceived addiction for women is dependent on sex scripting, religious beliefs or moral incongruence, and outcome expectations (Fisher & Barak, 2001). Researchers will likely continue pursuing perceived addiction as a combination of religiosity and moral incongruence for the male user (Duffy et al., 2016; Grubbs, Grant, et al., 2018; Maddock et al., 2019). However, for the female consumer, it may be time to consider how perceived addiction could be a negative cognitive effect and a future target for therapeutic intervention (Maddock et al., 2019).

### **Social Anxiety**

Social anxiety is commonly referred to in research literature as social phobia or social anxiety disorder, SAD (Alkis et al., 2017; M. Asher et al., 2017; Căndea & Szentágotai-Tătar, 2017). Numerous research studies exist on pornography linked to depression (Kuss et al., 2014; Levin et al., 2012). Yet, there is an empirical gap when searching for documentation on anxiety or social anxiety linked with pornography use (Spitzer, Kroenke, Williams, & Löwe, 2006). Kroenke, Spitzer, Williams, Monahan, and Lowe (2007) stated anxiety is as common as depression but remains under-researched, often undetected, and under-treated by physicians and psychologists. Anxiety disorders are divided into four types which include generalized anxiety, panic disorder, social anxiety, and post-traumatic stress disorder, or PTSD (Kroenke et al., 2007). Results from Kroenke et al., (2007) indicated noteworthy data connecting the comorbidity of all four disorders with depression and somatic symptoms. In current research, the term psychological distress is used as a collective variable which includes stress, state anger,



depression, and anxiety (Bradley et al., 2016; Grubbs, Stauner, et al., 2015; Grubbs, Volk, et al., 2015; Wilt, Cooper, et al., 2016). Psychological distress, as a combination variable for depression and anxiety, increases the disregard by researchers for other mental health issues such as social anxiety.

For this research study, social anxiety was defined as an intense fear of the negative evaluations of others from social situations. Shepherd and Edelman (2005) documented the spectrum for social anxiety begins with shyness and increases to social anxiety, then to social phobia. The defining features of social anxiety include functional impairment in the areas of relationships, social engagements, education, and vocation (Aderka et al., 2012; Alden & Taylor, 2004; M. Asher et al., 2017). Social anxiety disorder is the 4th most common psychiatric disorder with a 12.1% lifetime prevalence rate, with the highest rate in the 30-44 age range (Kessler et al., 2005). The disorder is more complex than anxiety with additional symptoms, as individuals have a marked fear of social situations, performance activities, and negative evaluation from others (M. Asher et al., 2017). Those with social anxiety live in the fear of embarrassment by themselves with judgment from others (M. Asher et al., 2017). This fear transforms all domains of their lives, as social anxiety keeps them in a cycle of social impairment (Aderka et al., 2012).

Social anxiety is more prevalent for the female gender than the male; typically, due to social interactions being perceived as fearful for women (M. Asher et al., 2017; Caballo et al., 2014; Turk et al., 1998). Less social interactions lead to fewer social relationships, fewer sexual relationships, and the likelihood of remaining single for most individuals with social anxiety (Alden & Taylor, 2004; M. Asher et al., 2017). Social anxiety can manifest itself in behavioral, physical, and cognitive symptoms (Heimberg et al., 2014; Rapee & Heimberg, 1997). Common

symptoms include muscle tension, vigilance, apprehension, and hyperactivity (Reich, Noyes, & Yates, 1988). Social anxiety symptoms of chest pains, headaches, blurred vision, dry mouth, sweating, shortness of breath, and fear of dying separate the mental illness from general anxiety and panic disorder (Reich et al., 1988). Rumination, or post-event processing, is the number one symptom associated with social anxiety across the literature (Cândea & Szentágotai-Tătar, 2017; Heimberg et al., 2014; Nolen-Hoeksema, 2000; Rachman et al., 2000).

Cognitive symptoms of social anxiety can appear as ruminations that interfere with concentration levels (Heimberg et al., 2014; Nolen-Hoeksema, 2000; Rachman et al., 2000). The ruminations begin with a fear of negative evaluation which spontaneously influences the individual's imagery of themselves (Heimberg et al., 2014). This imagery feeds their negative internal dialogue that recalls the mental representations of social situations (Heimberg et al., 2014). What is then remembered from the social situation becomes distorted as negative, reflecting biased imagery that once again continues the cycle (Heimberg et al., 2014). Ruminations, or post-event processing, keep those with social anxiety reviewing their actions as well as those of others which directly increases the negative effect of the mental illness (Cândea & Szentágotai-Tătar, 2017; Heimberg et al., 2014).

An increase in assessment measures for social anxiety occurred after the mental illness was first included in the American Psychiatric Association DSM-III (1980) for intense fear and the negative evaluation of others (Heimberg et al., 2014). Social anxiety continues to be documented with theories and methods including the model of social phobia by Rapee and Heimberg (1997). The model included the concepts of perceived audience, external indicators, internal cues, and judgment resulting in physical, behavioral, and cognitive symptoms (Heimberg et al., 2014; Rapee & Heimberg, 1997). Around the same time, the Liebowitz Social Anxiety

Scale, or LSAS, emerged as an assessment measurement focused on fear and avoidance (Liebowitz, Gorman, Fyer, & Klein, 1985; Mennin et al., 2002). The clinician-administered scale has now been updated to a convenient self-report index, LSAS-SR, which holds excellent psychometric properties consistent with the former LSAS (Baker, Heinrichs, Kim, & Hofmann, 2002; Fresco et al., 2001; Heimberg et al., 1999). As a state measure of social anxiety, the LSAS-SR includes the following six subscales: fear of social interaction, fear of performance, avoidance of social interaction, avoidance of performance, total fear, and total avoidance (Fresco et al., 2001; Oakman, Van Ameringen, Mancini, & Farvolden, 2003). The typical measurement from the LSAS-SR yields seven scores including the summary score (Fresco et al., 2001; Oakman et al., 2003). The LSAS-SR is robust in clinical patient populations with supporting consistency and validity as compared to the LSAS (Baker et al., 2002; Griffiths et al., 2014; Oakman et al., 2003).

An enormous body of evidence is growing that links problematic internet use with social anxiety, as the internet has created an anonymous environment for communication (Caplan, 2007; Erwin et al., 2004; Lee & Stapinski, 2012; Prizant-Passal et al., 2016; Shepherd & Edelman, 2005; Weidman et al., 2012; Weinstein et al., 2015). Those with social anxiety will avoid social situations creating safety behaviors to maintain avoidance (Clark, 1997). The allusive safety of the internet feeds the vulnerability of those with social anxiety, allowing them to minimize potential social treats while maintaining interpersonal needs (Erwin et al., 2004; Lee & Stapinski, 2012; Shepherd & Edelman, 2005). Most current research speculates this strong association is the result of negative expectations being different for online activities as compared to offline or real-life (Alden & Taylor, 2004; Caplan, 2007; Erwin et al., 2004; Lee & Stapinski, 2012). Text-based communication, on the internet, allows those with social anxiety freedom

from worrying about displaying their symptoms like blushing, stammering, or excessive sweating (Alden & Taylor, 2004; Erwin et al., 2004; Lee & Stapinski, 2012). Caplan (2007) termed the control over displaying symptoms as self-presentation, claiming those with social anxiety excitedly prefer online activities for this reason alone.

In two samples with equal male and female participants, Weinstein et al., (2015) discovered a moderately positive link between social anxiety and internet addiction. Those with social anxiety tended to lack self-confidence and needed to project a positive impression of themselves onto others (Weinstein et al., 2015). Online interactions, including internet pornography through message chat-rooms, provided low-risk opportunities to reduce levels of anxiety (Weinstein et al., 2015). Weinstein et al., (2015) also suggested social anxiety is a connecting variable between the feelings of loneliness and internet addiction. Similarly, Lee and Stapinski (2012) researched the relationship between social anxiety and problematic internet use in an Australian study with 134 men and 204 women. The online survey assessed social anxiety with the LSAS-SR (Fresco et al., 2001) resulting in a stronger association when controlling for general anxiety and depression (Lee & Stapinski, 2012). Results also supported the theory of negative evaluation avoidance as a safety behavior for those with social anxiety choosing online communication rather than face-to-face encounters (Lee & Stapinski, 2012).

Researchers have suggested the self-conscious emotion of shame is relevant to the symptoms of anxiety including social anxiety (Cândea & Szentagotai-Tăta, 2018; Cândea & Szentagotai-Tătar, 2017; Fergus, Valentiner, McGrath, & Jencius, 2010; Gilbert, 2000). Gilbert (2000) reported for those with depression, shame operates through social anxiety to increase the effects of symptoms. Fergus and colleagues (2010) likewise discussed how shame-proneness is more relevant than guilt-proneness for the maintaining of anxiety symptoms. It was Cândea and

Szentágotai-Tătar (2017) who linked shame as the activating and maintaining agent of social anxiety symptoms through post-event rumination. The study surveyed a population of 104, including 95 women with two tests for rumination; one-day post-event, and one-week post-event (Câdea & Szentágotai-Tătar, 2017). Social anxiety was measured with the LSAS-SR and shame with the TOSCA-3 and PFQ-2 to determine that shame mediates PER with social anxiety at the one week mark (Câdea & Szentágotai-Tătar, 2017). While both internal and external shame contributes to social anxiety, external shame is more predictive of symptoms (Câdea & Szentagotai-Tăta, 2018).

Therapeutic interventions for social anxiety should include awareness of problematic internet use, shame, and cognitive behaviors like rumination (Alden & Taylor, 2004; Câdea & Szentagotai-Tăta, 2018; Câdea & Szentágotai-Tătar, 2017; Lee & Stapinski, 2012; Stangier, Heidenreich, Peitz, Lauterbach, & Clark, 2003). Alden and Taylor (2004) suggested interpersonal therapy that focuses on the reduction of symptoms and relationship development would benefit those who present with social anxiety. Social anxiety management suggested by Lee and Stapinski (2012) included strategies for symptom reduction and the encouragement of face-to-face friendships. Stangier and colleagues (2003) supported individual cognitive therapy for social anxiety as compared to cognitive-behavioral group therapy, evidenced by post-treatment and follow-up measurement. Fergus et al., (2010) concluded a better understanding of the facets of shame may yield direct therapeutic targets for the treatment of social anxiety.

### **Shame**

Shame is a self-conscious, human emotion that finds its beginnings in the teachings of Christianity and the exit of humanity from the Garden of Eden (Câdea & Szentagotai-Tăta, 2018; Gilbert, 2000; Kim et al., 2011; Tangney, Stuewig, & Mashek, 2007). Scripture first

mentions shame in Genesis 2:25, “Both the man and his wife were naked, yet felt no shame” (Holman Christian Standard Bible). The word shame, meaning ‘to hide’ is taken from the root Indo-European word of skam or skem (Clark, 2012; Garfinkle, 2012; Tangney et al., 1992). Shame and guilt are natural expressions, tied to social and relational functioning, which can become negative when experienced in excess (Kim et al., 2011). They are twin emotions not easily separated yet remarkably different and research demands their separation (Elison, 2005; Garfinkle, 2012; Lund, 2017). Shame will focus attention on the core self, while guilt focuses attention on the behavior (Elison, 2005; Lewis, 1971; Price Tangney et al., 1996). Shame and guilt can be experienced together or separately (Clark, 2012). Clark (2012) explains that shame will cause an individual to hide, conceal, or cover-up their actions or other emotions. Shame is not easily expressed through words proving more difficult to measure than guilt in self-reported research (Clark, 2012).

As a negative evaluation of the self, shame is affecting or affective response to a situation or experience (Clark, 2012; Kim et al., 2011; Tracy & Robins, 2004). Sigmund Freud (1900) was first credited with distinguishing between the three components of a shameful experience for therapeutic purposes (Freud & Strachey, 1964). A shameful experience is comprised of the precipitating event or naked exposure, the affect emotion, and the act of hiding (Garfinkle, 2012). Freud (1910) also documented how the naked body, or indecent exposure of the genitals, creates a feeling of shame (Freud & Strachey, 1964). The emotion of shame carries with it a fear of exposure to others both physically and psychologically (Garfinkle, 2012). Shame, in its complexity, can be divided into internal shame and external shame for therapeutic purposes (Cândeia & Szentagotai-Tăta, 2018; Gilbert, 2000; Kim et al., 2011).

## **Internal Shame**

Shame can be internalized when an individual has a negative view of themselves, or a direct rejection of the self (Cândea & Szentagotai-Tăta, 2018; Gilbert, 2000; Kim et al., 2011). Internal shame is connected to self-regulated cognitions, self-regulated affect, and hostile anger at self (Cândea & Szentagotai-Tăta, 2018; Gilbert, 2000). The self-conscious aspect of the shame emotion was also documented by Black, Curran, and Dyer, (2013) as being essential to a person's healthy social and moral development. Their research supported the emotion of shame as a connection to insecurities, self-blame, and dysfunctional intimate relationships (Black et al., 2013). Therefore, internal shame can be defined as a negative self-evaluation with feelings of inadequacy, self-disgust, and defeat (Gilbert, 2000).

The concept of internal shame can also be found in a woman's self-reflection, as the emotion helps to define how she views herself inwardly (Clark, 2012). Body shame has been proven to mediate the relationship between sexual decision-making and menstrual shame, which is often associated with an increase in sexual risk-taking by women (Schooler et al., 2014). When describing their sexual arousal, men will focus on their physical levels of excitement, while women are cognitively subjective to the overall experience (Basson, 2002). The woman's cognitive appraisal of her sexual arousal can be positive and enjoyable or negative and filled with thoughts and feelings of guilt, shame, fear, or vulnerability (Basson, 2002). Those negative thoughts or feelings of shame will increase a woman's sexual vulnerability (Garfinkle, 2012). The negativity of internal shame is easily measured with the Test of Self-Conscious Affect, or TOSCA instrument (Gilbert, 2000; Kim et al., 2011).

## **External Shame**

Shame which is others focused is defined as external shame (Gilbert, 2000; Goss et al., 1994; Kim et al., 2011). This type of shame is based on the exposure of oneself to others, the evaluation of others, or the negative view of self from others (Cândeia & Szentagotai-Tăta, 2018; Gilbert, 2000; Kim et al., 2011). The experience of external shame typically involves how the self becomes the object of evaluation (Cândeia & Szentagotai-Tăta, 2018; Crozier, 1998; Gilbert, 2000). External shame is the rejection, criticism, judgment, or abandonment that is received, expected, or feared from others (Cândeia & Szentagotai-Tăta, 2018; Gilbert, 2000; Goss et al., 1994; Kim et al., 2011). If actions or behaviors were revealed to others would they reject attack, or criticize with negativity (Cândeia & Szentagotai-Tăta, 2018; Kim et al., 2011)? The Other as Shamer scale, or OAS, was developed out of the need to separate the self-evaluation part of shame from the beliefs about judgment from others (Gilbert, 2000; Goss et al., 1994; Kim et al., 2011). For this study, external shame was defined as the painful feeling that concerns how other people feel about you.

External shame, in the form of fear of exposure to others or the fear of what others might think, is particularly linked to people with anxiety disorders such as social anxiety (Cândeia & Szentagotai-Tăta, 2018; Clark, 2012; Gilbert, 2000; Kim et al., 2011). For individuals with social anxiety, guilt and shame lead to avoidance which becomes part of their struggle to deal with their anxiety disorder or other addictive behaviors (Clark, 2012). In a British study with 50 university students, Leeming and Boyle (2013) found that interpersonal relationships are more significant than self-acceptance in the overcoming of shame. In the research on managing and repairing shame, the results suggested repairing social positions with others was more important than repairing feels toward self (Leeming & Boyle, 2013). The managing and repairing of



shame occurred when the view of self was changed and relationships with others were repositioned (Leeming & Boyle, 2013).

### **Shame-Proneness**

For years, researchers have focused on shame as shame-proneness or trait shame, instead of state shame or a direct response to circumstances (Cândeia & Szentágotai-Tătar, 2017; Leeming & Boyle, 2013; Tangney et al., 1992; Vanderhei, Rojahn, Stuewig, & Mcknight, 2013). Shame-proneness is defined as the tendency to experience shame (Cândeia & Szentágotai-Tătar, 2017). In their study, Tangney, and colleagues (1992) documented an association with anger, hostility, and blaming others with shame-proneness. A proneness to shame will increase an individual's vulnerability to depression (Tangney et al., 1992). Shame proneness was also strongly related to an individual's psychological symptoms which consequently placed them at a higher risk for increased episodes of shame (Tangney et al., 1992; Vanderhei et al., 2013). In a later study, Dearing, Stuewig, and Tangney (2005) supported a positive correlation between shame-proneness and substance abuse problems with three populations. The study provided shame-proneness as a possible target for interventions when those with drug or alcohol dependence seek treatment (Dearing et al., 2005).

A growing number of research studies also indicated shame and shame proneness are stronger in women than men when associated with depressive symptoms, social acceptance, and interpersonal relationships (Kim et al., 2011; Orth, Robins, & Soto, 2010; Tangney et al., 1992). Shame-proneness was significantly linked to Social Anxiety Disorder, or SAD, and Generalized Anxiety Disorder, or GAD, in a study population of 54% women by Fergus et al., (2010). The research of Vanderhei and colleagues (2013) connected shame-proneness with non-suicidal self-injury or NSSI. The survey of 378 undergraduates was 71% female with results that proved

shame-proneness creates a risk for maladaptive behaviors like self-injury (Vanderhei et al., 2013). High shame-proneness was correlated with a high rate of self-injury (Vanderhei et al., 2013). Research literature continues moving forward with the construct of shame as a problematic affect response.

### **The Shame Pathway**

Like a yellow-brick road, the shame to depression pathway is now cemented by a large collection of research studies. To date, numerous amounts of research have chronicled the shame to depression relationship, where shame has been labeled a mediator between events and outcomes (Bilevicius et al., 2018; Kim et al., 2011; C. M. Young, Neighbors, DiBello, Traylor, & Tomkins, 2016). Recently, Bilevicius et al., (2018) released their study with undergraduates, 76% of whom were women, where high levels of shame explained the effects of depression on those with alcohol and gambling problems. In an Australian study with undergraduate students, Treeby and Bruno (2012) detailed how shame-proneness is positively linked with problematic alcohol use. The participants, 74% of whom were female, reported using alcohol as a means of coping with anxiety and depression symptoms (Treeby & Bruno, 2012). Results from the Bilevicius and colleagues' (2018) study and the Treeby and Bruno (2012) study both corresponded with the evidence presented by Dearing, Stuewig, and Tangney (2005) where individuals who were shame-prone would regulate their negative emotional state with alcohol, drugs, or other substances. External shame has also been shown to demonstrate a larger effect on depression symptoms than internal shame (Kim et al., 2011). The conclusion, set-forth by Kim et al., (2011), confirmed that the emotion of shame should begin to prominently figure into more research and treatment options for depression and its symptoms. As a pathway, shame to depression continues to be researched extensively.

With social anxiety, individuals experience a fear of future judgment and a need to isolate or hide; both of which are key elements for shame (Bilevicius et al., 2018; Clark, 2012; Tangney et al., 1992). A growing number of research studies indicates rumination could hold the answers for the shame and social anxiety connection (Cândeia & Szentágotai-Tătar, 2017; Lyubomirsky, Caldwell, & Nolen-Hoeksema, 1998; Nolen-Hoeksema, 2000). Rumination leads to social event avoidance (Clark, 2012). The repeated thought process keeps those with social anxiety analyzing everything (Nolen-Hoeksema, 2000). Self-forgiveness has been negatively correlated with ruminations adding to the shame and social anxiety relationship (Thompson et al., 2005). Rumination with shame also supplies an enhanced fear of the future, gloomy self-evaluations of the present, and contrary memories from the past for those with social anxiety (Lyubomirsky et al., 1998). Overall, the negative effect of shame seems to strengthen an individual's negative mood contributing to their social anxiety symptoms (Cândeia & Szentágotai-Tătar, 2017; Lyubomirsky et al., 1998). As a pathway, shame to social anxiety lacks substantial research evidence.

### **Shame the Affective Response**

The advice to therapists, counselors, and pastors is to never view shame as an isolated event (Wurmser, 2015). Shame, as the affect, is strongly tangled in webs of trauma, conflict, addictive behaviors, and other mental illness symptoms (Bilevicius et al., 2018; Wurmser, 2015). It is a psychological state where the individual's core is evaluated by self and others (Elison, 2005) The dynamics of shame are twisted around self-destructive behaviors, narcissism, masochism, and superego conflicts (Wurmser, 2015). Shame is significant in both Body Dysmorphic Disorder, or BDD, and Obsessive-Compulsive Disorder, or OCD, allowing the

affect, or psychological state of mind, to become the target of therapy for these disorders (Weingarden, Renshaw, Wilhelm, Tangney, & Dimauro, 2016).

Concerning the treatment of shame, most literature promotes spiritual, self-compassion, and self-acceptance interventions. Dhuffar and Griffiths (2014) asked what protective factors could work to decrease the shame and hypersexual connection for women? Lund (2017) advised taking spirituality into account when treating shame, while Clark (2012) endorsed mindfulness techniques, with self-compassion interventions. Weingarden and colleagues (2016) recommended either Compassion-Focused Therapy, or CFT, or Acceptance and Commitment Therapy, or ACT, for clients with assessments of shame. Therapy should immediately target shame-prone cognitions and shame-driven behaviors (Weingarden et al., 2016). First, mindfulness interventions would allow the client to observe his or her experiences with shame (Weingarden et al., 2016). Next, psychoeducation about shame can instruct on how to alter maladaptive responses, like withdrawal, to situations that evoke shame (Weingarden et al., 2016). Finally, validation of the emotion and experience surrounding the shame will allow the client to increase their feelings of acceptance and understanding (Weingarden et al., 2016). Perhaps, the therapeutic keys to unlocking the self-conscious emotion of shame are self-acceptance and love (Clark, 2012; Lund, 2017). Shame heals through the counter emotion of love when women understand their worth or value (Lund, 2017).

### **Grace**

Grace, a spiritual construct derived from the Greek word 'charis,' is commonly located throughout the writings of Paul in the Holy Bible (Bufford et al., 2017). A term used often to express acceptance and mercy, the word 'charis' is the root word for gracious and graceful (Bufford et al., 2017). Sells, Beckenbach, and Patrick (2009) documented grace from the Latin

derivative of ‘gratia’ from which the English word gratitude was derived. This root definition implies grace is the receiving of direct appreciation or unmerited favor from another (Sells et al., 2009). Children in Sunday school are often instructed the acronym for grace is ‘God’s riches at Christ’s expense.’ Christians believe grace is only received because of the redemptive work of Christ, combining the two root definitions to include both acceptance and unmerited favor. For this study, grace has been defined as an unconditional gift from God, through Jesus for mankind which provides healing and strength in times of need.

Most Christian believers have a common understanding of the theological concept of grace as both common grace and special grace (Bufford et al., 2017; Emmons, Hill, Barrett, & Kapic, 2017; Sisemore et al., 2011). Common grace has been awarded by God to all humans, creatures, and the living world (Bufford, Blackburn, Sisemore, & Bassett, 2015; Bufford et al., 2017). An example of this grace occurs in Matthew 5:45 (HCSB) where God allows the sun to shine and rain to fall on all humanity equally, both the just and the unjust (Bufford et al., 2015; Sisemore et al., 2011). Special grace is understood as saving grace only reserved for humans (Bufford et al., 2017; Sisemore et al., 2011). This grace is unmerited by the receiver, establishes freedom from the guilt of sin, and extends a promise of eternal life (Emmons et al., 2017; Sisemore et al., 2011). Special grace was established by the apostle Paul in Ephesians 2:8-9, “For you are saved by grace through faith, and this is not from yourselves; it is God’s gift – not from works so that no one can boast” (HCSB). Therefore, grace is a gift from God to humanity, mediated through Jesus Christ (Judd et al., 2018).

There are theological differentiations of grace, all of which are essential and need to be considered for the cognitive healing processes of therapy (Bufford et al., 2015; Emmons et al., 2017). Justifying grace found in Romans 3:24 (HCSB) provides a definition that incorporates

freedom and redemption (Bufford et al., 2015; Emmons et al., 2017; Tjeltveit, 2004). Another type of grace is referenced in Titus 2:11-14 (HCSB), where the concept embraced instruction or teaching those who obey, to deny godlessness and lust, in a process of sanctification (Emmons et al., 2017). Grace effects change; which can be found in a sufficient, enabling form through 2 Corinthians 12:9 (HCSB, Emmons et al., 2017). In their efforts to efficiently measure grace as a therapeutic concept, Bufford and colleagues (2015) distinguished special grace from common grace and presented grace as multidimensional.

If grace is approached through a Christian Psychology framework both faith (theology) and knowledge (science) can be combined to measure the experiences and beliefs of humanity to produce positive behavior (Bufford et al., 2015; Sisemore et al., 2011; Tjeltveit, 2004). The first to explore grace as a psychological construct was research by Watson, Morris, and Hood, (1988) which evaluated a belief in sin. Later, Tjeltveit (2004) suggested psychology needed to measure grace through scientific methods and begin recording grace as a measurable dimension. This new measurement of grace needed to account for how the concept impacted a person's belief system which directly influences their unique life experiences (Tjeltveit, 2004). The Richmond Grace Scale was created and endorsed by Sisemore and colleagues (2011) after they discovered Christians in counseling have little awareness of grace, yet high levels of psychological distress. The 36-item Dimensions of Grace Scale was created to combine the three reliable measurements of the Grace Scale, Richmond Grace Scale, and The Amazing Grace Scale (Bufford et al., 2015, 2017). The Dimensions of Grace Scale measures grace as a multidimensional factor through the subscales of Experiencing God's Grace, Costly Grace, Grace to Self, Grace from Others, and Grace to Others (Bufford et al., 2017).

Results from the Dimensions of Grace Scale indicated several significant relationships with spiritual, psychological, and social variables (Sisemore et al., 2011, Bufford et al., 2017). The subscales of Costly Grace and Grace to Others are related to internalized shame, while Grace to Self has been linked with shame and mental health symptoms (Bufford et al., 2017) Judd, Dyer, and Top (2018) also reported higher scores of grace were correlated with low anxiety, low depression, and lower shame. The Dimensions of Grace scale provides evidence that grace is inversely related to shame and psychological distress (Bufford et al., 2015, 2017; Judd et al., 2018).

Therefore, grace is a vital component of Christian therapy (Sisemore et al., 2011). Grace provides women with mental clarity of emotions, understanding of behaviors, and accepting attitudes toward self and others (Sells et al., 2009). Grace embraces an attitude of gratitude that acts to counter pain, injury, or defensiveness toward others (Sells et al., 2009). Stack, Wasserman, and Kern's (2004) research suggested women who were more involved with religious social bonds would directly reduce their usage of pornography. Those religious social bonds included church attendance, healthy and stable marriages, and conservative political values (Stack et al., 2004). Grace interventions can be instituted by the church through sermon series, small group Bible studies, or the individual practices of counseling, prayer, mindfulness, and scripture memory (Bufford et al., 2018). The freedom found within the free, unconditional gift of grace could break a pain-defense-pain cycle (Emmons et al., 2017; Sells et al., 2009).

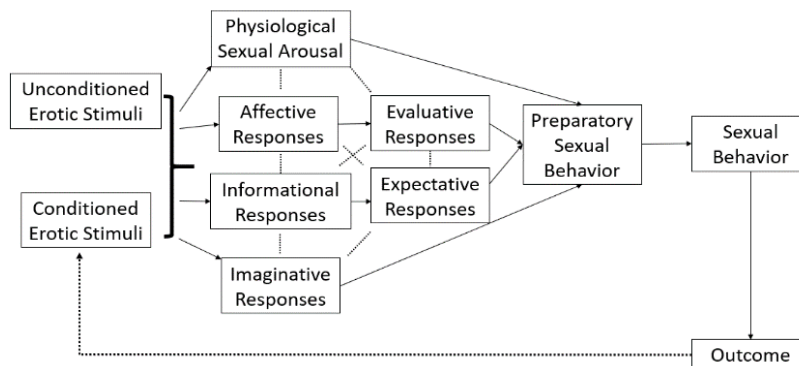
### **Research Hypotheses with Conceptual Models**

Based on the presented literature, several research questions and hypotheses were developed. The first hypothesis stated perceived addiction would have a positive relationship with social anxiety. Second, it was hypothesized that the relationship between perceived

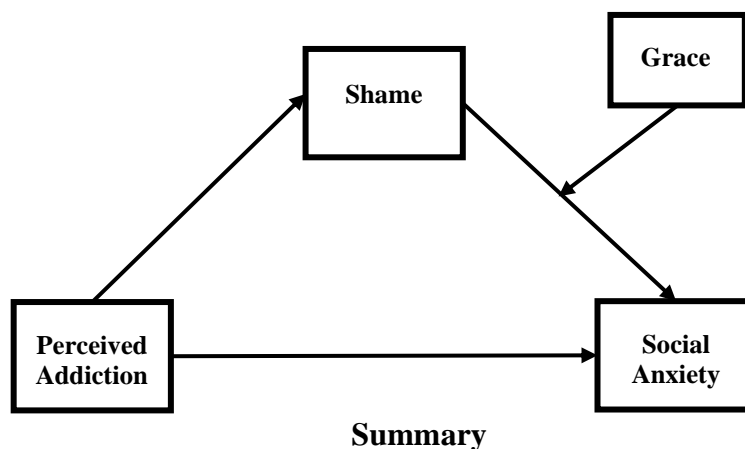
addiction and social anxiety would be mediated by global shame. Hypothesis three stated: The relationship between perceived addiction and social anxiety would be mediated by external shame. Hypotheses one, two, and three were formulated regarding the Sexual Behavior Sequence Theory as displayed in Figure 2.1. Perceived addiction is an imaginative response to the erotic stimuli or pornography viewing (Fisher & Barak, 2001). Shame, as a negative emotion, is an affective response to the imaginative response of perceived addiction (Fisher & Barak, 2001). Social anxiety is the outcome of perceived addiction related to the sexual behavior of internet pornography (Fisher & Barak, 2001). Hypothesis four stated the interaction of global shame and grace would transmit an effect on social anxiety. Hypothesis five stated the interaction of external shame and grace would transmit an effect on social anxiety. Finally, the sixth hypothesis stated that the indirect effect of perceived addiction to social anxiety would be mediated through global and external shame and moderated by grace.

**Figure 2.1**

*The Sexual Behavior Sequence (Byrne, 1976; Fisher & Barak, 2001; Gould, 1992)*





**Figure 2.2***Conceptual Model for Research*

Pornography use through the internet has been reported as common, socially acceptable, and increasing consumption rates each year. Research has indicated the use of internet pornography is problematic with self-reported addiction symptoms (Maddock et al., 2019). Trends in research, production, and marketing continue to reflect upon the male-centric consumer of pornography. However, women have participated in the viewing of problematic and addictive pornography both alone and within a relational context (Wright et al., 2013). Women who used pornography are likely to struggle between the complexities of an increase in their relational satisfaction and a decrease in their emotional intimacy. Those with anxiety issues, especially those associated with social anxiety, are at higher risk to develop internet addictions including pornography addiction (Weinstein et al., 2015). Social anxiety and shame are valuable concepts within the research literature contributing to knowledge about pornography use (Cândeia & Szentágotai-Tătar, 2017). Christian believers who embrace the concept of grace experience better mental, emotional, and relational health (Sisemore et al., 2011). Future research is required to advance therapeutic knowledge for the treatment of social anxiety disorders, addictive pornography usage, perceived addiction, shame, and grace.

### **CHAPTER THREE: METHODS**

This chapter will focus on the methodology used to examine the relationship between perceived addiction and social anxiety including the variables of shame and grace. First, the research investigated whether a relationship exists between perceived addiction and social anxiety for the female gender. Social anxiety was studied as an outcome of the perceived addiction to pornography viewing behavior following the SBS theory (Fisher & Barak, 2001). The emotion of shame was explored as an affective response to perceived addiction and the outcome of social anxiety through mediation. Shame was measured as both global shame and external shame. Next, the moderator of grace was evaluated as an influence on the established effects. Research questions are presented with a discussion on the purpose and design of the study. The methodology continues with the selection of participants along with detailed descriptions of all assessment instruments. The chapter concludes with a listing of research procedures, plans for statistical analysis, validity considerations, and limitations.

#### **Research Purpose**

The purpose of this non-experimental quantitative research study was to examine the Christian woman's usage of internet pornography as it related to perceived addiction, social anxiety, and shame, also examining the spiritual concept of grace as a moderator to decrease the negative outcomes associated with use. Results provided insight into the relationship between perceived addiction to pornography use and social anxiety. In addition, shame, as an affect response, was tested in mediation analysis. The mediation analysis aimed to prove the variable of shame provides an answer to the question of "why" women experienced perceived addiction and social anxiety. Grace was tested in moderation analysis to analyze the strength of the relationship between shame and social anxiety. In moderation analysis, this research was

searching for a way to change the relationship between perceived addiction and social anxiety for Christian women. Findings may provide pastoral counselors with critical insight into how Christian women are directly affected by their pornography use with perceived addiction, potentially breaking the negative cycles of such use.

## **Research Questions and Hypotheses**

### **Research Question One**

What is the relationship between perceived addiction to pornography and social anxiety?

*H<sub>a</sub>*. There will be a positive relationship between perceived addiction to pornography use for women and social anxiety.

*H<sub>0</sub>*. There will be no relationship between perceived addiction to pornography use for women and social anxiety.

### **Research Question Two**

Is the relationship between perceived addiction and social anxiety mediated by the negative emotion of global shame?

*H<sub>a</sub>*. The relationship between perceived addiction and social anxiety will be mediated by global shame.

*H<sub>0</sub>*. The relationship between perceived addiction and social anxiety will not be mediated by global shame.

### **Research Question Three**

Does external shame mediate the relationship between perceived addiction and social anxiety?

*H<sub>a</sub>*. The relationship between perceived addiction and social anxiety will be mediated by external shame.

*H<sub>0</sub>*. The relationship between perceived addiction and social anxiety will not be mediated by external shame.

#### **Research Question Four**

Does the spiritual aspect of grace moderate the relationship between global shame and social anxiety?

*H<sub>a</sub>*. The relationship between global shame and social anxiety will be moderated by grace.

*H<sub>0</sub>*. The relationship between global shame and social anxiety will not be moderated by grace.

#### **Research Question Five**

Does the spiritual aspect of grace moderate the relationship between external shame and social anxiety?

*H<sub>a</sub>*. The relationship between external shame and social anxiety will be moderated by grace.

*H<sub>0</sub>*. The relationship between external shame and social anxiety will not be moderated by grace.

#### **Research Question Six**

Is the relationship between perceived addiction and social anxiety mediated by global and external shame and moderated by grace?

*H<sub>a</sub>*. The indirect effect of perceived addiction on social anxiety through both global shame and external shame will be moderated by grace.

*H<sub>0</sub>*. The indirect effect of perceived addiction on social anxiety through both global shame and external shame will not be moderated by grace.

### **Research Design**

After approval was obtained by the Institutional Review Board or IRB, this study used a non-experimental survey design (Johnson, 2001). The non-experimental design was selected because manipulation of the variables did not occur. A longitudinal design was also not appropriate due to the lack of time in preparing for the dissertation. Therefore, a non-experimental survey design was suitable with the data collected only once, using an online questionnaire method (Johnson, 2001). First, a Pearson's *r* correlation test was conducted to assess whether the variables were correlated, or relational (Hayes, 2018). Next, a linear regression analysis plan allowed for all the variables to be expansively analyzed. Mediation analysis examined shame as an intervening variable to determine whether causal effects existed as indirect effects between perceived addiction and social anxiety (Hayes, 2018). Finally, moderation analysis examined the variable of grace to evaluate when, or under what circumstances, the relationship from perceived addiction to social anxiety may be changed (Hayes, 2018).

### **Participants and Setting**

Participants were recruited from the crowdsourcing platform of Amazon and their Mechanical Turk, or MTurk, service (Heppner, Wampold, Owen, Thompson, & Wang, 2016). To access Amazon MTurk, the study utilized the participant-sourcing dashboard of CloudResearch (Litman, Robinson, & Abberbock, 2017). CloudResearch creates an easier experience for the researcher when launching new surveys to Amazon MTurk (Litman et al., 2017). The survey platform of Amazon MTurk allows researchers to create unique surveys as a

‘requester’ to be completed as a Human Intelligence Task, or HIT, for a ‘worker’ (Shapiro, Chandler, & Mueller, 2013). The services provided through CloudResearch insured that the Amazon MTurk participants for this research would be high-quality respondents when adjusting approval ratings and previous HIT requirements (Litman et al., 2017).

The Amazon MTurk service has been proven to be an inexpensive way of soliciting specific participants from online communities (Goodman, Cryder, & Cheema, 2013). Researchers Shapiro, Chandler, and Mueller (2013) documented the Amazon MTurk service as providing faster collection and quality when compared to other sources. Mason and Suri, (2012) promoted Amazon MTurk as the ideal place for research of behavior issues, especially those examining online behaviors from a diverse background of participants. It is reported that Amazon MTurk participants have a prevalence of generalized social anxiety which matches the prevalence typically found in general populations (Shapiro et al., 2013). Buhrmester, Kwang, and Gosling (2011) stated that the test and re-test reliability of the Amazon MTurk is consistent with other research survey methods including traditional ones, meeting psychometric standards necessary for publication.

Participants were first asked to provide informed consent before participation in the study was allowed. Informed consent is documented in Appendix A. The inclusion criteria for this study specified age over 18 years old, classification as female gender, proficiency of English, an identification of the Christian faith, and usage of pornography within the previous week. Following the signed informed consent, participants answered the qualifying inclusion questions which were embedded throughout the demographic section of the survey. The survey was terminated for any participant who did not qualify with the inclusion criteria using a skip-logic answer method of design. Amazon MTurk participants who were terminated during the

demographic questions did not receive compensation for the completion of the survey. A 10-digit secret completion code of KF2JFG682J was randomly created and placed at the end of the survey. Amazon MTurk participants who completed the survey and entered the secret completion code were compensated with monetary compensation of \$1.00 (US). This study was seeking a predetermined minimum survey sample size of 300 participants (Bujang, Sa'at, & Sidik, 2017).

## **Research Instruments**

*Demographic Information.* Participants were asked several demographic questions designed to assess for the inclusion criteria of age, gender, proficiency of the English language, identification of faith as Christian, and use of pornography in the previous week. Information requested included age, gender, race, education, current employment status, household's annual income, current relationship status, sexual activity in the last 30 days, religious attendance, and daily effect of faith. Participants were presented with this research study's definition of pornography, as previously defined, before answering the inclusion question concerning use in the previous week. Demographic questions are documented in Appendix B. The addition of multiple demographic questions allows the received data to be analyzed further for a multitude of different studies with varying hypotheses.

*Cyber Pornography Use Inventory-9.* Participants were asked several questions regarding their pornography use as utilized through the Cyber Pornography Use Inventory-9, or CPUI-9 scale, created by Grubbs, Sessoms, Wheeler, & Volk (2010) and updated by Grubbs, Volk, and colleagues, in 2015. The inventory consists of three subscales for emotional distress, access efforts, and perceived compulsivity (Grubbs, Exline, Pargament, Hook, & Carlisle, 2015). A scale of one meaning "not at all" to seven meaning "extremely" is used by participants to rate

their similarities with assessment statements. Participants selected answers through a drop-down box design. Assessment statements for the CPUI-9 include the following: “I feel ashamed after viewing pornography online” and “I feel unable to stop my use of online pornography” (Grubbs et al., 2015). Participants were presented with this research study’s definition of pornography before answering the questions listed by the CUPI-9. The CPUI-9 is documented in Appendix C with questions and scale answers.

***Shame Inventory.*** The Shame Inventory is designed to measure shame through the cues of different individuals (Rizvi, 2010). A Likert scale of zero for “no shame” to four for “extreme shame” is used for 50 assessment statements (Rizvi, 2010). A global feeling of shame is measured with three beginning measurement questions (Rizvi, 2010). Examples of assessment statements include the following: “Didn’t live up to a really important standard of mine,” “Broke a promise,” “Was betrayed by someone I care about,” and “Had sexual/kinky fantasies” (Rizvi, 2010). Rizvi (2010) reports the Shame Inventory has a strong validity as it correlates with TOSCA and good internal reliability with a Cronbach’s alpha coefficient of ( $\alpha=.84$ ). The Shame Inventory can be viewed in Appendix D.

***Other as Shamer.*** The Other as Shamer (OAS) Scale measures external shame (Gilbert, 2000; Goss et al., 1994; Kim et al., 2011). There are 18 descriptions of experiences and feelings measured by a 5-point scale of 0=never and 4=almost always (Gilbert, 2000). The OAS will measure the extent to which the individual feels others are potentially shaming or degrading them (Gilbert, 2000). The OAS scale can be reviewed in Appendix E.

***LSAS-SR.*** The Liebowitz Social Anxiety Scale: Self-Reported version measures social anxiety symptoms (Baker et al., 2002; Căndea & Szentágotai-Tătar, 2017; Fresco et al., 2001). A self-report measurement was updated from the original LASA for convenience and holds



excellent psychometric properties consistent between each version (Baker et al., 2002; Fresco et al., 2001). The scale includes 24 items evaluating avoidance and fear in social and performance situations (Cândeia & Szentágotai-Tătar, 2017). As a state measure of social anxiety, the total score is calculated as well as scores for all six subscales (Baker et al., 2002; Cândeia & Szentágotai-Tătar, 2017). The LSAS-SR includes the following six subscales: fear of social interaction, fear of performance, avoidance of social interaction, avoidance of performance, total fear, and total avoidance (Fresco et al., 2001; Oakman et al., 2003). The LSAS-SR is documented in Appendix F.

***Dimensions of Grace Scale.*** The Dimensions of Grace Scale measures five dimensions of grace including grace to self and grace from others (Bufford, Blackburn, Sisemore, & Bassett, 2015). Introduced by Bufford et al., (2015) the scale contains 36 items for measurement of the multidimensional constructs. Examples of the assessment items include the following: “God cares more about what I do than who I am,” “I tend to dwell on my faults,” and “My parents always remember my mistakes” (Bufford et al., 2015). Dr. Roger Buford granted permission for this research study to use the Dimensions of Grace Scale. The Dimensions of Grace scale can be viewed in Appendix G which also contains documentation of permission for use.

### **Research Procedures**

The student researcher first applied for approval from the Institutional Review Board, or IRB, through Liberty University in August of 2020. The application for approval was modified and changed to reflect upon the study’s usage of Amazon MTurk. While the study data remains anonymous, the IRB felt it was necessary to acknowledge how the workers' Amazon MTurk identification number could potentially be accessed. The informed consent language was

modified to reflect this disclosure to future survey participants. Final approval for this research study was granted from the IRB on October 1, 2020 (IRB-FY20-21-70).

After approval was obtained, contracts were created with SurveyMonkey, CloudResearch, Amazon MTurk, and Amazon Web Services for the creation, launching, collecting, and payment of the survey. A new survey was created through the services of SurveyMonkey. The account with CloudResearch handled the requirement of high-quality participants, the launching of the survey to the Amazon MTurk platform, and the payment of \$1.00 to participants who submitted the secret completion code (Litman et al., 2017). A requester account was created on Amazon MTurk before the launching of the survey. An account with Amazon Web Services was required to pay the survey fee to Amazon.

The research survey was created through the services of SurveyMonkey as an original attempt at investigating the pornography usage of Christian women. Informed consent (Appendix A), demographic questions (Appendix B), and assessment instruments (Appendices C-G) were each individually uploaded into the survey design. Skip logic was added to the inclusion questions to ensure participants who completed the survey qualified as such. Assessment instruments were then added in the predetermined order of Cyber Pornography Use Inventory-9, or CPUI-9 (Grubbs et al., 2010, Appendix C), Shame Inventory (Rizvi, 2010, Appendix D), Other as Shamer (Goss et al., 1994, Appendix E), Liebowitz Social Anxiety Scale (Fresco et al., 2001, Appendix F), and Dimensions of Grace Scale (Bufford, Sisemore, & Blackburn, 2017, Appendix G). The Other as Shamer scale (Appendix E) was reverse coded on even statements as an added safeguard for participation attention purposes. The minimal risks for the survey could have included but were not limited to, triggers of social anxiety, feelings of

shame, or awareness of addiction symptoms for pornography use. On October 20, 2020, the survey design was completed and a weblink for the collection was created by SurveyMonkey.

The survey weblink was then copied and moved onto the dashboard of CloudResearch (Litman et al., 2017). CloudResearch was then used to launch the survey to the Amazon MTurk platform (Litman et al., 2017). The survey went ‘live’ on October 20, 2020, for the first time. CloudResearch had many advantages including its unique launching features which allowed the researcher to control the qualifications of the participants, the number of surveys collected, and the prioritization of the survey within the Amazon MTurk network (Litman et al., 2017). The survey launched seven times for a total of 108 hours of ‘live’ collection. Surveys were collected over a period of 4.5 days for a total number of 500 participants. Participants were paid the \$1.00 fee through CloudResearch. Surveys were rejected through CloudResearch if the participants failed to enter the secret completion code or if the total time to complete the survey was under three minutes. The final survey was completed on October 30, 2020, and the status of the weblink closed with SurveyMonkey. All survey data were collected in the year 2020. Ethically, every component of this research’s procedures including the design, participation with Amazon MTurk, recruitment of participants, survey instruments selected, and data collection was entirely centered on the participant’s confidentiality. Every effort to protect such confidentiality was extended throughout this research study’s process to reduce the potential risk of harm.

### **Data Processing and Analysis**

After the survey closed with SurveyMonkey, the data were exported into the IBM SPSS Statistics program (Hayes, 2018). The survey results have been stored confidentially and securely by the researcher and statistician through password protected files on password-protected computers. All data were carefully screened for missing cases and outliers were

identified. After excluding participants who had missing data for the relevant variables, the sample consisted of 470 participants (N=470). The independent or antecedent variable was identified as perceived addiction (Hayes, 2018). Social anxiety was identified as the dependent outcome or consequent variable (Hayes, 2018).

The data analysis plan included a screening of the data as stated above, regression analyses for all variables, simple mediation, and moderated mediation. A Person's  $r$  correlation test was conducted to assess if variables were correlated (Hayes, 2018). Linear regression was then conducted for the effects between perceived addiction and social anxiety. The PROCESS software by Hayes (2018) produced all regression coefficients,  $p$  values, as well as confidence intervals. Direct and indirect effects for the mediation and moderation analysis were reported (Hayes, 2018). Hayes's (2018) PROCESS Models 4 (mediation), and 14 (moderation) were used to analyze the research questions addressing all regression effects. Considerations for internal and external validity included self-reporting measurements, lack of clarity among assessments, a wide range of ages, and varied demographics. The survey only included female participants, which could be registered as a threat to external validity (Heppner, Wampold, Owen, Thompson, & Wang, 2016).

### **Summary**

This methodology chapter defined how the student researcher explored and examined the relationship between perceived addiction and social anxiety for Christian women who use pornography. Research questions, along with their corresponding hypotheses, were presented. The research's survey design along with the Amazon MTurk recruitment process was described. Details of all research instruments were reported, and attached in the Appendix. All research

procedures were chronologically documented for future replication by fellow researchers. Data processing and analysis plans concluded the methodology chapter.

## **CHAPTER FOUR: RESULTS**

The purpose of this non-experimental quantitative research study was to examine the Christian woman's usage of internet pornography as it related to perceived addiction, social anxiety, and shame, also examining the spiritual concept of grace as a moderator to decrease the negative outcomes associated with use. First, this study examined the relationship between perceived addiction to pornography use and social anxiety. Then, global shame and external shame were tested in mediation analysis. Grace, as a spiritual agent of change, was tested in moderation analysis. Moderation mediation allowed all variables in this research study to be tested for relational effects. This chapter presents the demographics of all N = 470 participants. Data analysis will detail all results from this research study. The chapter concludes with a summary of all findings.

### **Participant Demographics**

A sample of female participants was recruited through Amazon MTurk to take part in this present study. To be included participants were required to meet the inclusion criteria of age over 18, female gender, proficiency of English, identification with the Christian faith, and usage of pornography within the previous week. Data screening included removing all participants that did not meet the study's inclusion criteria and those with missing data. After excluding participants who had missing data for the relevant variables, the final sample consisted of 470 participants (N=470).

Demographics were reported for age, race/ethnicity, relationship status, sexual activity in the last 30 days, religious attendance, and the degree to which religion or faith affects a participant's daily life and decision-making. Participants were required to be over the age of 18 years. The mean age range of participants was the 25-34 range which included 199 of those

surveyed. Participants in the age range of 35-44 were the next highest grouping with 142 total (42.3%). Other age ranges were reported as follows: 18-24 (10.4%), 35-44 (30.2%), 45-54 (12.1%), 55-64 (3.0%), 65-75 (1.5%), and 75 or older (0.4%). The age ranges of 25-34 years and 35-44 years combined totaled 73% of the surveyed participants. The demographic results are presented next in Table 4.1.

**Table 4.1**

*Demographics*

Variable	N	%
<b>Age</b>		
18-24	49	10.4
25-34	199	42.3
35-44	142	30.2
45-54	57	12.1
55-64	14	3.0
65-75	7	1.5
75 or older	2	.4
<b>Race</b>		
Caucasian	358	76.2
African American	51	10.9
Hispanic, Latino, Spanish Origin	25	5.3
Native American Or Alaska Native	5	1.1
Asian	28	6.0
Other	3	.6

**Relationship Status**

Single	90	19.1
Non-committed	13	2.8
Monogamous Dating	51	10.9
Co-habiting	49	10.4
Married/Life Partner	239	50.9
Legally Separated	3	.6
Divorced	17	3.6
Widowed	6	1.3
Prefer not to say	2	.4

**Sexual Activity in the Last 30 Days**

Yes	382	81.3
No	73	15.5
Prefer not to say	15	3.2

**Religious Attendance**

Daily	4	.9
Weekly	233	49.6
Bi-monthly	48	10.2
Monthly	115	24.5
Prefer not to say	70	14.9

**Influence of Religion on Daily Life**

Not at all	7	1.5
Rarely	35	7.4



Occasionally	149	31.7
Usually	172	36.6
Daily	104	22.1
Prefer not to say	3	.6

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Most participants reported their race or ethnicity as Caucasian (76.2%) with 10.9% describing as African American, 6.0% as Asian, 5.3% as Hispanic, 1.1% as Native American, and 0.6% selecting other. The majority of participants (50.9%) reported either being married or having a life partner. Other responses to current relationship status included single (19.1%), non-committed (2.8%), monogamous dating (10.9%), co-habiting (10.4%), legally separated (0.6%), divorced (3.6%), widowed (1.3%), and those who preferred not to say (0.4%). When asked about sexual activity in the last 30 days, 81.3% of those surveyed responded ‘yes,’ with 15.5% responding ‘no’ as their answers.

As previously noted, participants were required to identify with the Christian faith. When asked about their religious attendance, 49.6% of the participants reported attending a religious activity weekly. The other responses for religious attendance were as follows: daily (0.9%), bi-monthly (10.2%), monthly (24.5%), and prefer not to say (14.9%). Participants were also asked to what degree religion or faith affected their everyday lives and decision-making. Responses to the influence of religion question included: not at all (1.5%), rarely (7.4%), occasionally (31.7%), usually (36.6%), daily (22.1%), and prefer not to say (0.6%).

### **Data Analysis**

The data analysis started with the demographics described above and followed into correlation testing, simple mediation, and moderated mediation. Data analysis was performed

using IBM SPSS Statistics Version 27 (Hayes, 2018). Table 4.2 displays the minimum score, maximum score, mean, and standard deviations for all five assessment inventories: CPUI-9, Shame Inventory (Global Shame), Other as Shamer (External Shame), LSAS-SR (Social Anxiety), and Dimensions of Grace.

**Table 4.2**

*Descriptive Statistics*

Variable	<i>N</i>	Range	Minimum	Maximum	Mean	SD
CPUI-9	470	5.67	1.00	6.69	2.549	1.216
Global Shame	470	9.33	2.33	11.67	6.071	2.042
External Shame	470	56.00	17.00	73.00	43.372	11.886
Social Anxiety	470	139.00	48.00	187.00	110.592	32.529
Grace	470	3.95	2.36	6.31	4.181	0.630

Research question one was investigated through a Pearson's *r* correlation test. Research questions two and three were examined using mediation of global shame and external shame. Research questions four and five measured the moderation of grace on both variables of shame. Finally, research question six utilized moderated mediation for perceived addiction to social anxiety.

**Research Question One: Correlations**

**RQ1:** What is the relationship between perceived addiction to pornography and social anxiety?

***H<sub>a</sub>*.** There will be a positive relationship between perceived addiction to pornography use for women and social anxiety.

Before testing the proposed models, a Pearson's  $r$  correlation test was conducted to assess the relationship between variables. Based on the research questions, the study expected that perceived addiction (CPUI-9) would be positively correlated with shame (Global Shame and External Shame). It was also expected that both perceived addiction (CPUI-9) and shame (Global Shame and External Shame) would be positively correlated with social anxiety (LSAS-SR). A total score for dimensions of grace was also expected to be negatively correlated with each of the negative variables, as grace should reduce the negative constructs.

The Pearson's  $r$  correlation test is documented in Table 4.3. All correlations were reported as significant at the  $p = <.01$  level (2 tailed). Results showed that perceived addiction (CPUI-9) was significantly positively correlated with global shame ( $r=.503, p<.01$ ) and external shame ( $r=.347, p<.01$ ). Additionally, perceived addiction was significantly positively correlated with social anxiety ( $r=.293, p<.01$ ). Global shame was found to be significantly positively correlated with social anxiety ( $r=.438, p<.01$ ). and external shame was also found to be significantly positively correlated with social anxiety ( $r=.510, p<.01$ ). Lastly, grace was found to be significantly negatively associated with perceived addiction ( $r=-.293, p<.01$ ), global shame ( $r=-.333, p<.01$ ), external shame ( $r=-.486, p<.01$ ), and social anxiety ( $r=-.419, p<.01$ ). Hypothesis one was supported as indicated in Table 4.3.

Each of the variables were correlated in ways consistent with the research questions and the study's expectations. Higher levels of perceived addiction to pornography use were associated with increased global shame, external shame, and social anxiety. Furthermore, higher levels of both global shame and external shame were associated with higher levels of social anxiety. Higher grace was associated with lower levels of perceived addiction, shame, and social anxiety. The overall highest correlation among the variables was external shame to social

anxiety. The lowest was both the correlations of perceived addiction to social anxiety and perceived addiction to grace. The highest correlation for grace was between external shame and grace.

**Table 4.3**

*Pearson's r, Means, and Standard Deviations*

	1	2	3	4	5
(1) Perceived Addiction	1				
(2) Global Shame	.503**	1			
(3) External Shame	.347**	.433**	1		
(4) Social Anxiety	.293**	.438**	.510**	1	
(5) Dimensions of Grace	-.293**	-.333**	-.486**	-.419**	1
Mean	2.549	6.071	43.372	110.790	4.181
SD	1.216	2.042	11.886	32.529	.630
Cronbach's $\alpha$	.871	.870	.879	.974	.819

\*Correlation is significant at the .05 level (2-tailed).

\*\*Correlation is significant at the .01 level (2-tailed).

### Research Question Two: Mediation

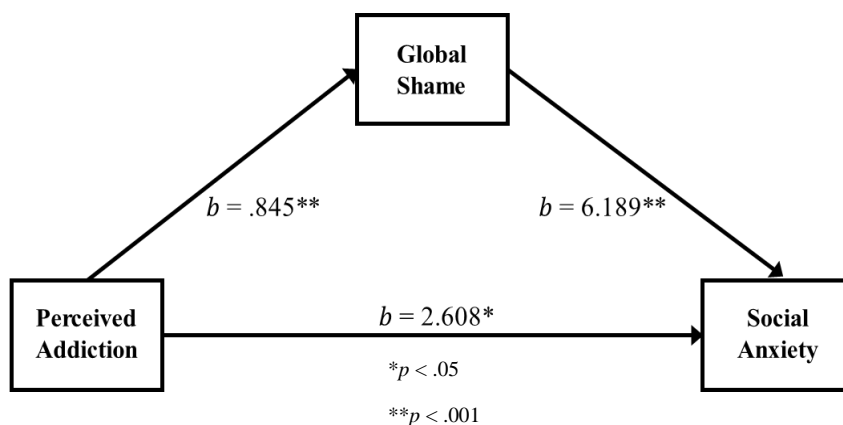
**RQ2:** Is the relationship between perceived addiction and social anxiety mediated by the negative emotion of global shame?

*H<sub>a</sub>.* The relationship between perceived addiction and social anxiety will be mediated by global shame.

A simple mediation model (Hayes Model 4) was tested in which it was hypothesized that global shame would mediate the effect of perceived addiction on social anxiety. Figure 4.1 demonstrates this hypothesis statistically. Table 4.4 provides a summary of the global shame mediation model. It was expected that perceived addiction (CPUI-9) would have a significant positive direct effect on social anxiety (RQ1) and that global shame would mediate the relationship between perceived addiction (CPUI-9) and social anxiety (RQ2). Consistent with expectations (RQ1), perceived addiction was found to transmit a significant positive direct effect on social anxiety ( $b=2.608$ ,  $SE=1.282$ ,  $CI = [.088$  to  $5.128]$ ). In addition, perceived addiction was found to transmit a significant positive effect on global shame ( $b=.845$ ,  $SE=.067$ ,  $CI = [.713$  to  $.977]$ ), and global shame was found to have a significant positive effect on social anxiety ( $b=6.189$ ,  $SE = .763$ ,  $CI= [4.689$  to  $7.689]$ ).

**Figure 4.1**

*Statistical Simple Mediation Model for Global Shame*



When standardized, perceived addiction had an effect size of  $b=.503$  on global shame and an effect size of  $b=.097$  on social anxiety. Global shame also had an effect size of  $b=.389$  on social anxiety, when standardized. The completely standardized indirect effect of perceived addiction on social anxiety was also significant ( $b=.195$ ,  $SE=.027$ ,  $CI = [.145$  to  $.250]$ ).

It was hypothesized that the relationship between perceived addiction and social anxiety would be mediated by global shame. Findings supported hypothesis two. The findings indicated that perceived addiction transmitted a significant positive indirect effect on social anxiety through global shame ( $b= 5.229$ ,  $SE = .729$ ,  $CI = [3.844 \text{ to } 6.705]$ ). The indirect effect was calculated as the pathway from perceived addiction to global shame ( $b= .845$ ) multiplied by the pathway from global shame to social anxiety ( $b= 6.189$ ) for a total mediation of global shame,  $b= 5.229$  (Table 4.4). Perceived addiction also had a significant positive total effect on social anxiety ( $b= 7.837$ ,  $SE = 1.183$ ,  $CI = [5.514 \text{ to } 10.161]$ ; unstandardized:  $b= .293$ ). The total effect of perceived addiction to social anxiety was calculated as the sum of the direct effect ( $b= 2.608$ ) and indirect effect ( $b= 5.229$ ) which equaled  $b= 7.837$  (Table 4.4). Therefore, the proportion-mediated measure for global shame through perceived addiction and social anxiety was calculated to 66.7% ( $b= 5.229$  [indirect] /  $b= 7.837$  [total]). The bootstrap confidence intervals did not cross zero for any of the calculations indicating statistical significance.

#### Table 4.4

##### *Results for Global Shame Mediation Model*

<i>Source</i>	<i>b</i>	<i>se</i>	<i>t</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>
Global Shame: $R = .503$ , $R^2 = .253$ , $MSE = 3.122$ , $F(1, 468) = 158.508$ , $p < .001$						
Perceived Addiction	.845	.067	12.590	<.001	.713	.977
Social Anxiety: $R = .446$ , $R^2 = .199$ , $MSE = 851.650$ , $F(2, 467) = 57.857$ , $p = <.001$						
Perceived Addiction	2.608	1.282	2.034	<.05	.088	5.128
Global Shame	6.189	.763	8.107	<.001	4.689	7.689
Indirect Effect	5.229	.729			3.844	6.705
Total Effect	7.837	1.183			5.515	10.161

The proposed simple mediation model for global shame was supported, as findings provided evidence for a significant positive indirect effect. Findings suggested that perceived addiction is associated with increased global shame and social anxiety. Global shame was also associated with increased social anxiety. Findings provided support that global assessments of shame mediated the effect of perceived addiction to pornography use on social anxiety amongst Christian female pornography users. Hypotheses one and two were supported through these findings.

### **Research Question Three: Mediation**

**RQ3:** Does external shame mediate the relationship between perceived addiction and social anxiety?

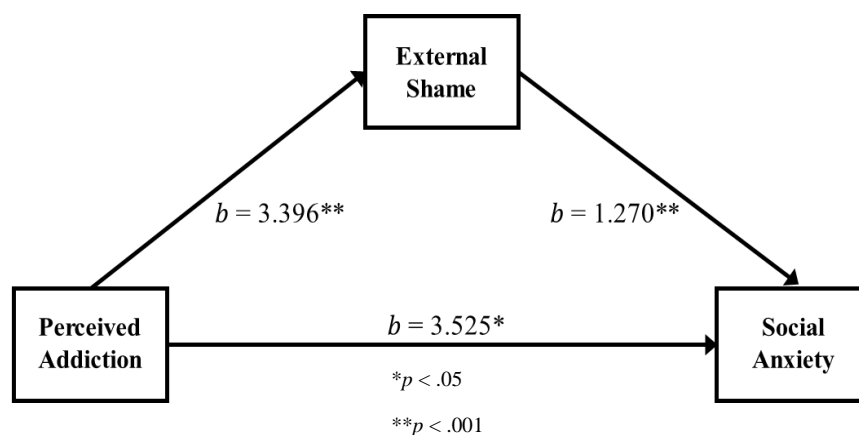
*H<sub>a</sub>*. The relationship between perceived addiction and social anxiety will be mediated by external shame.

Another simple mediation model (Hayes Model 4) was tested in which it was hypothesized that external shame would mediate the effect of perceived addiction on social anxiety. Figure 4.2 demonstrates this hypothesis statistically. Table 4.5 provides a summary of the external shame mediation model. It was expected that external shame would mediate the relationship between perceived addiction (CPUI-9) and social anxiety (RQ3). Consistent with the previous model, perceived addiction was found to transmit a significant positive direct effect on social anxiety ( $b = 3.525$ ,  $SE = 1.124$ ,  $CI [1.316 \text{ to } 5.734]$ ). In addition, perceived addiction was found to transmit a significant positive effect on external shame ( $b = 3.396$ ,  $SE = .424$ ,  $CI = [2.563 \text{ to } 4.228]$ ). External shame was found to have a significant positive effect on social anxiety ( $b = 1.270$ ,  $SE = .115$ ,  $CI = [1.044 \text{ to } 1.496]$ ).

When standardized, perceived addiction had an effect size of  $b=.347$  on external shame and an effect size of  $b=.132$  on social anxiety. External shame also had an effect size of  $b=.464$  on social anxiety, when standardized. The completely standardized indirect effect of perceived addiction on social anxiety was also significant ( $b= .161$ ,  $SE = .026$ ,  $CI = [.112 \text{ to } .214]$ ).

**Figure 4.2**

*Statistical Simple Mediation Model for External Shame*



It was hypothesized that the relationship between perceived addiction and social anxiety would be mediated by external shame. Findings support hypothesis three. The findings indicated that perceived addiction transmitted a significant positive indirect effect on social anxiety through external shame ( $b= 4.312$ ,  $SE = .718$ ,  $CI = [2.965 \text{ to } 5.806]$ ). The indirect effect was calculated as the pathway from perceived addiction to external shame ( $b= 3.396$ ) multiplied by the pathway from external shame to social anxiety ( $b= 1.270$ ) for a total mediation of external shame  $b= 4.312$  (Table 4.5). Perceived addiction had a significant positive total effect on social anxiety ( $b= 7.837$ ,  $SE= 1.183$ ,  $CI = [5.514 \text{ to } 10.161]$ ; unstandardized:  $b= .293$ ). The total effect of perceived addiction to social anxiety was calculated as the sum of the direct effect ( $b= 3.525$ ) and indirect effect ( $b= 4.312$ ) which equaled  $b= 7.837$  (Table 4.5). Therefore, the proportion-mediated measure for external shame through perceived addiction and social anxiety was



calculated to 55% ( $b= 4.312$  [indirect] /  $b= 7.837$  [total]). The bootstrap confidence intervals did not cross zero for any of these calculations indicating statistical significance.

**Table 4.5**

*Results for External Shame Mediation Model*

<i>Source</i>	<i>b</i>	<i>se</i>	<i>t</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>
External Shame: $R = .347$ , $R^2 = .121$ , $MSE = 124.497$ , $F(1, 468) = 64.203$ , $p < .001$						
Perceived Addiction	3.396	.424	8.013	<.001	2.563	4.228
Social Anxiety: $R = .525$ , $R^2 = .275$ , $MSE = 770.295$ , $F(2, 467) = 88.628$ , $p = <.001$						
Perceived Addiction	3.525	1.124	3.136	<.05	1.316	5.734
External Shame	1.270	.115	11.044	<.001	1.044	1.496
Indirect Effect	4.312	.718			2.965	5.806
Total Effect	7.837	1.183			5.514	10.161

The proposed simple mediation model for external shame was supported, as findings provided evidence for a significant positive indirect effect. Findings suggested that perceived addiction is associated with increased external shame and social anxiety. External shame is also associated with increased social anxiety. Findings provided support that external shame mediated the effect of perceived addiction to pornography use on social anxiety amongst Christian female pornography users. Hypotheses 1 and 3 were supported through these findings.

**Research Question Four: Moderation**

**RQ4:** Does the spiritual aspect of grace moderate the relationship between global shame and social anxiety?

*H<sub>a</sub>.* The relationship between global shame and social anxiety will be moderated by grace.

After testing the simple mediation models that differed in terms of shame type (mediators), the first moderation to be tested was the interaction of global shame and grace to social anxiety. It was expected that the interaction of global shame and grace would transmit a significant effect on social anxiety. The moderated mediation model for global shame is displayed in Figure 4.3. Results from the moderated mediation model for global shame can be viewed in Table 4.6. Consistent with expectations, grace was found to be significantly negatively associated with social anxiety ( $b=-15.555$ ,  $SE=2.188$ ,  $CI = [-19.854$  to  $-11.256]$ ). However, findings did not support that the interaction of global shame and grace transmitted a significant effect on social anxiety ( $b= .037$ ,  $SE = .948$ ,  $CI = [-1.826$  to  $1.899]$ ). Hypothesis four was not supported.

#### **Research Question Five: Moderation**

**RQ5:** Does the spiritual aspect of grace moderate the relationship between external shame and social anxiety?

*H<sub>a</sub>.* The relationship between external shame and social anxiety will be moderated by grace.

The next moderation to be tested was the interaction of external shame and grace to social anxiety. It was expected that the interaction of external shame and grace would transmit a significant effect on social anxiety. The moderated mediation model for external shame is displayed in Figure 4.4. Results from the moderated mediation model for external shame can be viewed in Table 4.7. As expected, Dimensions of Grace was found to be significantly negatively associated with social anxiety ( $b=-10.677$ ,  $SE=2.313$ ,  $CI = [-15.220$  to  $-6.133]$ ). However, findings did not support that the interaction of external shame and grace transmitted a significant

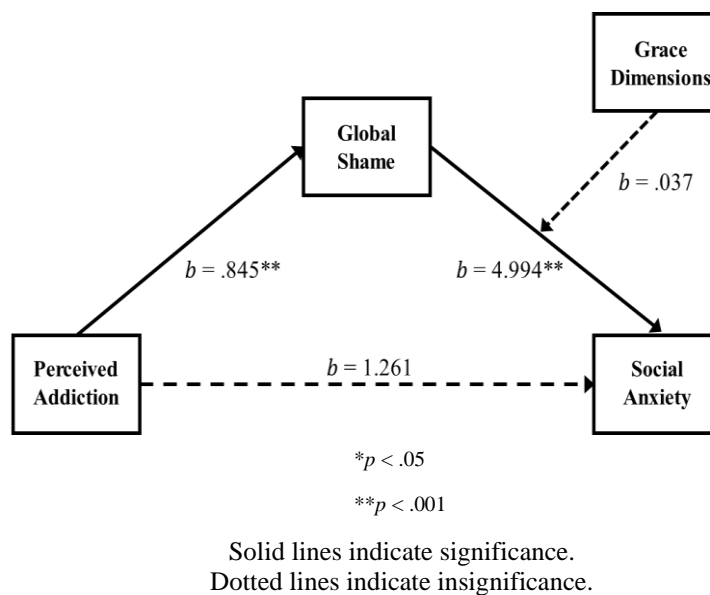
effect on social anxiety ( $b = .077$ ,  $SE = .164$ ,  $CI = [-.245 \text{ to } .400]$ ). Hypothesis five was not supported.

### **Research Question Six: Moderated Mediation**

**RQ6:** Is the relationship between perceived addiction and social anxiety mediated by global and external shame and moderated by grace?

*H<sub>a</sub>*. The indirect effect of perceived addiction on social anxiety through both global shame and external shame will be moderated by grace.

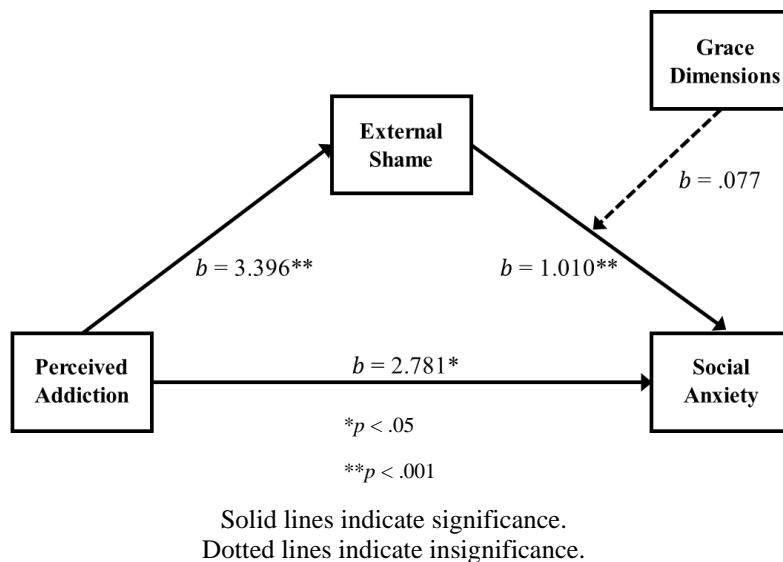
The moderated mediation for research question six was tested with Hayes (2018) PROCESS Model 14. Unfortunately, the moderated mediation for question six was not significant for the model including global shame as a mediator ( $b = .031$ ,  $SE = .762$ ,  $CI = [-1.434 \text{ to } 1.540]$ , Table 4.6) or the model including external shame as a mediator ( $b = .262$ ,  $SE = .576$ ,  $CI = [-.884 \text{ to } 1.399]$ , Table 4.7). The original mediation models were again supported, providing evidence that both shame types mediate the relationship between perceived addiction and social anxiety. As proposed, the moderation models in this study were not supported. Grace did not moderate the indirect effect from perceived addiction to social anxiety or the effect of shame type to social anxiety. However, grace was again negatively associated with social anxiety. Later in chapter five, the results for the proposed moderation of grace will be discussed in greater detail. The findings fail to reject the null hypothesis for research question six. Grace was not found to be a significant moderator in this research study.

**Figure 4.3***Statistical Moderated Mediation Model for Global Shame***Table 4.6***Results for Global Shame Moderated Mediation Model*

Source	<i>b</i>	<i>se</i>	<i>t</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>
Global Shame: $R = .503$ , $R^2 = .253$ , $MSE = 3.122$ , $F(1, 468) = 158.508$ , $p < .001$						
Perceived Addiction	.845	.067	12.590	<.001	.713	.977
Social Anxiety: $R = .527$ , $R^2 = .277$ , $MSE = 771.388$ , $F(4, 465) = 44.586$ , $p = <.001$						
Perceived Addiction	1.261	1.235	1.021	.308	-1.166	3.688
Global Shame	4.994	.746	6.694	<.001	3.528	6.460
Dimensions of Grace	-15.555	2.188	-7.110	<.001	-19.854	-11.256
Global Shame X Grace	.037	.948	.039	.969	-1.826	1.899
Moderated Mediation	.031	.762			-1.434	1.540

**Figure 4.4**

*Statistical Moderated Mediation Model for External Shame*

**Table 4.7**

*Results for External Shame Moderated Mediation Model*

<i>Source</i>	<i>b</i>	<i>se</i>	<i>t</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>
External Shame: $R = .347$ , $R^2 = .121$ , $MSE = 124.497$ , $F(1, 468) = 64.203$ , $p < .001$						
Perceived Addiction	3.396	.424	8.013	<.001	2.563	4.228
Social Anxiety: $R = .555$ , $R^2 = .308$ , $MSE = 738.819$ , $F(4, 465) = 51.676$ , $p = <.001$						
Perceived Addiction	2.781	1.117	2.490	<.05	.587	4.976
External Shame	1.010	.127	7.971	<.001	.761	1.259
Dimensions of Grace	-10.677	2.312	-4.618	<.001	-15.220	-6.133
External Shame X Grace	.077	.164	.470	.638	-.245	.400
Moderated Mediation	.262	.576			-.884	1.399

## Summary

This chapter provides all data analysis associated with this research study. Data was downloaded into IBM's SPSS Statistics Version 27 (2020) with Hayes (2018) PROCESS macro. The data analysis presented in this chapter followed the following order: data screening, demographics, correlations, simple mediation, moderation, and moderated mediation. Corresponding with the research questions, the variables of perceived addiction, social anxiety, global shame, external shame, and grace were examined. Hypotheses one, two, and three were supported. Hypotheses four, five, and six were not supported. Tables and figures were supplied to enhance the visual understanding of the findings. The next chapter proceeds with a discussion of all findings, limitations of the study, clinical and pastoral implications, and suggestions for future research.

## CHAPTER FIVE: CONCLUSIONS

The purpose of this non-experimental quantitative research study was to examine the Christian woman's usage of internet pornography as it related to perceived addiction, social anxiety, and shame, also examining the spiritual concept of grace as a moderator to decrease the negative outcomes associated with use. In direct connection with this purpose, the current study sought to provide new research that addressed the relationship between perceived addiction to social anxiety with global shame, external shame, and grace. This study attempted to add the variable of grace to affect these common research variables.

Chapter five provides an overview and discussion of the findings based on the six research questions: What is the relationship between perceived addiction to pornography use for women and social anxiety? Is the relationship between perceived addiction and social anxiety mediated by the negative emotion of global shame? Does external shame mediate the relationship between perceived addiction and social anxiety? Does the spiritual aspect of grace moderate the relationship between global shame and social anxiety for women who have recently used pornography? Does the spiritual aspect of grace moderate the relationship between external shame and social anxiety? Is the relationship between perceived addiction and social anxiety mediated by global and external shame and moderated by grace? The implications of these findings will be presented, followed by limitations of the study, clinical and pastoral implications, and suggestions for future research.

### **Summary of Findings and Implications**

The participants for this research study were recruited through the services of CloudResearch on the Amazon MTurk platform (Litman et al., 2017). The inclusion criteria for participation included age over 18 years, female gender, proficiency of English, identification of

the Christian faith, and use of pornography in the previous week. Women of the Christian faith were selected for this current study based on the previous research of Bradley and associates (2016) who reported belief in God increased perceived addiction to pornography use. Four hundred and seventy Christian women completed the five assessments of CPUI-9, Shame Inventory, Other as Shamer, Dimensions of Grace, and the LSAS-SR for social anxiety. The majority of the women were between the ages of 25-34 (42.3%), Caucasian (76.2%), were married or had a life partner (50.9%), and were sexually active in the last month (81.3%, Table 4.1). Participants reported attending weekly religious activities (49.6%) and usually relying on their faith for influence and decision making (36.6%, Table 4.1).

### **Research Question One**

The first research question examined a potential relationship between perceived addiction to pornography use for Christian women and social anxiety. No previous research has examined the combination of these specific constructs with a female-only population. It was hypothesized that there would be a positive relationship between perceived addiction to pornography use for women and social anxiety. In this hypothesis, perceived addiction (X) is the predictor variable and social anxiety (Y) is the outcome variable. Therefore, scores for perceived addiction (CPUI-9) would have a relationship with scores for social anxiety (LSAS-SR). A Pearson's  $r$  correlation test was conducted to assess the relationship between all research study variables. It is important to note that correlation shows the relationship between variables but does not provide evidence of an effect. Because this research was conducted as a nonexperimental study, the correlations cannot be interpreted as causation (Warner, 2013). The correlations for this study were found to be statistically significant as indicated in Table 4.3.



Results provided support for the hypothesis that perceived addiction (CPUI-9) was significantly positively correlated with social anxiety (LSAS-SR). Perceived addiction was significantly positively correlated with social anxiety at  $r = .293$  with a  $p$ -value of  $< .01$ , Table 4.3. This result means that as scores for perceived addiction (CPUI-9) increased, scores for social anxiety (LSAS-SR) also increased. Another way of understanding this correlation is that there exists a positive linear relationship between perceived addiction and social anxiety. For the Christian women in the survey, as their scores for perceived addiction (CPUI-9) increased the same held true for their scores for social anxiety (LSAS-SR). Perceived addiction can therefore be interpreted as a predictor of social anxiety. If a Christian woman perceives herself to be addicted to pornography after use, she may experience distress as an increase in her social anxiety. Based on these findings, hypothesis one was significantly supported. Upon further examination using Model 4 for mediation analysis, hypothesis one was supported again.

Following the SBS perspective, research question one expected perceived addiction to be a negative cognitive response to the erotic stimuli of pornography which was followed by a negative outcome such as social anxiety (Fisher & Barak, 2001). The first research question also connected with the previous results of Bradley and colleagues (2016) who reported a relationship between perceived addiction and psychological distress. This research chose to investigate social anxiety, because SAD is the 4th most common psychiatric disorder with a 12.1% lifetime prevalence rate, with the highest rating in the 30-44 age range (Kessler et al., 2005). Weinstein et al., (2015) correlated internet addiction with social anxiety with no gender difference in their study with college students. Zlot et al., (2018) also correlated social anxiety with sex addiction in their research with online dating. Finally, Leonhardt et al., (2018) correlated perceived addiction with relationship anxiety. Based on these previous reports, perceived addiction was

selected by this research study as the predictor of social anxiety for Christian women who had used pornography.

### **Other Correlations**

The five Pearson's  $r$  correlations reported in Table 4.3 also presented the research study findings for the other variables. Perceived addiction was also significantly correlated with global shame ( $r = .503, p < .01$ , Table 4.3) and external shame ( $r = .347, p < .01$ , Table 4.3). This means higher levels of perceived addiction, for the Christian women surveyed, corresponded with higher levels of shame. As scores for perceived addiction (CPUI-9) increased, scores for global shame and external shame also increased. Perceived addiction can therefore be interpreted as a predictor of both global shame and external shame. If a Christian woman perceives herself to be addicted to pornography, she may experience an increase in the negative emotion of shame after usage.

Global shame was also reported as significantly correlated with external shame ( $r = .433, p < .01$ , Table 4.3) and social anxiety ( $r = .438, p < .01$ , Table 4.3). External shame was also significantly correlated with social anxiety ( $r = .510, p < .01$ , Table 4.3). Surprisingly, the highest correlation among the variables was external shame to social anxiety. The  $r^2$  was 0.26  $[(.510)^2]$ ; thus about 26% of the variance in social anxiety could be predicted from external shame (Table 4.3). Overall, higher levels of shame corresponded with higher levels of social anxiety. Shame, measured both globally and externally, predicted social anxiety.

As shame increases, for the Christian woman who uses pornography, her social anxiety will also increase. For this research study, external shame, associated with the judgment from others, was correlated with the woman's social anxiety and withdrawal from others. In earlier research, symptoms of SAD had already been correlated with shame-proneness (Fergus et al.,

2010). Căndea and Szentagotai-Tăta (2018) correlated social anxiety with shame-proneness in their study with post-event rumination. Since this study reported correlations between both global shame and external shame with social anxiety, the research supporting this significant relationship has increased.

As expected, grace was negatively correlated with all other variables. As Pearson's  $r$  details the strength and direction of the linear relationship between variables, a negative correlation means as  $X$  increases,  $Y$  will decrease (Warner, 2013). First, grace was negatively correlated with perceived addiction ( $r = -.293, p < .01$ , Table 4.3). The highest correlation for grace was the relationship with external shame ( $r = -.486, p < .01$ , Table 4.3). Global shame and grace were also negatively correlated ( $r = -.333, p < .01$ , Table 4.3). Lastly, social anxiety was negatively correlated with grace ( $r = -.419, p < .01$ , Table 4.3). These negative correlations mean that higher levels of grace coincided with lower levels of perceived addiction, social anxiety, global shame, and external shame. For this research study, a woman's understanding of grace was correlated with her scores of perceived addiction, social anxiety, and shame.

### **Research Question Two**

The second research question investigated the relationship between perceived addiction and social anxiety for the mediation of global shame. Since research question one established a relationship between perceived addiction to social anxiety, question two asked why does this relationship exist? Therefore, it was hypothesized that the relationship between perceived addiction and social anxiety would be mediated by global shame. In this research question, the study was trying to assess if perceived addiction ( $X$ ) predicted social anxiety ( $Y$ ) and if global shame ( $M$ ) mediated the effect of that relationship. Mediation states that global shame becomes the mechanism through which perceived addiction influences social anxiety (Hayes, 2018).

First, the data analysis measured the direct pathway (X to Y) of perceived addiction (CPUI-9) to social anxiety (LSAS-SR). Then, the pathway (X to M) of perceived addiction (CPUI-9) to global shame was calculated. Another pathway (M to Y) of global shame to social anxiety (LSAS-SR) was also determined. Finally, the indirect pathway (X to M to Y), perceived addiction to global shame to social anxiety, was assessed for the effect size, or amount of mediation. The statistical data for these pathways can be viewed in Figure 4.1 and Table 4.4. Each relationship in the mediated model was statistically significant in the hypothesized direction.

Does perceived addiction (X) influence social anxiety (Y) through global shame (M), became the conceptual question for hypothesis three? Yes, findings provided support for a significant positive indirect effect. The direct effect of perceived addiction (X) to social anxiety (Y) was  $b=2.608$  (Figure 4.1). To calculate the indirect effect, the effect of pathway X to M ( $b=.845$ ) is multiplied by the effect of pathway M to Y ( $b=6.189$ , Figure 4.1). The indirect effect of perceived addiction to social anxiety, when mediated by global shame, is  $b=5.229$ ,  $SE=.729$ ,  $CI = 3.844$  to  $6.705$  (Table 4.4). Therefore, the proportion-mediated measure for global shame through perceived addiction and social anxiety was calculated to 66.7% ( $b= 5.229$  [indirect] /  $b= 7.837$  [total], Table 4.4). It can be stated that 66.7% of the total effect of perceived addiction to social anxiety operated through the mediator of global shame. The bootstrap confidence interval for these calculations did not cross zero indicating statistical significance. Hypothesis two was supported.

These findings can be interpreted in a multitude of different ways. First, perceived addiction again had a positive significant relationship with social anxiety. Then, perceived addiction had a positive significant relationship with global shame. Global shame also was

found to have a positive significant relationship with social anxiety. Finally, global shame mediated the effect of perceived addiction to social anxiety for the Christian women who used pornography in this research study. The findings reported that when perceived addiction scores (CPUI-9) increased, then global shame increased, along with social anxiety (LSAS-SR). For the Christian women surveyed, thoughts of perceived addiction from use influenced their social anxiety distress. Research question two allowed the study to see that perceived addiction affects global shame which affects social anxiety. Therefore, a woman who uses pornography may think she is addicted to its usage, experience an increase in global shame, and consequently an increase in the distress of social anxiety.

This research study connects with the results of Bilevicius et al., (2018), who reported shame mediated the relationship between depression and addictive behaviors. The researchers presented shame as a new vulnerability factor for those who struggle with behaviors and symptoms of addiction. Shame continues to be a popular mediator in past and present research (Bilevicius et al., 2018; Kim et al., 2011; C. M. Young et al., 2016). Young et al., (2016) reported shame-proneness mediates self-determination and depressive symptoms. The meta-analytic review by Kim et al., (2011) mentioned several studies that analyzed shame as a mediator. The researchers even reported how external shame typically has a documented larger effect size than internal shame (Kim et al., 2011). Therefore, external shame, separate from global shame, was investigated in the next research question.

### **Research Question Three**

The third research question investigated the relationship between perceived addiction and social anxiety for the mediation of external shame. Since research question two established a mediator of global shame existed, question three wanted to prove the same for external shame.

Therefore, it was hypothesized that external shame would mediate the relationship between perceived addiction and social anxiety. In this research question, the study was trying to assess if perceived addiction (X) influenced social anxiety (Y) and if external shame (M) mediated the effect of that relationship. The research study felt it would be interesting to see which mediator was stronger, global shame or external shame.

This research question followed the same steps as research question two. First, the data analysis calculated the direct pathway (X to Y) of perceived addiction (CPUI-9) to social anxiety (LSAS-SR). Then, the pathway (X to M) of perceived addiction (CPUI-9) to external shame was measured. Another pathway (M to Y) of external shame to social anxiety (LSAS-SR) was also figured. Finally, the indirect pathway (X to M to Y), perceived addiction to external shame to social anxiety, was assessed for the effect size, or amount of mediation. The statistical data for these pathways can be viewed in Figure 4.2 and Table 4.5. Each relationship in the mediated model was statistically significant in the hypothesized direction.

Conceptually, the question for hypothesis three becomes: Does perceived addiction (X) influence social anxiety (Y) through external shame (M)? Once again, findings do provide support for a significant positive indirect effect. The direct effect of perceived addiction (X) to social anxiety (Y) was  $b=3.525$  (Figure 4.2). To calculate the indirect effect, the effect of pathway X to M ( $b=3.396$ ) is multiplied by the effect of pathway M to Y ( $b=1.270$ , Figure 4.2). Therefore, the indirect effect of perceived addiction to social anxiety, when mediated by external shame, is  $b=4.312$ ,  $SE=.718$ ,  $CI = 2.965$  to  $5.806$  (Table 4.5). The proportion-mediated measure for external shame through perceived addiction and social anxiety was calculated as 55% ( $b=4.312$  [indirect] /  $b= 7.837$  [total], Table 4.5). It can be stated that 55% of the total effect of perceived addiction to social anxiety operated through the mediator of external shame. The

bootstrap confidence interval for these calculations did not cross zero indicating statistical significance. Hypothesis three was supported.

Similar to the interpretations for research question two, the mediation model for external shame provides multiple findings for this study. First, research question one was supported by a significant positive relationship between perceived addiction and social anxiety. Perceived addiction was determined to have a significant positive relationship with external shame. External shame also was found to have a significant positive relationship with social anxiety. In this research study, external shame mediated the effect of perceived addiction to social anxiety for Christian women who had used pornography.

This research question separated the mediation of shame from global to external. Findings allowed the study to report that perceived addiction affects external shame which affects social anxiety. For the Christian women in the survey, as their scores for perceived addiction (CPUI-9) increased, the same held true for their external shame and social anxiety (LSAS-SR). The findings supported a possible sequence in which the Christian woman could first, repeatedly use pornography and then, believe that she is addicted. At that point, the woman would possibly begin to experience shame either as a self-awareness toward her own actions or as a fear of being judged by others. Her shame, either internal or external, would then lead to an increase of social anxiety distress produced by the repeated use of pornography. The cyclical path of perceived addiction to shame to social anxiety becomes maintained with each use of pornography following the SBS theory (Fisher & Barak, 2001)

Surprisingly, the total effect for both global shame mediation and external shame mediation was the same calculated size in the relationship of perceived addiction to social anxiety ( $b=7.837$ ,  $SE=1.183$ ,  $CI = [5.514 \text{ to } 10.161]$ ; unstandardized:  $b=.293$ , Table 4.5). The

total effect of perceived addiction to social anxiety was calculated as the sum of the direct effect ( $b= 3.525$ ) and indirect effect ( $b= 4.312$ ) which equaled  $b= 7.837$  (Table 4.5). However, global shame had the highest direct effect ( $b=6.189$ , Table 4.4) and indirect through mediation effect ( $b=5.229$ , Table 4.4) on social anxiety. This means, for the women surveyed, overall global shame assessment scores influenced social anxiety scores more than external shame assessment scores. This research study can report that, for a Christian woman who perceives herself to be addicted to pornography, it is important for clinicians to understand how the influence of shame plays a vital role in the maintenance of her social anxiety distress.

#### **Research Question Four**

The fourth research question explored the potential of moderation with the variable of grace. The question asked: Does the spiritual aspect of grace moderate the relationship between global shame and social anxiety? It was expected that the interaction of global shame and grace would transmit a significant effect on social anxiety. The statistical figure for this research question can be viewed in Figure 4.3 with calculations detailed in Table 4.6.

Moderation implies that grace (W) changes the effect of global shame (X) on social anxiety (Y). Does grace (W) interact with global shame (X) to influence social anxiety (Y)? In moderation, grace becomes an agent of change. The study wanted to know if higher grace scores would weaken the global shame to social anxiety relationship. Consistent with the study's expectations, grace was found to be significantly negatively associated with social anxiety ( $b=-15.555$ ,  $SE=2.188$ ,  $CI = [-19.854$  to  $-11.256]$ , Table 4.6). Unfortunately, findings did not support the interaction of global shame and grace transmitted a significant effect on social anxiety ( $b=.037$ ,  $SE=.948$ ,  $CI = [-1.826$  to  $1.899]$ , Figure 4.3). The findings reported no statistically significant moderation for global shame to social anxiety by grace. Research question four was



not supported. Therefore, this research study failed to reject the null hypothesis for research question four.

A lack of moderation for the variable of grace was unexpected. The significant negative association between grace and social anxiety meant the score for grace was inversely related to the score for social anxiety. In this study, as a Christian woman's understanding of grace increased, her social anxiety distress decreased. However, the interaction of global shame to grace created no effect on social anxiety. As global shame scores increased and grace scores increased, social anxiety scores (LSAS-SR) did not decrease. A lack of moderation in this research study may stem from a misunderstanding about the spiritual concept or a disregard for the importance of grace. Another explanation for the lack of moderation could be found in the normalization of pornography even among Christian believers. In the Christian faith, grace is a spiritual concept needed when the believer has sinned. Is pornography viewing still regarded as a sin among believers? Normalization of the use of pornography could explain the lack of moderation by grace.

Interestingly, this current research study experienced some similarities with a previous study conducted by Dhuffar and Griffiths (2014) with a population of British women. The results from that study indicated hypersexual behaviors predicted shame and consequences of sexual behaviors significantly influenced shame (Dhuffar & Griffiths, 2014). However, contrary to their expectations religious beliefs did not influence the relationship between consequences of sexual behaviors and shame (Dhuffar & Griffiths, 2014). Similarly, this research study found no influence of grace on the relationship between shame and social anxiety, which could be considered a consequence of the sexual behaviors related to pornography use. Dhuffar and Griffiths (2014) noted the lack of influence of religious beliefs could be from a difference in the

women's interpretation of shame from technology-driven sex as opposed to traditional sex. The researchers present an interesting observation and possible explanation, which could be explored further, as to why grace did not moderate the relationship between global shame and social anxiety for this data.

### **Research Question Five**

The fifth research question again investigated the moderation of the variable of grace. Hypothesis five stated that the relationship between external shame and social anxiety would be moderated by grace. It was expected that the interaction of external shame and grace transmitted a significant effect on social anxiety. The study wanted to know if higher grace scores would weaken the external shame to social anxiety relationship. In chapter four, the statistical representation of this research question can be found in Figure 4.4 and Table 4.7.

As stated in the discussion for research question four, moderation implies a change by the variable of grace. The moderator of grace (W) is expected to change the effect of external shame (X) on social anxiety (Y). Does grace (W) interact with external shame (X) to influence social anxiety (Y)? Consistent with the study's expectations, grace was again found to be negatively associated with social anxiety ( $b=-10.677$ ,  $SE=2.313$ ,  $CI = [-15.220 \text{ to } -6.133]$ , Table 4.7). Grace, once again, did not moderate the relationship between external shame and social anxiety ( $b= .077$ ,  $SE = .164$ ,  $CI = [-.245 \text{ to } .400]$ , Figure 4.4). Therefore, the findings reported no statistically significant effect of external shame (X) and grace (M) on social anxiety (Y). Research question five was not supported. This research study failed to reject the null hypothesis for research question five.

A lack of moderation on either global shame or external shame was surprising to this research study. Again, the significant negative relationship between grace and social anxiety

means that as the score of grace increased, the score for social anxiety decreased. But, the lack of moderation means that as scores for external shame increased, and scores for grace increased, scores for social anxiety (LSAS-SR) did not decrease. For the Christian woman surveyed, their external shame influence upon social anxiety was not weakened by their understanding of grace.

Previous research results obtained by Lewczuk et al., (2017) directly supported Grubbs et al., (2017) connecting perceived addiction to internet pornography use to religious and spiritual struggles for women. Following both research studies, this current study fully expected grace to moderate the effects of perceived addiction. Lewczuk et al., (2017) also noted how religiosity is one of the top reasons women with problematic pornography behaviors will seek a therapist for treatment. Looking at grace interventions, Bufford et al., (2018) measured grace three times in two studies and found grace could be experimentally increased. Based on the previous work of Lewczuk et al., (2017), Grubbs et al., (2017), and Bufford et al., (2018), the current study anticipates the investigations into the aspects of grace as a therapeutic agent of change for perceived addiction to pornography use will continue.

### **Research Question Six**

The final research question examined all moderation and mediation from previous questions together in a moderated mediation model. Question six asked if the relationship between perceived addiction and social anxiety was mediated by global and external shame and moderated by grace. Therefore, it was hypothesized that the indirect effect of perceived addiction on social anxiety through both global shame and external shame would be moderated by grace. PROCESS model 14 allowed the research study to evaluate the indirect effect of X on Y which varies as a function of W, where W is moderating the path from M to Y (Hayes, 2018).

Moderate mediation is the perceived addiction (X) to shame (M) to social anxiety (Y) pathway effect, conditional on grace (W).

Ultimately, did grace change the already established mediated indirect pathways from perceived addiction to social anxiety through both shame types? No, findings did not support that grace moderated any of the effects from perceived addiction to social anxiety through either shame type. Findings reported the moderated mediation for question six was not significant for the model including global shame as the mediator ( $b=.031$ ,  $SE = .762$ ,  $CI = [-1.434 \text{ to } 1.540]$ , Table 4.6) or the model including external shame as the mediator ( $b=.262$ ,  $SE = .576$ ,  $CI = [-.884 \text{ to } 1.399]$ , Table 4.7). These findings again provide evidence that both shame types mediate the relationship between perceived addiction and social anxiety. The moderated mediation model provided support for hypotheses one, two, and three, but failed to support hypotheses four, five, and six.

Consequently, the index of moderated mediation was not significant for grace with either type of shame (Table 4.6 and Table 4.7). Grace did not moderate the indirect effect from perceived addiction to social anxiety through global shame or external shame. For this research study, grace was not found to be a significant moderator. It is interesting to note that even religious women who believed themselves to be addicted to pornography use and experienced social anxiety were not impacted by an understanding of grace. Findings failed to support research question six. This research study failed to reject the null hypothesis for question six.

### **Additional Findings**

The first additional finding worth documenting is found within the actual demographics of this study's population. The Christian women reported that they were married or had a life partner (50.9%) and had engaged in sexual activity in the last 30 days (81.3%, Table 4.1). In the

study of cybersex addiction with a female population, Laier et al., (2014) reported that a tendency toward a cybersex addiction was not based on the participants' real-life relationships. With reference to Laier et. al., (2014), the Christian women in this survey could have engaged in internet pornography use not as a lack of compensation for their real-life sexual contact, but in excess of their physical relationships with their husbands or life partner.

Another noteworthy finding of this research study was the inclusion questions that asked the Christian women if they had used pornography within the previous week. The participants were instructed, "Please use the following definition for pornography when answering the next question. Pornography will be defined as written text, picture images, videos or other sexually explicit material that contains nudity or sexual activity resulting in sexual arousal through thoughts or feelings." This research study never expected to reach N=470 Christian women as quickly as the survey was completed. Beyond the actual data, the study brings new awareness to the distress caused by viewing pornography. These Christian women were affected by perceived addiction, shame, and social anxiety because they had used pornography. The women did not just use pornography recently; the usage was astonishingly in the previous week.

### **Limitations of the Study**

Three limitations of this study have been documented as the self-report of the data, the expectation of honest answers by the participants, and the population limitations of an Amazon MTurk survey. First, the data retrieved for this research study was self-reported. Human error of interpretation is a major limitation of self-reported data. Next, the issues surrounding pornography use can be considered sensitive in nature. For this reason, participants, especially women, could provide socially acceptable responses instead of answering honestly. Lastly, the demographic of the Amazon MTurk worker can limit race or ethnicity, income, and education.

While the likelihood of these demographic factors affecting the current survey are based on the inclusion qualification of previous pornography usage, the population of Amazon MTurk workers only is still a limitation to consider. This study, despite its limitations, should be considered pivotal for the field of pornography research.

### **Implications**

This research brings to light the importance of understanding the Christian woman's use of pornography beyond previous research directed toward men. These findings resonate with the importance of quality assessments, focused treatments, and successful therapeutic care for women who perceive themselves to be addicted to pornography. The existence of Christian female pornography users established by these findings should influence the clinical focus of those who treat women presenting with psychological distress. It may be, in the treatment of pornography use for Christian women, that clinicians or pastoral counselors now consider the role of shame and social anxiety in their assessment strategies. As this research established shame as an affective response to perceived addiction, it is a malleable emotion, easily changed with new cognitions. The findings support that therapists should help those women who believe they are addicted to pornography use overcome their difficulties by addressing shame and social anxiety. Knowledge of the pathway from perceived addiction to shame to social anxiety can help inform future treatment strategies aimed at ending the cycle of pornography use and psychological distress.

Although this research failed to establish grace as a moderator, grace was significantly negatively correlated with perceived addiction, shame, and social anxiety. Therefore, findings of the negative correlations give importance to spiritual aspects as therapeutic agents of change. Clinicians, counselors, and pastoral counselors already familiar with positive psychology

practices could prosper from the discussion surrounding Bufford et al., (2018)'s grace interventions and the influence of faith-based research. Christian marriage counselors will also gain from this research study as the demographics established that the majority (50.9%) of the participants were married or had a life partner. Finally, Christian women who believe themselves to be addicted to pornography can benefit from this research study as attention to the issues brings awareness which births potential change.

### **Suggestions for Future Research**

First, future research should include specific assessment measures for pornography use for women. New assessment inventories designed for a woman's use of pornography including the type of use and frequency of use would be beneficial. Moving forward, this current research has opened the possibility of future research to continue linking pornography use for women with other psychosocial outcomes beyond social anxiety. The research variables of moral disapproval, emotional stability, and depression should be investigated using women-only populations in the future. Next, the Dimensions of Grace assessment could be revisited with this current data. The study used an overall or average score of grace to assess moderation. Future research could take the five subscales and investigate if the results of the moderation or moderated mediation would be different. Lastly, this current research study could be repeated when a population of Christian women expanded beyond the parameters of Amazon MTurk. An open survey with Christian women recruited through churches and religious organizations could expand upon the already established knowledge.

### **Summary**

There had been no research studies, to date, that examined the relationships between perceived addiction to use, social anxiety, shame, and grace for Christian women as proposed by

this current study (Borgogna & McDermott, 2018; Gola et al., 2017; Grubbs, Exline, et al., 2015). The study was designed and conducted specifically to remedy such a lack of knowledge. Christian women participants were recruited through the services of CloudResearch and Amazon MTurk (Litman et al., 2017). The research study examined the data received through Pearson's  $r$  correlations and linear regression calculations. A significant relationship was established between perceived addiction and social anxiety (Table 4.3). Other significant correlations between the variables were reported (Table 4.3). Thus, findings supported a possible sequence in which the Christian woman who uses pornography, will begin to perceive herself as addicted, will then experience an increase of shame (global and external), which in turn increases her social anxiety distress. Furthermore, the findings aligned with previous research attributing distress resulting from pornography use to a consumer's everyday life. The study was limited by the self-report of the data, the expectation of honest answers, and the Amazon MTurk population. Implications included the importance of understanding the Christian woman's use of pornography beyond previous research designed for male populations. Future research which is female focused was suggested to increase the knowledge surrounding the use of pornography and its association with psychological distress.

### **Summary of the Study**

The problem is that Christian women who consume internet pornography can experience perceived addiction, social anxiety, and shame which may negatively impact their self-concept and their relationships. Therefore, the purpose of this non-experimental quantitative research study was to examine the Christian woman's usage of internet pornography as it related to perceived addiction, social anxiety, and shame, also examining the spiritual concept of grace as a moderator to decrease the negative outcomes associated with use. To current knowledge, this



research study is the first of its kind to target the Christian woman directly for her usage of pornography addressing the distress associated with such use. This study answered a direct call by Grubbs and colleagues (2015) for perceived addiction to be studied with the female gender. The findings of this research study supported the hypotheses of a positive direct effect from perceived addiction to social anxiety and the mediation of global shame and external shame upon that effect. The research study also failed to support the expected hypotheses of moderation by grace upon the direct effect of perceived addiction to social anxiety and the mediation by shame. As such, a significant relationship was established between perceived addiction to pornography use and social anxiety. Global shame and external shame affected the established relationship of perceived addiction to social anxiety through mediation. The expected moderation and moderated mediation of grace for the relationship of shame to social anxiety failed to be supported. This study placed needed attention on the issues surrounding the Christian woman's use of pornography. Pornography use among women, including those with faith convictions, is likely to continue to increase. Future research is needed and necessary for the knowledge encompassing perceived addiction, shame, social anxiety, and grace to gain awareness. This current study could serve as a foundation for numerous researchers who will continue to address the need for knowledge. In the meantime, this study brings awareness to the issue – one Christian woman at a time.

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**APPENDIX A: Informed Consent****Consent**

**Title of the Project:** Christian Women's Pornography Usage: The Role of Social Anxiety, Shame, Perceived Addiction, and Grace

**Principal Investigator:** Kathryn Jackson Bohannon, Liberty University

**Invitation to be Part of a Research Study**

You are invited to participate in a research study. In order to participate, you must be over the age of 18, identify as Female gender, of the Christian faith, proficient in English, and used pornography within the previous week. Taking part in this research project is voluntary through your agreement with Amazon Mechanical Turk.

Please take the time to read this entire form and ask questions before deciding whether to take part in this research project.

**What is the study about and why is it being done?**

The purpose of the study is to examine the Christian woman's usage of internet pornography as it relates to social anxiety, shame, and perceived addiction to pornography use. The spiritual concept of grace will also be examined through survey questions.

**What will happen if you take part in this study?**

If you agree to be in this study, I would ask you to do the following things:

1. Complete the Online Survey. Completion time is between 20 to 45 minutes.

**How could you or others benefit from this study?**

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include important information for counselors and church laypersons for future counseling services.

**What risks might you experience from being in this study?**

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**How will personal information be protected?**

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept anonymous.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

**How will you be compensated for being part of the study?**

Participants will be compensated \$1 (U.S.) for their **completion** of the study. A code will be issued upon completion of the survey to be entered on the participant's Amazon Turk dashboard.

**Is study participation voluntary?**

Participation in this study is voluntary. Your decision about whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey.

**What should you do if you decide to withdraw from the study?**

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

**Whom do you contact if you have questions or concerns about the study?**

The researcher conducting this study is Kathryn Jackson Bohannon. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [kejackson3@liberty.edu](mailto:kejackson3@liberty.edu). You may also contact the researcher's faculty sponsor, Dr. Jennifer Weniger, at [jweniger@liberty.edu](mailto:jweniger@liberty.edu).

**Whom do you contact if you have questions about your rights as a research participant?**

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at [irb@liberty.edu](mailto:irb@liberty.edu).

**Your Consent**

Before agreeing to be part of the research, please be sure that you understand what the study is about. You will be given a copy of this document for your records. If you have any questions about the study later, you can contact the researcher/study team using the information provided above.

**APPENDIX B: Demographics**

What is your age?

18-24

25-34

35-44

45-54

55-64

65-74

75 or older

Do you identify as female?

No

Yes

Prefer not to say

Do you identify as:

Caucasian / White

African American / Black

Hispanic, Latino, or Spanish Origin

Native American or Alaska Native

Asian

Native Hawaiian or Pacific Islander

Other

What is your highest completed education level?

No school completed	Less than High School
High School Diploma or GED	Some college
Bachelor's degree	Master's degree
Professional degree	Doctorate degree
Prefer not to say	

Employment Status: Are you currently....?

Unemployed	Part-time employed
Full-time employed	Homemaker
Student	Military
Retired	Unable to work
Prefer not to say	

What is your household's annual income?

Under \$10,000	\$10,000 - \$30,000
\$30,000 - \$50,000	\$50,000 - \$70,000
\$70,000 - \$90,000	\$90,000 - \$110,00
Over \$110,000	Prefer not to say



What is your current relationship status? I am currently....

Single (Not in a serious relationship) Non-committed Relationship  
Monogamous Dating Relationship Co-habiting with a Partner  
Married / Life Partner Married but Legally Separated  
Divorced Widowed  
Prefer not to say

Have you been sexually active in the last six months with your current partner?

No Yes  
Prefer not to say

Do you identify as Christian?

No Yes  
Prefer not to say

On a normal basis, how often do you attend religious services?

Daily Weekly  
Bi-monthly Monthly  
Prefer not to say

To what degree does religion or faith affect your daily life and decision making?

Not at all

Rarely

Occasionally

Usually

Daily

Prefer not to say

Have you used pornography within the previous week?

No

Yes

Prefer not to say

### **APPENDIX C: Cyber-Pornography Use Inventory - 9**

The CPUI-9 is divided into three named sections with three questions to each section. Each question is scored on a Likert scale of 1 to 7, where 1 is equal to “not at all” and 7 is equal to “extremely”.

#### **Perceived Compulsivity Section**

1. I believe I am addicted to Internet pornography.
2. I feel unable to stop my use of online pornography.
3. Even when I do not want to view pornography online, I feel drawn to it

#### **Access Efforts Section**

4. At times, I try to arrange my schedule so that I will be able to be alone in order to view pornography.
5. I have refused to go out with friends or attend certain social functions to have the opportunity to view pornography.
6. I have put off important priorities to view pornography.

#### **Emotional Distress Section**

7. I feel ashamed after viewing pornography online.
8. I feel depressed after viewing pornography online.
9. I feel sick after viewing pornography online.

Scale:

- |                    |                  |                    |
|--------------------|------------------|--------------------|
| 1. Not at all true | 2. Untrue        | 3. Somewhat untrue |
| 4. Neutral         | 5. Somewhat true | 6. True            |
| 7. Extremely true  |                  |                    |

## APPENDIX D: Shame Inventory

The Shame Inventory (SI) measures both an overall shame feeling score and experiences of shame score. An overall shame feeling score is calculated from three questions using a Likert scale of 0 equals “Never” to 4 equaling “Always”. A list of 50 life experiences is scored providing an experience of shame score.

### Introduction

Shame is a negative and painful feeling in which the entire self is viewed as bad and/or worthless. It may be accompanied by urges to withdraw or conceal some behavior or aspect of yourself. Shame is different from just generally being upset or distressed because it relates to how you feel about yourself. Some people experience shame on a regular basis; others hardly experience shame at all.

### Part 1: Global Experience of Shame

The questions below are about *overall* shame feelings that you may experience.

1. Select the number which indicates *how often* you typically experience shame.

Never	Seldom	Occasionally	Often	Always
0	1	2	3	4

2. Select the number which indicates the *intensity or severity* of shame that you typically experience.

None	Slight	Moderate	Considerable	Extreme
0	1	2	3	4

3. To what extent does shame negatively affect the quality of your life?

No	Slight	Moderate	Considerable	Extreme
Effect	Effect	Effect	Effect	Effect
0	1	2	3	4

### Part 2: Specific Life Events

This is a list of situations and behaviors that may be related to the experience of shame for you. Shame is thoughts about yourself that helps you to feel bad. Please write a number (between 0-4) beside each statement that indicates the intensity of your shame about the event. If the statement does not apply to you, write an “X” besides the statement.

Didn't Happen /Does	No	Slight	Moderate	Considerable	Extreme
Not Apply to Me	Shame	Shame	Shame	Shame	Shame

0-4 A time when I ...

\_\_\_\_\_ 1. was laughed at in front of others

\_\_\_\_\_ 2. was criticized in front of others

\_\_\_\_\_ 3. cried in front of others

\_\_\_\_\_ 4. made a scene in public

\_\_\_\_\_ 5. lost something important

\_\_\_\_\_ 6. had sex with someone that I didn't want to

- \_\_\_\_\_ 7. forced/coerced someone to have sex with me
- \_\_\_\_\_ 8. had an affair/was unfaithful/was sexually promiscuous
- \_\_\_\_\_ 9. was sexually harassed
- \_\_\_\_\_ 10. made a suicidal attempt/threat or harmed myself on purpose
- \_\_\_\_\_ 11. didn't know an answer to a question I felt I should know
- \_\_\_\_\_ 12. was caught saying negative things about others
- \_\_\_\_\_ 13. overate or ate unhealthy/high-fat food
- \_\_\_\_\_ 14. missed an important appointment
- \_\_\_\_\_ 15. was praised for something I didn't do
- \_\_\_\_\_ 16. didn't live up to a really important standard of mine
- \_\_\_\_\_ 17. didn't live up to others' standards
- \_\_\_\_\_ 18. told a lie
- \_\_\_\_\_ 19. broke a promise
- \_\_\_\_\_ 20. committed a crime
- \_\_\_\_\_ 21. knew someone talked badly about me behind my back
- \_\_\_\_\_ 22. received a compliment
- \_\_\_\_\_ 23. found out someone I cared for didn't feel the same way
- \_\_\_\_\_ 24. was turned down for a date/request to spend time with someone

- \_\_\_\_\_ 25. could not afford something
- \_\_\_\_\_ 26. was slow to learn something
- \_\_\_\_\_ 27. hurt someone emotionally
- \_\_\_\_\_ 28. hurt someone physically
- \_\_\_\_\_ 29. hurt an animal
- \_\_\_\_\_ 30. was physically and sexually abused
- \_\_\_\_\_ 31. saw a picture of myself/saw myself in the mirror
- \_\_\_\_\_ 32. was afraid to do something
- \_\_\_\_\_ 33. failed at work
- \_\_\_\_\_ 34. lost a friend
- \_\_\_\_\_ 35. had fantasies of violence or death
- \_\_\_\_\_ 36. had sexual/kinky fantasies
- \_\_\_\_\_ 37. betrayed a friend
- \_\_\_\_\_ 38. was betrayed by someone I care about
- \_\_\_\_\_ 39. hated a family member
- \_\_\_\_\_ 40. had an abortion or encouraged sex partner to get an abortion
- \_\_\_\_\_ 41. had a private aspect of my life exposed
- \_\_\_\_\_ 42. other, describe: \_\_\_\_\_

\_\_\_\_\_ 43. was not in an intimate relationship

\_\_\_\_\_ 44. was not having children

\_\_\_\_\_ 45. was gay/lesbian/bisexual

\_\_\_\_\_ 46. was feeling unattractive or ugly

\_\_\_\_\_ 47. was having a mental disorder

\_\_\_\_\_ 48. was a certain race/ethnicity

\_\_\_\_\_ 49. was not having a good career

\_\_\_\_\_ 50. was being adopted



### APPENDIX E: Other as Shamer Scale

The scale contains 18 statements that measure external shame as the evaluations and judgment from others. A 5-point Likert scale of 0 equals “Never” to 4 equals “Almost Always” scores each statement.

#### Instructions

We are interested in how people think others see them. Below is a list of statements describing feelings or experiences about how you may feel other people see you.

Read each statement carefully and circle the number to the right of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below.

0	1	2	3	4
Never	Seldom	Sometimes	Frequently	Almost Always

#### Statements

1. I feel other people see me as not good enough.
2. I think that other people look down on me.
3. Other people put me down a lot.
4. I feel insecure about others' opinions of me.
5. Other people see me as not measuring up to them.
6. Other people see me as small and insignificant.

7. Other people see me as somehow defective as a person.
8. People see me as unimportant compared to others.
9. Other people look for my faults.
10. People see me as striving for perfection but being unable to reach my own standards.
11. I think others are able to see my defects.
12. Others are critical or punishing when I make a mistake.
13. People distance themselves from me when I make mistakes.
14. Other people always remember my mistakes.
15. Others see me as fragile.
16. Others see me as empty and unfulfilled.
17. Others think there is something missing in me.
18. Other people think I have lost control over my body and feelings.

### **APPENDIX F: Liebowitz Social Anxiety Scale, Self-Report (LSAS-SR)**

There are 24 items included on the LASA-SR measured for both fear and avoidance. A Likert scale of 0 to 3 is used for both subscales. The fear subscale measures from 0 of “None” to 3 of “Severe”. The avoidance subscale measures from 0 of “Never 0%” to 3 of “Usually 67-100%”. This scale provides a total social anxiety score along with the four subscale scores of performance anxiety, performance-avoidance, social anxiety, and social avoidance.

#### **Instructions**

This measure assesses the way that social phobia plays a role in your life across a variety of situations. Read each situation carefully and answer two questions about that situation. The first question asks how anxious or fearful you feel in the situation. The second question asks how often you avoid the situation. If you come across a situation that you ordinarily do not experience, imagine “what if you were faced with that situation,” and then, rate the degree to which you would fear this hypothetical situation and how often you would tend to avoid it. Please base your ratings on the way that the situations have affected you in the last week. Fill out the following scale with the most suitable answer provided below.

1. How anxious or fearful do you feel when...?

0 = none, 1 = mild, 2 = moderate, 3 = severe

2. How often do you avoid the following...?

0 = never (0%), 1 = occasionally (1%-33%), 2 = often (33%-67%), 3 = Usually (67%-100%)

**Scale Items**

1. Telephoning in public.
2. Participating in small groups.
3. Eating in public places.
4. Drinking with others in public places.
5. Talking to people in authority.
6. Acting, performing or giving a talk in front of an audience.
7. Going to a party.
8. Working while being observed.
9. Writing while being observed.
10. Calling someone you don't know very well.
11. Talking with people you don't know very well.
12. Meeting strangers.
13. Urinating in a public bathroom.
14. Entering a room when others are already seated.
15. Being the center of attention.
16. Speaking up at a meeting.
17. Taking a test.

18. Expressing a disagreement or disapproval to people you don't know very well.
19. Looking at people you don't know very well in the eyes.
20. Giving a report to a group.
21. Trying to pick up someone.
22. Returning goods to a store.
23. Giving a party.
24. Resisting a high-pressure salesperson.

**APPENDIX G: Dimensions of Grace Scale**

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